



INTERNATIONAL PRODUCT CATALOGUE May 2022 (rev. 1)



Autonomous residential | Centralized residential Service Industry | Industrial Process





1922

2022





5 RIELLO ISOTHERMO



RIELLO



RIELLO BURNERS



- RIELLO
Energy For Life



RIELLO is a world leader in combustion technology and a point of reference in the production of systems and technologies for heating and air conditioning in the residential and light commercial sectors.

100 YEARS OF ENERGY FOR LIFE

# WE INNOVATE FOR A MORE SUSTAINABLE FUTURE

A century of energy for life, for people's comfort. Innovation and sustainability are what guide Riello's way of working and its ability to create ground-breaking systems. The company has become a world leader in its field by predicting future needs and speeding up the shift towards sustainable energy transition.

Riello has pledged to develop increasingly healthy, safe and efficient technologies, transforming various energy sources. Its aim is to continuously improve the quality of our lives, making our planet a more liveable place not only today but also for future generations. This philosophy is reflected in the logo for its 100-year anniversary:

an endless embrace, representing ongoing research along with the goal of a production model designed to improve the performance of its products whilst at the same time reducing emissions and waste.

100 years is a significant milestone, but also represents a new start for the next phase as a reference player for industrial and cultural change.



ENVIRONMENT AND WELL-BEING

# RIELLO 4 GREEN

RIELLO FULLY EMBRACES THE CONCEPT OF WELL-BEING, TRANSLATING IT INTO A BUSINESS MODEL BASED ON SUSTAINABILITY AND INNOVATION AND ON PRODUCTS THAT STIMULATE THE ENERGY TRANSITION.



**TECHNOLOGY** THAT RESPECTS THE **ENVIRONMENT** 



**ENERGY SAVINGS** 



**SUSTAINABILITY** 



**WELL-BEING** & ENVIRONMENT

To handle the European and worldwide decarbonisation goals, Riello has strengthened its Riello 4 Green program that defines its environmental sustainability focus in two areas:



products and how they are designed

linked to production, the characteristics of the

Riello is aware of the role that a brand can and must have when it comes to consumption habits; that's why it wants to be a messenger for the efficient use of resources in the production context. All Riello's production sites in Italy, in fact, are powered by renewable energy and the company has adopted practices and technologies to boost energy efficiency. Painstaking product design focuses on the integration of various energy sources and the reduction of the environmental impact, turning towards alternative sources such as hydrogen and biofuels.



This goes hand in hand with the development of high-efficiency technologies and smart control systems (based on the potential of the IoT) that enable consumption to be reduced thanks to intuitive remote control tailored to the customer's needs. The result? Benefits for the consumer, in economic terms, but above all benefits for the ecosystem.

Because active responsibility has to be shared responsibility.

### PROFESSIONAL GROWTH AND DEVELOPMENT

# TRAINING



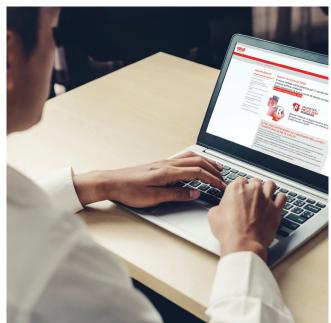
TRAINING IS ONE OF RIELLO'S STRENGTHS:
IT HAS ALWAYS BEEN AN INTEGRAL PART OF ITS BUSINESS AND A
DISTINCTIVE COMPONENT RECOGNISED BY THE MARKET FOR ITS
CONTINUITY AND CONSISTENCY.



Riello has an ongoing training process to transfer its know-how both to consultants and to market operators. It involves technical update meetings and specific training courses intended to foster the professional growth of the people Riello works with. Professionalism, skills and reliability are made available to the supply chain every single day, to promote a comprehensive knowledge of next generation products and system solutions. For Riello, training also means being aware of legislative developments and being able to interpret their evolution in advance. The company's pre-sales and training structure is

ready to provide constant support and the best refresher courses to its customers, so they can address a rapidly changing market. The Angiari training centre is a tangible example of the importance of training for Riello. Consisting of classrooms and fully fitted-out labs, it provides theory and hands-on training using the very latest learning systems.





AT A DISTANCE, NOT DISTANT

# **WEBINARS**

A FULL CALENDAR OF VIRTUAL MEETINGS, TO KEEP UP-TO-DATE ABOUT LEGISLATIVE DEVELOPMENTS AND TO FIND OUT ABOUT SOME OF RIELLO'S MOST INNOVATIVE SOLUTIONS.
FOR BOTH INSTALLERS AND DESIGNERS.

To ensure the utmost attention to the constant reworking of daily life and to aid Italian professionals, Riello has set up a digital training program via the web.

Each of the courses of this full schedule of training events can, in fact, be followed online.





# THANKS TO HI, COMFORT, RIELLO'S NEW PLATFORM OF IOT SOLUTIONS, MANAGING COMFORT HAS NEVER BEEN SO EASY

The end user can manage the temperature in the home using the HI, COMFORT T100 thermostat and connecting the new HI, COMFORT app to it via a Wi-Fi box. The new app can be downloaded free of charge for Android and iOS systems, and used to monitor the status, set the DHW temperature and define the boiler settings simply and safely, from a distance. In addition, HI, COMFORT T100 is quick and easy to install and, even if it's replacing an old thermostat, no work is needed on the electrical system of the home. With battery power, HI, COMFORT T100 can also take advantage of wireless installation if the system is fitted with a radiofrequency receiver.

hi-comfort.com

The HI, COMFORT platform, bringing together the latest Riello boilers with smart thermostats and an app, is the beginning of a new generation of comfort.

### HI, COMFORT T100

- A command unit complete with backlit display for managing domestic comfort even from a distance, via a smartphone or tablet
- A modern, user-friendly app with innovative functions
- Advanced remote control of Riello boilers, and standard ON/OFF remote control of all other boilers
- Versatile communication: ON/OFF and OTBus, both wired and wireless



USER-FRIENDLY INTERFACE



QUICK, EASY INSTALLATION



WIDE COMPATIBILITY



HIGH SAFETY STANDARDS

# HI, COMFORT K100

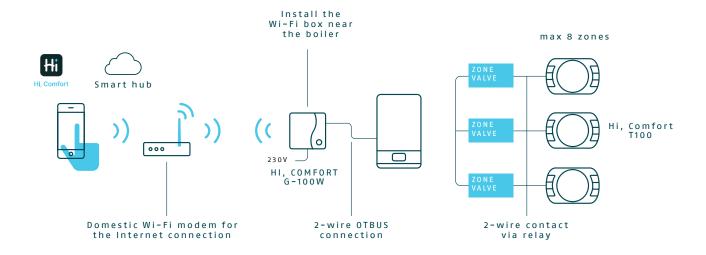
Apart from HI, COMFORT T100, the new HI, COMFORT K100\* smart key will soon be available too. It also connects to the HI, COMFORT app which, linked directly to the boiler, makes it "smart" without having to replace the thermostat.

\*(Availability during 2022)

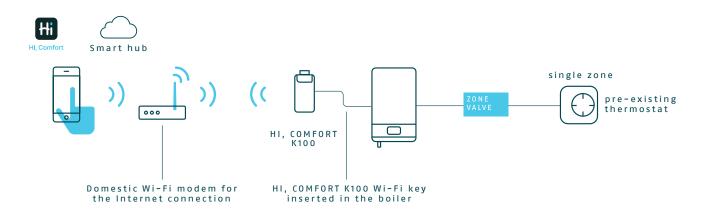




### ADVANCED SMART CONTROL



### STANDARD SMART CONTROL



### PRO WALL-HUNG HYBRID SYSTEM

# A HIGH-EFFICIENCY HYBRID SYSTEM THAT GUARANTEES COMFORT AND A LOW ENVIRONMENTAL IMPACT

RIELLO'S NEW HYBRID SYSTEM, UP TO 112 KW, COMBINES THE VERSATILITY OF THE CONDEXA PRO WALL-HUNG BOILER WITH THE EFFICIENCY OF THE FAMILY ES SPLIT HYDRONIC HEAT PUMP.

The multi-energy hybrid system for heating and DHW production, conceived for the energy requalification of medium- and high-output heating plants and developed and tested by Riello, combines the high-efficiency combustion technology of the boiler with that of the hydronic heat pump, creating a system that offers top performance in terms of efficiency and comfort as well as a reduced environmental impact.

The system is made up of 3 main components:

- CONDEXA PRO wall-hung condensing boiler guaranteeing excellent performance (single installation)
- FAMILY ES split air-water heat pump with an internal wall-hung unit; a compact, efficient and quiet solution
- REC 101 system control panel

### SYSTEM CHARACTERISTICS AND ADVANTAGES:

- «Factory made» solution
- A system that can work with high-temperature terminals thanks to the in-series operation of the generators
- System manager with advanced control logics aimed at ensuring the maximum system efficiency, favouring the most efficient heat source
- The ideal system in a variety of application contexts, both residential and professional
- · Excellent system configurability
- Hydraulic layouts validated in the lab to ensure the optimum efficiency of the hybrid system
- Possibility to take advantage of the incentive mechanisms set up (50%/65% tax relief, "Conto Termico" and "Superbonus 110%")





In 2021, the multi-energy hybrid system won the Archiproducts Design Awards 2021, admired for its concept and design and obtaining the "Special mention 2021 for sustainability".





RIELLO'S NEW RANGE OF WALL-HUNG CONDENSING BOILERS EMBODIES THE COMPANY'S CONSTRUCTION PHILOSOPHY: TOP PERFORMANCE, EASY USE AND MAINTENANCE, DESIGNED TO ADAPT TO DIFFERENT INSTALLATION REQUIREMENTS, AND WITH AN EYE TO TOMORROW.

The flagship model, FAMILY, is the perfect blend of comfort and sustainability. The top of the Riello wall-hung range is the result of a new way of thinking about energy: efficient, hybrid, eco-sustainable. FAMILY provides optimum comfort in both heating and DHW mode, along with high efficiency and reduced consumption. It's designed as "hybrid ready" - in other words, able to directly manage the components of a multi-energy system effectively and efficiently, without the need for any extra accessories.

The FAMILY range is designed to work with mixtures of natural gas and hydrogen (up to 20%) - the first step towards the environmental sustainability goals and the decarbonisation process launched by the European Union. The boilers of today, for the generations of tomorrow.





DIGITAL TOUCHPAD INTERFACE



HOT WATER TEMPERATURE STABILITY



LOW NOISE OPERATION



HIGH FEEICIENC



COMPACT DESIGN



EASY TO USE



FOR A SUSTAINABLE FUTURE



BEYOND THEIR APPLICATION

# HIGH EFFICIENCY REDUCED ENVIRONMENTAL IMPACT



Riello has set up an R&D and operating program to provide products that ensure high energy efficiency and, at the same time, limit the impact on the environment.

TAU N is the range of condensing gas boilers with a high water content, designed to meet the modern needs of centralised heating in large residential, commercial or industrial areas; models

up to 3.0 MW available. A range that represents the pioneering nature of Riello's research, already geared up for the evolution of tomorrow: in fact the TAU N models are tested as "Hydrogen Combustion Ready".

TAU N is the base element of a wider range of high-performance integrated systems tested in the Riello laboratories.

# **SYMBOLS**

TO MAKE ITS PRICE LIST CATALOGUE A TOOL THAT'S SIMPLE TO READ AND EASY TO UNDERSTAND, RIELLO HAS STARTED USING THE FOLLOWING SELF-EXPLANATORY SYMBOLS.



The product falls within the sphere of the ErP "Energy Related Product" Directive, and complies with the relative requisites.



The energy class of the specific product model.



Low NOx emissions on standard efficiency combustion products.



The quality and performance of this product are Solar Keymark certified.

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### www.riello.com

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HYBRID SYSTEMS WITH MONOBLOC HEAT PUMP

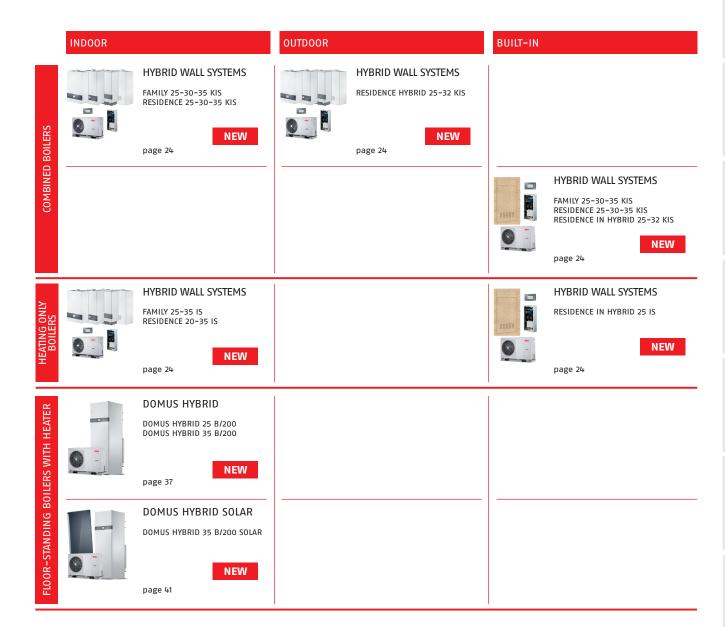
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**HYBRID SYSTEMS WITH SPLIT HEAT PUMP** 

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# HYBRID SYSTEMS WITH MONOBLOC HEAT PUMP





Hybrid system-Wall-hung solutions

# **Hybrid wall systems**

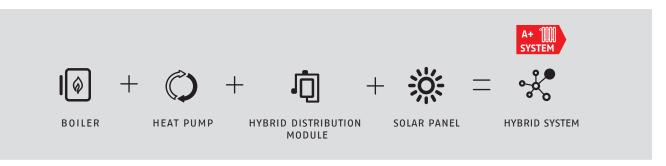




- Heating, cooling and domestic hot water production
- Intelligent management of multiple energy sources: condensing boiler, solar thermal and heat pump
- Large display for setting and monitoring the entire system

A wall-hung hybrid system is a multi-energy hybrid system for heating, summer cooling and domestic hot water production. This system is manufactured by combining three main components together:

- the wall-hung boiler: depending on the installation needs, the choice of the gas generator can be made among boilers from 25 to 35kW, heating only or combined boilers, for wall-hung (indoor or outdoor in partially protected places) or built-in installation. The boilers have a modulation ratio of 1:5 or 1:8, depending on the model, and are all equipped with highefficiency circulators. The system control panel is able to activate the most energy efficient heat source based on climatic conditions, and to manage the system with up to 2 independent hot/cold temperature zones.
- The heat pump: monobloc air-water outdoor type of the NXHM 004-016 series, used for heating, cooling and pre-heating of domestic hot water for domestic use if a DHW heater is present. NXHM 004-016, specific for hybrid systems, is able to communicate with the system intelligence via bus, and is available with 4, 6, 8, 10, 12, 14 and 16 kW power ratings.
- The hydraulic distribution module: the choice can be made between the simple Hbox hydraulic node, and the more flexible BAG³ Hybrid distribution module. Hbox allows you to make a simple hydraulic connection between the two generators, creating a one-way system in which the boiler pumps and the heat pump supply the system. For more complex systems, the BAG³ Hybrid distribution module is available: for indoor recessed or wall-hung installations, or for outdoor recessed installations, in 1-direct, 2-direct or 1-direct and 1-mixed configurations, equipped with low consumption self-modulating circulators (EEI≤0.20). The distribution module also works as hydraulic separator between the generators and the system circuits. The system is set up for connection to a single-coil domestic hot water heater served by heat pump, or to a dual-coil domestic hot water heater served by heat pump and solar thermal system, by installing the diverting valve kit.



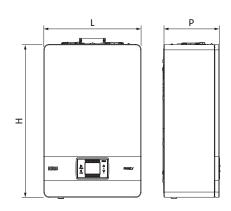
### **WALL-HUNG BOILERS**

### **TECHNICAL DATA**

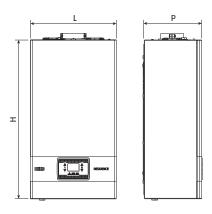
Description	Heat output Heating/Domestic Water	Working	efficiency	Domestic water	Energy efficiency class		Notes	Code
	min-max kW	Pn (50°/30°C) %	30% Pn (rit. 30 °C) %	production ΔT 25° I/min	100	7		
COMBINED VERSION OF HEATING AND INS	TANT SANITARY WATER							
FAMILY 25 KIS	3.6-20.0/3.6-25.0	106.6	109.1	15.1	A	Α	(1)(5)	20187642
FAMILY 30 KIS	4.9-25.0/4.9-30.0	107.5	109.5	18.1	А	А	(1)(5)	20187644
FAMILY 35 KIS	4.9-32.0/4.9-34.6	107.4	109.5	20.1	A	А	(1)(5)	20187645
RESIDENCE 25 KIS	3.6-20.0/3.6-25.0	106.2	108.4	15.1	A	Α	(1)(2)	20139525
RESIDENCE 30 KIS	4.9-25.0/4.9-30.0	106.0	108.1	18.1	A	Α	(1)(2)	20148496
RESIDENCE 35 KIS	4.9-30.0/4.9-34.6	106.9	108.2	20.8	A	Α	(1)(2)	20139527
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RESIDENCE IN HYBRID 32 KIS	3.7-30.0/3.7-32.0	104.7	109.5	18.3	A	Α	(3)	20118749
HEATING ONLY VERSION					`			
FAMILY 25 IS	3.6-20.0/3.6-25.0	106.6	109.1	1	A	_	(1)(5)	20187643
FAMILY 35 IS	4.9-32.0/4.9-34.6	107.5	109.5	1	A	_	(1)(5)	20187646
RESIDENCE 20 IS	3.6-20.0/3.6-20.0	106.2	108.4	-	A	-	(1)(2)	20139526
RESIDENCE 35 IS	4.9-30.0/4.9-34.6	106.9	108.2	_	Α	-	(1)(2)	20139528
RESIDENCE IN HYBRID 25 IS	3.1-20.0/3.1-25.0	105.0	110.0	_	A		(3)	20135128
BUILT-IN INSTALLATION UNIT			·					
BUILT-IN UNIT M							(4)	20082310

- The external probe is not included in the boiler supply, but is available as an accessory with code 1220559. To create a wall-mounted hybrid system, it is necessary to replace the boiler display with the code 20193921. The boiler code includes the hybrid system control panel and the external probe. To be used for Family 25 KIS, Residence 25 KIS and Residence In Hybrid. Compatibility declared with the FAMILY range starting from November 2021.

**OVERALL DIMENSIONS** 



Description	H mm	L mm	P mm	Net weight kg
FAMILY 25 KIS	740	470	275	35
FAMILY 30 KIS	740	470	350	40
FAMILY 35 KIS	740	470	350	40
FAMILY 25 IS	740	470	275	35
FAMILY 35 IS	740	470	350	39



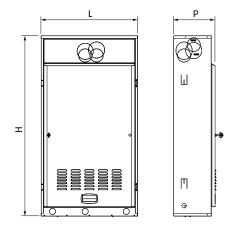
Description	H mm	L mm	P mm	Net weight kg
RESIDENCE 25 KIS	740	420	275	35
RESIDENCE 30 KIS	740	420	350	37
RESIDENCE 35 KIS	740	420	350	37
RESIDENCE 20 IS	740	420	275	34
RESIDENCE 35 IS	740	420	350	36

Height including SRD device: 822 mm

**TERMINAL UNITS** 

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Description	H mm	L mm	P mm	Net weight kg
RESIDENCE HYBRID 25 KIS	872	553	275	44
RESIDENCE HYBRID 32 KIS	872	553	275	46



Description	H mm	L mm	P mm	Net weight kg
RESIDENCE IN HYBRID 25 KIS	785	553	268	42
RESIDENCE IN HYBRID 32 KIS	785	553	268	43
RESIDENCE IN HYBRID 25 IS	785	553	268	40
BUILT-IN UNIT M	1223	654	281	21

# **MATCHING HEAT PUMPS**

# **TECHNICAL DATA**

Description		Hea	nting			Cooling			Electrical	Energy	Code		
	Floo	or (1)	Fan co	oils (2)	Floo	Floor (3) Fan		Floor (3)		oils (4)	supply V/Ph/Hz	efficiency class	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)			
AIR-WATER MONOBLO	OC SINGLE PI	HASE											
NXHM 004	4.20	5.10	4.30	3.80	4.50	5.50	4.70	3.45	230/1/50	A++	20191936		
NXHM 006	6.35	4.95	6.30	3.70	6.50	4.80	7.00	3.00	230/1/50	A++	20191940		
NXHM 008	8.40	5.15	8.10	3.85	8.30	5.05	7.45	3.35	230/1/50	A++	20191942		
NXHM 010	10.00	4.95	10.00	3.75	9.90	4.55	8.20	3.25	230/1/50	A++	20191943		
NXHM 012	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	230/1/50	A++	20191944		
NXHM 014	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	230/1/50	A++	20191945		
AIR-WATER MONOBLO	OC THREE-PI	HASE											
NXHM 012T	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	400/3/50	A++	20191947		
NXHM 014T	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	400/3/50	A++	20191948		

- The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

  (1) Heating: delivery water temperature 35 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u.

  (2) Heating: delivery water temperature 45 °C with gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u.

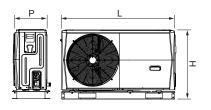
  (3) Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C.

  (4) Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C.

  (5) Seasonal energy efficiency class for average climate zone for 55 °C delivery temperature.

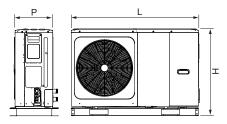
**OVERALL DIMENSIONS** 

### NXHM 004-006



Description	H mm	L mm	P mm	Net weight kg
NXHM 004	792	1295	429	98
NXHM 006	792	1295	429	98
NXHM 008	945	1385	526	121
NXHM 010	945	1385	526	121
NXHM 012/012T	945	1385	526	144
NXHM 014/014T	945	1385	526	144

### NXHM 008-014



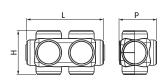
### MATCHING HYBRID DISTRIBUTION MODULES

### **TECHNICAL DATA**

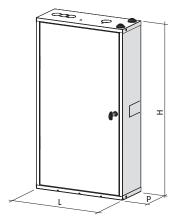
Description	Zone management	Electrical power supply V/Ph/Hz	Maximum power absorbed W	Notes	Code
DISTRIBUTION MODULES WITHOUT SEPARATOR					
HBOX - 1D HYBRID DISTRIBUTION MODULE	1 direct zone	_	_	(1)	20165227
DISTRIBUTION MODULES WITH SEPARATOR					
BAG <sup>3</sup> HYBRID 1D	1 direct zone	230/1/50	57	(2)(5)	20130805
BAG <sup>3</sup> HYBRID 2D	2 direct zone	230/1/50	114	(2)(5)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(3)(5)	20130807
IN-WALL INSTALLATION BOX	-	-	_	(4)	20130808

- Can only be combined with NXH 005-007 heat pumps code 20161608 and 20161610.
  Equipped as standard with limit thermostat for low temperature systems.
  Mixed zone equipped as standard with limit thermostat for low temperature systems.
  Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG³ HYBRID.
  Supplied without in-wall installation box. (1) (2) (3) (4) (5)

### **OVERALL DIMENSIONS**

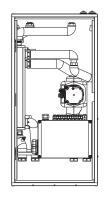


Description	H	L	P	Net weight
	mm	mm	mm	kg
HBOX - 1D HYBRID DISTRIBUTION MODULE	107	187	92	0,9

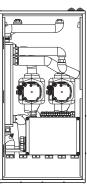


Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 1D	797	400	160	17
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

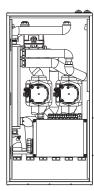
BAG<sup>3</sup> HYBRID 1D



BAG3 HYBRID 2D



BAG3 HYBRID 1D+1M



### **ACCESSORIES**

Description	Notes	Code
HBOX adjustable bypass valve	(1)	20182807

(1) Mandatory accessory when using HBOX - 1D hybrid distribution module code 20165227 with variable flow systems.

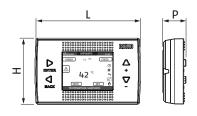
### **REC10MH MANAGEMENT CONTROL**

### **TECHNICAL DATA**

Description	Electrical power supply V/Ph/Hz	Notes	Code
REC10MH MANAGEMENT CONTROL	230/1/50	(1)	20193921

(1) Already included in Residence Hybrid and Residence In Hybrid.

### **OVERALL DIMENSIONS**



Description	H	L	P	Net weight
	mm	mm	mm	kg
REC10MH MANAGEMENT	90	146	32	0,15

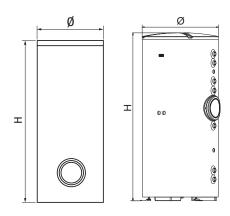
### **MATCHING SANITARY TANKS**

### **TECHNICAL DATA**

Description	Usable volume I	Lower coil exchange surface (m²)	Upper coil exchange power (kW)*	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy class	Notes	Code
RBC 200 1S	207	1.38	-	99	10	58	В	(1)	20124168
RBC 300 1S	305	1.7	-	99	10	68	В	(1)	20124169
RBS 200 2S	208	0,7	16.1	99	10	62	В	(2)	20116675
RBS 300 2S	301	1,0	23	99	10	69	В	(2)	20116335
7200 300 HP	263	4.0	-	99	10	85	С	(1)	4383500
7200 500 HP	470	6.0	-	99	10	112	С	(1)	4383501

- With  $\Delta t$ = 20°C and primary temperature of 80°C.
- Single-coil heater for heat pump. Double-coil solar heater.

### **OVERALL DIMENSIONS**



Description	H mm	ø mm	S (*) mm	Net weight kg
RBC 200 1S	1338	604	52	78
RBC 300 1S	1838	604	52	103
RBS 200 2S	1338	604	50	86
RBS 300 2S	1838	604	50	108
7200 300 HP	1615	600	50	119
7200 500 HP	1690	750	50	166

Dimensions and weight with insulation.

(\*) Insulation thickness.

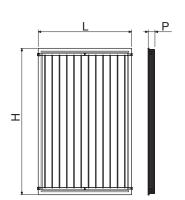
# **MATCHING SOLAR COLLECTORS**

### **TECHNICAL DATA**

Description	Collecto	r surface	Values refe	rred to the op	ening area	Stagnation	Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C		
RPS 25/2 EVO	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2,30	2,14	0,802	4,28	0,0064	200	(1)	20127137

(1) The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page 223.

### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg			
RPS 25/2 EV0	2004	1195	86	41.5			
RPS 25/4	2004	1195	85	44			

### **WALL-MOUNTED BOILER ACCESSORIES**

Description	Notes	Code
FAMILY BOILER		
/ertical connection manifold kit Ø60/100 mm	(1)	20129174
00° boiler start bend kit Ø60/100 mm	(2)	20129172
(it with system and gas taps for recessed installation (only model 25 KIS)		20137668
Condensate booster pump kit		20097192
mmersion probe for remote storage cylinder (for heating only version)		1220599
Compact magnetic filter	(3)	20191517
Compact polyphosphate doser kit	(3)	20191518
Kit for managing second pump or zone valves		20062614
Adjustable splitter device kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed twin system Ø80 mm kit		20129765
Fixed twin system Ø80 mm kit		20129175
Telescopic wall collector Ø60/100 mm		20129176
/ertical collector Ø60/100 mm		20129177
Splitter device kit B23 Ø80 mm for in-wall installation box		20129768
Adapter kit B23 Ø80 mm		20129769
External probe		1220559
Anti-freeze resistors kit for combi versions		20193278
Anti-freeze resistors kit for heating only versions		20193279
RESIDENCE BOILER		
Vertical connection manifold kit Ø60/100 mm	(1)	20129174
90° boiler start bend kit Ø60/100 mm	(2)	20129172
Kit with system and gas taps for recessed installation (only model 25 KIS)	(=/	20137668
Connection kit with heating system, domestic water and gas cocks (for KIS models)		20133516
Connection kit with heating system and gas cocks (for IS models)		20133517
Connection kit with domestic water and gas cocks (for KIS models)		20132005
Connection kit with gas cock (for IS models)		20133386
High head circulator		20105883
Condensate booster pump kit		20097192
mmersion probe for remote storage cylinder (for heating only version)		1220599
Compact magnetic filter	(3)	20191517
Compact magnetic inter	(3)	20191517
Adjustable splitter device kit from Ø60/100 mm to Ø80/80 mm	(5)	20134830
Fixed twin system Ø80 mm kit		20129765
Fixed twin system Ø80 mm kit		20129175
Telescopic wall collector Ø60/100 mm  /ertical collector Ø60/100 mm		20129176
		20129177
Splitter device kit B23 Ø80 mm for in-wall installation box		20129768
Adapter kit B23 Ø80 mm		20129769
External probe		1220559
Anti-freeze resistors kit for combi versions		20145304
Anti-freeze resistors kit for heating only versions		20145305
RESIDENCE HYBRID BOILER		
Open-air installation kit		20011638
Antifreeze heater kit		20164833
Condensate booster pump kit		20097192
Nall-mounted hydraulic fittings kit		20130639
Heating system tap kit		4047252
Clapper kit		20100893
LPG conversion kit (only for per 25 kW)		20102669
PG conversion kit (only for 32 kW)		20102674
Propane air transformation kit (only for 25 kW)		20102673
RESIDENCE IN HYBRID BOILER		
Door kit for built-in	(4)	4047250

Description	Notes	Code
Wall fittings kit		4047255
External probe		1220559
Antifreeze heater kit KIS version		20164827
Antifreeze heater kit IS version		20164828
Condensate booster pump kit		20097192
Immersion probe for remote storage cylinder (for heating only version)		1220599
LPG conversion kit Residence Externa Condens 25 KIS-20 IS		20102669
LPG conversion kit Residence Externa Condens 32 KIS		20102674
Propane air transformation kit Residence Externa Condens 25 KIS		20102673
Clapper kit		20162838

- Code required in case of vertical discharge with 60/100 mm flue. Accessory already included in kit 20129177.

  Code required in case of horizontal discharge with flue Ø60/100 mm. Accessory already included in kits 20129175 and 20129176.
- (1) (2) (3) (4)
- Available from November 2021. For retrofitting on old caissons without doors.

### **HEAT PUMP ACCESSORIES**

Description	Notes	Code
NXHM HEAT PUMPS		
7000 ACI 60 PLUS		20090056
7000 ACI 120 PLUS		20082450
50 litre inertial buffer tank	(1)	20171999
1" Y water filter	(2)	20175281

- The inertial tank cannot be installed horizontally below the heat pump.

  The water filter is included with the NXHM heat pump. If necessary, it should only be used for NXHM 004 and 006 models.

### **ACCESSORIES HYBRID DISTRIBUTION MODULES**

Description	Notes	Code
HYBRID DISTRIBUTION MODULES		
Cock kit on system and heat pump side		20131752
Photovoltaic system input card	(1)	20132409
Diverting valve kit for BAG <sup>3</sup> HYBRID		20131755
Diverting valve kit for HBOX		20168920
Solar interface kit		20131756

To be used only if the diverting valve (code 20131755) is not present in BAG3 HYBRID configuration.

### **DOMESTIC TANKS MODULES**

Description	Notes	Code
DOMESTIC TANKS MODULES		
Solar heat exchanger 0.8 m² (7200 300 HP)		4383504
Solar heat exchanger 1,2 m² (7200 500-800 HP)		4383505
Solar mixing diverting valve kit	(1)	20025113

(1) Mandatory in case of domestic water heater installation and KIS model boiler.

### **SOLAR COLLECTOR MODULES ACCESSORIES**

Description	Notes	Code
SOLAR COLLECTORS		
RSS R solar hydraulic unit	(1)	20116168

(1) The RSS R return-only solar hydraulic unit and the solar interface kit (code 20131756) must always be ordered together.

### **SOLAR THERMAL ACCESSORIES**

Description	Notes	Code
SOLAR THERMAL		
Solar collector probe kit	(1)	20008787
Manual solar degasser kit	(2)	20026577
Weld-in connection kit (includes: 2 weld-in connectors for connection to RPS 25/4 collectors and 2 connectors for connection to RSS hydraulic unit or directly to the solar heater)		20132142
Connection kit for stainless steel tube (includes: 2 connectors for connection to RPS 25/4 collectors and 2 connectors for connection to RSS hydraulic unit or directly to the solar heater)		20132143
15 m flexible DN16 stainless steel tube kit (includes: double corrugated stainless steel pipe for delivery and return, cable for solar probe and suitable insulation for solar applications)		4383254
20 m flexible DN16 stainless steel tube kit (includes: double corrugated stainless steel pipe for delivery and return, cable for solar probe and suitable insulation for solar applications)		4383255
5 kg propylene glycol kit (concentrated heat transfer fluid, with corrosion inhibitors, for flat collectors)		4383085
10 kg propylene glycol kit (concentrated heat transfer fluid, with corrosion inhibitors, for flat collectors)		4383059
18-Litre SUN expansion reservoir (specific for solar applications, complete with bracket, ¾" connection)		4383052
24-Litre SUN expansion reservoir (specific for solar applications, complete with bracket, ¾" connection)		4383053

The solar interface kit code 20131756 already contains the solar probe.

### **Hi, COMFORT CONTROLS**

Room controls with capability of management through APP

Drawing	Description	Notes	Code
20.0	Hi, Comfort T100 Wi-Fi	(1)	20193354
208 g	Hi, Comfort T100	(2)	20193352
A, Gendari	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

Use one for each set of manifolds fitted in the highest position.

<sup>(1)</sup> With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
(2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

### SYSTEM CONFIGURABILITY

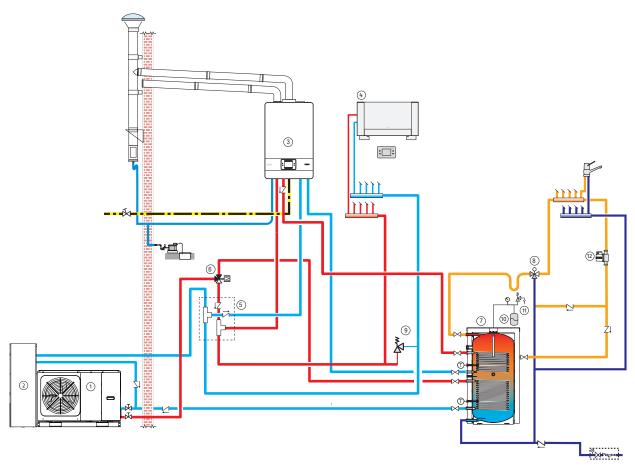
Description	scription Code Built-in unit agement control Heat pumps possible combinations						Hyd	Hydraulic distribution							
		Built-in unit M	RECIOMH management control	400 MHXN	NXHM 006	NXHM 008	NXHM 010	NXHM 012	NXHM 014 (3)	NXHM 012T	NXHM 014T	HBOX – 1D hybrid distribution module (1)	BAG <sup>3</sup> HYBRID 1D (2)	BAG³ HYBRID 2D (2)	BAG <sup>3</sup> HYBRID 1D+1M (2)
		20082310	20193921	20191936	20191940	20191942	20191943	20191944	20191945	20191947	20191948	20165227	20130805	20130806	20130807
COMBINED VERSION OF HEATING AND INST	COMBINED VERSION OF HEATING AND INSTANT SANITARY WATER														
FAMILY 25 KIS	20187642	•	(4)	•	•	•						•	•	•	•
FAMILY 30 KIS	20187644		(4)	•	•	•	•	•		•		•	•	•	•
FAMILY 35 KIS	20187645		(4)	•	•	•	•	•	•	•	•	•	•	•	•
RESIDENCE 25 KIS	20139525	•	•	•	•	•						•	•	•	•
RESIDENCE 30 KIS	20148496		•	•	•	•	•	•		•		•	•	•	•
RESIDENCE 35 KIS	20139527		•	•	•	•	•	•	•	•	•	•	•	•	•
RESIDENCE HYBRID 25 KIS	20130398		(4)	•	•	•						•	•	•	•
RESIDENCE HYBRID 32 KIS	20130399		(4)	•	•	•	•	•	•	•	•	•	•	•	•
RESIDENCE IN HYBRID 25 KIS	20118748	•	(4)	•	•	•						•	•	•	•
RESIDENCE IN HYBRID 32 KIS	20118749	•	(4)	•	•	•						•	•	•	•
HEATING ONLY VERSION															
FAMILY 25 IS	20187643		(4)	•	•	•						•	•	•	•
FAMILY 35 IS	20187646		(4)	•	•	•	•	•	•	•	•	•	•	•	•
RESIDENCE 20 IS	20139526		•	•	•	•						•	•	•	•
RESIDENCE 35 IS	20139528		•	•	•	•	•	•	•	•	•	•	•	•	•
RESIDENCE IN HYBRID 25 IS	20135128	•	(4)	•	•	•						•	•	•	•

Can only be combined with NXHM 004-006-008 heat pumps.
Combine the flush-mounted box code 20130808 only with BAG<sup>3</sup> HYBRID code 20130805, 20130806 and 20130807.
The configuration of the hybrid mural system with NXHM 015 is not suitable for the request for a contribution provided for by the thermal account or for the request for a tax incentive provided for by Ecobonus.
Check when ordering if the boiler is already equipped with a REC10MH control compatible with NXHM. (1) (2) (3)

**TERMINAL UNITS** 

### **EXAMPLES OF PLANT WITH HYBRID WALL SYSTEM**

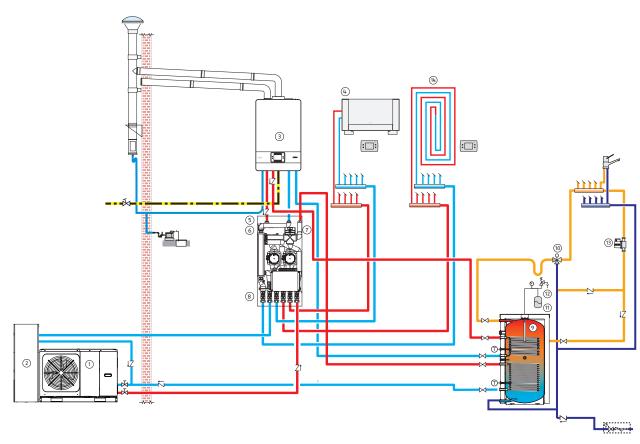
### BIVALENT HEATING, COOLING AND DHW PRODUCTION SYSTEM COMBINED WITH HEAT PUMP AND BOILER



- Heat pump
- Hot/cold inertial storage kit 2
- 3 Wall-hung boiler
- 4 Fan coil
- HBOX 1D Hybrid distribution module
- DHW diverter valve kit for heat pump

- 7 Heater
- 3/4 "thermostatic mixer 8
- 9 Adjustable by-pass valve
- Expansion vessel 10
- Safety valve 11
- DHW recirculation pump

### BIVALENT HEATING, COOLING AND DHW PRODUCTION SYSTEM COMBINED WITH HEAT PUMP AND MULTI-ZONE **BOILER**

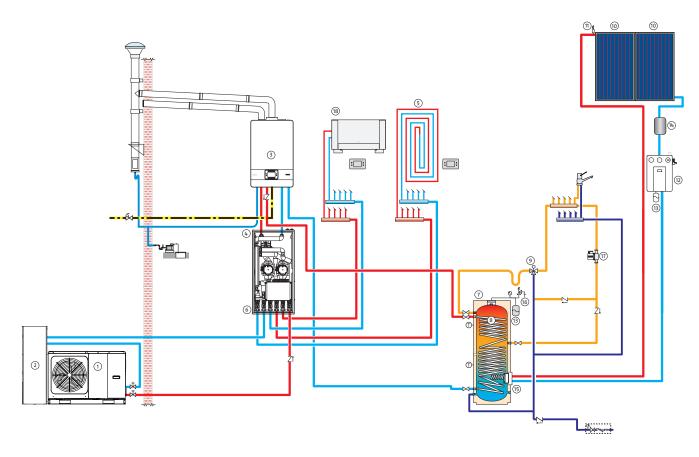


- Heat pump Hot/cold inertial storage kit 2
- 3 Wall-hung boiler
- Fan coil
- 5 BAG<sup>3</sup> HYBRID
- 6 In-wall installation box
- BAG<sup>3</sup> HYBRID Diverting valve kit

- Tap kit for BAG3 HYBRID system and heat pump side 8
- 9 Heater
- 3/4 "thermostatic mixer 10
- 11 **Expansion vessel**
- 12
- Safety valve DHW recirculation pump 13
- Underfloor heating system

**RIELLO** 

### BIVALENT HEATING, COOLING AND DHW PRODUCTION SYSTEM COMBINED WITH SOLAR THERMAL, HEAT PUMP **AND BOILER**



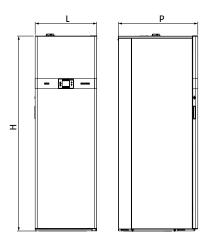
- 1
- Heat pump Hot/cold inertial storage kit 2
- 3 Wall-hung boiler
- BAG<sup>3</sup> HYBRID
- Underfloor heating system
  Tap kit for BAG3 HYBRID system and heat pump side 6
- DHW heater 7
- DHW boiler coil
- 3/4 "thermostatic mixer
- Solar collector

- Manual solar degasser kit Solar hydraulic unit 11
- 12
- 13 Expansion vessel
- 14 Intermediate solar tank
- Solar exchanger 15
- Safety valve 16
- 17 DHW recirculation pump
- Fan coil

Hybrid system-Floor standing solutions

### **Domus Hybrid**





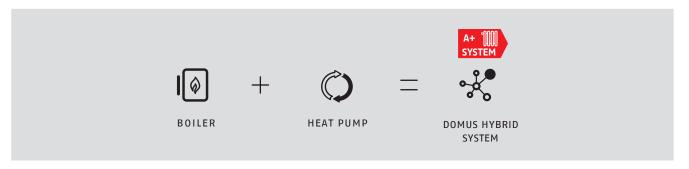


- Heating, cooling and domestic hot water production
- Intelligent management of two energy sources: condensing boiler and heat pump
- Possibility to control up to 3 indoor zones

Description	H mm	L mm	P mm	Net weight kg
Domus Hybrid 25 B/200	1900	600	775	212
Domus Hybrid 35 B/200	1900	600	775	212

Domus Hybrid is a multi-energy hybrid system for heating, summer cooling and domestic hot water production, consisting of a column unit housing a condensing gas boiler, a 200 litre heater with double coil and a control panel with system intelligence. Domus Hybrid can be combined with NXHM series air/water monobloc heat pumps for hybrid systems. All components of the hybrid system interact with each other via communication Modbus.

- Condensing boiler inside the column unit, available with the 2 powers of 25 and 35 kW with condensing heat exchanger, 1:10 modulation ratio and "Range Rated" certification that allows the nominal power to be adjusted to the actual heat demand of the system.
- Column unit equipped with hydraulic separator, diverting valve for domestic hot water production, 200 litre double coil
  heater, prearranged for control of a direct zone through a low consumption self-modulating circulator. Up to 2 additional
  zone control kits can be installed inside the column unit, each one with low-consumption self-modulating circulator, in
  order to manage up to 3 independent temperature zones.
- Control panel for the entire system with large, intuitive and descriptive display; the panel is the system intelligence, capable
  of activating the most energy-efficient heat source. It can be removed from the column unit and installed inside the house.
- Intelligent system filling that can be activated from system control panel.
- It can be combined with a monobloc air-water heat pump equipped with Modbus communication with the system intelligence, available with 4, 6, 8, 10, 12, 14 and 16 kW power.



### **HYBRID FLOOR-STANDING BOILER**

### **TECHNICAL DATA**

Description	Heat output Heating/Domestic water min-max kW	Working efficiency  Nominal output (50°/30°C) output (ret. 30 °C) %		Domestic water production ∆T 25° I/min	Fuel	- 03	Energy efficiency class		Code
VERSION WITH SEALED CHAMBER AN	D FORCED DRAUGHT-HEATIN	IG AND DOMESTIC	HOT WATER PROD	UCTION					
Domus Hybrid 25 B/200	2,5-25,0	102,8	106,5	14,3	MTN	А	A	(1)	20120778
Domus Hybrid 35 B/200	3,5-35,0	103,5	108,7	17,8	MTN	А	A	(1)	20120779

<sup>(1)</sup> The code does not include the heat pump; to be ordered separately according to actual needs.

### **MATCHING HEAT PUMPS**

### **TECHNICAL DATA**

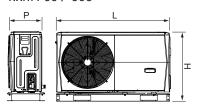
Description		Hea	nting			Coc	oling		Electrical	Energy	Code
	Floo	or (1)	Fan co	oils (2)	Floo	Floor (3) Fan coils (4)			supply V/Ph/Hz	efficiency class	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)	
AIR-WATER MONOBL	OC SINGLE PI	HASE									
NXHM 004	4.20	5.10	4.30	3.80	4.50	5.50	4.70	3.45	230/1/50	A++	20191936
NXHM 006	6.35	4.95	6.30	3.70	6.50	4.80	7.00	3.00	230/1/50	A++	20191940
NXHM 008	8.40	5.15	8.10	3.85	8.30	5.05	7.45	3.35	230/1/50	A++	20191942
NXHM 010	10.00	4.95	10.00	3.75	9.90	4.55	8.20	3.25	230/1/50	A++	20191943
NXHM 012	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	230/1/50	A++	20191944
NXHM 014	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	230/1/50	A++	20191945
NXHM 016	15.90	4.50	16.00	3.50	14.20	3.61	14.00	2.50	230/1/50	A++	20191946
AIR-WATER MONOBL	OC THREE-PH	HASE									
NXHM 012T	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	400/3/50	A++	20191947
NXHM 014T	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	400/3/50	A++	20191948
NXHM 016T	15.90	4.50	16.00	3.50	14.20	3.61	14.00	2.50	400/3/50	A++	20191949

The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

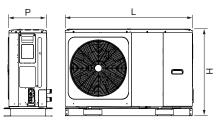
- Heating: delivery water temperature 35 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Heating: delivery water temperature 45 °C with gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Seasonal energy efficiency class for average climate zone for 55 °C delivery temperature.
- (1) (2)

### **OVERALL DIMENSIONS**

### NXHM 004-006



### NXHM 008-016



Description	H mm	L mm	P mm	Net weight kg
NXHM 004	792	1295	429	98
NXHM 006	792	1295	429	98
NXHM 008	945	1385	526	121
NXHM 010	945	1385	526	121
NXHM 012/012T	945	1385	526	144
NXHM 014/014T	945	1385	526	144
NXHM 016/016T	945	1385	526	144

### **ZONE MANAGEMENT**

1 Direct zone as standard in the boiler

Zone management	Additional zones kit
1 direct zone + 1 mixed zone	20093831
1 direct zone + 2 mixed zones	2 x 20093831
2 direct zones	20093833
3 direct zones	2 x 20093833
2 direct zones + 1 mixed zone	20093831 + 20093833

### **ACCESSORIES**

Description	Notes	Code
DOMUS HYBRID		
Direct hybrid zone kit		20093833
Mixed hybrid zone kit		20093831
Boiler control panel cover kit (with release button)		20124351
REC10H control		20124352
Limit thermostat for low-temperature systems		20085223
Domestic water recirculation kit with circulator		20084749
Heating system and domestic water shut-off cock kit		20084750
Installation template kit		20106844
Condensate booster pump kit		20097192
LPG conversion kit (25 kW)		20104217
LPG conversion kit (35 kW)		20104215
NXHM HEAT PUMPS		
50 litre inertial buffer tank		20171999
1" Y water filter	(1)	20175281

<sup>(1)</sup> The water filter is included with the NXHM heat pump. If necessary, it should only be used for NXHM 004 and 006 models.

### **Hi, COMFORT CONTROLS**

Room controls with capability of management through APP

	True capability or management amougn Art		
Drawing	Description	Notes	Code
A COMPA	Hi, Comfort T100 Wi-Fi	(1)	20193354
20.80	Hi, Comfort T100	(2)	20193352
N, Garden	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

 <sup>(1)</sup> With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
 (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

### BASIC LAYOUT PURELY FOR ILLUSTRATIVE PURPOSES: COOLING ALSO POSSIBLE USING FAN COIL

Domus Hybrid system priority logics

In domestic hot water production:

- Heat pump (only if with favourable outdoor temperature conditions and with the possibility of limiting its operation in time slots chosen by the user according to preset usage profiles)
- 2) Boiler

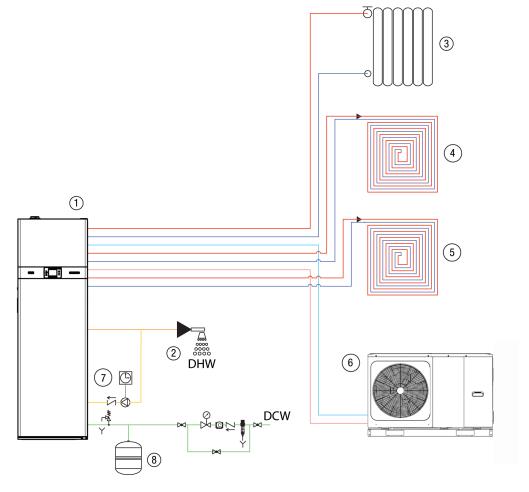
**RIELLO** 

In heating mode:

- Heat pump (only in "winter" and only if the outdoor temperature is favourable) 1)
- 2) Boiler

In cooling mode:

Heat pump (in "summer" only)

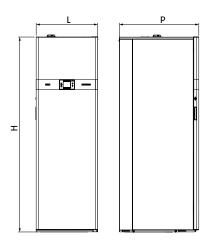


- DOMUS HYBRID condensing floor-standing boiler
- User/domestic hot water 2.
- Direct zone/high temperature 3.
- 4. Mixed zone/low temperature
- Mixed zone/low temperature
- Heat pump
- Domestic water recirculation (optional accessory that can be installed on the boiler, consisting of a circulator with timer) 7.
- 8. 8-litre domestic water expansion reservoir, already included as standard inside the column unit

Hybrid system-Floor standing solutions

### **Domus Hybrid Solar**





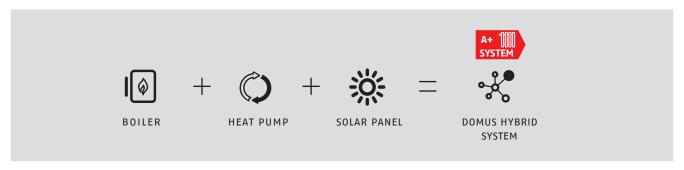


- Heating, cooling and domestic hot water production
- Intelligent management of multiple energy sources: condensing boiler, heat pump and solar thermal
- Possibility to control up to 3 indoor zones

Description	H	L	P	Net weight
	mm	mm	mm	kg
Domus Hybrid 35 B/200 Solar	1900	600	775	212

Domus Hybrid Solar is a multi-energy hybrid system for heating, summer cooling and domestic hot water production, consisting of a column unit housing a condensing gas boiler, a 200 litre heater with double coil and a control panel with system intelligence. Domus Hybrid Solar can be combined with NXHM series air/water monobloc heat pumps for hybrid systems and with solar collectors. All components of the hybrid system interact with each other via communication Modbus.

- Condensing boiler inside the column unit, available with power of 35 kW with condensing heat exchanger, 1:10 modulation ratio and "Range Rated" certification that allows the nominal power to be adjusted to the actual heat demand of the system.
- Column unit equipped with hydraulic compensator, diverting valve for domestic hot water production, 200 litre double coil
  heater, prearranged for control of a direct zone through a low consumption self-modulating circulator. Up to 2 additional
  zone control kits can be installed inside the column unit, each one with low-consumption self-modulating circulator, in
  order to manage up to 3 independent temperature zones.
- Control panel for the entire system with large, intuitive and descriptive display; the panel is the system intelligence, capable
  of activating the most energy-efficient heat source. It can be removed from the column unit and installed inside the house.
- Intelligent system filling that can be activated from system control panel.
- It can be combined with a monobloc air-water NXHM heat pump equipped with Modbus communication with the system intelligence, available with 4, 6, 8, 10, 12, 14 and 16 kW power.
- It can be combined with solar collectors; the hydraulic unit and 18-litre expansion reservoir of solar circuit are already
  included in the Domus Hybrid Solar column.



### **RIELLO**

### **HYBRID FLOOR-STANDING BOILERS**

### **TECHNICAL DATA**

	Heat output Heating/ Domestic water min-		efficiency	water					Classe energetica		Code
	max kW	Nominal output (50°/30°C) %	(50°/30°C) output		AT25° I/min		7				
VERSION WITH SEALED CHAMBER AND FORCED DRAUGHT-HEATING AND DOMESTIC HOT WATER PRODUCTION											
Domus Hybrid 35 B/200 Solar	3,5-35,0	103,5	108,7	17,8	MTN	A	A	(1)	20120780		

<sup>(1)</sup> The code does not include the heat pump; to be ordered separately according to actual needs.

### **MATCHING HEAT PUMPS**

### **TECHNICAL DATA**

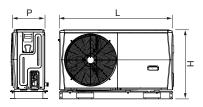
Description		Hea	nting			Coc	oling		Electrical	Energy	Code
	Floo	Floor (1) Fan coils (2)		oils (2)	Floor (3)		Fan co	ils (4)	supply V/Ph/Hz	efficiency class	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)	
AIR-WATER MONOBL	OC SINGLE PI	HASE									
NXHM 004	4.20	5.10	4.30	3.80	4.50	5.50	4.70	3.45	230/1/50	A++	20191936
NXHM 006	6.35	4.95	6.30	3.70	6.50	4.80	7.00	3.00	230/1/50	A++	20191940
NXHM 008	8.40	5.15	8.10	3.85	8.30	5.05	7.45	3.35	230/1/50	A++	20191942
NXHM 010	10.00	4.95	10.00	3.75	9.90	4.55	8.20	3.25	230/1/50	A++	20191943
NXHM 012	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	230/1/50	A++	20191944
NXHM 014	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	230/1/50	A++	20191945
NXHM 016	15.90	4.50	16.00	3.50	14.20	3.61	14.00	2.50	230/1/50	A++	20191946
AIR-WATER MONOBL	OC THREE-PI	HASE									
NXHM 012T	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	400/3/50	A++	20191947
NXHM 014T	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	400/3/50	A++	20191948
NXHM 016T	15.90	4.50	16.00	3.50	14.20	3.61	14.00	2.50	400/3/50	A++	20191949

The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

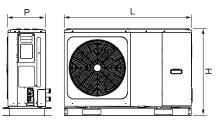
- Heating: delivery water temperature 35 °C with gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Heating: delivery water temperature 45 °C with gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Seasonal energy efficiency class for average climate zone for 55 °C delivery temperature. (1) (2)

### **OVERALL DIMENSIONS**

### NXHM 004-006



### NXHM 008-016



Description	H mm	L mm	P mm	Net weight kg
NXHM 004	792	1295	429	98
NXHM 006	792	1295	429	98
NXHM 008	945	1385	526	121
NXHM 010	945	1385	526	121
NXHM 012/012T	945	1385	526	144
NXHM 014/014T	945	1385	526	144
NXHM 016/016T	945	1385	526	144

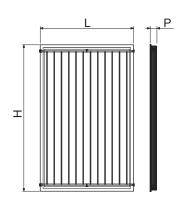
### MATCHING SOLAR COLLECTORS

### **TECHNICAL DATA**

Description	Collecto	r surface	Values refe	erred to the op	ening area	Stagnation	Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C		
RPS 25/2 EV0	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2,30	2,14	0,802	4,28	0,0064	200	(1)	20127137

<sup>(1)</sup> The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page 223.

### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
RPS 25/2 EVO	2004	1195	86	41.5
RPS 25/4	2004	1195	85	44

### **ZONE MANAGEMENT**

1 Direct zone as standard in the boiler

Price Zone as standard in the bone.				
Zone management	Additional zones kit			
1 direct zone + 1 mixed zone	20093831			
1 direct zone + 2 mixed zones	2 x 20093831			
2 direct zones	20093833			
3 direct zones	2 x 20093833			
2 direct zones + 1 mixed zone	20093831 + 20093833			

### **ACCESSORIES**

Description	Notes	Code
DOMUS HYBRID SOLAR		
Direct hybrid zone kit		20093833
Mixed hybrid zone kit		20093831
Boiler control panel cover kit (with release button)		20124351
REC10MH remote control		20193921
Limit thermostat for low-temperature systems		20085223
Domestic water recirculation kit with circulator		20084749
Heating system and domestic water shut-off cock kit		20084750
Installation template kit		20106844
Condensate booster pump kit		20097192
LPG conversion kit (25 kW)		20104217
LPG conversion kit (35 kW)		20104215
NXHM HEAT PUMPS		
50 litre inertial buffer tank		20171999
1" Y water filter	(1)	20175281
SOLAR THERMAL		
Solar collector probe kit		20008787
Manual solar degasser kit	(2)	20026577
Weld-in connection kit (includes: 2 weld-in connectors for connection to RPS 25/4 collectors and 2 connectors for connection to RSS hydraulic unit or directly to the solar heater)		20132142

Description	Notes	Code
Connection kit for stainless steel tube (includes: 2 connectors for connection to RPS 25/4 collectors and 2 connectors for connection to RSS hydraulic unit or directly to the solar heater)		20132143
15 m flexible DN16 stainless steel tube kit (includes: double corrugated stainless steel pipe for delivery and return, cable for solar probe and suitable insulation for solar applications)		4383254
20 m flexible DN16 stainless steel tube kit (includes: double corrugated stainless steel pipe for delivery and return, cable for solar probe and suitable insulation for solar applications)		4383255
5 kg propylene glycol kit (concentrated heat transfer fluid, with corrosion inhibitors, for flat collectors)		4383085
10 kg propylene glycol kit (concentrated heat transfer fluid, with corrosion inhibitors, for flat collectors)		4383059

- The water filter is included with the NXHM heat pump. If necessary, it should only be used for NXHM 004 and 006 models. Use one for each set of manifolds mounted in the highest position.

### **Hi, COMFORT CONTROLS**

Room controls with capability of management through APP

Drawing	Description	Notes	Code
20.0	Hi, Comfort T100 Wi-Fi	(1)	20193354
808 S	Hi, Comfort T100	(2)	20193352
A, Garden	Hi, Comfort G100-W		20193355
en=	Hi, Comfort G100-R		20193356

- (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
   (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

### BASIC LAYOUT PURELY FOR ILLUSTRATIVE PURPOSES: COOLING ALSO POSSIBLE USING FAN COIL

DOMUS HYBRID SOLAR system priority logics:

In domestic hot water production:

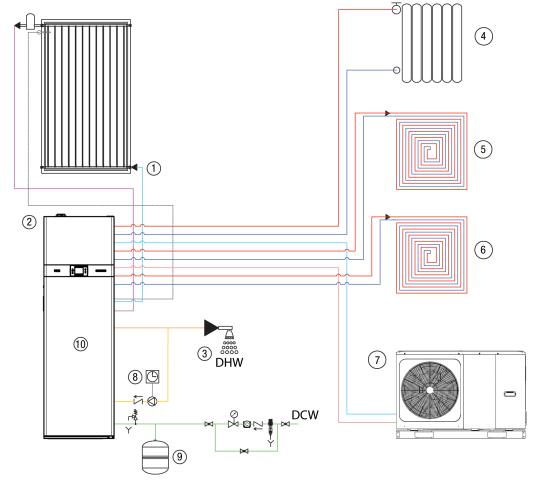
- 1) Solar thermal
- 2) Boiler

In heating mode:

- 1) Heat pump (only in "winter" and only if the outdoor temperature is favourable)
- 2) Boiler

In cooling mode:

1) Heat pump (in "summer" only)



- 1. Solar collector
- 2. Domus Hybrid Solar condensing floor-standing boiler
- 3. User/domestic hot water
- 4. Direct zone/high temperature
- 5. Mixed zone/low temperature
- 6. Mixed zone/low temperature
- 7. Heat pump
- 8. Domestic water recirculation (optional accessory that can be installed on the boiler, consisting of a circulator with timer)
- 9. 8-litre domestic water expansion reservoir, already included as standard inside the column unit
- 10. 18-litre solar expansion reservoir included as standard inside the column unit

### **HYBRID SYSTEMS WITH SPLIT HEAT PUMP**



COMBINED AND HEATING ONLY BOILERS

WALL-HUNG BOILERS

HEATING ONLY BOILERS

RES WALL-HUNG SPLIT HYBRID SYSTEM

NEW

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WALL-HUNG SPLIT HEAT PUMPS



RES FLOOR-STANDING SPLIT HYBRID SYSTEM

NEW

NEW

page 77

FLOOR-STANDING SPLIT HEAT PUMPS



SOLAR RES FLOOR-STANDING SPLIT HYBRID **SYSTEM** 

page 86

HYBRID PRO WALL-HUNG SYSTEM

CONDEXA PRO 57-70 P CONDEXA PRO 90-115

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HYBRID PRO FLOOR-STANDING SYSTEM

TAU UNIT 35-115

page 96

HEATING ONLY BOILERS

**TERMINAL UNITS** 

Hybrid systems-Wall-hung solution

# RES wall-hung split hybrid system

NEW







- Heating, cooling and domestic hot water production
- Intelligent management of multiple energy sources: condensing boiler, solar thermal and heat pump
- Large display for setting and monitoring the entire system

A wall-hung hybrid system is a multi-energy hybrid system for heating, summer cooling and domestic hot water production. This system is manufactured by combining three main components together:

- the wall-hung boiler: depending on the installation needs, the choice of the gas generator can be made among boilers from 25 to 35kW, heating only or combined boilers, for wall-hung (indoor or outdoor in partially protected places) or built-in installation. The boilers have a modulation ratio of 1:5 or 1:8, depending on the model, and are all equipped with high-efficiency circulators. The system control panel is able to activate the most energy efficient heat source based on climatic conditions, and to manage the system with up to 2 independent hot/cold temperature zones.
- the heat pump: wall-hung split air-water type of the FAMILY ES series, available in versions ranging from 5 to 15 kW, with wall-hung indoor unit for heating and domestic hot water production. The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The indoor unit houses the main components of the hydronic system, high surface plate exchanger and high-efficiency electronic circulation pump. The outdoor unit also stands out for its extreme compactness, with all the hydraulic and cooling connections in the lower part of the unit.
- The hydraulic distribution module: the choice can be made between the simple Hbox hydraulic node, and the more flexible BAG³ Hybrid distribution module. Hbox allows you to make a simple hydraulic connection between the two generators, creating a one-way system in which the boiler pumps and the heat pump supply the system. For more complex systems, the BAG³ Hybrid distribution module is available: for indoor recessed or wall-hung installations, or for outdoor recessed installations, in 1-direct, 2-direct or 1-direct and 1-mixed configurations, equipped with low consumption self-modulating circulators (EEI≤0.20). The distribution module also works as hydraulic separator between the generators and the system circuits. The system is set up for connection to a single-coil domestic hot water heater served by heat pump, or to a dual-coil domestic hot water heater served by heat pump and solar thermal system, by installing the diverting valve kit.
- Simple and intuitive control panel with large backlit display, characterised by advanced management logics of the hybrid system, in order
  to guarantee maximum efficiency by giving priority to the most efficient heat source according to the outside temperature. The panel
  allows the full parametrisation of the system, as well as displaying the operating status. It is supplied with heat pump, complete with
  bracket, to be positioned directly inside the rooms.

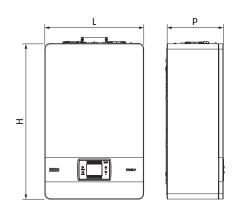
### **WALL-HUNG BOILERS**

### **TECHNICAL DATA**

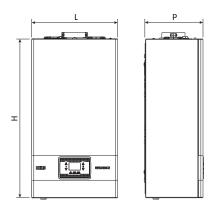
Description	Heating/Domestic Water		Domestic water production	water class		Notes	Code	
	kW	Nominal output (50°/30°C) %	30% of nominal output (ret. 30 °C) %	ΔT 25°	9000	Ţ		
INSTANTANEOUS COMBINED HEATING	AND DOMESTIC WATER VERS	ION						
FAMILY 25 KIS	3.6-20.0/3.6-25.0	106.6	109.1	15.1	A	A	(1)	20187642
FAMILY 30 KIS	4.9-25.0/4.9-30.0	107.5	109.5	18.1	A	A	(1)	20187644
FAMILY 35 KIS	4.9-32.0/4.9-34.6	107.4	109.5	20.1	A	A	(1)	20187645
RESIDENCE 25 KIS	3.6-20.0/3.6-25.0	106.2	108.4	15.1	A	Α	(1)(2)	20139525
RESIDENCE 30 KIS	4.9-25.0/4.9-30.0	106.0	108.1	18.1	A	Α	(1)(2)	20148496
RESIDENCE 35 KIS	4.9-30.0/4.9-34.6	106.9	108.2	20.8	A	A	(1)(2)	20139527
RESIDENCE HYBRID 25 KIS	3.1-20.0/3.1-25.0	105	109.6	14.3	A	А	(3)	20130398
RESIDENCE HYBRID 32 KIS	3.7-30.0/3.7-32.0	104.7	109.5	18.3	A	А	(3)	20130399
RESIDENCE IN HYBRID 25 KIS	3.1-20.0/3.1-25.0	105	109.6	14.3	А	Α	(3)	20118748
RESIDENCE IN HYBRID 32 KIS	3.7-30.0/3.7-32.0	104.7	109.5	18.3	A	Α	(3)	20118749
HEATING-ONLY VERSION			,					
FAMILY 25 IS	3.6-20.0/3.6-25.0	106.6	109.1	1	A	_	(1)	20187643
FAMILY 35 IS	4.9-32.0/4.9-34.6	107.5	109.5	1	Α	-	(1)	20187646
RESIDENCE 20 IS	3.6-20.0/3.6-20.0	106.2	108.4	-	A	-	(1)(2)	20139526
RESIDENCE 35 IS	4.9-30.0/4.9-34.6	106.9	108.2	-	A	-	(1)(2)	20139528
RESIDENCE IN HYBRID 25 IS	3.1-20.0/3.1-25.0	105	110	-	A	-	(3)	20135128
BUILT-IN UNIT								
IN-WALL INSTALLATION BOX							(4)	20082310

- (1) (2) (3) (4) The external probe is not included in the boiler supply, but is available as accessory with code 1220559. A wall-hung hybrid system requires the replacement of boiler display with code 20193921. The boiler code includes hybrid system control panel and external probe. To be used for Family 25 KIS and Residence 25 KIS.

### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
FAMILY 25 KIS	740	470	275	35
FAMILY 30 KIS	740	470	350	40
FAMILY 35 KIS	740	470	350	40
FAMILY 25 IS	740	470	275	35
FAMILY 35 IS	740	470	350	39



Description	H mm	L mm	P mm	Net weight kg
RESIDENCE 25 KIS	740	420	275	35
RESIDENCE 30 KIS	740	420	350	37
RESIDENCE 35 KIS	740	420	350	37
RESIDENCE 20 IS	740	420	275	34
RESIDENCE 35 IS	740	420	350	36

Height including SRD device: 822 mm

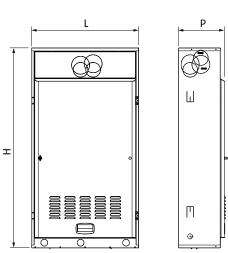
**RIELLO** 

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	000000 RESIDENCE HYDROD	

Description	H mm	L mm	P mm	Net weight kg
RESIDENCE HYBRID 25 KIS	872	553	275	44
RESIDENCE HYBRID 32 KIS	872	553	275	46

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Description	H mm	L mm	P mm	Net weight kg
RESIDENCE IN HYBRID 25 KIS	785	553	268	42
RESIDENCE IN HYBRID 32 KIS	785	553	268	43
RESIDENCE IN HYBRID 25 IS	785	553	268	40



Description	H	L	P	Net weight
	mm	mm	mm	kg
IN-WALL INSTALLATION BOX	1223	654	281	21

### **HEAT PUMPS**

### **TECHNICAL DATA**

Description		Heating				Coc	ling		Electrical power	- 03	fficiency	Code
	Floo	r (1)	Fan co	oils (2)	Floor (3)		Fan co	n coils (4) supply V/Ph/Hz		Cla	ass	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		<b>(5)</b>	<b>(6)</b>	
THE CODES BELOW AL	WAYS REFE	R TO THE	COMBINA	TION OF II	NDOOR AN	ID OUTDO	OR UNITS		*			
FAMILY ES 5M	4.8	4.11	4.5	2.96	5.1	3.43	3.5	2.48	230/1/50	A++	A++	20181792
FAMILY ES 7M	7.1	4.33	6.7	3.13	7.4	4.02	5.3	3.03	230/1/50	A++	A++	20181795
FAMILY ES 9M	8.1	4.53	7.6	3.46	8.7	4.21	6.3	3.18	230/1/50	A+++	A++	20181796
FAMILY ES 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A++	20181797
FAMILY ES 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A++	20181805
FAMILY ES 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A++	20181803
FAMILY ES 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A++	20181806

- The performance is in accordance with standards EN 14511:2013 and EN 14825:2016.

  (1) External air temperature 7°C D.B., 6°C W.B.; water inlet/outlet 30/35°C.

  (2) External air temperature 7°C D.B., 6°C W.B.; water inlet/outlet 40/45°C.

  (3) External air temperature 35°C; water inlet/outlet 23/18°C.

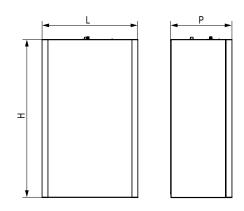
  (4) External air temperature 35°C; water inlet/outlet 12/7°C.

  (5) Value referred to the Average climate profile for delivery temperature of 35 °C. Values in accordance with Regulation 811/2013.

  (6) Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013.

### **OVERALL DIMENSIONS**

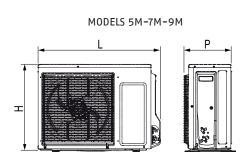
### INDOOR UNIT

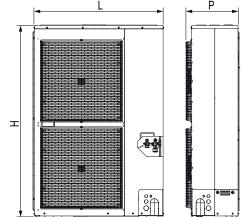


Description	H mm	L mm	P mm	Net weight kg
INDOOR UNIT				
FAMILY ES	825	505	325	41-49
OUTDOOR UNIT				
FAMILY ES 5M	619	799	299	39
FAMILY ES 7M	619	799	299	40
FAMILY ES 9M	996	940	340	69
FAMILY ES 12M/12T	1416	940	340	98
FAMILY ES 15M/15T	1416	940	340	98

### **OUTDOOR UNIT**







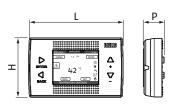
MODELS 12M-15M-12T-15T

### **REC10 I CONTROL**

**RIELLO** 

Note: the hybrid system control is supplied with the FAMILY ES heat pump.

### **OVERALL DIMENSIONS**



Description	H	L	P	Net weight
	mm	mm	mm	kg
REC10 i control	90	146	32	0.15

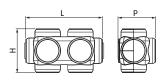
### **COMBINABLE HYBRID DISTRIBUTION MODULES**

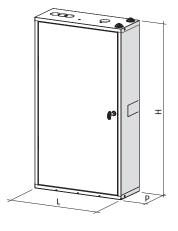
### **TECHNICAL DATA**

Description	Zone management	Electrical power supply V/Ph/Hz	Maximum power absorbed W	Notes	Code
DISTRIBUTION MODULES WITHOUT SEPARATOR					
HBOX - 1D HYBRID DISTRIBUTION MODULE	1 direct zone	-	_	(1)	20165227
DISTRIBUTION MODULES WITH SEPARATOR					
BAG <sup>3</sup> HYBRID 1D	1 direct zone	230/1/50	57	(2)(5)	20130805
BAG <sup>3</sup> HYBRID 2D	2 direct zone	230/1/50	114	(2)(5)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(3)(5)	20130807
IN-WALL INSTALLATION BOX	_	_	_	(4)	20130808

- Can be combined with FAMILY ES 5-7-9-12 heat pumps. For combinations with FAMILY ES 15, check the circulator curve. Equipped as standard with limit thermostat for low temperature systems.
- (1) (2) (3) (4) (5)
- Mixed zone equipped as standard with limit thermostat for low temperature systems.

  Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG³ HYBRID. Supplied without in-wall installation box.

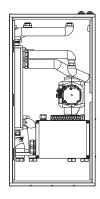




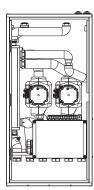
Description	H	L	P	Net weight
	mm	mm	mm	kg
HBOX - 1D HYBRID DISTRIBUTION MODULE	107	187	92	0.9

Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 1D	797	400	160	17
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

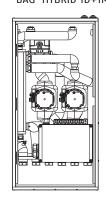
BAG<sup>3</sup> HYBRID 1D



BAG3 HYBRID 2D



BAG3 HYBRID 1D+1M



### **ACCESSORIES**

Description	Notes	Code
HBOX adjustable bypass valve	(1)	20182807

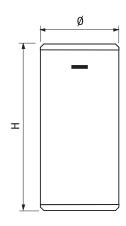
<sup>(1)</sup> Mandatory accessory when using HBOX - 1D hybrid distribution module code 20165227 with variable flow systems.

### **INERTIAL STORAGE TANKS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Volume delivered I	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy efficiency class <u>≅</u>	Code no.
7000 ACI 60 PLUS	57	99	6	34	В	20090056
7000 ACI 120 PLUS	123	99	6	50	В	20082450

### **OVERALL DIMENSIONS**



Description	H mm	ø mm	Net weight kg
7000 ACI 60 PLUS	935	400	25
7000 ACI 120 PLUS	1095	500	35

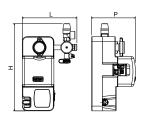
Dimensions and weight with insulation.

### **SOLAR HYDRAULIC UNITS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Connections and ball valves	Net surface connectable collectors* m²	Notes	Code
RSS R	Return-only	20	(1)	20116168

<sup>(1)</sup> Compatible with PWM and ON/OFF control.



Description	H	L	P	Net weight
	mm	mm	mm	kg
RSS R	364	228	183	4.1

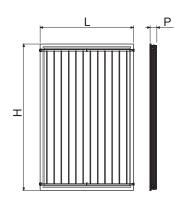
### **SOLAR COLLECTORS TO BE MATCHED**

### **TECHNICAL DATA**

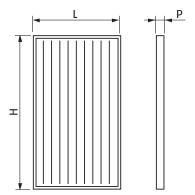
**RIELLO** 

Description	Collecto	r surface	Values refe	rred to the or	ening area	Stagnation	Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C		no.
RPS 25/2 EVO	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2.3	2.14	0.802	4.28	0.0064	200	(1)	20127137
CSAL 20 RS	1.91	1.77	0.781	4.98	0.0005	192	(1)	20094521
CSV 25 R	2.77	2.69	0.7	1.15	0.011	268	(1)	20023353
CSV 35 R	3.91	3.84	0.7	1.15	0.011	268	(1)	20023416

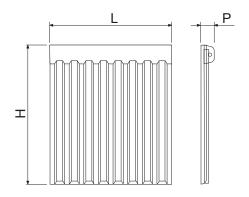
<sup>(1)</sup> The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page 223.



Description	H mm	L mm	P mm	Net weight kg		
RPS 25/2 EV0	2004	1195	86	41.5		
RPS 25/4	2004	1195	85	44		



Description	H	L	P	Net weight
	mm	mm	mm	kg
CSAL 20 RS	1818	1097	70	30



Description	H mm	L mm	P mm	Net weight kg
CSV 25 R	1730	1600	145	52
CSV 35 R	1730	2260	145	74

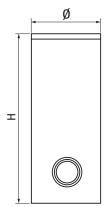
### **DHW HEATERS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Volume delivered	Lower coil exchange surface	Upper coil exchange surface	Upper coil exchange power	Single coil exchange surface (kW)*	Maximum Maximum temperature pressure bar		Dispersions W	Energy efficiency class	Notes	Code
	(1)	(m²)	(m²)	(kW)*	(,				€		
7200 300 HP	263	4.0	_	-	96	99	10	85	С	(1)	4383500
7200 500 HP	470	6.0	-	-	156	99	10	112	С	(2)	4383501
RBC 150 1S	162	0.85	-	-	27	99	10	55	В		20124167
RBC 200 1S	207	1.38	-	-	39	99	10	58	В		20124168
RBC 300 1S	305	1.7	-	-	49	99	10	68	В		20124169
RBC 430 1S	445	2.0	_	-	56	99	10	73	В		20124170
RBS 200 2S	208	0.7	0.7	16.1	-	99	10	62	В		20116675
RBS 300 2S	301	1.0	0.8	23.0	-	99	10	69	В		20116335
RBS 430 2S	430	1.4	1.0	31.4	_	99	10	75	В		20117339

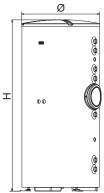
- With  $\Delta t$  = 20°C and primary temperature of 80 °C. Can be combined with Family ES 5 and 9 heat pumps. Can be combined with Family ES 12 and 15 heat pumps.

### **OVERALL DIMENSIONS**



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Description	H mm	Ø mm	S (*) mm	Net weight kg
7200 300 HP	1615	600	50	119
7200 500 HP	1690	750	50	166

(\*) Insulation thickness.
Dimensions and weight with insulation.

Description	H mm	Ø mm	S (*) mm	Net weight kg
RBC 150 1S	1088	604	52	62
RBC 200 1S	1338	604	52	78
RBC 300 1S	1838	604	52	103
RBC 430 1S	1644	755	52	131

(\*) Insulation thickness.
Dimensions and weight with insulation.

Description	H mm	Ø mm	S (*) mm	Net weight kg
RBS 200 2S	1338	604	50	86
RBS 300 2S	1838	604	50	108
RBS 430 2S	1644	755	50	146

(\*) Insulation thickness.
Dimensions and weight with insulation.

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### **GUIDE TO SYSTEM CONFIGURATION**





- **BOILER-HEAT PUMP COMBINATIONS**
- WALL-HUNG BOILER ACCESSORIES
- 3. ACCESSORIES TO COMPLETE THE SYSTEM
- 3.1 Hydraulic accessories
- 3.2 Secondary circuit management
- 3.3 Hybrid distribution module accessories
- 3.4 DHW heater accessories
- 3.5 Solar circuit management
- 4. HI, COMFORT CONTROLS

### 1. BOILER-HEAT PUMP COMBINATIONS (RECOMMENDED)\*

Description	Code	Built-	in unit		Possibl	e heat	pump	combi	nation	S	Hydra	ulic di	stribut	ion (1)
		IN-WALL INSTALLATION BOX	IN-WALL INSTALLATION BOX	FAMILY ES 5M	FAMILY ES 7M	FAMILY ES 9M	FAMILY ES 12M	FAMILY ES 15M	FAMILY ES 12T	FAMILY ES 15T	HBOX - 1D MODULE	BAG3 HYBRID 1D	BAG <sup>3</sup> HYBRID 2D	BAG <sup>3</sup> HYBRID 1D+1M
		20082310	20161604	20181792	20181795	20181796	20181797	20181805	20181803	20181806	20165227	20130805	20130806	20130807
INSTANTANEOUS COMBINED HEATING AND DOMESTIC V	VATER VERSION													
FAMILY 25 KIS	20187642	•		•	•	•					•	•	•	•
FAMILY 30 KIS	20187644			•	•	•					•	•	•	•
FAMILY 35 KIS	20187645			•	•	•	•	•	•	•	•	•	•	•
RESIDENCE 25 KIS	20139525	•		•	•	•					•	•	•	•
RESIDENCE 30 KIS	20148496			•	•	•					•	•	•	•
RESIDENCE 35 KIS	20139527			•	•	•	•	•	•	•	•	•	•	•
RESIDENCE HYBRID 25 KIS	20130398			•	•	•					•	•	•	•
RESIDENCE HYBRID 32 KIS	20130399			•	•	•	•	•	•	•	•	•	•	•
RESIDENCE IN HYBRID 25 KIS	20118748	•		•	•	•					•	•	•	•
RESIDENCE IN HYBRID 32 KIS	20118749	•		•	•	•	•	•	•	•	•	•	•	•
HEATING-ONLY VERSION														
FAMILY 25 IS	20187643			•	•	•					•	•	•	•
FAMILY 35 IS	20187646			•	•	•	•	•	•	•	•	•	•	•
RESIDENCE 20 IS	20139526			•	•	•					•	•	•	•
RESIDENCE 35 IS	20139528			•	•	•	•	•	•	•	•	•	•	•
RESIDENCE IN HYBRID 25 IS	20135128	•		•	•	•					•	•	•	•

The following combinations ensure the best energy performance; for the complete list of certified hybrid systems, refer to the company declaration.(2) Combine the in-wall installation box code 20130808 only with BAG³ HYBRID code 20130805, 20130806 and 20130807.

Combine the in-wall installation box code 20130808 only with BAG³ HYBRID code 20130805, 20130806 and 20130807.

### 2. WALL-HUNG BOILER ACCESSORIES

Description	Notes	Code
FAMILY BOILERS		
/ertical connection stub pipe kit Ø60/100 mm	(1)	20129174
00° bend kit Ø60/100 mm for boiler start	(2)	20129172
ystem and gas cock kit for recessed installation (25 KIS model only)		20137668
Condensate booster pump kit		20097192
Vell probe for remote heater (for heating only version)		1220599
Compact magnetic water filter		20191517
Compact polyphosphate dispenser		20191518
Oouble relay kit (second pump/lockout signal)		20062614
Adjustable splitter kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed split system kit Ø80 mm		
Vall-hung collector Ø60/100 mm		20129765
		20129175
elescopic wall-hung collector Ø60/100 mm  Tertical collector Ø60/100 mm		20129176
,		20129177
Split kit B23 Ø80 mm for in-wall installation box Adapter kit B23 Ø80 mm		20129768
external probe kit		1220559
Anti–freeze resistance kit for combined versions		
		20193278
Anti-freeze resistance kit for heating-only versions		20193279
RESIDENCE BOILERS	(4)	20420474
/ertical connection stub pipe kit Ø60/100 mm	(1)	20129174
90° bend kit Ø60/100 mm for boiler start	(2)	20129172
System and gas cock kit for recessed installation (25 KIS model only)		20137668
Connection kit with heating system, domestic water and gas cocks (for KIS models)		20133516
Connection kit with heating system and gas cocks (for IS models)		20133517
Connection kit with domestic water and gas cocks (for KIS models)		20132005
Connection kit with gas cock (for IS models)		20133386
ligh head circulator kit		20105883
RESIDENCE HYBRID BOILERS		
Open-air installation kit		20011638
Anti-freeze resistance kit		20164833
Condensate booster pump kit		20097192
Vall-hung hydraulic connection kit		20130639
Heating system cock kit		4047252
Clapet kit		20100893
PG conversion kit (for 25 kW only)		20102669
PG conversion kit (for 32 kW only)		20102674
Propane air conversion kit (for 25 kW only)		20102673
RESIDENCE IN HYBRID BOILERS	(2)	
Ooor kit for recessed installation	(3)	4047250
Heating system cock kit		4047252
Vall-hung connection kit		4047255
external probe		1220559
nti-freeze resistance kit for KIS versions		20164827
nti-freeze resistance kit for IS versions		20164828
condensate booster pump kit		20097192
lemote heater well probe (for pairing with IS version)		1220599
PG conversion kit for Residence In Condens 20 IS and 25 KIS		20102669
PG conversion kit for Residence In Condens 32 KIS		20102674
Propane air conversion kit for Residence In Condens 25 KIS		20102673
apet kit		2016283

Code required in case of vertical discharge with 60/100 flue system. Accessory already included in kit 20129177.

Code required in case of horizontal discharge with flue system Ø60/100. Accessory already included in kits 20129175 and 20129176. For retrofit on old boxes without door.

### RIELLO

### 3. ACCESSORIES TO COMPLETE THE SYSTEM

### 3.1 Hydraulic accessories

Description	Notes	Code
1" Y water filter		20175281
50 litre inertial buffer tank	(1)	20171999

(1) Inertial storage cannot be installed horizontally below the heat pump.

### 3.2 Secondary circuit management

Description	Notes	Code
1" DHW diverting valve with heater probe		20175064
Immersion probe	(1)	1220599
1st direct/mixed area control		20132795
Control of 2 <sup>nd</sup> and 3 <sup>rd</sup> direct/mixed zone		20132796

(1) Used for secondary circuit and heater management.

Note: for ambient temperature adjustment, refer to section SYSTEM ACCESSORIES - THERMOSTATS AND PROGRAMMABLE THERMOSTATS

### 3.3 Hybrid distribution module accessories

Description	Notes	Code
Cock kit on system and heat pump side		20131752
Photovoltaic system input card	(1)	20165741
Diverting valve kit for BAG³ HYBRID		20131755
Diverting valve kit for HBOX		20168920
Solar interface kit		20131756

(1) To be used only if the diverting valve (code 20131755) is not present in BAG3 HYBRID configuration.

### 3.4 DHW heater accessories

Description	Notes	Code
Electronic anode equipped with plug	(1)	20055206
Thermometer kit	(1)	20123850
Curve kit for electronic anode	(1)	20123851
Solar heat exchanger 0.8 m² for HP 300	(2)	4383504
Solar heat exchanger 1.2 m² for 500 HP and 800 HP	(3)	4383505
Solar mixing diverting valve kit	(4)	20025113

- RBC 1S and RBS 2S series heater accessories.
- 7200 300 HP heater accessories. 7200 500 HP and 7200 800 HP heater accessories.
- Mandatory in case of domestic water heater installation and KIS model boiler.

### 3.5 Solar circuit management

<del>_</del>		
Description	Notes	Code
RSS R solar hydraulic unit	(1)(2)(3)	20116168
Solar interface kit	(4)	20131756

- The RSS R return-only solar hydraulic unit and the solar interface kit (code 20131756) must always be ordered together. Net surface area of collectors to be connected  $20 \text{ m}^2$ .
- Connections and ball valves on the return line.

It allows viewing the operating status of the solar system on the REC10 I system interface.

Note: if collectors with net surface >20 m² are installed, refer to section SOLAR THERMAL SYSTEM AND HEATERS - ACCESSORIES - HYDRAULIC UNITS AND SOLAR ADJUSTMENTS. Note: for selection of accessories for solar panels, refer to section SOLAR THERMAL SYSTEM AND HEATERS - SOLAR PANELS.

### 4. Hi, COMFORT CONTROLS

### Room controls with capability of management through APP

Drawing	Description	Notes	Code
20.0	Hi, Comfort T100 Wi-Fi	(1)	20193354
80.80 m	Hi, Comfort T100	(2)	20193352
N. Conton	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

(1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.

(2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

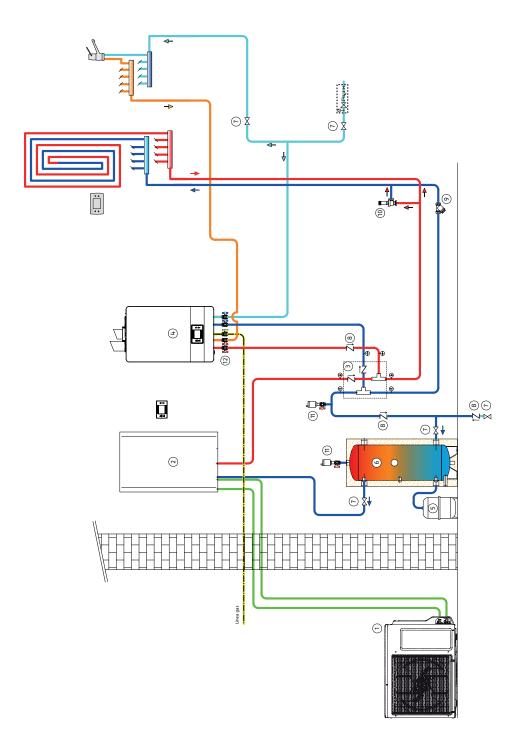
Adjustable bypass valve Deaerator Under-boiler cock kit

9 1 1 2 2

Filter

# **EXAMPLES OF SYSTEM WITH SPLIT HYBRID SYSTEM**

# ONE-ZONE HEATING, COOLING AND DHW PRODUCTION SYSTEM COMBINED WITH SPLIT HEAT PUMP AND BOILER



Expansion reservoir Heat pump indoor unit with circulator and reservoir Hydraulic module with non-return valves Boiler with circulator and reservoir

Heat pump outdoor unit

4 3 5 7

- 9 4 6 2
- Storage tank Shut-off valve Non-return valve
- CENTRALIZED HEATING

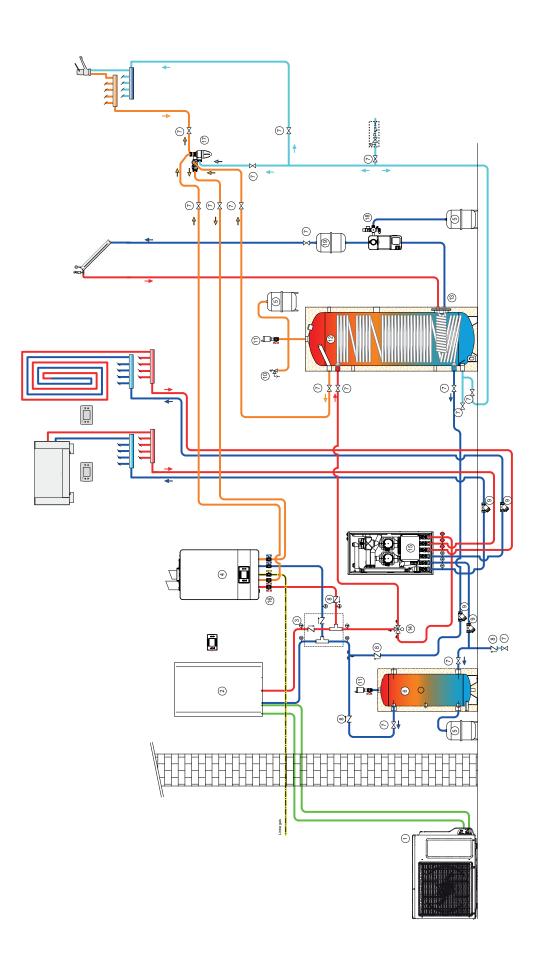
**AIR CONDITIONING** 

**TERMINAL UNITS** 

HOT AIR GENERATORS

SYSTEM COMPLEMENTARY ITEMS

MONOVALENT TWO-ZONE HEATING AND DHW PRODUCTION SYSTEM COMBINED WITH SPLIT HEAT PUMP, BOILER AND SOLAR SYSTEM



18 19

Removable coil

2 4 4 5

Non-return valve

Filter Safety valve Deaerator

8 6 2 1

Hydraulic module with non-return valves Boiler with circulator and reservoir Expansion reservoir

Shut-off valve Storage tank

9

Heat pump indoor unit with circulator and

Heat pump outdoor unit

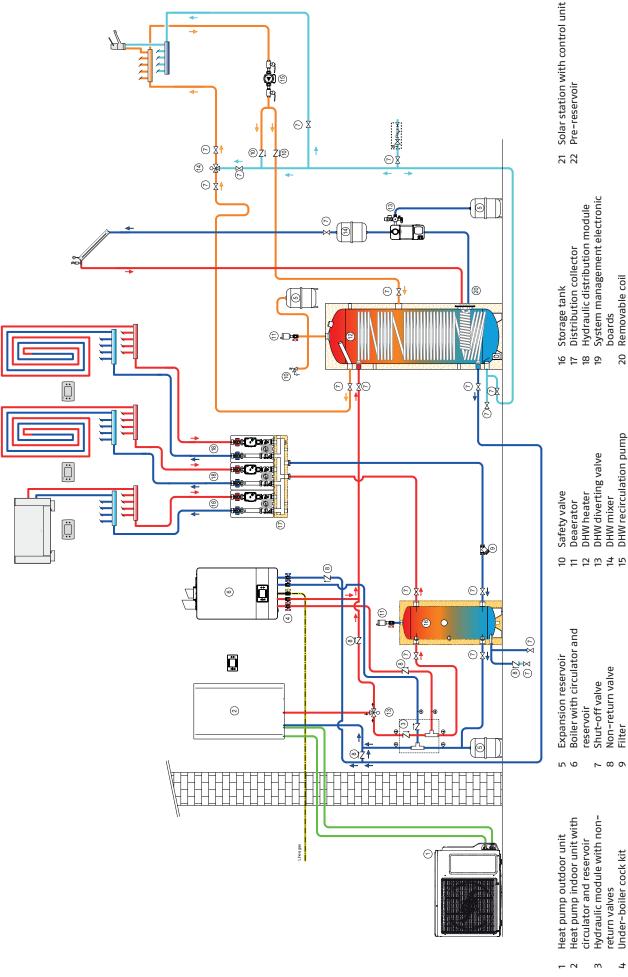
7

DHW heater

- DHW diverting-mixing valve Solar station with control unit Pre-reservoir

  - DHW diverting valve Hydraulic module with pumps and hydraulic compensator Under-boiler cock kit

reservoir



MONOVALENT THREE-ZONE HEATING AND DHW PRODUCTION SYSTEM COMBINED WITH SPLIT HEAT PUMP, BOILER AND SOLAR SYSTEM

Hybrid systems-Wall-hung solution

## Hybrid PRO wall-hung system



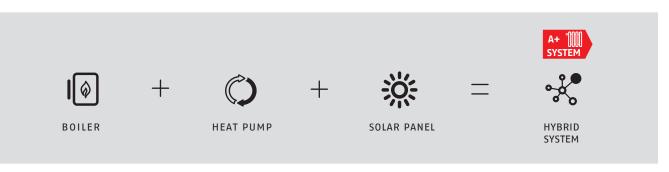


- Heating and domestic hot water production
- Intelligent management of multiple energy sources: condensing boiler, solar thermal and heat pump
- Large display for setting and monitoring the entire system
- Possibility to control up to 3 independent zones

The Hybrid PRO wall-hung system is a multi-energy hybrid system for room heating and domestic hot water production. This system is made by combining three main components together:

- Stand alone wall-hung boiler of the CONDEXA PRO series, available in versions ranging from 57 up to 112 kW of heat input, to be installed internally either in open chamber or sealed configuration. Range equipped with the heat exchanger with two concentric pipes, in stainless steel, respectively having a pentagonal section on the inside and circular on the outside. The shunt pump with modulating regulation (standard on models 57-70 P, optional on models 90-112) allows operating with a constant and settable ΔT, thus reducing the system set-up time and maximising condensation. The optimal management of combustion and the high modulation ratios (1:5) allow high efficiency and low polluting emissions (Class 6 according to UNI EN 15502-1). Maximum operating pressure: 6 bar. Included as standard: boiler drain cock, LPG transformation kit and wall bracket.
- FAMILY ES series split heat pump, available in versions ranging from 12 up to 25 kW, with wall-hung indoor unit for heating and domestic hot water production. The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of −20°C. The indoor unit houses the main components of the hydronic system, high surface plate exchanger and high-efficiency electronic circulation pump. The outdoor unit also stands out for its extreme compactness, with all the hydraulic and cooling connections in the lower part of the unit.
- Simple and intuitive control panel with large backlit display, featured by advanced management logics of the hybrid system, in order to ensure maximum efficiency by giving priority to the most efficient heat source according to the outside temperature. The panel allows the full parametrisation of the system, as well as displaying the operating status. It is supplied with heat pump, complete with bracket, to be positioned directly inside the rooms.

A wide range of accessories is available to complete the system and ensure simple, fast installation in order to meet different installation requirements.



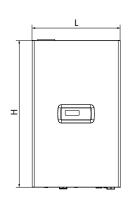
**RIELLO** 

### **WALL-HUNG BOILERS**

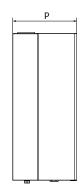
### TECHNICAL DATA

Description		Power - k	w		Efficiency - %	)	Energy	Language	Code
	Output useful 80°/60° max	Output useful 50°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (50°/30°)	Useful 30% Pn (50°/30°)	efficiency class		
CONDEXA PRO 57 P	55,7	61,9	14,0-57,0	98,3	108,6	109,2	A	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115223 20150685 20151706 20151726 20151754 20151824 20192124
CONDEXA PRO 70 P	67,0	73,9	14,0-68,0	97,9	108,1	108,8	A	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115224 20150686 20151707 20151727 20151756 20151825 20192125
CONDEXA PRO 90	88,3	97,4	19,4-90,0	98,0	108,3	108,9	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115225 20150687 20151709 20151728 20151759 20151826 20192126
CONDEXA PRO 100	95,3	105,1	19,4-97,0	97,9	108,2	108,8	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115226 20150688 20151721 20151730 20151762 20151827 20192127
CONDEXA PRO 115	109,8	121,1	22,4-112,0	98,3	108,6	108,8	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115228 20150689 20151722 20151731 20151767 20151828 20192128

### **OVERALL DIMENSIONS**



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Description	H mm	L mm	P mm	ø mm	Net weight kg
CONDEXA PRO 57 P	1000	600	435	80	64
CONDEXA PRO 70 P	1000	600	435	80	64
CONDEXA PRO 90	1000	600	435	110	69
CONDEXA PRO 100	1000	600	435	110	69
CONDEXA PRO 115	1170	600	435	110	84

M-DELIVERY LINE G 1"1/2 G-GAS G 1"
R-RETURN LINE G 1"½
SC-CONDENSATE DRAIN Ø24 mm
ØF-FLUE GAS
ØA-AIR (opt)

### **HEAT PUMPS**

**RIELLO** 

### **TECHNICAL DATA**

Description		Неа	ating			Cool	ing (*)		Electrical power	03		Code
	Floo	or (1)	Fan co	ils (2)	Floo	r (3)	Fan co	ils (4)	supply V/Ph/Hz	cl	ass	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		° <b>∭</b> (5)	<b>(6)</b>	
THE CODES BELOW A	LWAYS REFE	R TO THE	COMBINAT	ION OF IN	IDOOR ANI	OUTDOO	R UNITS					
FAMILY ES 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A++	20181797
FAMILY ES 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A++	20181805
FAMILY ES 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A++	20181803
FAMILY ES 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A++	20181806
FAMILY ES 18T	16.9	4.37	15.9	3.18	19.4	4.13	13.9	3.19	400/3+N/50	A++	A++	20181807
FAMILY ES 25T	24.8	4.06	23.2	2.93	27.9	4.20	19.9	3.15	400/3+N/50	A++	A++	20181809

- (\*) If the heat pump is installed in the Hybrid PRO wall-hung system, the cooling function is disabled.

  The performance is in accordance with standards EN 14511:2013 and EN 14825:2016.

  (1) External air temperature 7°C D.B., 6°C W.B.; water inlet/outlet 30/35°C.

  (2) External air temperature 7°C D.B., 6°C W.B.; water inlet/outlet 40/45°C.

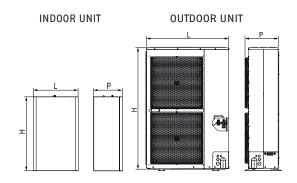
  (3) External air temperature 35°C; water inlet/outlet 23/18°C.

  (4) External air temperature 35°C; water inlet/outlet 12/7°C.

  (5) Value referred to the Average climate profile for delivery temperature of 35 °C. Values in accordance with Regulation 811/2013.

  (6) Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013.

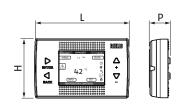
### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
INDOOR UNIT				
FAMILY ES	825	505	325	41-49
OUTDOOR UNIT				
FAMILY ES 12M/12T	1416	940	340	98
FAMILY ES 15M/15T	1416	940	340	98
FAMILY ES 18T	1416	940	340	98
FAMILY ES 25T	1500	980	370	138

### **REC10 I CONTROL**

Note: the hybrid system control is supplied with the FAMILY ES heat pump.



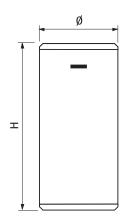
Description	H	L	P	Net weight
	mm	mm	mm	kg
REC10 I control	90	146	32	0.15

### STORAGE TANKS TO BE MATCHED

### **TECHNICAL DATA**

Description	Usable volume I	Maximum temperature	Maximum pressure bar	Dispersions W	Energy efficiency class	Code
		°C			æ	
7000 ACI 120 PLUS	123	99	6	50	В	20082450
7000 ACI 200 PLUS	203	99	6	68	С	20028093
7000 ACI 300 PLUS	277	99	6	82	С	20028094

### **OVERALL DIMENSIONS**



Description	H mm	ø mm	Net weight kg
7000 ACI 120 PLUS	1095	500	35
7000 ACI 200 PLUS	1395	550	45
7000 ACI 300 PLUS	1560	600	55

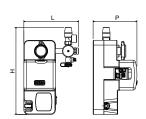
Dimensions and weight with insulation.

### SOLAR HYDRAULIC UNITS TO BE MATCHED

### **TECHNICAL DATA**

Description	Connections and ball valves	Net surface of collectors to be connected* m²	Notes	Code
RSS R	Return-only	20	(1)	20116168

<sup>(1)</sup> Compatible with PWM and ON/OFF control.



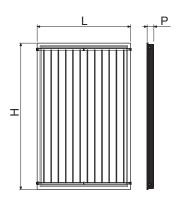
Description	H	L	P	Net weight
	mm	mm	mm	kg
RSS R	364	228	183	4.1

### **SOLAR COLLECTORS TO BE MATCHED**

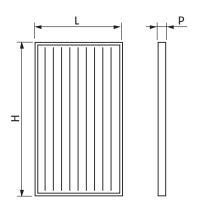
### **TECHNICAL DATA**

Description	Collecto	Collector surface		Values referred to the opening area			Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C		no.
RPS 25/2 EVO	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2.3	2.14	0.802	4.28	0.0064	200	(1)	20127137
CSAL 20 RS	1.91	1.77	0.781	4.98	0.0005	192	(1)	20094521
CSV 25 R	2.77	2.69	0.7	1.15	0.011	268	(1)	20023353
CSV 35 R	3.91	3.84	0.7	1.15	0.011	268	(1)	20023416

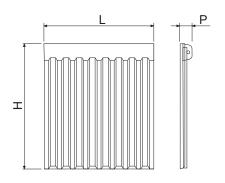
(1) The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page 223.



Description	H mm	L mm	P mm	Net weight kg
RPS 25/2 EV0	2004	1195	86	41.5
RPS 25/4	2004	1195	85	44



Description	H	L	P	Net weight
	mm	mm	mm	kg
CSAL 20 RS	1818	1097	70	30



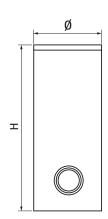
Description	H mm	L mm	P mm	Net weight kg
CSV 25 R	1730	1600	145	52
CSV 35 R	1730	2260	145	74

### **DHW CYLINDERS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Useful delivered I	Heat pump coil surface area (m²)	Exchange surface area lower coil (m²)	Exchange power upper coil (kW)	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy efficiency class	Code
	262	1.0			00	10	0.5	_	4202500
7200 300 HP	263	4.0	-	-	99	10	85	С	4383500
7200 500 HP	470	6.0	-	-	99	10	112	С	4383501
7200 800 HP	702	7.0	-	-	99	10	130	С	20136293
RBC 430 1S	445	-	2	-	99	10	73	В	20124170
RBC 550 1S	555	-	2.4	-	99	10	84	В	20124171
RBC 800 1S	735	-	2.57	-	99	7	95	В	20132270
RBC 1000 1S	890	-	2.92	-	99	7	103	В	20132271
RBS 430 2S	430	-	1.4	31.4	99	10	75	В	20117339
RBS 550 2S	551	-	1.8	31.4	99	10	68	В	20116587
RBS 800 2S	731	-	2.3	50	99	7	94	В	20132268
RBS 1000 2S	883	-	2.7	50	99	7	101	В	20132269
7200/2-1500 HV PLUS	1390		3.4	47	99	8	162	С	20136237
7200/2-2000 HV PLUS	1950		4.6	73	99	8	186	С	20136239

### **OVERALL DIMENSIONS**



Description	H mm	ø mm	S (*) mm	Net weight kg
7200 300 HP	1615	600	50	119
7200 500 HP	1690	750	50	166
7200 800 HP	1875	990	100	217

(\*) Insulation thickness.
Dimensions and weight with insulation.

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Description	H mm	ø mm	S (*) mm	Net weight kg
RBC 430 1S	1644	755	52	131
RBC 550 1S	1988	755	52	157
RBC 800 1S	1835	974	92	203
RBC 1000 1S	2155	974	92	225

(\*) Insulation thickness.
Dimensions and weight with insulation.

**TERMINAL UNITS** 

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Description	H mm	Ø mm	S (*) mm	Net weight kg
RBS 430 2S	1644	755	50	146
RBS 550 2S	1988	755	50	171
RBS 800 2S	1846	1000	100	222
RBS 1000 2S	2171	1000	100	245

(\*) Insulation thickness. Dimensions and weight with insulation.

Description	H mm	Ø mm	S (*) mm	Net weight kg
7200/2-1500 HV PLUS	2185	1200	100	324
7200/2-2000 HV PLUS	2470	1300	100	544

(\*) Insulation thickness. Dimensions and weight with insulation.

### **SYSTEM CONFIGURATION GUIDE**



### BOILER-HEAT PUMP COMBINATIONS

### WALL-HUNG BOILER ACCESSORIES

- 2.1 Accessories to complete the system
- 2.2 Shunt pumps (only for 90-115 kW)
- 2.3 Additional safety devices
- 2.4 Hydraulic separator
- 2.5 Sealed combustion conversion kit (type C)
- 2.6 Flue systems
- 2.7 Treatment systems for condensate neutralization

### 3. ACCESSORIES TO COMPLETE THE SYSTEM

- 3.1 Hydraulic accessories
- 3.2 Secondary circuit management
- 3.3 DHW cylinder accessories
- 3.4 Solar circuit management

### 4. HI, COMFORT CONTROLS

### 1. BOILER-HEAT PUMP COMBINATIONS (RECOMMENDED)\*

Description	Code	FAMILY ES 12M	FAMILY ES 15M	FAMILY ES 12T	FAMILY ES 15T	FAMILY ES 18T	FAMILY ES 25T
		20181797	20181805	20181803	20181806	20181807	20181809
CONDEXA PRO 57 P	(1)	•	•	•	•	•	•
CONDEXA PRO 70 P	(1)		•		•	•	•
CONDEXA PRO 90	(1)					•	•
CONDEXA PRO 100	(1)						•
CONDEXA PRO 115	(1)						•

To satisfy the Italian regulation about the hybrid systems. For the extra-IT markets, all the boiler-HP combinations are available. Refer to the section WALL-HUNG BOILERS – TECHNICAL DATA to choose the proper boiler code.

### 2. WALL-HUNG BOILER ACCESSORIES

### 2.1 Accessories to complete the system

Description	Code
Condensate drain kit for stand alone boiler	20133102

### 2.2 Shunt pumps (only for 90-115 kW models)

Description	Notes	Code
Shunt pump kit (90-115 KW)	(1)	20125034

<sup>(1)</sup> For CONDEXA PRO 57-70 P models the pump is installed present in the boiler.

### 2.3 Additional safety devices

Description	Notes	Code
Manifold kit with INAIL safety devices for stand alone boiler	(1)	20131898
Shut-off cock		20190221
Manifold kit with safety devices for stand alone boiler	(2)(3)	20189780
Safety valve 5.4 bar ØG.¾'' FF		20143981
Kit with connection pipe to hydraulic separator for stand alone boiler		20131899

### 2.4 Hydraulic separator

Description	Code
Horizontal hydraulic separator kit for stand alone boiler	20131897
Frame kit for front cascades	20131663
Cover for safety kit/hydraulic separator unit for stand alone boiler	20133224

### 2.5 Sealed combustion conversion kit (type C)

Description	Code
Conversion kit C type (57–70 kW)	20131665
Conversion kit C type (90-135 kW)	20131668

### 2.6 Flue systems

Description	Notes	Code
Spacer kit for fixing to wall	(1)	20131270

<sup>(1)</sup> Kit required for rear wall concentric discharge.

Note: for each type, check the maximum equivalent lengths by consulting the technical data sheet and/or by contacting the pre-sales service.

Note: for matching flue accessories, please refer to the 2021 Product Catalogue under the section CENTRALISED HEATING, FLUE GAS EXHAUST SYSTEMS.

### 2.7 Treatment systems for condensate neutralization

Description	Notes	Code
Condensate neutralizer HN2 (up to 270 kW)	(1)	4031811
Condensate neutralizer N2 (up to 450 kW)		4031810

Equipped with extraction pumps.

MAY 2022 EDITION

Includes all the safety devices, including safety valve and VIC.
Includes pressure gauge, thermometer and 3 bar safety valve (¾ "FF). Coupled with the under boiler cover kits (20133224) it allows the display of temperature and pressure values

<sup>(3)</sup> If an operating pressure> 3 bar is required, it can be combined with the safety valve code 20143981.

### 3. ACCESSORIES TO COMPLETE THE SYSTEM

### 3.1 Hydraulic accessories

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Description	Code
1" Y water filter	20175281
7000 ACI 120 PLUS	20082450
7000 ACI 200 PLUS	20028093
7000 ACI 300 PLUS	20028094

### 3.2 Secondary circuit management

Description	Notes	Code
1" DHW diverting valve with DHW cylinder probe	(1)	20175064
Immersion probe	(2)	1220599
1st direct/mixed zone management		20132795
2 <sup>nd</sup> /3 <sup>rd</sup> direct/mixed zone management		20132796

(1) For FAMILY ES 18T and 25T models, carefully check the system and DHW circuit for pressure drops.

(2) Used for secondary circuit and DHW cylinder management.

Note: for room temperature control refer to the section SYSTEM COMPLEMENTARY ITEMS - THERMOSTATS AND CHRONOTHERMOSTATS.

### 3.3 DHW cylinder accessories

Description	Notes	Code
Electronic anode equipped with plug	(1)	20055206
Thermometer kit	(1)	20123850
Curve kit for electronic anode	(1)	20123851
Solar heat exchanger 0.8 m² for HP 300	(2)	4383504
Solar heat exchanger 1.2 m <sup>2</sup> for HP 500 and HP 800	(3)	4383505

RBC 1S and RBS 2S series DHW cylinder accessories.

(2) 7200 HP 300 DHW cylinder accessories.(3) 7200 HP 500 and 7200 HP 800 DHW cylinder accessories.

### 3.4 Solar circuit management

Description	Notes	Code
RSS R solar hydraulic unit	(1)(2)(3)	20116168
Solar interface kit	(4)	20131756

The RSS R return-only solar hydraulic unit and the solar interface kit (code 20131756) must always be ordered together.

(2) (3) Net area of connectable collectors: 20 m<sup>2</sup>.

Connections and ball valves on the return line.

It allows viewing the operating status of the solar system on the REC10 I system interface.

Note: in case of installation of collectors with a net surface area >20 m², please refer to the section SOLAR THERMAL AND CYLINDER - COMPLEMENTARY ITEMS - PUMP STATIONS AND DIFFERENTIAL CONTROLLERS.

Note: for the selection of solar panel accessories, please refer to the section SOLAR THERMAL AND CYLINDER - SOLAR COLLECTORS.

### 4. Hi, COMFORT CONTROLS

### Room controls with capability of management through APP

Drawing	Description	Notes	Code
200	Hi, Comfort T100 Wi-Fi	(1)	20193354
20.8 A	Hi, Comfort T100	(2)	20193352
15, Garden	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

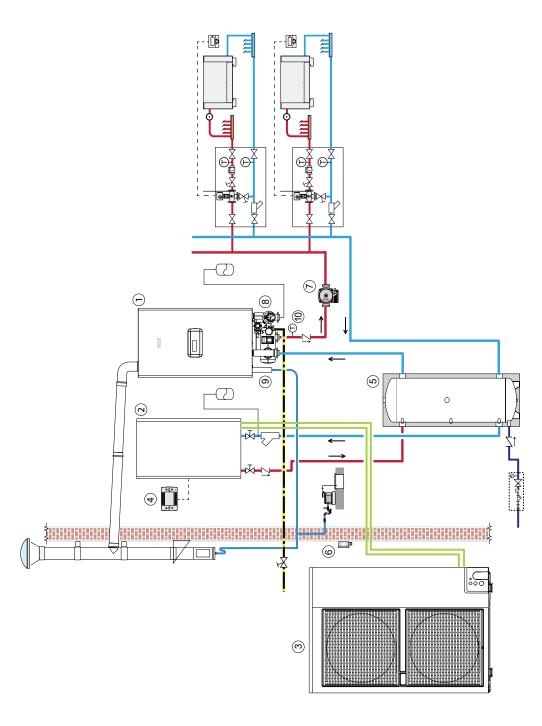
HEAT PUMPS & CHILLERS

WALL-HUNG BOILERS

### **RIELLO**

# EXAMPLES OF INSTALLATION WITH Hybrid PRO wall-hung system

## BIVALENT HEATING SYSTEM WITH HEAT PUMP AND BOILER



Manifold kit with safety devices for stand alone boiler Condensate drain Immersion probe 8 6 2

FLOOR-STANDING BOILERS

WATER-HEATERS

SOLAR THERMAL AND CYLINDERS

Storage tank
External probe for climatic heat control (supplied with the heat pump)
System circulation pump

6 2

CONDEXA PRO condensing boiler FAMILY ES heat pump indoor unit FAMILY ES heat pump outdoor unit REC10 I control panel (supplied with the heat pump)

4 3 5 7

7

CENTRALIZED HEATING

**AIR CONDITIONING** 

**TERMINAL UNITS** 

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

HEAT PUMPS & CHILLERS

WALL-HUNG BOILERS

FLOOR-STANDING BOILERS

WATER-HEATERS

SOLAR THERMAL AND CYLINDERS

CENTRALIZED HEATING

AIR CONDITIONING

**TERMINAL UNITS** 

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

**MANDATORY ACCESSORIES** 

Ref. Layout	Code	Description	Notes	CONDEXA PRO 57 P - 70 P	CONDEXA PRO 90-115
WALL-HUNG BOILER	IG BOILER				
-	ı	CONDEXA PRO	(1)	•	•
-	20125034	Shunt pump kit (90-115 kW)	*		•
8	20131897	Horizontal hydraulic separator kit for stand alone boiler		•	•
2	20131899	Kit with connection pipe to hydraulic separator for stand alone boiler		•	•
0/1	20143981	Safety valve 5.4 bar ØG.3/4" FF	[	•	•
8/2	20131898	Manifold kit with INAIL safety devices for stand alone boiler	(c)	•	•
8/3	20189780	Manifold kit with safety devices for stand alone boiler		•	•
6	20133102	Condensate drain kit for stand alone boiler	*)	•	•
HEAT PUMP	Ь				
2	ı	FAMILY ES indoor unit	(1)	•	•
٣	ı	FAMILY ES outdoor unit	(1)	•	•
SYSTEM COMPLETION	MPLETION				
47	ı	REC10 I control panel	(2)	•	•
2	1	7000 ACI PLUS storage tank	(3)	•	•
9	ı	External probe for climatic heat control	(2)	•	•
7	ı	System circulation pump	(4)	•	•
10	1220599	Immersion probe		•	•

Check the combinations indicated in section "1. BOILER-HEAT PUMP COMBINATION".

Supplied with the FAMILY ES heat pump.

The 7000 ACI 120 PLUS storage tank (code 20082450) ensures the minimum water content necessary for the correct operation of all the heat pump models proposed.

The 7000 ACI 120 PLUS Storage tank (code 20082450) ensures the minimum water content necessary for the correct operation of all the heat pump models proposed. Possible hydraulic separator connection.

Accessories to be installed inside the boiler.

<sup>\$</sup>Q£303

4

4

2-way motor-driven valve

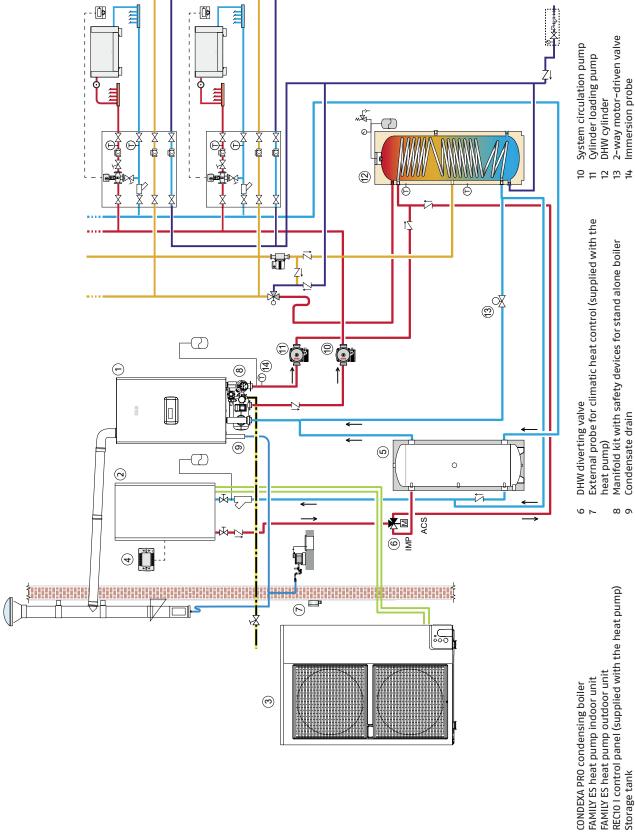
Manifold kit with safety devices for stand alone boiler

Condensate drain

80 0

Immersion probe

## CENTRALIZED HEATING **AIR CONDITIONING TERMINAL UNITS** SYSTEM COMPLEMENTARY ITEMS



7 4 3 5

BIVALENT HEATING AND COMBINED DHW PRODUCTION SYSTEM WITH HEAT PUMP, BOILER AND SINGLE COIL CYLINDER

RI	FI	IN
•		

HEAT PUMPS & CHILLERS

WALL-HUNG BOILERS

FLOOR-STANDING BOILERS

WATER-HEATERS

SOLAR THERMAL AND CYLINDERS

CENTRALIZED HEATING

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

TERMINAL UNITS AIR CONDITIONING

SORIES	
MANDATORY ACCESSORIES	

Ref. Layout	Code	Description	Notes	CONDEXA PRO 57 P - 70 P	CONDEXA PRO 90-115
WALL-HUR	WALL-HUNG BOILER				
1	ı	CONDEXA PRO	(1)	•	•
-	20125034	Shunt pump kit (90-115 kW)	(*)		•
8	20131897	Horizontal hydraulic separator kit for stand alone boiler		•	•
0 /1	20131899	Kit with connection pipe to hydraulic separator for stand alone boiler		•	•
- /0	20143981	Safety valve 5.4 bar ØG.34" FF	(9)	•	•
8/2	20131898	Manifold kit with INAIL safety devices for stand alone boiler	9	•	•
8/3	20189780	Manifold kit with safety devices for stand alone boiler		•	•
6	20133102	Condensate drain kit for stand alone boiler	(*)	•	•
HEAT PUMP	IP				
2	ı	FAMILY ES indoor unit	(1)	•	•
8	ı	FAMILY ES outdoor unit	(1)	•	•
SYSTEM CO	SYSTEM COMPLETION				
47	ı	REC10 I control panel (supplied with the heat pump)	(2)	•	•
5	ı	7000 ACI PLUS storage tank	(3)	•	•
9	20175064	1" DHW diverting valve with cylinder probe		•	•
7	ı	External probe for climatic heat control (supplied with the heat pump)	(2)	•	•
10	ı	System circulation pump	(4)	•	•
11	ı	Cylinder loading pump	(4)	•	•
12	ı	DHW cylinder	(2)	•	•
13	ı	2-way motor-driven valve with limit microswitch	(2)	•	•
14	1220599	Immersion probe		•	•

Check the combinations indicated in section "1. BOILER-HEAT PUMP COMBINATION".

Supplied with the FAMILY ES heat pump.

The 7000 ACI 120 PLUS storage tank (code 20082450) ensures the minimum water content necessary for the correct operation of all the heat pump models proposed.

Refer to the SYSTEM COMPLEMENTARY ITEMS - WATER CIRCULATORS section.

Responsible hydraulic separator connection.

Responsability of the installer.

Accessories to be installed inside the boiler. \$300£00£

DHW secondary cylinder Immersion probe

Manifold kit with safety devices for stand alone boiler

Condensate drain

ω σ

heat pump)

### **A** P 4 P System circulation pump Cylinder loading pump DHW primary cylinder X X $\Theta^{\hat{1}}$ $\Theta$ 4 3 2 3 9 0-DHW diverting valve External probe for climatic heat control (supplied with the (2) (14) $\odot$ (8) RIELLO 6 (2) $\bigcirc$ (7) 9 ~ <u>Σ</u> <u>Θ</u> <u>Δ</u> ACS 4 **\[ \]** FAMILY ES heat pump indoor unit FAMILY ES heat pump outdoor unit RECIO I control panel (supplied with the heat pump) (P) CONDEXA PRO condensing boiler $\odot$

BIVALENT HEATING AND COMBINED DHW PRODUCTION SYSTEM WITH HEAT PUMP, BOILER AND SINGLE COIL CYLINDER

Storage tank

7497

|--|

HEAT PUMPS & CHILLERS

WALL-HUNG BOILERS

FLOOR-STANDING BOILERS

WATER-HEATERS

SOLAR THERMAL AND CYLINDERS

CENTRALIZED HEATING

AIR CONDITIONING

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

**TERMINAL UNITS** 

Ref.	Code	Description	Notes	CONDEXA PRO	CONDEXA PR
Layout 1				57 P - 70 P	90-115
WALL-HUNG	IG BOILER				

Ref. Layout 1	Code	Description Description	Notes	57 P - 70 P	CONDEXA PRO 90-115
WALL-HUNG BOILER	IG BOILER				
1	ı	CONDEXA PRO	(1)	•	•
1	20125034	Shunt pump kit (90-115 kW)	*)		•
8	20131897	Horizontal hydraulic separator kit for stand alone boiler		•	•
7,0	20131899	Kit with connection pipe to hydraulic separator for stand alone boiler		•	•
700	20143981	Safety valve 5.4 bar ØG.3/4" FF	3	•	•
8/2	20131898	Manifold kit with INAIL safety devices for stand alone boiler	9	•	•
8/3	20189780	Manifold kit with safety devices for stand alone boiler	ı	•	•
6	20133102	Condensate drain kit for stand alone boiler	*	•	•
НЕАТ РИМР	Ь				
2	ı	FAMILY ES indoor unit	(1)	•	•
8	ı	FAMILY ES outdoor unit	(1)	•	•
SYSTEM CC	SYSTEM COMPLETION				
4	ı	REC10 I control panel (supplied with the heat pump)	(2)	•	•
2	ı	7000 ACI PLUS storage tank	(3)	•	•
9	20175064	1" DHW diverting valve with cylinder probe		•	•
7	ı	External probe for climatic heat control (supplied with the heat pump)	(2)	•	•
10	ı	System circulation pump	(4)	•	•
11	ı	Cylinder loading pump	(4)	•	•
12	ı	DHW primary cylinder	(2)	•	•
13	ı	DHW secondary cylinder	(2)	•	•
14	1220599	Immersion probe		•	•

\$\text{(20)}{(20)}

Check the combinations indicated in section "1. BOILER-HEAT PUMP COMBINATION".

Supplied with the FAMILY ES heat pump.

The 7000 ACI 120 PLUS storage tank (code 20082450) guarantees the minimum water content necessary for the correct operation of the heat pump.

Refer to the SYSTEM COMPLEMENTARY ITEMS - WATER CIRCULATORS section.

Refer to "TECHNICAL Separator connection.

Possible hydraulic separator connection.

Accessories to be installed inside the boiler.

MAY 2022 EDITION

**MANDATORY ACCESSORIES** 

Hybrid systems-Floor-standing solution

## RES floor-standing split hybrid system





- Heating, cooling and domestic hot water production
- Intelligent management of several energy sources: condensing boiler and heat pump
- Possibility to control up to 3 indoor zones

A floor-standing hybrid system is a multi-energy hybrid system for heating, summer cooling and domestic hot water production. This system is manufactured by combining three main components together:

- the wall-hung boiler: depending on the installation needs, the choice of the gas generator can be made among boilers from 25 to 35kW, heating-only boilers, for wall-hung (indoor or outdoor in partially protected places) or built-in installation. The boilers have a modulation ratio of 1:5 or 1:8, depending on the model, and are all equipped with high-efficiency circulators. The system control panel is able to activate the most energy efficient heat source based on climatic conditions, and to manage the system with up to 2 independent hot/cold temperature zones.
- The heat pump: floor-standing split air-water type of the Domus ES series, available in versions ranging from 5 to 15 kW, with floor-standing indoor unit for heating, cooling and domestic hot water production. The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The indoor unit houses the main components of the hydronic system, including a 200l buffer tank with large-surface stainless steel coil for instantaneous production of domestic hot water.
- The hydraulic distribution module: the choice can be made between the simple Hbox hydraulic node, and the more flexible BAG3 Hybrid distribution module. Hbox allows you to make a simple hydraulic connection between the two generators, creating system which boiler pumps and the heat pump in the vlagus For more complex systems, the BAG3 Hybrid distribution module is available: for indoor recessed or wall-hung installations, or for outdoor recessed installations, in 1-direct, 2-direct or 1-direct and 1-mixed configurations, equipped with low consumption self-modulating circulators (EEI≤0.20). The distribution module also works as hydraulic separator between the generators and the system circuits. The system is set up for connection to a single-coil domestic hot water heater served by heat pump, or to a dual-coil domestic hot water heater served by heat pump and solar thermal system, by installing the diverting valve kit.
- Simple and intuitive control panel with large backlit display, characterised by advanced management logics of the hybrid system, in order to guarantee maximum efficiency by giving priority to the most efficient heat source according to the outside temperature. The panel allows the full parametrisation of the system, as well as displaying the operating status. It is supplied with heat pump, complete with bracket, to be positioned directly inside the rooms.

### WALL-HUNG BOILERS

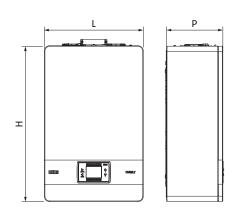
### **TECHNICAL DATA**

**RIELLO** 

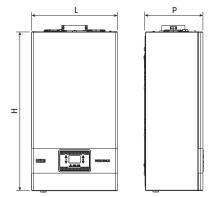
Description	Heat output Heating/Domestic Water	Working	Working efficiency		Energy efficiency class		Notes	Code
	min-max kW	Nominal output (50°/30°C) %	30% of nominal output (ret. 30 °C) %	production ∆T 25° I/min	1			
HEATING-ONLY VERSION					•			
FAMILY 25 IS	3.6-20.0/3.6-25.0	106.6	109.1	1	A	-	(1)	20187643
FAMILY 35 IS	4.9-32.0/4.9-34.6	107.5	109.5	1	А	-	(1)	20187646
RESIDENCE 20 IS	3.6-20.0/3.6-20.0	106.2	108.4	-	Α	-	(1)(2)	20139526
RESIDENCE 35 IS	4.9-30.0/4.9-34.6	106.9	108.2	-	A	-	(1)(2)	20139528
RESIDENCE IN HYBRID 25 IS	3.1-20.0/3.1-25.0	105	110	-	Α	-	(3)	20135128
BUILT-IN UNIT								
IN-WALL INSTALLATION BOX							(4)	20082310

- The external probe is not included in the boiler supply, but is available as accessory with code 1220559.
   A wall-hung hybrid system requires the replacement of boiler display with code 20193921.
   The boiler code includes hybrid system control panel and external probe.
   To be used for Family 25 KIS, Residence 25 KIS and Residence In Hybrid.

### **OVERALL DIMENSIONS**

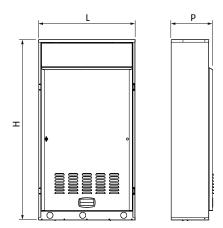


Description	H mm	L mm	P mm	Net weight kg
FAMILY 25 IS	740	470	275	35
FAMILY 35 IS	740	470	350	39

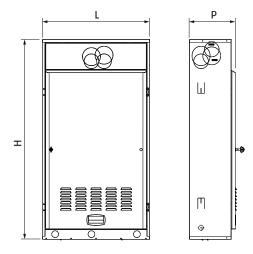


Description	H mm	L mm	P mm	Net weight kg
RESIDENCE 20 IS	740	420	275	34
RESIDENCE 35 IS	740	420	350	36

Height including SRD device: 822 mm



Description	H	L	P	Net weight
	mm	mm	mm	kg
RESIDENCE IN HYBRID 25 IS	785	553	268	40



Description	H	L	P	Net weight
	mm	mm	mm	kg
IN-WALL INSTALLATION BOX	1223	654	281	21

### **HEAT PUMPS**

### **TECHNICAL DATA**

Description		Hea	ating			Coc	ling		Electrical											
	Floo	or (1)	Fan co	oils (2)	Floo	Floor (3)		Floor (3)		Floor (3)		Floor (3)		Floor (3) Fan coil		oils (4)	power supply V/Ph/Hz			
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)	(6)									
THE CODES BELOW A	ALWAYS RE	FER TO TH	IE COMBIN	ATION OF	INDOOR A	AND OUTD	OOR UNITS	5	*		,									
DOMUS ES 5M	4.8	4.11	4.5	2.96	5.1	3.43	3.5	2.48	230/1/50	A++	A /L	20155360								
DOMUS ES 7M	7.1	4.33	6.7	3.13	7.4	4.02	5.3	3.03	230/1/50	A++	A /L	20155362								
DOMUS ES 9M	8.1	4.53	7.6	3.46	8.7	4.21	6.3	3.18	230/1/50	A+++	A /L	20155363								
DOMUS ES 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A /XL	20155364								
DOMUS ES 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A /XL	20155366								
DOMUS ES 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A /XL	20155365								
DOMUS ES 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A /XL	20155368								

- The performance is in accordance with standards EN 14511:2013 and EN 14825:2016

  (1) External air temperature 7°C BS, 6°C BU; water inlet/outlet 30/35°C

  (2) External air temperature 7°C BS, 6°C BU; water inlet/outlet 40/45°C

  (3) External air temperature 35°C; water inlet/outlet 23/18°C

  (4) External air temperature 35°C; water inlet/outlet 12/7°C

  (5) Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013

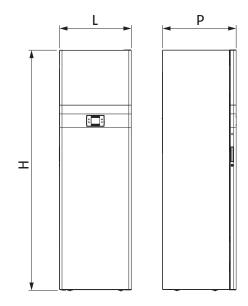
  (6) Tank set temperature 53°C. Values compliant with standard EN 16147.

TERMINAL UNITS

### **RIELLO**

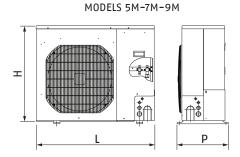
### **OVERALL DIMENSIONS**

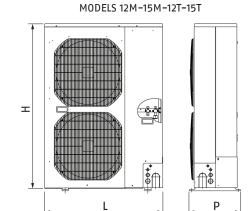
INDOOR UNIT



Description	H mm	L mm	P mm	Net weight kg
INDOOR UNIT				,
DOMUS ES 5-7-9-12-15M DOMUS ES 12-15T	2000	600	600	179
OUTDOOR UNIT				
DOMUS ES 5M	619	799	299	39
DOMUS ES 7M	619	799	299	40
DOMUS ES 9M	996	940	340	69
DOMUS ES 12M	1416	940	340	98
DOMUS ES 15M	1416	940	340	98
DOMUS ES 12T	1416	940	340	98
DOMUS ES 15T	1416	940	340	98

### OUTDOOR UNIT

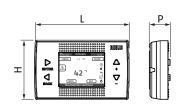




### **REC10 I CONTROL**

Note: the hybrid system management control is supplied with DOMUS ES heat pump.

### **OVERALL DIMENSIONS**



Description	H	L	P	Net weight
	mm	mm	mm	kg
REC10 I control	90	146	32	0.15

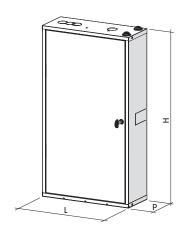
### **COMBINABLE HYBRID DISTRIBUTION MODULES**

### **TECHNICAL DATA**

Description	Zone management	t Electrical power Maximum power supply absorbed W/Ph/Hz W		Notes	Code
DISTRIBUTION MODULES WITH SEPARATOR					
BAG³ HYBRID 2D	2 direct zone	230/1/50	114	(2)(5)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(3)(5)	20130807
IN-WALL INSTALLATION BOX	-	-	-	(4)	20130808

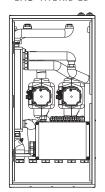
- Equipped as standard with limit thermostat for low temperature systems. Mixed zone equipped as standard with limit thermostat for low temperature systems.
- Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG³ HYBRID. Supplied without in-wall installation box.

### **OVERALL DIMENSIONS**

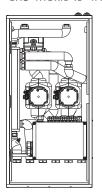


Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

### BAG3 HYBRID 2D



### BAG<sup>3</sup> HYBRID 1D+1M



### **INERTIAL STORAGE TANKS TO BE MATCHED**

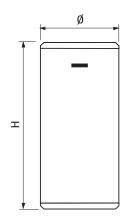
### **TECHNICAL DATA**

Description	Volume delivered l	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy efficiency class	Code
7000 ACI 60 PLUS	57	99	6	34	В	20090056
7000 ACI 120 PLUS	123	99	6	50	В	20082450

**TERMINAL UNITS** 

### **OVERALL DIMENSIONS**

**RIELLO** 



Description	H mm	ø mm	Net weight kg
7000 ACI 60 PLUS	935	400	25
7000 ACI 120 PLUS	1095	500	35

Dimensions and weight with insulation.

### **GUIDE TO SYSTEM CONFIGURATION**



- BOILER-HEAT PUMP COMBINATIONS
- 2. WALL-HUNG BOILER ACCESSORIES
- 3. ACCESSORIES TO COMPLETE THE SYSTEM
- 3.1 Hydraulic accessories
- 3.2 Secondary circuit management
- 3.3 Hybrid distribution module accessories
- 4. HI, COMFORT CONTROLS

### 1. BOILER-HEAT PUMP COMBINATIONS (RECOMMENDED)\*

Description	Code	Built-in unit		Possible heat pump combinations					Hydraulic distribution		
		IN-WALL INSTALLATION BOX	DOMUS ES 5M	DOMUS ES 7M	DOMUS ES 9M	DOMUS ES 12M	DOMUS ES 15M	DOMUS ES 12T	DOMUS ES 15T	BAG³ HYBRID 2D	BAG <sup>3</sup> HYBRID 1D+1M
		20161604	20155360	20155362	20155363	20155364	20155366	20155365	20155368	20130806	20130807
HEATING-ONLY VERSION											
FAMILY 25 IS	20187643		•	•	•					•	•
FAMILY 35 IS	20187646		•	•	•	•	•	•	•	•	•
RESIDENCE 20 IS	20139526		•	•	•					•	•
RESIDENCE 35 IS	20139528		•	•	•	•	•	•	•	•	•
RESIDENCE IN HYBRID 25 IS	20135128	•	•	•	•					•	•

<sup>(\*)</sup> The following combinations guarantee the best energy performance; for the full list of certified hybrid systems please refer to the company declaration.

### 2. WALL-HUNG BOILER ACCESSORIES

Description	Notes	Code
FAMILY BOILERS		
Vertical connection stub pipe kit Ø60/100 mm	(1)	20129174
90° bend kit Ø60/100 mm for boiler start	(2)	20129172
Condensate booster pump kit		20097192
Well probe for remote heater (for heating only version)		1220599
Compact magnetic water filter		20191517
Compact polyphosphate dispenser		20191518
Double relay kit (second pump/lockout signal)		20062614
Adjustable splitter kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed split system kit Ø80 mm		20129765
Wall-hung collector Ø60/100 mm		20129175
Telescopic wall-hung collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Split kit B23 Ø80 mm for in-wall installation box		20129768
Adapter kit B23 Ø80 mm		20129769
External probe kit		1220559
Anti-freeze resistance kit for heating-only versions		20193279
RESIDENCE BOILERS		
Vertical connection stub pipe kit Ø60/100 mm	(1)	20129174
90° bend kit Ø60/100 mm for boiler start	(2)	20129172
Connection kit with heating system and gas cocks (for IS models)		20133517
Connection kit with gas cock (for IS models)		20133386
High head circulator kit		20105883
Condensate booster pump kit		20097192
Well probe for remote heater (for heating only version)		1220599
Magnetic filter kit		20178780
Polyphosphate dispenser kit		20178781
Adjustable splitter kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed split system kit Ø80 mm		20129765
Wall-hung collector Ø60/100 mm		20129175
Telescopic wall-hung collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Split kit B23 Ø80 mm for in-wall installation box		20129768
Adapter kit B23 Ø80 mm		20129769
External probe kit		1220559

Description Notes Code Anti-freeze resistance kit for heating-only versions 20145305 RESIDENCE IN HYBRID BOILERS Door kit for recessed installation (3)4047250 4047252 Heating system cock kit Wall-hung connection kit 4047255 External probe 1220559 Anti-freeze resistance kit for IS versions 20164828 Condensate booster pump kit 20097192 Remote heater well probe (for pairing with IS version) 1220599 Clapet kit 20162838

Code required in case of vertical discharge with 60/100 flue system. Accessory already included in kit 20129177.

Code required in case of horizontal discharge with flue system 60/100. Accessory already included in kits 20129175 and 20129176.

For retrofit on old boxes without door.

### 3. ACCESSORIES TO COMPLETE THE SYSTEM

### 3.1 Hydraulic accessories

Description	Notes	Code
Cock kit	(1)	20155924
50 litre inertial buffer tank	(2)	20171999
2-4-6 kW single-phase heating element kit	(3)	20155831
2-4-6 kW three-phase heating element kit	(3)	20157335
S hydraulic separator kit (includes secondary circulator)	(4)	20155826
L hydraulic separator kit (includes secondary circulator)	(5)	20155827
Average temperature circulator kit (towel warmers)		20155834
REC10CH locking kit and wall bracket		20161942

All accessories are supplied separately as kits and must be installed on site.

Mandatory accessory to be ordered together with the unit. The kit includes domestic water inlet and outlet cocks, system and design radiators, the discharge

tubes for safety valves, the collector for discharge and the necessary hardware. Inertial storage cannot be installed horizontally below the heat pump.

The power supplied by the heating element depends on the type of wiring performed during installation

Accessory that can be combined with Domus ES 5, 7 and 9 models. This accessory must be installed in the unit before connecting it to the system.

Accessory that can be combined with Domus ES 12, 15 models. This accessory must be installed in the unit before connecting it to the system.

### 3.2 Secondary circuit management

Description	Notes	Code
1" DHW diverting valve with heater probe		20175064
Immersion probe	(1)	1220599
1st direct/mixed area control		20132795
Control of 2 <sup>nd</sup> and 3 <sup>rd</sup> direct/mixed zone		20132796

(1) Used for secondary circuit and heater management.

Note: for ambient temperature adjustment, refer to section SYSTEM ACCESSORIES - THERMOSTATS AND PROGRAMMABLE THERMOSTATS

### 3.3 Hybrid distribution module accessories

Description	Code
Cock kit on system and heat pump side	20131752

### 4. Hi, COMFORT CONTROLS

### Room controls with capability of management through APP

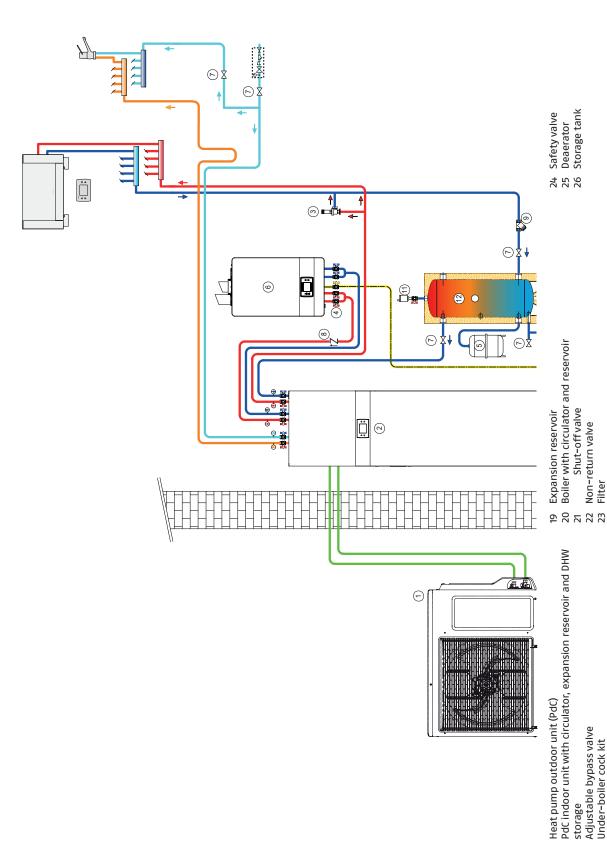
Drawing	Description	Notes	Code
20.00	Hi, Comfort T100 Wi-Fi	(1)	20193354
208.00	Hi, Comfort T100	(2)	20193352
N, (sanker	Hi, Comfort G100-W		20193355
ense (	Hi, Comfort G100-R		20193356

With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.

(2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

## **EXAMPLES OF SYSTEM WITH SPLIT HYBRID SYSTEM**

# ONE-ZONE HEATING, COOLING AND DHW PRODUCTION SYSTEM COMBINED WITH SPLIT HEAT PUMP AND BOILER



15

18

Hybrid systems-Floor-standing solution

## Solar RES floor-standing split hybrid system





- Heating, cooling and domestic hot water production
- Intelligent management of multiple energy sources: condensing boiler, solar thermal and heat pump
- Possibility to control up to 3 indoor zones

A floor-standing hybrid system is a multi-energy hybrid system for heating, summer cooling and domestic hot water production. This system is manufactured by combining three main components together:

- the wall-hung boiler: depending on the installation needs, the choice of the gas generator can be made among boilers from 25 to 35kW, heating-only boilers, for wall-hung (indoor or outdoor in partially protected places) or built-in installation. The boilers have a modulation ratio of 1:5 or 1:8, depending on the model, and are all equipped with high-efficiency circulators. The system control panel is able to activate the most energy efficient heat source based on climatic conditions, and to manage the system with up to 2 independent hot/cold temperature zones.
- The heat pump: floor-standing split air-water type of the Domus ES Solar series, available in versions ranging from 5 to 15 kW, with floor-standing indoor unit for heating, cooling and domestic hot water production. The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The indoor unit houses the main components of the hydronic system, including a 200l buffer tank with large-surface stainless steel coil for instantaneous production of domestic hot water.
- The hydraulic distribution module: the choice can be made between the simple Hbox hydraulic node, and the more flexible BAG³ Hybrid distribution module. Hbox allows you to make a simple hydraulic connection between the two generators, creating a one-way system in which the boiler pumps and the heat pump supply the system. For more complex systems, the BAG³ Hybrid distribution module is available: for indoor recessed or wall-hung installations, or for outdoor recessed installations, in 1-direct, 2-direct or 1-direct and 1-mixed configurations, equipped with low consumption self-modulating circulators (EEI≤0.20). The distribution module also works as hydraulic separator between the generators and the system circuits. The system is set up for connection to a single-coil domestic hot water heater served by heat pump, or to a dual-coil domestic hot water heater served by heat pump and solar thermal system, by installing the diverting valve kit.
- Simple and intuitive control panel with large backlit display, characterised by advanced management logics of the hybrid system, in order
  to guarantee maximum efficiency by giving priority to the most efficient heat source according to the outside temperature. The panel
  allows the full parametrisation of the system, as well as displaying the operating status. It is supplied with heat pump, complete with
  bracket, to be positioned directly inside the rooms.

### **WALL-HUNG BOILERS**

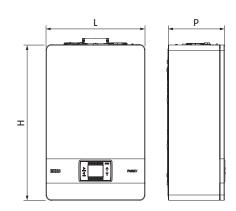
### **TECHNICAL DATA**

Description	Heat output Heating/Domestic Water	Working	Domestic Energy effi water class			Notes	Code	
	min-max kW	Nominal output (50°/30°C) %	30% of nominal output (ret. 30 °C) %	production ΔT 25° I/min	1000	<b>"</b>		
HEATING-ONLY VERSION								
FAMILY 25 IS	3.6-20.0/3.6-25.0	106.6	109.1	1	А	-	(1)	20187643
FAMILY 35 IS	4.9-32.0/4.9-34.6	107.5	109.5	1	Α	-	(1)	20187646
RESIDENCE 20 IS	3.6-20.0/3.6-20.0	106.2	108.4	-	Α	-	(1)(2)	20139526
RESIDENCE 35 IS	4.9-30.0/4.9-34.6	106.9	108.2	-	Α	-	(1)(2)	20139528
RESIDENCE IN HYBRID 25 IS	3.1-20.0/3.1-25.0	105	110	-	Α	_	(3)	20135128
BUILT-IN UNIT					•			
IN-WALL INSTALLATION BOX							(4)	20082310

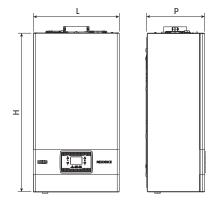
- The external probe is not included in the boiler supply, but is available as accessory with code 1220559. A wall-hung hybrid system requires the replacement of boiler display with code 20193921. The boiler code includes hybrid system control panel and external probe.

  To be used for Family 25 KIS, Residence 25 KIS and Residence In Hybrid.

### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
FAMILY 25 IS	740	470	275	35
FAMILY 35 IS	740	470	350	39



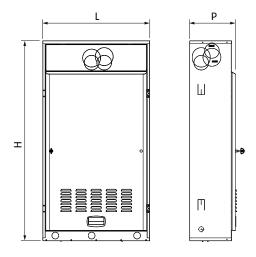
Description	H mm	L mm	P mm	Net weight kg
RESIDENCE 20 IS	740	420	275	34
RESIDENCE 35 IS	740	420	350	36

Height including SRD device: 822 mm

**RIELLO** 

	L	P
エ	•	

Description	H	L	P	Net weight
	mm	mm	mm	kg
RESIDENCE IN HYBRID 25 IS	785	553	268	40



Description	H mm	L mm	P mm	Net weight kg
IN-WALL INSTALLATION BOX M	1223	654	281	21
IN-WALL INSTALLATION BOX S	1223	654	255	18

### **HEAT PUMPS**

### **TECHNICAL DATA**

Description		Hea	ting			Coo	ling		Electrical .		efficiency	Notes	Code
	Flo (1)		Fan co	ils (2)	Flo (3		Fan d		power supply V/Ph/Hz	Cl	ass		
	Nominal power kW	СОР	Nominal power kW	COP	Nominal power kW	EER	Nominal power kW	EER		(5)	(6)		
THE CODES BELOW ALWAY	YS REFER	TO THE	COMBINA	TION OF	INDOOR	AND OU	TDOOR UN	IITS					
DOMUS ES SOLAR 5M	4.8	4.11	4.5	2.96	5.1	3.43	3.5	2.48	230/1/50	A++	A /L	(D)	20155373
DOMUS ES SOLAR 7M	7.1	4.33	6.7	3.13	7.4	4.02	5.3	3.03	230/1/50	A++	A /L	(D)	20155375
DOMUS ES SOLAR 9M	8.1	4.53	7.6	3.46	8.7	4.21	6.3	3.18	230/1/50	A+++	A /L	(D)	20155376
DOMUS ES SOLAR 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A /XL	(D)	20155377
DOMUS ES SOLAR 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A /XL	(D)	20155382
DOMUS ES SOLAR 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A /XL	(D)	20155380
DOMUS ES SOLAR 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A /XL	(D)	20155385

- The performance is in accordance with standards EN 14511:2013 and EN 14825:2016

  (1) External air temperature 7°C BS, 6°C BU; water inlet/outlet 30/35°C

  (2) External air temperature 7°C BS, 6°C BU; water inlet/outlet 40/45°C

  (3) External air temperature 35°C; water inlet/outlet 23/18°C

  (4) External air temperature 35°C; water inlet/outlet 12/7°C

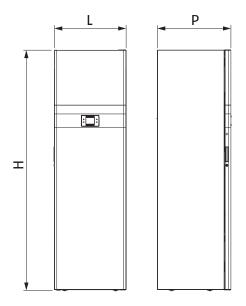
  (5) Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013

  (6) Tank set temperature 53°C. Values compliant with standard EN 16147

  (D) Availability of the material at our warehouse: 15 working days from the order validation date.

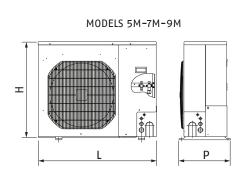
### **OVERALL DIMENSIONS**

### INDOOR UNIT

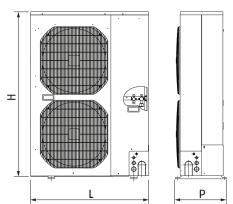


Description	H mm	L mm	P mm	Net weight kg
INDOOR UNIT				
DOMUS ES SOLAR 5-7-9-12-15M DOMUS ES SOLAR 12-15T	2000	600	600	179
OUTDOOR UNIT				
DOMUS ES SOLAR 5M	619	799	299	39
DOMUS ES SOLAR 7M	619	799	299	40
DOMUS ES SOLAR 9M	996	940	340	69
DOMUS ES SOLAR 12M	1416	940	340	98
DOMUS ES SOLAR 15M	1416	940	340	98
DOMUS ES SOLAR 12T	1416	940	340	98
DOMUS ES SOLAR 15T	1416	940	340	98

### OUTDOOR UNIT



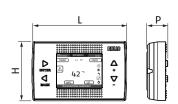
### MODELS 12M-15M-12T-15T



### **REC10 I CONTROL**

Note: the hybrid system management control is supplied with DOMUS ES SOLAR heat pump.

### **OVERALL DIMENSIONS**



Description	H	L	P	Net weight
	mm	mm	mm	kg
REC10 I control	90	146	32	0.15

### **COMBINABLE HYBRID DISTRIBUTION MODULES**

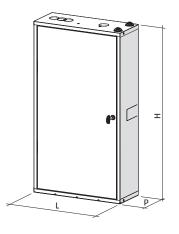
### **TECHNICAL DATA**

**RIELLO** 

IN-WALL INSTALLATION BOX	-	_	_	(4)	20130808				
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(3)(5)	20130807				
BAG <sup>3</sup> HYBRID 2D	2 direct zone	230/1/50	114	(2)(5)	20130806				
DISTRIBUTION MODULES WITH SEPARATOR									
Description	Zone management	Electrical power supply V/Ph/Hz	Maximum power absorbed W	Notes	Code				

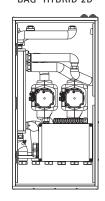
- Equipped as standard with limit thermostat for low temperature systems. Mixed zone equipped as standard with limit thermostat for low temperature systems.
- Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG<sup>3</sup> HYBRID. Supplied without in-wall installation box.

### **OVERALL DIMENSIONS**

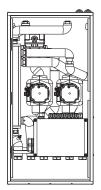


Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

### BAG<sup>3</sup> HYBRID 2D



### BAG<sup>3</sup> HYBRID 1D+1M

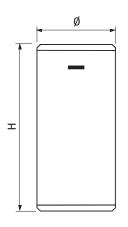


### **INERTIAL STORAGE TANKS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Volume delivered I	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy efficiency class	Code
7000 ACI 60 PLUS	57	99	6	34	В	20090056
7000 ACI 120 PLUS	123	99	6	50	В	20082450

### OVERALL DIMENSIONS



Description	H mm	ø mm	Net weight kg
7000 ACI 60 PLUS	935	400	25
7000 ACI 120 PLUS	1095	500	35

Dimensions and weight with insulation.

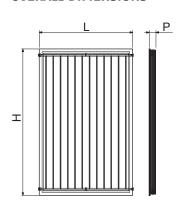
### **SOLAR COLLECTORS TO BE MATCHED**

### **TECHNICAL DATA**

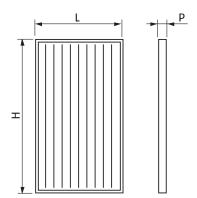
Description	Collecto	Collector surface		erred to the or	ening area	Stagnation	Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C		no.
RPS 25/2 EVO	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2.3	2.14	0.802	4.28	0.0064	200	(1)	20127137
CSAL 20 RS	1.91	1.77	0.781	4.98	0.0005	192	(1)	20094521
CSV 25 R	2.77	2.69	0.7	1.15	0.011	268	(1)	20023353
CSV 35 R	3.91	3.84	0.7	1.15	0.011	268	(1)	20023416

<sup>(1)</sup> The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page 223.

### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
RPS 25/2 EVO	2004	1195	86	41.5
RPS 25/4	2004	1195	85	44



Description	H	L	P	Net weight
	mm	mm	mm	kg
CSAL 20 RS	1818	1097	70	30

	<u>L</u>	P
I		

Description	H mm	L mm	P mm	Net weight kg
CSV 25 R	1730	1600	145	52
CSV 35 R	1730	2260	145	74

### **GUIDE TO SYSTEM CONFIGURATION**



- 1. BOILER-HEAT PUMP COMBINATIONS
- 2. WALL-HUNG BOILER ACCESSORIES
- 3. ACCESSORIES TO COMPLETE THE SYSTEM
- 3.1 Hydraulic accessories
- 3.2 Secondary circuit management
- 3.3 Hybrid distribution module accessories
- 4. HI, COMFORT CONTROLS

### 1. BOILER-HEAT PUMP COMBINATIONS (RECOMMENDED)\*

Description	Code	Built-in unit		Possil	ole hea	at pump combinations				Hydraulic distribution	
		IN-WALL INSTALLATION BOX	DOMUS ES SOLAR 5M	DOMUS ES SOLAR 7M	DOMUS ES SOLAR 9 M	DOMUS ES SOLAR 12M	DOMUS ES SOLAR 15 M	DOMUS ES SOLAR 12T	DOMUS ES SOLAR 15T	BAG³ HYBRID 2D	BAG³ HYBRID 1D+1M
		20161604	20155373	20155375	20155376	20155377	20155382	20155380	20155385	20130806	20130807
HEATING-ONLY VERSION	·										
FAMILY 25 IS	20187643		•	•	•					•	•
FAMILY 35 IS	20187646		•	•	•	•	•	•	•	•	•
RESIDENCE 20 IS	20139526		•	•	•					•	•
RESIDENCE 35 IS	20139528		•	•	•	•	•	•	•	•	•
RESIDENCE IN HYBRID 25 IS	20135128	•	•	•	•					•	•

<sup>(\*)</sup> The following combinations guarantee the best energy performance; for the full list of certified hybrid systems please refer to the company declaration.

### 2. WALL-HUNG BOILER ACCESSORIES

Description	Notes	Code
FAMILY BOILERS		
Vertical connection stub pipe kit Ø60/100 mm	(1)	20129174
90° bend kit Ø60/100 mm for boiler start	(2)	20129172
Condensate booster pump kit		20097192
Well probe for remote heater (for heating only version)		1220599
Compact magnetic water filter		20191517
Compact polyphosphate dispenser		20191518
Double relay kit (second pump/lockout signal)		20062614
Adjustable splitter kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed split system kit Ø80 mm		20129765
Wall-hung collector Ø60/100 mm		20129175
Telescopic wall-hung collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Split kit B23 Ø80 mm for in-wall installation box		20129768
Adapter kit B23 Ø80 mm		20129769
External probe kit		1220559
Anti-freeze resistance kit for heating-only versions		20193279
RESIDENCE BOILERS		
Vertical connection stub pipe kit Ø60/100 mm	(1)	20129174
90° bend kit Ø60/100 mm for boiler start	(2)	20129172
Connection kit with heating system and gas cocks (for IS models)		20133517
Connection kit with gas cock (for IS models)		20133386
High head circulator kit		20105883
Condensate booster pump kit		20097192
Well probe for remote heater (for heating only version)		1220599
Magnetic filter kit		20178780
Polyphosphate dispenser kit		20178781
Adjustable splitter kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed split system kit Ø80 mm		20129765
Wall-hung collector Ø60/100 mm		20129175
Telescopic wall-hung collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Split kit B23 Ø80 mm for in-wall installation box		20129768
Adapter kit B23 Ø80 mm		20129769
External probe kit		1220559
Anti-freeze resistance kit for heating-only versions		20145305
RESIDENCE IN HYBRID BOILERS		
Door kit for recessed installation	(3)	4047250
Heating system cock kit		4047252
Nall-hung connection kit		4047255
External probe		1220559
Anti-freeze resistance kit for IS versions		20164828
Condensate booster pump kit		20097192
Remote heater well probe (for pairing with IS version)		1220599
LPG conversion kit for Residence In Condens 20 I		20102669
Clapet kit		20162838

<sup>(1)</sup> (2) (3) Code required in case of vertical discharge with 60/100 flue system. Accessory already included in kit 20129177.

Code required in case of horizontal discharge with flue system 60/100. Accessory already included in kits 20129175 and 20129176. For retrofit on old boxes without door.

**TERMINAL UNITS** 

### 3. ACCESSORIES TO COMPLETE THE SYSTEM

### 3.1 Hydraulic accessories

RIELLO

Description	Notes	Code
Cock kit	(1)	20155924
50 litre inertial buffer tank	(2)	20171999
2-4-6 kW single-phase heating element kit	(3)	20155831
2-4-6 kW three-phase heating element kit	(3)	20157335
S hydraulic separator kit (includes secondary circulator)	(4)	20155826
L hydraulic separator kit (includes secondary circulator)	(5)	20155827
Average temperature circulator kit (towel warmers)		20155834
REC10CH locking kit and wall bracket		20161942

All accessories are supplied separately as kits and must be installed on site.

Mandatory accessory to be ordered together with the unit. The kit includes domestic water inlet and outlet cocks, system and design radiators, the discharge tubes for safety valves, the collector for discharge and the necessary hardware.

- Inertial storage cannot be installed horizontally below the heat pump.

  The power supplied by the heating element depends on the type of wiring performed during installation
- Accessory that can be combined with Domus ES 5, 7 and 9 models. This accessory must be installed in the unit before connecting it to the system.
- Accessory that can be combined with Domus ES 12, 15 models. This accessory must be installed in the unit before connecting it to the system.

### 3.2 Secondary circuit management

Description	Notes	Code
1" DHW diverting valve with heater probe		20175064
Immersion probe	(1)	1220599
1st direct/mixed area control		20132795
Control of 2 <sup>nd</sup> and 3 <sup>rd</sup> direct/mixed zone		20132796

(1) Used for secondary circuit and heater management.

Note: for ambient temperature adjustment, refer to section SYSTEM ACCESSORIES - THERMOSTATS AND PROGRAMMABLE THERMOSTATS

### 3.3 Hybrid distribution module accessories

Description	Code
Cock kit on system and heat pump side	20131752

### 4. Hi, COMFORT CONTROLS

### Room controls with capability of management through APP

Drawing	Description	Notes	Code
20 0	Hi, Comfort T100 Wi-Fi	(1)	20193354
20.8	Hi, Comfort T100	(2)	20193352
NJ. (Sambor)	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

- (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
- (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

Solar station with control unit

Pre-reservoir DHW mixer

Non-return valve Filter

9 6 2

Under-boiler cock kit Expansion reservoir Boiler with circulator and reservoir

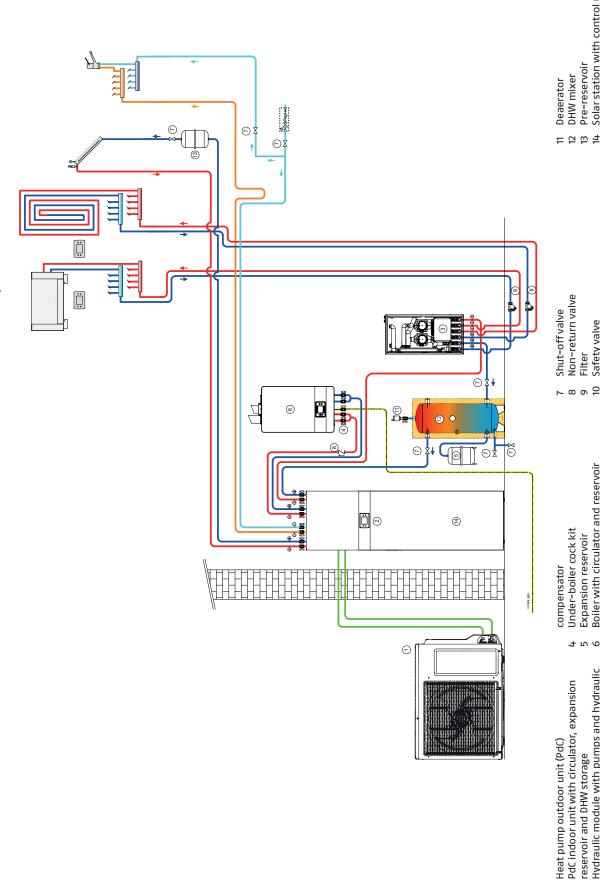
9 2 4

PdC indoor unit with circulator, expansion reservoir and DHW storage Hydraulic module with pumps and hydraulic

Safety valve

## **EXAMPLES OF SYSTEM WITH SPLIT HYBRID SYSTEM**

# MONOVALENT TWO-ZONE HEATING AND DHW PRODUCTION SYSTEM COMBINED WITH SPLIT HEAT PUMP, BOILER AND SOLAR SYSTEM



Hybrid systems-Floor-standing solution

## Hybrid PRO floor-standing system

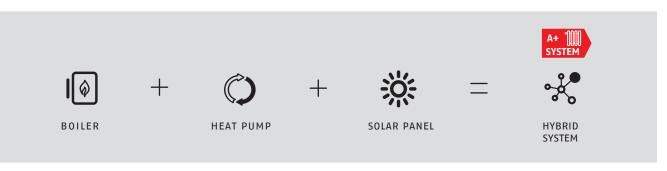


- Heating and domestic hot water production
- Intelligent management of multiple energy sources: condensing boiler, solar thermal and heat pump
- Large display for setting and monitoring the entire system
- Possibility to control up to 3 independent zones

The Hybrid PRO floor-standing system is a multi-energy hybrid system for room heating and domestic hot water production. This system is made by combining three main components together:

- Stand alone floor-standing boiler of the TAU UNIT series, available in versions ranging from 34.9 up to 115 kW of heat input, to be installed internally either in open chamber or sealed configuration. This range is equipped with a high water content heat exchanger with vertical flue gas tubes, allowing an effective stratification of the water and ensuring that high-temperature water will be in the upper part of the unit, while cold water will accumulate in the lower part, where condensation takes place. The optimal management of combustion and the high modulation ratio (1:10) allow high efficiency and low polluting emissions (NOx in Class 6 according to UNI EN 15502-1). Maximum operating pressure: 5 bar.
- FAMILY ES series split heat pump, available in versions ranging from 12 up to 25 kW, with wall-hung indoor unit for heating and domestic hot water production. The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The indoor unit houses the main components of the hydronic system, high surface plate exchanger and high-efficiency electronic circulation pump. The outdoor unit also stands out for its extreme compactness, with all the hydraulic and cooling connections in the lower part of the unit.
- Simple and intuitive control panel with large backlit display, featured by advanced management logics of the hybrid system, in order to ensure maximum efficiency by giving priority to the most efficient heat source according to the outside temperature. The panel allows the full parametrisation of the system, as well as displaying the operating status. It is supplied with heat pump, complete with bracket, to be positioned directly inside the rooms.

A wide range of accessories is available to complete the system and ensure simple, fast installation in order to meet different installation requirements.

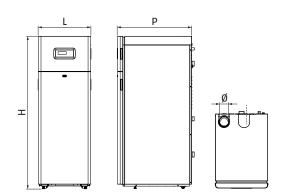


FLOOR-STANDING BOILERS

### **TECHNICAL DATA**

Description	Delivered max 80°/60°	Output kW Delivered max 50°/30°	Furnace thermal output min-max	Max nominal	Norking efficiency Max nominal output (50°/30°) %	Red. load	Energy efficiency class	Code
TAU UNIT 35	34.0	37.0	3.5-34.8	97.7	106.3	107.7	Α	20145133
TAU UNIT 50	48.5	54.5	4.9-49.0	97.1	109.2	108.9	A	20144105
TAU UNIT 70	68.0	76.5	6.9-69.9	97.3	109.4	108.5	Α	20144106
TAU UNIT 100	97.5	106.5	10.0-100.0	97.5	109.2	108.6	-	20144107
TAU UNIT 115	112.0	125.4	11.5-115.0	97.4	109.0	108.8	-	20144108

### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	ø mm	Net weight kg
TAU UNIT 35	1365	600	760	80	135
TAU UNIT 50	1550	600	890	80	155
TAU UNIT 70	1550	600	890	80	165
TAU UNIT 100	1810	600	870	110	245
TAU UNIT 115	1810	600	870	110	245

### **HEAT PUMPS**

### **TECHNICAL DATA**

Description		Hea	iting			Cooli	ng (*)		Electrical power		fficiency	Code
	Floo	r (1)	Fan co	ils (2)	Floo	r (3)	Fan co	oils (4)	supply V/Ph/Hz	CI	ass	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		<b>)</b> (5)	<b>(6)</b>	
THE CODES BELOW ALV	VAYS REFE	R TO THE	COMBINAT	ION OF IN	DOOR AND	OUTD00	R UNITS					
FAMILY ES 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A++	20181797
FAMILY ES 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A++	20181805
FAMILY ES 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A++	20181803
FAMILY ES 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A++	20181806
FAMILY ES 18T	16.9	4.37	15.9	3.18	19.4	4.13	13.9	3.19	400/3+N/50	A++	A++	20181807
FAMILY ES 25T	24.8	4.06	23.2	2.93	27.9	4.20	19.9	3.15	400/3+N/50	A++	A++	20181809

(\*) If the heat pump is installed in the PRO Wall-hung Hybrid System, the cooling function is disabled.

The performance is in accordance with standards EN 14511:2013 and EN 14825:2016.

(1) External air temperature 7°C D.B., 6°C W.B.; water inlet/outlet 30/35°C.

(2) External air temperature 7°C D.B., 6°C W.B.; water inlet/outlet 40/45°C.

(3) External air temperature 35°C; water inlet/outlet 23/18°C.

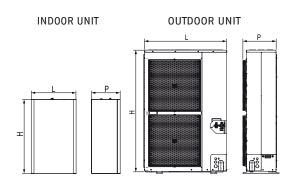
(4) External air temperature 35°C; water inlet/outlet 12/7°C.

(5) Value referred to the Average climate profile for delivery temperature of 35 °C. Values in accordance with Regulation 811/2013.

(6) Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013.

### **OVERALL DIMENSIONS**

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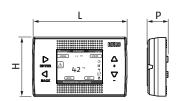


Description			В	N - 4 · · · · · l - l - 4
Description	H	L	P	Net weight
	mm	mm	mm	kg
INDOOR UNIT				
FAMILY ES	825	505	325	41-49
OUTDOOR UNIT				
FAMILY ES 12M/12T	1416	940	340	98
FAMILY ES 15M/15T	1416	940	340	98
FAMILY ES 18T	1416	940	340	98
FAMILY ES 25T	1500	980	370	138

### **REC10 I CONTROL**

Note: the hybrid system control is supplied with the FAMILY ES heat pump.

### **OVERALL DIMENSIONS**



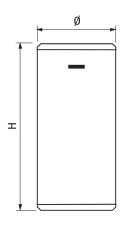
Description	H	L	P	Net weight
	mm	mm	mm	kg
REC10 I control	90	146	32	0.15

### STORAGE TANKS TO BE MATCHED

### **TECHNICAL DATA**

Description	Usable volume I	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy efficiency class	Code
7000 ACI 120 PLUS	123	99	6	50	В	20082450
7000 ACI 200 PLUS	203	99	6	68	С	20028093
7000 ACI 300 PLUS	277	99	6	82	С	20028094

### **OVERALL DIMENSIONS**



Description	H mm	ø mm	Net weight kg
7000 ACI 120 PLUS	1095	500	35
7000 ACI 200 PLUS	1395	550	45
7000 ACI 300 PLUS	1560	600	55

Dimensions and weight with insulation.

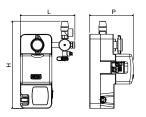
### **SOLAR HYDRAULIC UNITS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Connections and ball valves	Net surface of collectors to be connected* m²	Notes	Code
RSS R	Return-only	20	(1)	20116168

<sup>(1)</sup> Compatible with PWM and ON/OFF control.

### **OVERALL DIMENSIONS**



Description	H	L	P	Net weight
	mm	mm	mm	kg
RSS R	364	228	183	4.1

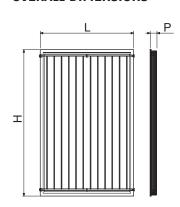
### **SOLAR COLLECTORS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Collecto	r surface	Values refe	erred to the op	ening area	Stagnation	Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C		no.
RPS 25/2 EVO	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2.3	2.14	0.802	4.28	0.0064	200	(1)	20127137
CSAL 20 RS	1.91	1.77	0.781	4.98	0.0005	192	(1)	20094521
CSV 25 R	2.77	2.69	0.7	1.15	0.011	268	(1)	20023353
CSV 35 R	3.91	3.84	0.7	1.15	0.011	268	(1)	20023416

<sup>(1)</sup> The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page 223.

### **OVERALL DIMENSIONS**

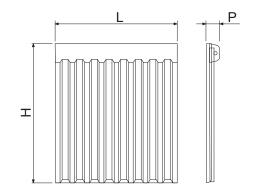


Description	H mm	L mm	P mm	Net weight kg
RPS 25/2 EVO	2004	1195	86	41.5
RPS 25/4	2004	1195	85	44

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#		

Description	H	L	P	Net weight
	mm	mm	mm	kg
CSAL 20 RS	1818	1097	70	30

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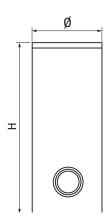
Description	H mm	L mm	P mm	Net weight kg
CSV 25 R	1730	1600	145	52
CSV 35 R	1730	2260	145	74

### **DHW CYLINDERS TO BE MATCHED**

### **TECHNICAL DATA**

Description	Useful delivered I	Heat pump coil surface area (m²)	Exchange surface area lower coil (m²)	Exchange power upper coil (kW)	Maximum temperature °C	Maximum pressure bar	Dispersions W	Energy efficiency class	Code
								<b>E</b>	
7200 300 HP	263	4.0	-	-	99	10	85	С	4383500
7200 500 HP	470	6.0	-	-	99	10	112	С	4383501
7200 800 HP	702	7.0	-	-	99	10	130	С	20136293
RBC 430 1S	445	-	2	-	99	10	73	В	20124170
RBC 550 1S	555	-	2.4	-	99	10	84	В	20124171
RBC 800 1S	735	-	2.57	-	99	7	95	В	20132270
RBC 1000 1S	890	-	2.92	-	99	7	103	В	20132271
RBS 430 2S	430	-	1.4	31.4	99	10	75	В	20117339
RBS 550 2S	551	-	1.8	31.4	99	10	68	В	20116587
RBS 800 2S	731	-	2.3	50	99	7	94	В	20132268
RBS 1000 2S	883	-	2.7	50	99	7	101	В	20132269
7200/2-1500 HV PLUS	1390		3.4	47	99	8	162	С	20136237
7200/2-2000 HV PLUS	1950		4.6	73	99	8	186	С	20136239

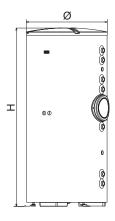
### **OVERALL DIMENSIONS**

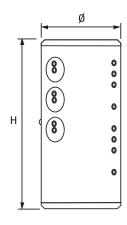


Description	H mm	ø mm	S (*) mm	Net weight kg
7200 300 HP	1615	600	50	119
7200 500 HP	1690	750	50	166
7200 800 HP	1875	990	100	217

(\*) Insulation thickness.
Dimensions and weight with insulation.

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Description	H mm	ø mm	S (*) mm	Net weight kg
RBC 430 1S	1644	755	52	131
RBC 550 1S	1988	755	52	157
RBC 800 1S	1835	974	92	203
RBC 1000 1S	2155	974	92	225

(\*) Insulation thickness.
Dimensions and weight with insulation.

Description	H mm	ø mm	S (*) mm	Net weight kg
RBS 430 2S	1644	755	50	146
RBS 550 2S	1988	755	50	171
RBS 800 2S	1846	1000	100	222
RBS 1000 2S	2171	1000	100	245

(\*) Insulation thickness.
Dimensions and weight with insulation.

Description	H mm	ø mm	S (*) mm	Net weight kg
7200/2-1500 HV PLUS	2185	1200	100	324
7200/2-2000 HV PLUS	2470	1300	100	544

(\*) Insulation thickness.
Dimensions and weight with insulation.

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**TERMINAL UNITS** 

### SYSTEM CONFIGURATION GUIDE



### 1. BOILER-HEAT PUMP COMBINATIONS

- 2. FLOOR-STANDING BOILER ACCESSORIES
- 2.1 Accessories to complete the system
- 2.2 Additional safety devices
- 2.3 LPG transformation kit
- 2.4 Sealed combustion conversion kit (type C)
- 2.5 Flue systems
- 2.6 Treatment systems for condensate neutralization
- 3. ACCESSORIES TO COMPLETE THE SYSTEM
- 3.1 Hydraulic accessories
- 3.2 Secondary circuit management
- 3.3 DHW cylinder accessories
- 3.4 Solar circuit management
- 4. HI, COMFORT CONTROLS

### 1. BOILER-HEAT PUMP COMBINATIONS (RECOMMENDED)\*

Description	Code	FAMILY ES 12M	FAMILY ES 15M	FAMILY ES 12T	FAMILY ES 15T	FAMILY ES 18T	FAMILY ES 25T
		20181797	20181805	20181803	20181806	20181807	20181809
TAU UNIT 35	20145133	•	•	•	•	•	
TAU UNIT 50	20144105	•	•	•	•	•	
TAU UNIT 70	20144106		•		•	•	•
TAU UNIT 100	20144107						•
TAU UNIT 115	20144108						•

<sup>(\*)</sup> To satisfy the Italian regulation about the hybrid systems. For the extra-IT markets, all the boiler-HP combinations are available.

### 2. FLOOR-STANDING BOILER ACCESSORIES

### 2.1 Accessories to complete the system

Description	Code
Expansion vessel (only for TAU UNIT 35)	20154816

### 2.2 Additional safety devices

Description	Notes	Code
Safety devices kit	(1)	20180519
Pressure gauge and safety valve set 4 bar	(2)	20181010
Pressure gauge and safety valve set 4,5 bar	(3)	20181867
Reduction fitting 2" - 1" ½	(4)	20182680
Fuel shut-off valve kit (VIC) - ØG.1"	(5)	20009486
DN15 flowmeter		20149998
DN20 flowmeter		20149996

Description	Notes	Code
DN25 flowmeter		20146343

- Includes stub pipe with INAIL safety devices, excluding: safety valve + pressure gauge set, fuel shut-off valves and flowmeter (to be ordered separately). To be provided for TAU UNIT 50-70 models
- (1) (2) (3)
- To be provided for TAU UNIT 100-115 models
- To be provided in case of INAIL kit installation for TAU UNIT 100 and 115 models.

  Recommended up to maximum power of 131 kW, calculated considering gas supply pressure = 20 mbar.

### 2.3 LPG transformation kit

Description	Code
LPG transformation kit (TAU UNIT 35)	20145150
LPG transformation kit (TAU UNIT 50)	20144699
LPG transformation kit (TAU UNIT 70)	20144700
LPG transformation kit (TAU UNIT 100)	20144703
LPG transformation kit (TAU UNIT 115)	20144704

### 2.4 Sealed combustion conversion kit (type C)

Description	Notes	Code
Type C conversion kit (TAU UNIT 35–50)	(1)	20144759
Type C conversion kit (TAU UNIT 70)	(1)	20144760
Type C conversion kit (TAU UNIT 100–115)	(1)	20144761

Accessories for split discharge, for concentric discharge, to complete the installation, refer to the section "Flue systems".

### 2.5 Flue systems

Description	Notes	Code
Conversion kit for back flue discharge (TAU UNIT 35)	(1)	20160064
Conversion kit for back flue discharge (TAU UNIT 50-70)	(1)	20147234
Conversion kit for back flue discharge (TAU UNIT 100-115)	(1)	20147235

For each type, check the maximum equivalent lengths by referring to the technical data sheet and/or by contacting the pre-sales service. For flue gas exhaust system refer to the 2021 Product Catalogue.

### 2.6 Treatment systems for condensate neutralization

Description	Notes	Code
Condensate neutralizer HN2 (up to 270 kW)	(1)	4031811
Condensate neutralizer N2 (up to 450 kW)		4031810

<sup>(1)</sup> Equipped with extraction pumps.

### 3. ACCESSORIES TO COMPLETE THE SYSTEM

### 3.1 Hydraulic accessories

Descript	ion Code
1" Y water filter	20175281
7000 ACI 120 PLUS	20082450
7000 ACI 200 PLUS	20028093
7000 ACI 300 PLUS	20028094

### 3.2 Secondary circuit management

Description	Notes	Code
1" DHW diverting valve with DHW cylinder probe	(1)	20175064
Immersion probe	(2)	1220599
1st direct/mixed zone management		20132795
2 <sup>nd</sup> /3 <sup>rd</sup> direct/mixed zone management		20132796

For FAMILY ES 18T and 25T models, carefully check the system and DHW circuit for pressure drops. Used for secondary circuit and DHW cylinder management.

MAY 2022 EDITION

Note: for room temperature control refer to the 2021 Product Catalogue under section SYSTEM COMPLEMENTARY ITEMS - THERMOSTATS AND CHRONOTHERMOSTATS.

WATER-HEATERS

### 3.3 DHW cylinder accessories

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Description	Notes	Code
Electronic anode equipped with plug	(1)	20055206
Thermometer kit	(1)	20123850
Curve kit for electronic anode	(1)	20123851
Solar heat exchanger 0.8 m² for HP 300	(2)	4383504
Solar heat exchanger 1.2 m <sup>2</sup> for 500 HP and 800 HP	(3)	4383505

- RBC 1S and RBS 2S series DHW cylinder accessories.
- 7200 HP 300 DHW cylinder accessories
- 7200 HP 500 and 7200 HP 800 DHW cylinder accessories.

### 3.4 Solar circuit management

Description	Notes	Code
RSS R solar hydraulic unit	(1)(2)(3)	20116168
Solar interface kit	(4)	20131756

- The RSS R return-only solar hydraulic unit and the solar interface kit (code 20131756) must always be ordered together.
- Net area of connectable collectors: 20 m<sup>2</sup>
- (2) (3) Connections and ball valves on the return line
- It allows viewing the operating status of the solar system on the REC10 I system interface.

Note: in case of installation of collectors with a net surface area >20 m², please refer to the 2021 Product Catalogue under the section SOLAR THERMAL AND CYLINDER - COMPLEMENTARY ITEMS - PUMP STATIONS AND DIFFERENTIAL CONTROLLERS.

Note: for the selection of solar panel accessories, please refer to the 2021 Product Catalogue under the section SOLAR THERMAL AND CYLINDER - SOLAR COLLECTORS.

### 4. Hi, COMFORT CONTROLS

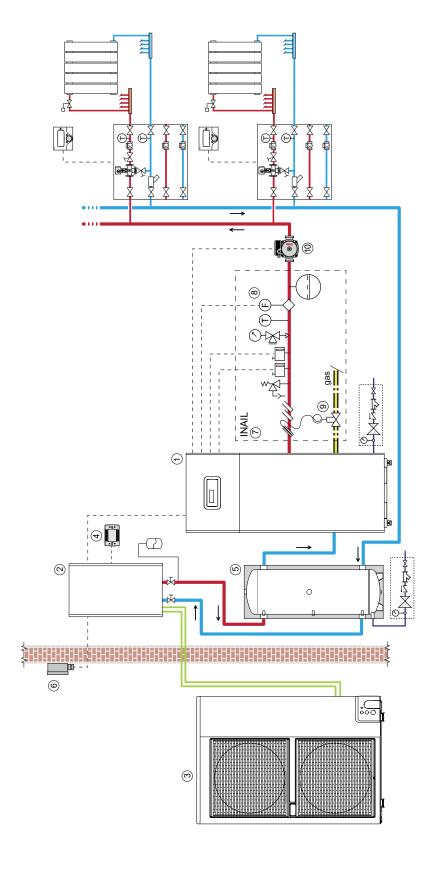
### Room controls with capability of management through APP

Drawing	Description	Notes	Code
20.00	Hi, Comfort T100 Wi-Fi	(1)	20193354
E 20.85	Hi, Comfort T100	(2)	20193352
II, feeder	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

- (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
  (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

# EXAMPLES OF INSTALLATION WITH PRO WALL-HUNG HYBRID SYSTEM

## BIVALENT HEATING SYSTEM WITH HEAT PUMP AND BOILER



Storage tank 19

External probe for climatic heat control (supplied with the heat pump)
INAIL safety device stub pipe

System circulation pump Flowmeter Fuel shut-off valve 22 23 24

FAMILY ES heat pump indoor unit FAMILY ES heat pump outdoor unit REC10 I control panel (supplied with the heat pump) 15 17 18

TAU UNIT condensing boiler

**AIR CONDITIONING TERMINAL UNITS** 

SYSTEM COMPLEMENTARY ITEMS

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HEAT PUMPS & CHILLERS

WALL-HUNG BOILERS

FLOOR-STANDING BOILERS

WATER-HEATERS

SOLAR THERMAL AND CYLINDERS

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

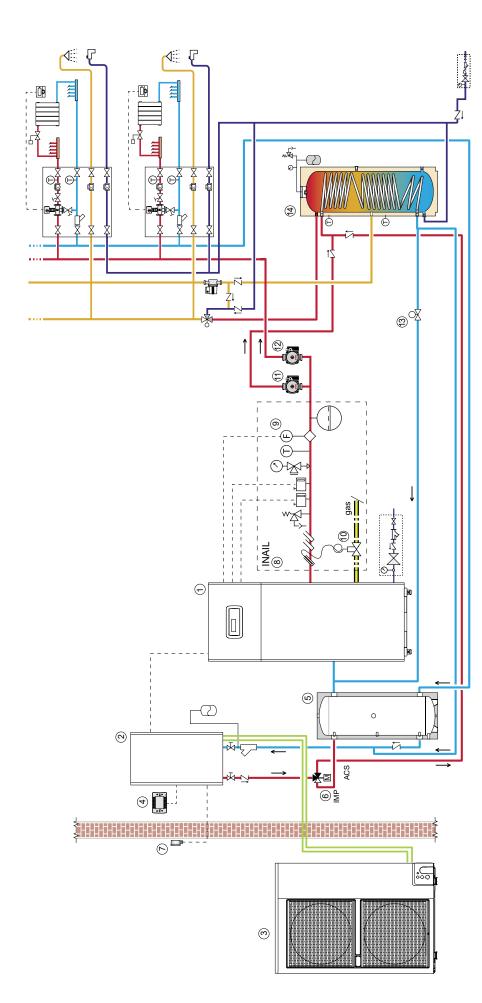
TERMINAL UNITS AIR CONDITIONING

CENTRALIZED HEATING

SORIES
MANDATORY ACCESSORIES

Ref. Layout	Code	Description		Notes	TAU UNIT 35	TAU UNIT 50	TAU UNIT 70	TAU UNIT 100	TAU UNIT 115
FLOOR-STA	FLOOR-STANDING BOILER								
-	1	TAU UNIT		(1)	•	•	•	•	•
7	20180519	Safety devices kit				•	•	•	•
7	20182680	Reduction fitting 2" - 1" 1/2	1" 1/2					•	•
7	20181867	Pressure gauge and	Pressure gauge and safety valve set 4,5 bar			•	•		
7	20181010	Pressure gauge and	Pressure gauge and safety valve set 4 bar					•	•
8	20149998	DN15 flowmeter	$(\Delta T = 20^{\circ}C)$			•			
			$(\Delta T = 10^{\circ}C)$			•			
80	20149996	DN20 flowmeter	$(\Delta T = 15^{\circ}C)$			•	•		
			$(\Delta T = 20^{\circ}C)$				•	•	
			$(\Delta T = 10^{\circ}C)$				•		
80	20146343	DN25 flowmeter	$(\Delta T = 15^{\circ}C)$					•	•
			$(\Delta T = 20^{\circ}C)$						•
80	20146345	DN32 flowmeter	$(\Delta T = 10^{\circ}C)$					•	•
6	20009486	Fuel shut-off valve kit (VIC) - ØG.1"	e kit (VIC) – ØG.1"			•	•	•	•
неат римр	Ф								
2	1	FAMILY ES indoor unit	nit	(1)	•	•	•	•	•
3	1	FAMILY ES outdoor unit	unit	(1)	•	•	•	•	•
SYSTEM COMPLETION	MPLETION								
4	1	REC10 I control panel	lel	(2)	•	•	•	•	•
9	1	External probe for	External probe for climatic heat control	(2)	•	•	•	•	•
5	-	7000 ACI PLUS storage tank	ige tank	(3)	•	•	•	•	•
10	1	System circulation pump	dund	(4)	•	•	•	•	•

Check the combinations indicated in section "1. BOILER-HEAT PUMP COMBINATION".
Supplied with the FAMINE'S heat pump.
The 7004 G1120 PULS storage 1-rank (Code 20082450) guarantees the minimum water content necessary for the correct operation of all the heat pump models proposed.
Refer to the SYSTEM COMPLEMENTARY ITEMS - WAITER CIRCULATORS section. £353



- DHW diverting valve External probe for climatic heat control (supplied with 9 2
  - the heat pump)
- INAIL safety device stub pipe Flowmeter 80 0

REC10 I control panel (supplied with the heat pump)

Storage tank

TAU UNIT condensing boiler FAMILY ES heat pump indoor unit FAMILY ES heat pump outdoor unit

- Cylinder loading pump Fuel shut-off valve
- System circulation pump 2-way motor-driven valve
  - DHW cylinder

**TERMINAL UNITS** 

BIVALENT HEATING AND COMBINED DHW PRODUCTION SYSTEM WITH HEAT PUMP, BOILER AND SINGLE COIL CYLINDER

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•		

HEAT PUMPS & CHILLERS

CENTRALIZED HEATING

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

MANDATORY ACCESSORIES

TERMINAL UNITS AIR CONDITIONING

WALL-HUNG BOILERS FLOOR-STANDING BOILERS WATER-HEATERS SOLAR THERMAL AND CYLINDERS

Ref. Layo ut	Code	Description		Notes	TAU UNIT 35	TAU UNIT 50	TAU UNIT 70	TAU UNIT 100	TAU UNIT 115
FLOOR-ST.	FLOOR-STANDING BOILER								
-	ı	TAU UNIT		(1)	•	•	•	•	•
8	20180519	Safety devices kit				•	•	•	•
8	20182680	Reduction fitting 2" - 1" 1/2	11 1/2					•	•
80	20181867	Pressure gauge and	Pressure gauge and safety valve set 4,5 bar			•	•		
8	20181010	Pressure gauge and	Pressure gauge and safety valve set 4 bar					•	•
6	20149998	DN15 flowmeter	$(\Delta T = 20^{\circ}C)$			•			
			$(\Delta T = 10^{\circ}C)$			•			
6	20149996	DN20 flowmeter	$(\Delta T = 15^{\circ}C)$			•	•		
			$(\Delta T = 20^{\circ}C)$				•	•	
			$(\Delta T = 10^{\circ}C)$				•		
6	20146343	DN25 flowmeter	$(\Delta T = 15^{\circ}C)$					•	•
			(∆T = 20°C)						•
6	20146345	DN32 flowmeter	$(\Delta T = 10^{\circ}C)$					•	•
10	20009486	Fuel shut-off valve kit (VIC) - ØG.1"	e kit (VIC) – ØG.1"			•	•	•	•
НЕАТ РИМР	1P								
2	ı	FAMILY ES indoor unit	ınit	(1)	•	•	•	•	•
3	ı	FAMILY ES outdoor unit	unit	(1)	•	•	•	•	•
SYSTEM CO	SYSTEM COMPLETION								
4	ı	REC10 I control par	REC10 I control panel (supplied with the heat pump)	(2)	•	•	•	•	•
5	ı	7000 ACI PLUS storage tank	age tank	(3)	•	•	•	•	•
9	20175064	1" DHW diverting v	1" DHW diverting valve with cylinder probe		•	•	•	•	•
7	ı	External probe for	External probe for climatic heat control (supplied with the heat pump)	(2)	•	•	•	•	•
11	ı	Cylinder loading pump	dwn	(4)	•	•	•	•	•
12	ı	System circulation pump	dwnd L	(4)	•	•	•	•	•
13	ı	2-way motor-drive	2-way motor-driven valve with limit microswitch	(9)	•	•	•	•	•
14	ı	DHW cylinder		(5)	•	•	•	•	•

Check the combinations indicated in section "1. BOILER-HEAT PUMP COMBINATION".

Supplied with the FAMILY ES heat pump.
The 7000 AGI 120 PUJS storage tank (code 20082450) guarantees the minimum water content necessary for the correct operation of all the heat pump models proposed.
Refer to the SYSTEM COMPLEMENTARY ITEMS - WATER CIRCULATORS section.
Refer to "TECHNICAL DATA".
Responsibility of the installer. @@£@D3

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- DHW diverting valve External probe for climatic heat control (supplied with
- the heat pump) 9 2

System circulation pump DHW primary cylinder DHW secondary cylinder Cylinder loading pump Fuel shut-off valve 

> INAIL safety device stub pipe Flowmeter 80 0

REC10 I control panel (supplied with the heat pump)

Storage tank

FAMILY ES heat pump indoor unit FAMILY ES heat pump outdoor unit

TAU UNIT condensing boiler

BIVALENT HEATING AND COMBINED DHW PRODUCTION SYSTEM WITH HEAT PUMP, BOILER AND SINGLE COIL CYLINDER

RI	EL	LO

HEAT PUMPS & CHILLERS

WALL-HUNG BOILERS

FLOOR-STANDING BOILERS

SYSTEM COMPLEMENTARY ITEMS

HOT AIR GENERATORS

MANDATORY ACCESSORIES

**TERMINAL UNITS** 

WATER-HEATERS SOLAR THERMAL AND CYLINDERS CENTRALIZED HEATING AIR CONDITIONING

Ref. Layout	Code	Description		Notes	TAU UNIT 35	TAU UNIT 50	TAU UNIT 70	TAU UNIT 100	TAU UNIT 115
FLOOR-ST	FLOOR-STANDING BOILER								
1	ı	TAU UNIT		(1)	•	•	•	•	•
8	20180519	Safety devices kit				•	•	•	•
8	20182680	Reduction fitting 2" - 1" 1/2	" - 1" 1/2					•	•
8	20181867	Pressure gauge and	Pressure gauge and safety valve set 4,5 bar			•	•		
8	20181010	Pressure gauge and	Pressure gauge and safety valve set 4 bar					•	•
6	20149998	DN15 flowmeter	$(\Delta T = 20^{\circ}C)$			•			
			$(\Delta T = 10^{\circ}C)$			•			
6	20149996	DN20 flowmeter	$(\Delta T = 15^{\circ}C)$			•	•		
			$(\Delta T = 20^{\circ}C)$				•	•	
			$(\Delta T = 10^{\circ}C)$				•		
6	20146343	DN25 flowmeter	$(\Delta T = 15^{\circ}C)$					•	•
			$(\Delta T = 20^{\circ}C)$						•
6	20146345	DN32 flowmeter	$(\Delta T = 10^{\circ}C)$					•	•
10	20009486	Fuel shut-off valve kit (VIC) - ØG.1"	e kit (VIC) – ØG.1"			•	•	•	•
НЕАТ РИМР	1P								
2	ı	FAMILY ES indoor unit	nit	(1)	•	•	•	•	•
3	ı	FAMILY ES outdoor unit	unit	(1)	•	•	•	•	•
SYSTEM CO	SYSTEM COMPLETION								
4	ı	REC10 I control par	REC10 I control panel (supplied with the heat pump)	(2)	•	•	•	•	•
5	ı	7000 ACI PLUS storage tank	age tank	(3)	•	•	•	•	•
9	20175064	1" DHW diverting v	1" DHW diverting valve with cylinder probe		•	•	•	•	•
7	ı	External probe for	External probe for climatic heat control (supplied with the heat pump)	(2)	•	•	•	•	•
11	ı	Cylinder loading pump	dwn	(4)	•	•	•	•	•
12	-	System circulation pump	dmud i	(4)	•	•	•	•	•
13	ı	DHW primary cylinder	der	(2)	•	•	•	•	•
14	ı	DHW secondary cylinder	linder	(2)	•	•	•	•	•

9£003

Check the combinations indicated in section "1. BOILER-HEAT PUMP COMBINATION".

Supplied with the FAMILY ES heat pump.

The 7000 ACI 120 PUJS storage tank (code 20082450) guarantees the minimum water content necessary for the correct operation of all the heat pump models proposed.

Refer to the SYSTEM COMPLEMENTARY ITEMS - WATER CIRCULATORS section.

Refer to "TECHNICAL DATA".



HEAT PUMPS & CHILLERS	
HEAT PUMPS	115
CHILLERS	137

**HEAT PUMPS** 



#### FOR CENTRAL HEATING AND DHW PRODUCTION FROM LOW TO MEDIUM POWER

		AIR-WATER MON	IOBLOC	AIR-WATER S	SPLIT		
				1	WALL-HUNG	STA	ANDING
		NO.	NXHM 004-016		FAMILY ES		DOMUS ES
		-	NXHM 004-016 NXHM 012-016 T		Family ES 5-15M Family ES 12-25T		Domus ES 5-15M Domus ES 12-15T
	HIGH TEMPERATURE		NEW	RIELLO		RELID	
	PER/		page 116		page 123		page 128
	TEM		NXHM 018-030 (*)				DOMUS ES SOLAR
DNINOL	HIGH		NXHM 018-030T			RELIO	Domus ES Solar 5–15M Domus ES Solar 12–15T
CONDIT			page 118				page 132
D AIR			NEXPOLAR 017-022				
HEATING AND AIR CONDITIONING	URE		NEXPOLAR 017-022 TE				
	MEDIUM TEMPERATURE		page 120				
	M TE		NXH				
	MEDIUI	to a	NXH 026-040				
			page 122				

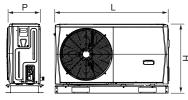
<sup>(\*)</sup> Available from July 2022.

RIELLO

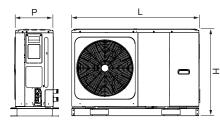
## NXHM 004-016

NEW





#### NXH 008-016



Description	H mm	L mm	P mm	Net weight kg
NXHM 004	792	1295	429	98
NXHM 006	792	1295	429	98
NXHM 008	945	1385	526	121
NXHM 010	945	1385	526	121
NXHM 012/012T	945	1385	526	144
NXHM 014/014T	945	1385	526	144
NXHM 016/016T	945	1385	526	144

Monobloc air-water heat pumps





• High efficiency inverter heat pump in R32

NXHM is a high energy efficient residential hydronic heat pump for heating, cooling and possible production of domestic hot water for domestic use.

The unit operates on ecological R32 refrigerant ensuring not only low Global Warming Potential (GWP) and CO, emission, but also powerful performance with high energy efficiency at all times.

NXHM is also equipped with new Blue-Fin exchange coils, a special hydrophilic and anti-corrosion treatment, which improves the flow of condensation on the fins thus reducing the risk of freezing on the coil (maximum efficiency even in humid climates). NXHM is available in 10 different models with heating capacity from 4.2 to 15.9 kW.

- DC-Inverter technology with Twin-Rotary compressor which modulates the power necessary to perfectly match the real needed load
- High COP and EER (all NXHM heat pumps is compliant with the highest standards in term of energy efficiency)
- HP Keymark certified performance
- They can be connected to low-temperature radiators, underfloor radiant elements and fan coil type units
- Water heating temperature up to +65 °C
- Easy and quick installation
- Silent operation
- Wired controller is included which is able to manage completely heating/ cooling/ domestic hot water system
- The control can manage up to 6 units in cascade system (1 master & 5 slaves) even with different power input
- Anti-freeze program protects the entire system especially the hydraulic parts from damage in very cold ambient air temperature.

#### TECHNICAL DATA

Description		Hea	ating			Coc	oling		Electrical supply	Energy efficiency	Code
	Floo	or (1)	Fan co	oils (2)	Floo	r (3)	Fan co	ils (4)	V/Ph/Hz	class	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)	
AIR-WATER MONOBI	OC SINGLE PI	HASE									
NXHM 004	4.20	5.10	4.30	3.80	4.50	5.50	4.70	3.45	230/1/50	A++	20191936
NXHM 006	6.35	4.95	6.30	3.70	6.50	4.80	7.00	3.00	230/1/50	A++	20191940
800 MHXN	8.40	5.15	8.10	3.85	8.30	5.05	7.45	3.35	230/1/50	A++	20191942
NXHM 010	10.00	4.95	10.00	3.75	9.90	4.55	8.20	3.25	230/1/50	A++	20191943

Description		Hea	nting			Coc	oling		Electrical	Energy	Code
	Floo	r (1)	Fan co	oils (2)	Floo	r (3)	Fan co	oils (4)	supply V/Ph/Hz	efficiency class	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)	
NXHM 012	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	230/1/50	A++	20191944
NXHM 014	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	230/1/50	A++	20191945
NXHM 016	15.90	4.50	16.00	3.50	14.20	3.61	14.00	2.50	230/1/50	A++	20191946
AIR-WATER MONOB	LOC THREE-PH	IASE									
NXHM 012T	12.10	4.95	12.30	3.70	12.00	3.95	11.50	2.75	400/3/50	A++	20191947
NXHM 014T	14.50	4.60	14.10	3.60	13.50	3.61	12.40	2.50	400/3/50	A++	20191948
NXHM 016T	15.90	4.50	16.00	3.50	14.20	3.61	14.00	2.50	400/3/50	A++	20191949

- The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

  (1) Heating: delivery water temperature 35 °C with thermal gradient 5 K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u.

  (2) Heating: delivery water temperature 45 °C with gradient 5 K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u.

  (3) Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C.

  (4) Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C.

  (5) Seasonal energy efficiency class for average climate zone for 55 °C delivery temperature.

#### **ACCESSORIES**

Description	Notes	Code
CYLINDER		
RBC 150 1S		20124167
RBC 200 1S		20124168
RBC 300 1S		20124169
RBC 430 1S		20124170
RBC 550 1S		20124171
RBC 800 1S		20132270
RBC 1000 1S		20132271
7200 300 HP (NXHM 004-008)		4383500
7200 500 HP (NXHM 010-016)		4383501
PUFFER		
7000 ACI 120 PLUS		20082450
7000 ACI 60 PLUS		20090056
Inertial storage of 50 liters	(8)	20171999
HYDRAULIC SYSTEM ACCESSORY		
1" DHW diverting valve with heater probe	(10)	20168920
Solar heat exchanger 1.2 m² for 500 HP	(1)	4383505
Y water filter 1"	(7)	20175281
MECHANICAL ACCESSORY		
Solar heat exchanger 0.8 m² for 300 HP	(1)	4383504
1" DHW diverter valve with boiler probe	(2)(4)(9)	20175064
ELECTRICAL ACCESSORY		
REC10MH remote control		20193921
Temperature probe for balancing tanks or zone 2 flow temperature or solar temperature		20194933
1.5 kW single-phase electric heater kit	(1)	4383270
3.0 kW single-phase electric heater kit	(3)(5)(6)	20182272
3.8 kW three-phase electric heater kit	(1)	20020707
Integrative electrical resistance 1PH-3PH 2-6 kW	(6)	20182292

- The accessory must be ordered together with the base unit and is supplied not installed with finished product availability.
- The accessory must be used in combination with the temperature probe included in the heat pump, or accessory 20194933. Only in combination with RECIOMH remote control.

- The accessory must be ordered together with the base unit and is supplied not installed with finished product availability
   The accessory must be used in combination with the temperature probe included in the heat pump, or accessory 20194933
   Only in combination with RECIOMH remote control.
   Mandatory in case of domestic water heater installation.
   The kit includes the three-way diverting valve for DHW with heater probe.
   Includes electrical power box and activation relay.
   The water filter is included with the NXHM heat pump. If necessary, it should only be used for NXHM 004 and 006 models.
   The buffer tank cannot be installed horizontally below the heat pump.

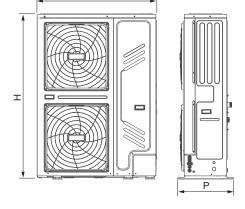
- (9) Accessory managed by the machine interface. (10) Only in combination with the REC10MH remote control.

Monobloc air-water heat pumps

## NXHM 018-030









• High efficiency inverter heat pump in R32

Description	H	L	P	Net weight
	mm	mm	mm	kg
NXHM 018T-030T	1558	1129	528	177

NXHM 018-030 is the ideal solution for any type of residential and commercial applications for heating and cooling, with the possibility of producing domestic hot water at high energy efficiency.

The unit operates on ecological R32 refrigerant ensuring not only low Global Warming Potential (GWP) and CO, emission, but also powerful performance with high energy efficiency at wide operating range. NXHM 018-030 is also equipped with new Blue-Fin exchange coils, a special hydrophilic and anti-corrosion treatment, which improves the flow of condensation on the fins thus reducing the risk of freezing on the coil (maximum efficiency even in humid climates). The unit is monobloc so all components are included inside to facilitate installation and operation.

NXHM 018-030 is supplied with the control, and is available in 4 different models with heating capacity from 18 to 30 kW.

- DC-Inverter technology with Twin-Rotary compressor which modulates the power necessary to perfectly match the real
- High COP and EER (all NXHM heat pumps is compliant with the highest standards in term of energy efficiency)
- HP Keymark certified performance
- They can be connected to low-temperature radiators, underfloor radiant elements and fan coil type units
- Water heating temperature up to +60 °C
- Easy and quick installation
- Silent operation
- Wired controller is included which is able to manage completely heating/ cooling/ domestic hot water system
- The control can manage up to 6 units in cascade system (1 master & 5 slaves) even with different power input
- Anti-freeze program protects the entire system especially the hydraulic parts from damage in very cold ambient air temperature.

#### **TECHNICAL DATA**

Description		Hea	ting			Cooling				Energy	Code
	Floo	Floor (1)		Fan coils (2)		Floor (3)		ils (4)	supply V/Ph/Hz	efficiency class	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5) ••••••	
THREE PHASE MONOB	LOC AIR - W	/ATER									
NXHM 018T	18.00	4.70	18.00	3.50	18.50	4.75	17.00	3.05	400/3/50	A++	20194140
NXHM 022T	22.00	4.40	22.00	3.40	23.00	4.60	21.00	2.95	400/3/50	A++	20194141
NXHM 026T	26.00	4.08	26.00	3.10	27.00	4.30	26.00	2.70	400/3/50	A+	20194142
NXHM 030T	30.10	3.91	30.00	2.90	31.00	4.00	29.50	2.55	400/3/50	A+	20194143

The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

- Heating: delivery water temperature 35 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Heating: delivery water temperature 45 °C with gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u.

- Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Seasonal energy efficiency class for average climate zone for 55 °C delivery temperature.

#### **ACCESSORIES**

Description	Notes	Code
CYLINDER		
RBC 800 1S		20132270
RBC 1000 1S		20132271
7200 HP 500		4383501
7200 HP 800		20136293
PUFFER		
7000 ACI 60 PLUS		20090056
7000 ACI 120 PLUS		20082450
Inertial storage of 100 liters		20142300
MECHANICAL ACCESSORY		
Solar exchanger 1,2 m² (7200 500-800 HP)	(1)(2)	4383505
Support bracket kit		20175145
ELECTRICAL ACCESSORY		
Temperature probe for balancing tanks or zone 2 flow temperature or solar temperature		20194933
1.5 kW single-phase electric heater kit	(1)(2)	4383270
2.2 kW single-phase electric heater kit	(1)(2)	4383271
3.0 kW single-phase electric heater kit	(1)(2)	4383272
3.8 kW three-phase electric heater kit	(1)(2)	20020707

<sup>(1)</sup> The accessory must be ordered together with the base unit and is supplied not installed with the availability of the finished product.
(2) Not for 7000 ACI 60 PLUS.

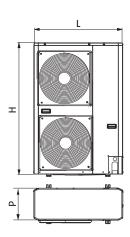
**TERMINAL UNITS** 

## RIELLO

Monobloc air-water heat pumps

## NexPolar 017-022







· High efficiency inverter heat pump

Description	H	L	P
	mm	mm	mm
NexPolar 017-022	1579	1135	559

NexPolar is the new Riello proposal for heating and cooling, with possible production of high energy efficient domestic hot water for domestic use. The unit is equipped with a PAM and PWM modulated DC-Inverter control, which allows the Twin-Rotary type compressor to be continuously modulated from 30% up to 120%, thereby guaranteeing

high energy efficiency at all times. The operating range of the unit in winter reaches outdoor temperatures of -20 °C, with hot water up to +60 °C; in summer operation the maximum outdoor temperature is +47 °C with a maximum chilled water temperature of +18 °C.

NexPolar is therefore the ideal proposal for any type of residential and commercial application for heating and cooling with underfloor installations and/or fan coils.

The unit is monobloc, so all components are housed inside to facilitate and speed up installation operations.

NexPolar is supplied with climate control as standard. NexPolar is available in nine models, 17 and 21 kW.

- DC-Inverter technology with Twin-Rotary compressor
- Low inrush current thanks to the Inverter technology
- High COP and EER
- They can be connected to low-temperature radiators, underfloor heating elements and fan coil type units
- On-board control as standard
- Water heating temperature up to +60°C
- Easy and quick installation; only connection of the hydraulic pipes is required
- Small size.

#### **TECHNICAL DATA**

Description	- Flan		iting	-:1- (2)	Fla		ling	-: (1)	Electrical supply V/Ph/Hz	Energy efficiency class	Code
		or (1)	-	oils (2)		r (3)	Fan co		. (5)		
	Nom. power kW	СОР	Nom. power kW	COP	Nom. power kW	EER	Nom. power kW	EER		UUUU (2)	
NexPolar 017 TE	17.10	4.10	16.90	3.30	20.20	3.80	14.90	3.00	400/3/50	A+	20102834
NexPolar 022 TE	21.10	4.10	21.00	3.30	25.80	3.80	18.60	3.10	400/3/50	A+	20102838

The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

- Heating: delivery water temperature 35 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Heating: delivery water temperature 45 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Seasonal energy efficiency class for average climate zone for 55 °C delivery temperature.

#### **ACCESSORIES**

Description	Notes	Code
7000 ACI 60 PLUS		20090056
7000 ACI 120 PLUS		20082450
Support bracket kit		20175145
Heater single-phase heating element kit 1.5 kW for 7000 ACI PLUS	(1)	4383270
Heater three-phase heating element kit 3.8 kW for 7000 ACI PLUS	(1)	20020707
External air probe		20028567
Domestic water probe		20121637
Cascade probe		20121638
100 litre inertial buffer tank		20142300
1" Y water filter		20175281

<sup>(1)</sup> The accessory must be ordered together with the base unit and is supplied not installed with finished product availability.

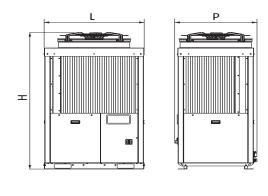
**TERMINAL UNITS** 

RIELLO

Monobloc air-water heat pumps

## NXH 026-040







 Air-water reversible heat pumps for powers from 31 kW to 39 kW with helical fan and hydronic kit as standard

Description	H	L	P
	mm	mm	mm
NXH 026-040	1790	1002	824

The NXH series units are reversible heat pumps with pumping unit and self-adaptive control, which allows a reduction of the quantity of water in the system. These features, the wide operating range with outdoor temperatures down to -15°C in heating mode and up to +48°C in air conditioning mode, make this series ideal for applications where extreme compactness, simplicity and speed of installation are required.

The unit is silent thanks to the high efficiency scroll compressor and the low noise axial fan.

- CLASS A + efficiency
- Plug & Play solution with pump on board the machine
- Easy maintenance by removing the service panels
- Microprocessor-based self-adaptive control system.

#### **TECHNICAL DATA**

Description	Output (1) kW	COP (1)	Output (2) kW	COP (2)	Output (3) kW	EER (3)	Output (4) kW	EER (4)	ESEER (4)	Energy efficiency class	Notes	Code
										(5)		
NXH 026	30.9	3.94	29.7	3.18	33.9	3.52	26.2	2.89	3.23	A+	(A)	20120387
NXH 033	34.4	3.95	33.1	3.17	42.8	3.83	32.2	3.11	3.46	A+	(A)	20120388
NXH 040	38.8	3.48	40.9	3.13	54	3.37	39.1	2.81	3.12	A+	(A)	20120389

The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

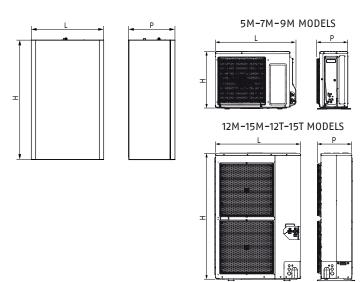
- Heating: delivery water temperature 35 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Heating: delivery water temperature 45 °C with thermal gradient 5K; outdoor air temperature 7 °C Tb.s and 6 °C Tb.u. Cooling: delivery water temperature 18 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Cooling: delivery water temperature 7 °C with water thermal gradient 5 °C; inlet air temp. 35 °C. Seasonal energy efficiency class for average climate zone for low temperature application. (1) (2)

Conditions for supply:
(A) For 7000 ACI PLUS tank accessories, refer to the dedicated section.

HOT AIR SENERATOR

Wall-hung split air-water heat pumps

## **Family ES**



Description	H mm	L mm	P mm	Net weight kg
INDOOR UNIT	•			
FAMILY ES	825	505	325	41-49
OUTDOOR UNIT				
FAMILY ES 5M	619	799	299	39
FAMILY ES 7M	619	799	299	40
FAMILY ES 9M	996	940	340	69
FAMILY ES 12M/12T	1416	940	340	98
FAMILY ES 15M/15T	1416	940	340	98
FAMILY ES 18T	1416	940	340	98
FAMILY ES 25T	1500	980	370	138







- Split type heat pump with wall-hung indoor unit for heating, cooling and DHW production
- Wide range of powers available, from 5 to 25kW
- Intelligent management of multiple energy sources: heat pump, boiler and solar thermal
- Control panel that can be positioned in the room also with room sensor function (V ErP class)

Family ES is a split type heat pump system with wall-hung indoor unit for heating, cooling and domestic water production. The system consists of an outdoor unit in R410A connected through refrigerant pipes to the indoor wall-hung unit. The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The indoor unit houses the main components of the hydronic system, high surface plate exchanger, high efficiency electronic circulator, collector for installation of an additional heating element available as ACCESSORY.

The indoor unit is extremely compact with all hydraulic and refrigerant connections from below.

Remove the front panel to access all internal components, the electronic service panel and the electrical terminal block. The system control panel is simple and intuitive, with large backlit colour display. It is supplied complete with bracket to be positioned directly inside the rooms. It can be used as room control and allows integration with BAG3 Hybrid distribution systems.

As an alternative to the additional heating element, the Family ES control can also manage an auxiliary heat source, such as a boiler, to be operated as integration or as backup.



#### **TECHNICAL DATA**

Description		Hea	ting			Cod	oling		Electrical		efficiency	Code	
	Floo	or (1)	Fan co	oils (2)	Floo	or (3)	Fan co	oils (4)	supply V/Ph/Hz	Cla	ass		
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		° <b>)</b> (5)	°[[] (6)		
THE CODES SHOWN	THE CODES SHOWN BELOW ALWAYS REFER TO THE COMBINATION OF INDOOR UNIT AND OUTDOOR UNIT												
FAMILY ES 5M	4.8	4.11	4.5	2.96	5.1	3.43	3.5	2.48	230/1/50	A++	A++	20181792	
FAMILY ES 7M	7.1	4.33	6.7	3.13	7.4	4.02	5.3	3.03	230/1/50	A++	A++	20181795	
FAMILY ES 9M	8.1	4.53	7.6	3.46	8.7	4.21	6.3	3.18	230/1/50	A+++	A++	20181796	
FAMILY ES 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A++	20181797	
FAMILY ES 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A++	20181805	
FAMILY ES 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A++	20181803	
FAMILY ES 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A++	20181806	
FAMILY ES 18T	16.9	4.37	15.9	3.18	19.4	4.13	13.9	3.19	400/3+N/50	A++	A++	20181807	
FAMILY ES 25T	24.8	4.06	23.2	2.93	27.9	4.20	19.9	3.15	400/3+N/50	A++	A++	20181809	

- The performance is in accordance with standards EN 14511:2013 and EN 14825:2016
  (1) External air temperature 7°C BS, 6°C BU; water inlet/outlet 30/35°C
  (2) External air temperature 7°C BS, 6°C BU; water inlet/outlet 40/45°C

- External air temperature 35°C; water inlet/outlet 23/18°C
  External air temperature 35°C; water inlet/outlet 12/7°C
  Value referred to the Average climate profile for delivery temperature of 35 °C. Values in accordance with Regulation 811/2013
  Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013

#### MATCHING HYBRID DISTRIBUTION MODULES

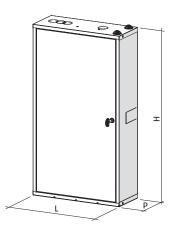
#### **TECHNICAL DATA**

Description	Zone management	Electrical supply V/Ph/Hz	Maximum power absorbed W	Notes	Code
BAG <sup>3</sup> HYBRID 2D	2 direct zone	230/1/50	114	(1)(2)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(1)(3)	20130807
IN-WALL INSTALLATION BOX				(4)	20130808

- (1) (2) (3)
- Equipped as standard with limit thermostat for low temperature systems.

  Mixed zone equipped as standard with limit thermostat for low temperature systems.
- Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG³ HYBRID.

#### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

## **CODE MATCHING TABLE**

Description	Set code	Indoor unit code	Outdoor unit code
FAMILY ES 5M	20181792	20174927	20155167
FAMILY ES 7M	20181795	20174927	20155172
FAMILY ES 9M	20181796	20174927	20155173
FAMILY ES 12M	20181797	20174929	20155174
FAMILY ES 15M	20181805	20174929	20155175
FAMILY ES 12T	20181803	20174932	20155182
FAMILY ES 15T	20181806	20174932	20155184
FAMILY ES 18T	20181807	20174932	20175541
FAMILY ES 25T	20181809	20174933	20175544

#### **ACCESSORIES**

Description	Notes	Code
CYLINDER		
RBC 150 1S		20124167
RBC 200 1S		20124168
RBC 300 1S		20124169
RBC 430 1S		20124170
RBC 550 1S		20124171
RBC 800 1S		20132270
RBC 1000 1S		20132271
7200 300 HP		4383500
7200 500 HP		4383501
PUFFER		
50 litre inertial buffer tank		20171999
ELECTRICAL ACCESSORY		
2-4-6 kW single-phase heating element kit	(1)	20155831
2-4-6 kW three-phase heating element kit	(1)	20157335
MECHANICAL ACCESSORY		
1" DHW diverting valve with heater probe		20175064
HYDRAULIC SYSTEM ACCESSORY		
1" Y water filter		20175281

<sup>(1)</sup> The power supplied by the heating element depends on the type of wiring performed during installation.

#### **HI, COMFORT CONTROLS**

#### Room controls with capability of management through APP

Drawing	Description	Notes	Code
ST COLOR	Hi, Comfort T100 Wi-Fi	(1)	20193354
80.80	Hi, Comfort T100	(2)	20193352
A, families	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

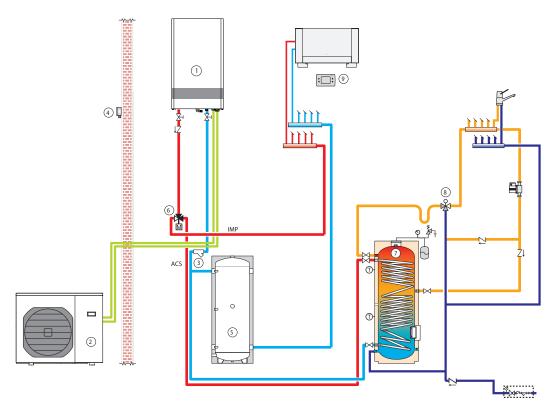
 <sup>(1)</sup> With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
 (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

**TERMINAL UNITS** 

#### SYSTEM DIAGRAMS

**RIELLO** 

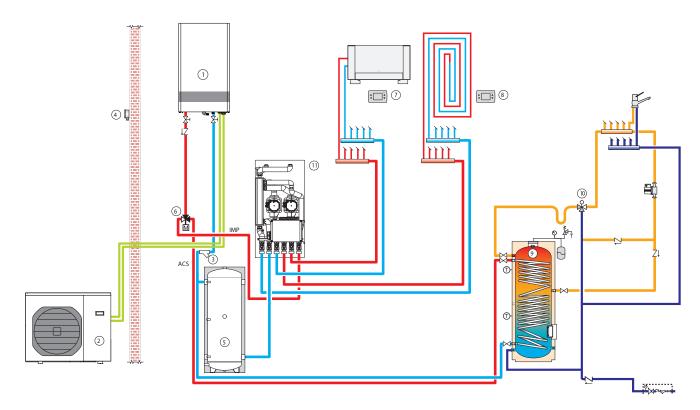
#### BIVALENT HEATING, COOLING AND DHW PRODUCTION SYSTEM



- Indoor unit heat pump
- 2 Outdoor unit heat pump
- 3 Y-filter
- External air probe
- Buffer tank

- DHW diverting valve kit 6
- Heater
- 8 ³/₄" thermostatic mixer
- REC10CH remote control

#### BIVALENT SYSTEM FOR HEATING, COOLING AND MULTIZONE DHW PRODUCTION



- 1 Indoor unit heat pump
- 2 Outdoor unit heat pump
- 3 Y-filter
- 4 External air probe
- 5 Buffer tank
- 6 DHW diverting valve kit

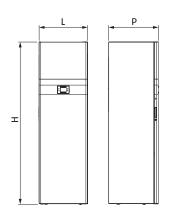
- 7 REC10CH remote control
- 8 Additional zone control
- 9 Heater
- 10 3/4" thermostatic mixer
- 11 BAG<sup>3</sup> HYBRID

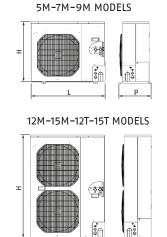
Floor standing split air-water heat pumps

## Domus ES



RIELLO







- · Ready-to-use solution for heating, cooling and DHW production
- Dedicated connections for bathroom towel warmers with temperature and management independent from the main system
- Instant DHW production with high efficiency stainless steel heat exchanger (no antilegionella)
- Possibility of connecting and managing a second external generator

Description	H	L	P	Net weight
	mm	mm	mm	kg
DOMUS ES 5-7-9-12-15M DOMUS ES 12-15T	600	600	2000	179

Note: dimensions and weights refer to the indoor unit only.

Description	H mm	L mm	P mm	Net weight kg
DOMUS ES 5M	619	799	299	39
DOMUS ES 7M	619	799	299	40
DOMUS ES 9M	996	940	340	69
DOMUS ES 12M	1416	940	340	98
DOMUS ES 15M	1416	940	340	98
DOMUS ES 12T	1416	940	340	98
DOMUS ES 15T	1416	940	340	98

Note: dimensions and weights refer to the outdoor unit only.

Domus ES is a floor-standing split heat pump system for heating, cooling and domestic water production. The system consists of an outdoor unit in R410A connected through refrigerant pipes to the indoor floor-standing unit.

The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The main components of the hydronic system are located in the indoor unit, including a 200l buffer tank with high-surface stainless steel coil for instantaneous production of domestic hot water.

- All-in-One floor-standing indoor unit for clean and tidy installation
- 2001 buffer tank with exchanger for instantaneous production of DHW
- Elimination of anti-legionella cycles
- Compact indoor unit, only 600x600mm plan dimensions, and with reduced clear spaces
- Hydraulic, electrical and refrigeration connections from above
- Front access to all components and simplified installation thanks to the cock kit (ACCESSORY)
- Simple and intuitive control panel with large backlit colour display and suitable for remote connection in the room
- Connections for 2 independent direct zones: one for the main heating/air conditioning system, the other for towel warmers
- Easy integration with a secondary backup generator through dedicated hydraulic connections and management via digital signals

#### **TECHNICAL DATA**

Description	Heating			Cooling			Electrical supply	0,0		Code		
	Floo	or (1)	Fan co	oils (2)	Floo	r (3)	Fan co	oils (4)	V/Ph/Hz	CI	ass	
	Nominal power kW	СОР	Nominal power kW	СОР	Nominal power kW	EER	Nominal power kW	EER		(5)	(6)	
THE CODES SHOWN BELOW ALWAYS REFER TO THE COMBINATION OF INDOOR UNIT AND OUTDOOR UNIT												
DOMUS ES 5M	4.8	4.11	4.5	2.96	5.1	3.43	3.5	2.48	230/1/50	A++	A /L	20155360
DOMUS ES 7M	7.1	4.33	6.7	3.13	7.4	4.02	5.3	3.03	230/1/50	A++	A /L	20155362
DOMUS ES 9M	8.1	4.53	7.6	3.46	8.7	4.21	6.3	3.18	230/1/50	A+++	A /L	20155363
DOMUS ES 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A /XL	20155364
DOMUS ES 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A /XL	20155366
DOMUS ES 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A /XL	20155365
DOMUS ES 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A /XL	20155368

- The performance is in accordance with standards EN 14511:2013 and EN 14825:2016
  (1) External air temperature 7°C BS, 6°C BU; water inlet/outlet 30/35°C
  (2) External air temperature 7°C BS, 6°C BU; water inlet/outlet 40/45°C
  (3) External air temperature 35°C; water inlet/outlet 23/18°C
  (4) External air temperature 35°C; water inlet/outlet 12/7°C
  (5) Value referred to the Average climate profile for delivery temperature of 55 °C
  (6) Tank set temperature 53°C. Values compliant with standard EN 16147. Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013 Tank set temperature 53°C. Values compliant with standard EN 16147.

#### MATCHING HYBRID DISTRIBUTION MODULES

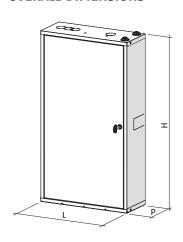
#### **TECHNICAL DATA**

Description	Zone management	Electrical supply V/Ph/Hz	Maximum absorbed power W	Notes	Code
BAG <sup>3</sup> HYBRID 2D	2 direct zone	230/1/50	114	(1)(2)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(1)(3)	20130807
IN-WALL INSTALLATION BOX				(4)	20130808

- Supplied without in-wall installation box. (1)
- (2) (3)
- Equipped as standard with limit thermostat for low temperature systems.

  Mixed zone equipped as standard with limit thermostat for low temperature systems.
- Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG³ HYBRID.

#### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

## **CODE MATCHING TABLE**

**RIELLO** 

Description	Set code	Indoor unit code	Outdoor unit code
DOMUS ES 5M	20155360	20155167	20155185
DOMUS ES 7M	20155362	20155172	20155186
DOMUS ES 9M	20155363	20155173	20155311
DOMUS ES 12M	20155364	20155174	20155313
DOMUS ES 15M	20155366	20155175	20155315
DOMUS ES 12T	20155365	20155182	20155316
DOMUS ES 15T	20155368	20155184	20155318

#### **ACCESSORIES**

Description	Notes	Code
Cock kit	(1)	20155924
50 litre inertial buffer tank		20171999
2-4-6 kW single-phase heating element kit	(2)	20155831
2-4-6 kW three-phase heating element kit	(2)	20157335
S hydraulic separator kit (includes secondary circulator)	(3)	20155826
L hydraulic separator kit (includes secondary circulator)	(4)	20155827
Average temperature circulator kit (towel warmers)		20155834
REC10CH locking kit and wall bracket		20161942
ACCESSORIES FOR HYBRID DISTRIBUTION MODULES	, ,	
Cock kit for BAG³ HYBRID on system and heat pump side		20131752

- All accessories are supplied separately as kits and must be installed on site.

  (1) Mandatory accessory to be ordered together with the unit. The kit includes domestic water inlet and outlet cocks , system and towel warmers, the discharge tubes for safety valves, the collector for discharge and the necessary hardware.

  (2) The power supplied by the heating element depends on the type of wiring performed during installation

  (3) Accessory that can be combined with Domus ES 5, 7 and 9 models. This accessory must be installed in the unit before connecting it to the system.

  (4) Accessory that can be combined with Domus ES 12, 15 models. This accessory must be installed in the unit before connecting it to the system.

#### Hi, COMFORT CONTROLS

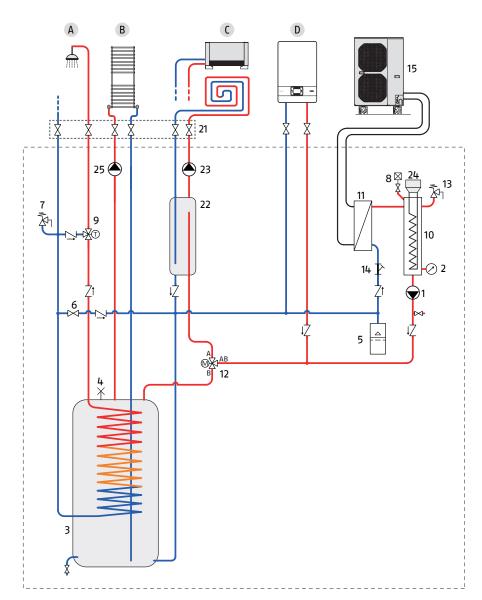
#### Room controls with capability of management through APP

Drawing	Description	Notes	Code
ST CONTRACTOR	Hi, Comfort T100 Wi-Fi	(1)	20193354
20.8	Hi, Comfort T100	(2)	20193352
4, faulus	Hi, Comfort G100-W		20193355
	Hi. Comfort G100-R		20193356

- (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
  (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

#### **HYDRAULIC DIAGRAM**

- The control of a possible external boiler is performed through two digital signals: one for enabling and one for management
  of a second setpoint in case of domestic water request.
- · If a boiler presence is configured, it will only be used as an alternative (backup) to the heat pump.
- If the single-phase/three-phase heating element kit is configured, it can be set to operate as an integration or as an
  alternative to the heat pump.
- The connections to the average temperature circuit for towel warmers are always present, but to operate they require the average temperature circulator kit ACCESSORY. This can be installed directly inside the unit where the power cable for the pump and the terminals to which the bathroom thermostats can be connected are already in place.
- The average temperature circuit for towel warmers is completely independent from the main system and can therefore be used even when the latter is off. The delivery temperature is equal to the temperature set for the domestic water buffer tank.
- The main system is managed through a digital enabling of a room thermostat. If more than one zone is to be managed, the
  various room thermostats must be placed in parallel and it is advisable to add the "Hydraulic separator kit" ACCESSORY to the
  standard equipment.
- Otherwise, it is possible to remotely connect the user interface of the indoor unit in the room, using it also as room thermostat. If more than one zone is to be managed, the BAG3 Hybrid must be added as a distribution system.



- A Domestic water users
- B Towel warmers
- C Main system users
- D Secondary generator (boiler)
- 1 Primary circulation pump (P1)
- 2 Pressure gauge
- 3 Domestic water buffer tank
- 4 Manual bleeder valve
- 5 Expansion reservoir
- 6 System load valve
- 7 6-bar safety valve8 Automatic drain valve

- 9 Thermostatic mixing valve
- 10 Manifold
- 11 Plate exchanger
- 12 3-way diverting valve
- 13 3-bar safety valve14 Y-filter
- 15 Outdoor unit
- 21 Cock kit \*
- 22 Hydraulic separator \*\*
- 23 Secondary circulation pump (P2) \*\*
- 24 2/4/6 kW supplemental heating element \*\*\*
- 25 Towel warmer circulation pump (P3)
- \* Accessory cock kit
- \*\* Accessory hydraulic separator kit with
- secondary circuit circulator
- \*\*\* Accessory supplemental heating element kit
- \*\*\*\* Accessory towel warmer circulator kit

**TERMINAL UNITS** 

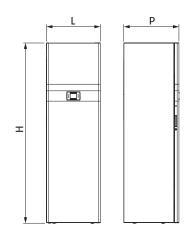
RIELLO

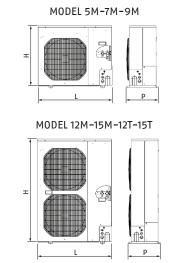
Floor standing split air-water heat pumps

## **Domus ES Solar**



RIELLO







- Ready-to-use solution for heating, cooling and DHW production
- Dedicated connections for bathroom towel warmers with temperature and management independent from the main system
- Instant DHW production with high efficiency stainless steel heat exchanger (no antilegionella)
- Intelligent management of multiple energy sources: heat pump, boiler and solar thermal

Description	H	L	P	Net weight
	mm	mm	mm	kg
DOMUS ES 5-7-9-12-15M DOMUS ES 12-15T	600	600	2000	179

Note: dimensions and weights refer to the indoor unit only.

Description	H mm	L mm	P mm	Net weight kg
DOMUS ES SOLAR 5M	619	799	299	39
DOMUS ES SOLAR 7M	619	799	299	40
DOMUS ES SOLAR 9M	996	940	340	69
DOMUS ES SOLAR 12M	1416	940	340	98
DOMUS ES SOLAR 15M	1416	940	340	98
DOMUS ES SOLAR 12T	1416	940	340	98
DOMUS ES SOLAR 15T	1416	940	340	98

Note: dimensions and weights refer to the outdoor unit only.

Domus ES Solar is a floor-standing split heat pump system for heating, cooling and domestic water production. The system consists of an outdoor unit in R410A connected through refrigerant pipes to the indoor floor-standing unit.

The outdoor unit, compact and quiet, includes a Twin Rotary DC inverter compressor, electronic expansion valve, fans with

brushless motor and finned pack coil optimized for heat pump operation even with outdoor air temperature of -20°C. The main components of the hydronic system are located in the indoor unit, including a 200l buffer tank with high-surface stainless steel coil for instantaneous production of domestic hot water.

- All-in-One floor-standing indoor unit for clean and tidy installation
- 200l buffer tank with exchanger for instantaneous production of DHW
- Elimination of anti-legionella cycles
- Compact indoor unit, only 600x600mm plan dimensions, and with reduced clear spaces
- Hydraulic, electrical and refrigeration connections from above
- Front access to all components and simplified installation thanks to the cock kit (ACCESSORY)
- Simple and intuitive control panel with large backlit colour display and suitable for remote connection in the room
- Connections for 2 independent direct zones: one for the main heating/air conditioning system, the other for towel warmers
- Easy integration with a secondary backup generator through dedicated hydraulic connections and management via digital
- Solar management directly from the machine user interface
- The solar section includes high efficiency circulator, 24-litre expansion reservoir, safety valve, pressure gauge and panel probe.

**TECHNICAL DATA** 

Description		Неа	ating			Coc	oling		Electrical			Notes	Code
	Flo (1		Fan co	oils (2)	Flo	oor 3)	Fan (4		supply c V/Ph/Hz	cl	ass		
	Nominal power kW	СОР	Nominal power kW	COP	Nominal power kW	EER	Nominal power kW	EER		<b>(</b> 5)	(6)		
THE CODES LISTED BELOW	ALWAYS	REFER TO	O THE CON	4BINATIO	N OF IND	OOR UN	IT AND O	UTDOOR	UNIT				
DOMUS ES SOLAR 5M	4.8	4.11	4.5	2.96	5.1	3.43	3.5	2.48	230/1/50	A++	A /L	(D)	20155373
DOMUS ES SOLAR 7M	7.1	4.33	6.7	3.13	7.4	4.02	5.3	3.03	230/1/50	A++	A /L	(D)	20155375
DOMUS ES SOLAR 9M	8.1	4.53	7.6	3.46	8.7	4.21	6.3	3.18	230/1/50	A+++	A /L	(D)	20155376
DOMUS ES SOLAR 12M	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	230/1/50	A+++	A /XL	(D)	20155377
DOMUS ES SOLAR 15M	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	230/1/50	A+++	A /XL	(D)	20155382
DOMUS ES SOLAR 12T	12.8	4.44	12.0	3.37	12.3	4.09	8.9	3.22	400/3+N/50	A+++	A /XL	(D)	20155380
DOMUS ES SOLAR 15T	14.6	4.58	13.7	3.40	15.6	4.00	11.2	3.20	400/3+N/50	A+++	A /XL	(D)	20155385

- (1) (2) (3) (4) (5) (6) (D)

- The performance is in accordance with standards EN 14511:2013 and EN 14825:2016

  (1) External air temperature 7°C BS, 6°C BU; water inlet/outlet 30/35°C

  (2) External air temperature 7°C BS, 6°C BU; water inlet/outlet 40/45°C

  (3) External air temperature 35°C; water inlet/outlet 23/18°C

  (4) External air temperature 35°C; water inlet/outlet 12/7°C

  (5) Value referred to the Average climate profile for delivery temperature of 55 °C. Values in accordance with Regulation 811/2013

  (6) Tank set temperature 53°C. Values compliant with standard EN 16147

  (9) Availability of the material at our waterboxes: 15 working days from the order validation date
- Availability of the material at our warehouse: 15 working days from the order validation date.

#### MATCHING HYBRID DISTRIBUTION MODULES

#### **TECHNICAL DATA**

Description	Zone management	Electrical supply V/Ph/Hz	Maximum absorbed power W	Notes	Code
BAG <sup>3</sup> HYBRID 2D	2 direct zone	230/1/50	114	(1)(2)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	230/1/50	118	(1)(3)	20130807
IN-WALL INSTALLATION BOX				(4)	20130808

- Supplied without in-wall installation box.
- (2) (3) (4)
- Equipped as standard with limit thermostat for low temperature systems.

  Mixed zone equipped as standard with limit thermostat for low temperature systems.
- Galvanised sheet in-wall installation box, possible white painting; the box is mandatory for installation of BAG3 HYBRID.

#### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

WATER-HEATERS

#### **MATCHING SOLAR COLLECTORS**

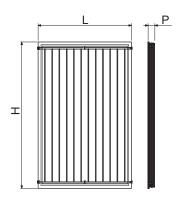
#### **TECHNICAL DATA**

**RIELLO** 

Description	Collecto	Collector surface		Values referred to the opening area			Notes	Code
	Gross m²	Net m²	ηο	a1 W/m²K	a2 W/m²K²	temperature °C	re	
RPS 25/2 EV0	2.3	2.14	0.821	4.41	0.006	200	(1)	20127134
RPS 25/4	2.30	2.14	0.802	4.28	0.0064	200	(1)	20127137

<sup>(1)</sup> The solar collector brackets kits are available in the section "SOLAR COLLECTORS" on page <?>.

#### **OVERALL DIMENSIONS**



Description	H mm	L mm	P mm	Net weight kg
RPS 25/2 EV0	2004	1195	86	41.5
RPS 25/4	2004	1195	85	44

#### **CODE MATCHING TABLE**

Description	SET code	Outdoor unit code	Indoor unit code
DOMUS ES SOLAR 5M	20155373	20155167	20155319
DOMUS ES SOLAR 7M	20155375	20155172	20155324
DOMUS ES SOLAR 9M	20155376	20155173	20155330
DOMUS ES SOLAR 12M	20155377	20155174	20155331
DOMUS ES SOLAR 15M	20155382	20155175	20155333
DOMUS ES SOLAR 12T	20155380	20155182	20155334
DOMUS ES SOLAR 15T	20155385	20155184	20155337

#### **ACCESSORIES**

Description	Notes	Code
Cock kit	(1)	20155924
50 litre inertial buffer tank		20171999
2-4-6 kW single-phase heating element kit	(2)	20155831
2-4-6 kW three-phase heating element kit	(2)	20157335
S hydraulic separator kit (includes secondary circulator)	(3)	20155826
L hydraulic separator kit (includes secondary circulator)	(4)	20155827
Average temperature circulator kit (towel warmers)		20155834
REC10CH locking kit and wall bracket		20161942
ACCESSORIES FOR HYBRID DISTRIBUTION MODULES		
Cock kit for BAG³ HYBRID on system and heat pump side		20131752
ACCESSORIES FOR SOLAR THERMAL		
Solar collector probe kit	(5)	20008787
Manual solar degasser kit	(6)	20026577
Weld-in connection kit (includes: 2 weld-in connectors for connection to RPS 25/2 EVO and RPS 25/4 collectors and 2 connectors for connection to RSS hydraulic unit or directly to the solar heater)		20132142
Connection kit for stainless steel tube (includes: 2 connectors for connection to RPS 25/2 EVO and RPS 25/4 collectors and 2 connectors for connection to RSS hydraulic unit or directly to the solar heater)		20132143
15 m flexible DN16 stainless steel tube kit (includes: double corrugated stainless steel pipe for delivery and return, cable for solar probe and suitable insulation for solar applications)		4383254

Description	Notes	Code
20 m flexible DN16 stainless steel tube kit (includes: double corrugated stainless steel pipe for delivery and return, cable for solar probe and suitable insulation for solar applications)		4383255
5 kg propylene glycol kit (concentrated heat transfer fluid, with corrosion inhibitors, for flat collectors)		4383085
10 kg propylene glycol kit (concentrated heat transfer fluid, with corrosion inhibitors, for flat collectors)		4383059

All accessories are supplied separately as kits and must be installed on site.

- mandatory accessory to be ordered together with the unit. The kit includes domestic water inlet and outlet cocks, system and towel warmers, the discharge tubes for safety valves, the collector for discharge and the necessary hardware.

  The power supplied by the heating element depends on the type of wiring performed during installation.

  Accessory that can be combined with Domus E5 5, 7 and 9 models. This ACCESSORY must be installed in the unit before connecting it to the system.

  Accessory that can be combined with Domus E5 12, 15 models. This ACCESSORY must be installed in the unit before connecting it to the system.

  The indoor unit already includes a panel probe.

  Use one for each set of manifolds fitted in the highest position. (1)
- (2) (3) (4) (5) (6)

#### **Hi, COMFORT CONTROLS**

#### Room controls with capability of management through APP

Drawing	Description	Notes	Code
200	Hi, Comfort T100 Wi-Fi	(1)	20193354
208.08 208.08	Hi, Comfort T100	(2)	20193352
A, Garden	Hi, Comfort G100-W		20193355
****	Hi, Comfort G100-R		20193356

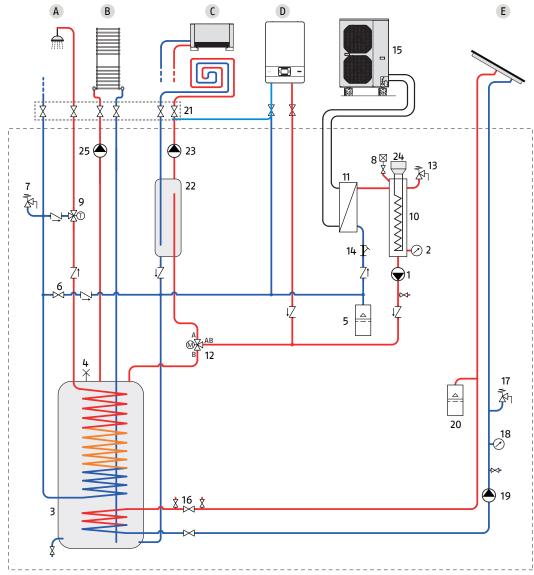
(1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
(2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

**TERMINAL UNITS** 

#### **HYDRAULIC DIAGRAM**

RIELLO

- The control of a possible external boiler is performed through two digital signals: one for enabling and one for management of a second setpoint in case of domestic water request.
- If a boiler presence is configured, it will only be used as an alternative (backup) to the heat pump.
- If the "integrative heating element" kit is configured, it can be set to operate as an integration or as an alternative to the heat pump.
- The connections to the average temperature circuit for towel warmers are always present, but to operate they require the "Towel warmer circulator kit" Accessory. This can be installed directly inside the unit where the power cable for the pump and the terminals to which the bathroom thermostats can be connected are already in place.
- The average temperature circuit for towel warmers is completely independent from the main system and can therefore be  $used\ even\ when\ the\ latter\ is\ off.\ The\ delivery\ temperature\ is\ equal\ to\ the\ temperature\ set\ for\ the\ domestic\ water\ buffer\ tank.$
- The main system is managed through a digital enabling of a room thermostat. If more than one zone is to be managed, the various room thermostats must be placed in parallel and it is advisable to add the "Hydraulic separator kit" ACCESSORY to the standard equipment.
- Otherwise, it is possible to remotely connect the user interface of the indoor unit in the room, using it also as room thermostat. If more than one zone is to be managed, the BAG³ Hybrid must be added as a distribution system.



- Domestic water users
- В Towel warmers
- Main system users
- Secondary generator (boiler)
- F Solar panel
- Primary circulation pump (P1)
- 2 Pressure gauge
- Domestic water buffer tank 3
- 4 Manual bleeder valve
- 5 Expansion reservoir
- 6 System load valve
- 6-bar safety valve Automatic drain valve

- Thermostatic mixing valve 9
- 10 Manifold
- Plate exchanger 11
- 3-way diverting valve 12
- 3-bar safety valve 13
- Y-filter 14
- 15 Outdoor unit
- Solar load valve 16
- 4-bar solar safety valve 17
- 18 Solar pressure gauge
- 19 Solar circuit pump (PSO) 20 Solar expansion reservoir
- 21 Cock kit \*

- 22 Hydraulic separator \*\*
- 23 Secondary circulation pump (P2) \*\*
- 2/4/6 kW supplemental heating element \*\*\*
- 25 Towel warmer circulation pump (P3)
- Accessory cock kit
- \*\* Accessory hydraulic separator kit with secondary circuit circulator
- Accessory supplemental heating element
- Accessory towel warmer circulator kit

**CHILLERS** 



### AIR-WATER MONOBLOC



COLD ONLY

NXC

NXC 017-040

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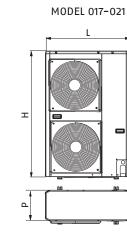
## RIELLO

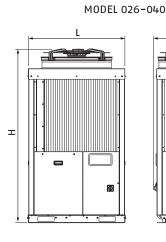
Air cooled process water chillers

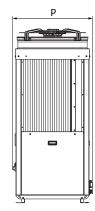
## NXC 017-040

Product compliant with EU Ecodesign Regulation 2015/1095 for medium temperature process applications.









ER	Ρ	/
1		

 Air cooled water chillers for powers from 17 kW to 41 kW with hydronic kit as standard

Description	H mm	L mm	P mm
NXC 017-021	1579	1136	584
NXC 026-040	1790	1002	824

The NXC series units are air cooled water chillers with pumping unit and self-adaptive control, which allows a reduction of the quantity of water in the system.

These features, the wide operating range with outdoor temperatures up to +46°C (017-021 models) and up to +48°C (026-040 models) make this series ideal for applications where extreme compactness, simplicity and speed of installation are required. The unit is silent thanks to the high efficiency scroll compressor and the low noise axial fan.

- Plug & Play solution with pump on board the machine
- Easy maintenance by removing the service panels
- Microprocessor-based self-adaptive control system.

#### **TECHNICAL DATA**

Description	Output (1) kW	EER (1)	SEPR (2)	Notes	Code
NXC 017	22.70	3.83	2.79	(D)(3)	20120382
NXC 021	29.50	3.88	2.92	(D)(3)	20120383
NXC 026	38.40	3.94	2.97	(D)(3)	20120384
NXC 033	45.40	4.03	2.89	(D)(3)	20120385
NXC 040	57.00	3.47	2.96	(D)(3)	20120386

The performance is in accordance with standard EN 14511-3:2013 and refers to the following conditions:

Reference standard EN 14511-3:2013 for delivery water temperature 18°C with water thermal gradient of 5°C; inlet air temperature 35°C.

Reference standard EU 2015/1095 for delivery water temperature conditions -8°C with water thermal gradient of 5°C (medium temperature process applications).

Availability of the material at our warehouse: 30 working days from the order validation date. For 7000 ACI PLUS tank accessories, refer to the dedicated section.

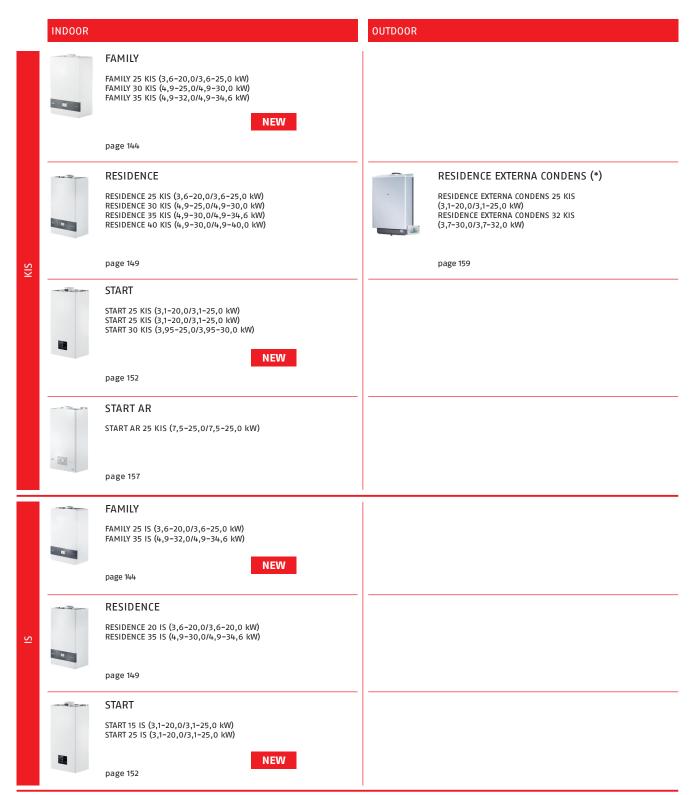


WALL-HUNG BOILERS	I
CONDENSING WALL-HUNG BOILERS	142
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STSTEM COMPLEMENTARY ITEMS	109
FLUE OPTIONS SYSTEM	173

RIELLO

### **CONDENSING WALL-HUNG BOILERS**





Heating/Domestic Water heat output

KIS Combined, Heating and Instant DHW production

- IS Heating only (\*) Availability until stocks last.

# **CONDENSING WALL-HUNG BOILERS**



#### INDOOR



#### FAMILY AQUA CONDENS

FAMILY AQUA CONDENS 3.5 BIS (3,5-35,0 kW)

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BIS

#### START AQUA CONDENS

START AQUA CONDENS 25/45 BIS (6,0-25,0 kW) START AQUA CONDENS 25/60 BIS (6,0-25,0 kW)

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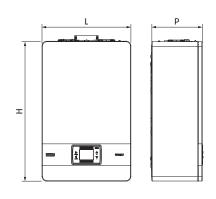
Heating/Domestic Water heat output BIS Combined, Heating and DHW production with boiler

# **Family**

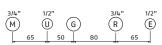
Wall-hung condensing boilers







- U-DHW OUTLET
- G-GAS
- R-RFTIIRN
- E-DHW INLET





- · Stainless steel primary heat exchanger, rugged and compact
- · Combi and heating only models, with indoor, in-wall and partially covered intallations
- High performance DHW heat exchanger
- Self-adaptive electronic combustion control
- Designed to support Hydrogen and NG mixture up to 20%
- Class 6 NOx
- Combi and heating only models compatible with NG and LPG. 25 KIS and 25 IS models are also certified for air-propane mixture

Description	H mm	L mm	P mm	Net weight kg
FAMILY 25 KIS	740	470	275	35
FAMILY 30 KIS	740	470	350	40
FAMILY 35 KIS	740	470	350	40
FAMILY 25 IS	740	470	275	35
FAMILY 35 IS	740	470	350	39

The new Family is the Riello solution for the most demanding user. The primary heat exchanger, made of stainless steel with frontal access to the combustion chamber, ensures maximum efficiency and reliability, moreover the new optimized DHW heat exchanger guarantees exceptional comfort and the best energy efficiency class (A class).

FAMILY is available in 3 different output 25, 30, 35 kW, with combi (KIS) and heating only (IS) models.

- ACC self-adaptive electronic combustion control
- Possibility of direct integration in hybrid systems using built-in REC10 control and ModBus protocol
- Innovative built-in air-filtering system
- New color display panel that can be wall-mounted with room unit function (ErP class: V)
- Smart system filling function
- 10 litre expansion tank
- Optimized layout with safety valve and siphon inside the boiler
- Easy to install and wide range of accessory available
- High head modulating circulator pump with very low consumption
- Modulation ratio 1:8
- 93% seasonal energy efficiency on 25 kW models (KIS and IS) and 94% on 30-35 kW (KIS), 35 kW (IS) models
- Flue gases flange as standard with dedicated flue system
- Clapet valve as standard
- Thermoregulation as standard using outdoor temperature sensor (optional).
- Possibility of in-wall installation (25 KIS) and outdoor in partially covered places (IPXD5D)
- Assembly template, hydraulic connections and power supply cable provided.

#### **TECHNICAL DATA**

Description	Heat input Heating/DHW	Useful e	efficiency	DHW production	- 03	efficiency ass	Notes	Code
	min-max kW	Pn (50°/30 °C) %	30% Pn (return 30 °C) %	ΔT 25° I/min	.000	7		
COMBI HEATING AND INSTANTANEO	OUS DOMESTIC HOT WATER \	/ERSION			-			
FAMILY 25 KIS	3.6-20.0/3.6-25.0	106.6	109.1	15.1	А	А	(1)	20187642
FAMILY 30 KIS	4.9-25.0/4.9-30.0	107.5	109.5	18.1	А	А	(1)	20187644
FAMILY 35 KIS	4.9-32.0/4.9-34.6	107.4	109.5	20.1	А	А	(1)	20187645
ONLY HEATING VERSION								
FAMILY 25 IS	3.6-20.0/3.6-25.0	106.6	109.1	1	А	_	(1)	20187643
FAMILY 35 IS	4.9-32.0/4.9-34.6	107.5	109.5	1	А	-	(1)	20187646

<sup>(1)</sup> The outdoor temperature sensor is not supplied as standard (code 1220559 available as an accessory).

#### **ACCESSORIES**

Description	Notes	Code
IN-WALL INSTALLATION		
In-wall installation unit (only model 25 KIS)	(1)	20082310
Kit with system and gas taps for recessed installation (only model 25 KIS)		20137668
HYDRAULIC ACCESSORIES		
First zone management kit (MIX or DIR zone)	(2)	20132795
Additional zone management kit (MIX or DIR zone)	(2)(3)	20132796
Kit for managing second pump or zone valves		20062614
Condensate evacuation pump		20097192
Immersion probe for remote storage cylinder (for heating only version)		1220599
Solar diverter valve kit for instant wall-hung combined boilers		20035644
Compact polyphosphate doser kit		20191518
Compact magnetic filter		20191517
COMPLEMENTARY ACCESSORIES		
Boiler interface wall bracket closure kit		20161942
Anti-freeze resistors kit for combi versions		20193278
Anti-freeze resistors kit for heating only versions		20193279
External probe		1220559
Hydraulic low cover available only for boilers with depth = 275 mm	(6)	20191519
SPECIFIC FLUES (*)		
Wall collector Ø60/100 mm	(4)	20129175
Fixed twin system Ø80 mm kit		20129765
Telescopic wall collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Vertical connection Ø60/100 mm	(4)	20129174
90° boiler start bend kit Ø60/100 mm	(5)	20129172
Adjustable splitter device kit from Ø60/100 mm to Ø80/80 mm		20134830
Compact adjustable splitter device kit from 60/100 mm to 80/80 mm		20190475
Splitter device kit B23 Ø80 mm for in-wall installation box		20129768
Flue gas exhaust kit B23 Ø80 mm		20129769

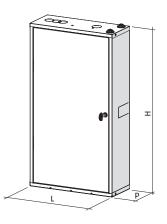
- Unit supplied complete with door.
- (1) (2) (3) (4) (5) (6) (\*) Allows you to manage a MIX zone (pump + 3-point mixer valve) or DIR zone (only pump). Not necessary for BAG³ Hybrid. The first zone management kit must always be present. The boiler can manage up to 3 zones in total. Code necessary for vertical exhaust with flue system. Accessory already included in kit 20129177.
- Code necessary for horizontal exhaust with flue system 60/100. Accessory already included in kit 20129175 and 20129176. Compatible with FAMILY 25 KIS and FAMILY 25 IS.
- Dedicated flue gases accessories, compatible with the Family flange. For further accessories for the flue gas exhaust system, see the section "Flue gas exhaust systems"

## **HYDRAULIC DISTRIBUTION MODULES**

Description	Zone management	Notes	Code
BAG <sup>3</sup> HYBRID 1D	1 direct zone	(1)(2)	20130805
BAG <sup>3</sup> HYBRID 2D	2 direct zone	(1)(2)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	(1)(3)	20130807
IN-WALL INSTALLATION BOX		(4)	20130808

- Supplied without in-wall installation box
- Equipped as standard with limit thermostat for low temperature systems
  Mixed zone equipped as standard with limit thermostat for low temperature systems
- (1) (2) (3) (4) In-wall installation box made of galvanised sheet metal that can be painted white; the box is compulsory for the installation of the BAG³ HYBRID

#### **OVERALL DIMENSION**



Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 1D	797	400	160	17
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

#### **ACCESSORIES FOR BAG<sup>3</sup> HYBRID**

Description	Code
Taps kit for BAG <sup>3</sup> HYBRID system side and heat pump	20131752

#### Hi, COMFORT CONTROLS

Drawing	Description	Notes	Code
20.0	Hi, Comfort T100 Wi-Fi	(1)	20193354
80.80 D	Hi, Comfort T100	(2)	20193352
II, Gentler	Hi, Comfort G100-W		20193355
4000	Hi, Comfort G100-R		20193356

- (\*) Only ON/OFF connection with BAG³ HYBRID.

  (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.

  (2) For wired connection with boiler, compatible in radio-frequency connection with For wired connection with boiler, compatible in radio-frequency connection with Hi, Comfort G100-W, code 20193355 (accessory not included and necessary for internet connection by means of ADSL Wi-Fi router) and compatible i with Hi, Comfort G100-R, code 20193356.

1/2"

(E)

Condensing wall-hung boilers

# **Family Aqua Condens**





- In conformity with Directive 2009/125/EC
- Low polluting emissions
- Condensing heat exchanger in aluminium, with premix burner
- Combi model with built-in 60-liters DHW tank in stainless steel

<del>-</del>		P	
н			
M-FLOW U-DHW OUTLET G-GAS R-RETURN E-DHW INLET RC-RECIRCULATION	3/4" 3/4" R M	G U 1/2"	RC

-FLOW -DHW OUTLET -GAS	3/4" 3/4"	
-RETURN		
-DHW INLET	65 85	10
C-RECIRCULATION	1- 1	

Description	H	L	P	Net weight
	mm	mm	mm	kg
FAMILY AQUA CONDENS 3.5 BIS	1015	600	450	72

Family Aqua Condens is a wall-hung boiler that guarantees an excellent comfort in the DHW production thanks to a built-in 60-liters DHW storage tank in stainless steel. The Riello heat exchanger, manufactured 100% aluminium, ensures high efficiency and long life, while reducing polluting emissions to a minimum.

Family Agua Condens is available with outputs from 3.5 to 35 kW.

- Modulating ratio 1:10 (minimum output of 3.5 kW) which allows the boiler to meet all heating requirements
- "Range Rated" certification which allows adapting the rated output of the boiler to the thermal requirements of the installation
- High efficiency circulator (EEI ≤ 0,20)
- Remote alarm which allows the reporting of the boiler lockout status
- Special Family functions: Comfort Button, Memory Button, Touch&Go Function, Smart semi-automatic Filling System
- Boilers are equipped with: mounting template, hydraulic connections, wiring and LPG conversion kit.
- External probe supplied as standard.

## **TECHNICAL DATA**

Description	Heat input Heating/DHW	Useful	efficiency	Tank capacity	Fuel	- 03	efficiency ass	Code
	min - max kW	Pn (50°/30 °C) %	30% Pn (return 30 °C) %	I		·M	~	
ROOM-SEALED - HEATING AND DHW PE	RODUCTION							
FAMILY AQUA CONDENS 3.5 BIS	3.5-35.0	105.5	108.0	60.0	NG	А	Α	20021509

#### **ACCESSORIES**

Description	Code
CONTROL DEVICES	
CHRONORIELLO 7D (7-day digital room thermostat)	20063873
CHRONORIELLO 7D WIRELESS (7-day digital room thermostat wireless)	20101747
ELECTRICAL ACCESSORIES	
Family Remote Control (RECO6) (with electronic interface board)	20165771
Interface board ITRF11	20164477
Remote alarm kit	20165627
Room sensor kit	20163783
Zone valves management kit	20165142
HYDRAULIC ACCESSORIES	
Central heating taps	4047476
Central heating taps with filter	4047475
Condensate evacuation pump	20097192
DHW recirculation kit (Aqua model)	4047994
MECHANICAL ACCESSORIES	·
Hydraulic connection cover	4047505
Mounting template kit	4047440

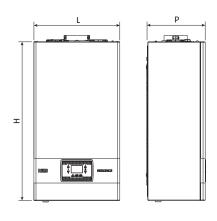
#### **Hi, COMFORT CONTROLS**

Drawing	Description	Notes	Code
100 miles	Hi, Comfort T100 Wi-Fi	(1)	20193354
208.20 80.80	Hi, Comfort T100	(2)	20193352
N, Standars	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

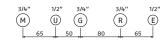
- (\*) Possibility of connection via OTBus or in ON/OFF mode.
- With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
   For cable OTBus connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem) and compatible with Hi, Comfort G100-R code 20193356. For operation via OTBus, the code 20164477 "ITRF11 interface card" is required.

Wall-hung condensing boilers

# Residence







Description	H mm	L mm	P mm	Net weight kg
RESIDENCE 25 KIS	740	420	275	35
RESIDENCE 30 KIS	740	420	350	37
RESIDENCE 35 KIS	740	420	350	37
RESIDENCE 40 KIS	740	420	350	40
RESIDENCE 20 IS	740	420	275	34
RESIDENCE 35 IS	740	420	350	36

Overall height of the SRD device: 822 mm

# REDORICE



- Stainless steel primary heat exchanger
- Self-adaptive electronic combustion control
- Class 6 N0x
- Combi and heating only models, NG and LPG compatible

Residence is the Riello wall-hung condensing boiler that is ideal as a replacement and for new installations.

The primary heat exchanger, which is made of stainless steel on the inside and with front access to the comb

The primary heat exchanger, which is made of stainless steel on the inside and with front access to the combustion chamber, provides maximum efficiency and reliability over time.

Residence comes with outputs of 20, 25, 30, 35 and 40 kW, in instantaneous combi or heating only versions.

- ACC adaptive electronic combustion control
- Range Rated type-approval
- New simple and intuitive digital control panel with backlit display
- Low consumption modulating circulator
- Modulation ratio 8:1
- Flue gases flange as standard with dedicated flue system
- Check valve and SRD device as standard
- Thermoregulation as standard in combination with the outdoor temperature sensor, available as an accessory
- Possibility also of recessed installation (model 25 KIS) and outdoors in partially protected places (IPX5D)
- Easy to install and a wide range of accessories
- Integrated management of up to 2 direct or mixed circuits (with BAG3 HYBRID accessories or zone management kit)

#### **TECHNICAL DATA**

Description	Heat input Heating/DHW	Useful et	fficiency	DHW production		fficiency ass	Notes	Code
	min-max kW	Pn (50°/30 °C) %	30% Pn (return 30 °C) %	ΔT 25° I/min	1111	Ç		
COMBI HEATING AND INSTANTANE	OUS DOMESTIC HOT WATER V	ERSION						
RESIDENCE 25 KIS	3.6-20.0/3.6-25.0	106.2	108.4	15.1	А	А	(1)	20139525
RESIDENCE 30 KIS	4.9-25.0/4.9-30.0	106.0	108.1	18.1	А	Α	(1)	20148496
RESIDENCE 35 KIS	4.9-30.0/4.9-34.6	106.9	108.2	20.8	Α	А	(1)	20139527
RESIDENCE 40 KIS	4.9-30.0/4.9-40.0	106.9	108.2	24.1	Α	Α	(1)	20139530
ONLY HEATING VERSION								
RESIDENCE 20 IS	3.6-20.0/3.6-20.0	106.2	108.4	-	А	_	(1)	20139526
RESIDENCE 35 IS	4.9-30.0/4.9-34.6	106.9	108.2	-	Α	-	(1)	20139528

The outdoor temperature sensor is not supplied as standard (code 1220559 available as an accessory)

#### **ACCESSORIES**

Description	Notes	Code
ELECTRICAL ACCESSORIES		
Kit for managing second pump or zone valves		20062614
Anti-freeze resistors kit for combi versions		20145304
Anti-freeze resistors kit for heating only versions		20145305
External probe		1220559
Immersion probe for remote storage cylinder (for heating only version)		1220599
SPECIFIC FLUES (*)		
Wall collector Ø60/100 mm		20129175
Telescopic wall collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Adaptor kit B23 Ø80 mm		20129769
90° boiler start bend kit Ø60/100 mm		20129172
Splitter device kit B23 Ø80 mm for in-wall installation box		20129768
Compact adjustable splitter device kit from 60/100 mm to 80/80 mm		20190475
Adjustable splitter device kit from Ø60/100 mm to Ø80/80 mm		20134830
Fixed splitter system kit Ø80 mm		20129765
Vertical connection manifold kit Ø60/100 mm	(2)	20129174
HYDRAULIC ACCESSORIES		
Condensate evacuation pump	(3)	20097192
High head circulator		20105883
Compact magnetic filter kit		20191517
Compact polyphosphates doser kit		20191518
First zone management kit (MIX or DIR zone)	(4)	20132795
Additional zone management kit (MIX or DIR zone)	(4)(5)	20132796
Connections kit with heating system and gas taps (for IS models)		20133517
Connections kit with heating system, domestic hot water and gas taps (for IS models)		20133516
Connections kit with domestic hot water and gas taps (for KIS models)		20132005
Connections kit with gas tap (for IS models)		20133386
Kit with system and gas taps for recessed installation (only model 25 KIS)		20137668
Solar diverter valve kit for instantaneous wall-hung combi boilers		20025113
MECHANICAL ACCESSORIES		
In-wall installation unit (only model 25 KIS)	(1)	20082310

Unit supplied complete with door

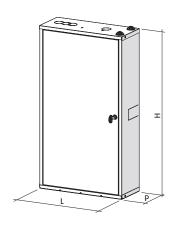
<sup>(1)</sup> (2) (3) (4) (5) **(\*)** 

Unit supplied complete with door Code necessary for vertical discharge with flue system ø60/100. Accessory already included in the kit 20129177 Code necessary for horizontal discharge with flue system ø60/100. Accessory already included in the kit 20129175 and 20129176 allows you to manage a MIX zone (pump + 3-point mixer valve) or DIR zone (only pump). Not necessary for BAG<sup>3</sup> HYBRID The first zone management kit should always be present. The boiler can manage up to a maximum of 2 zones in total. Dedicated flue gases accessories, compatible with the Residence flange. For further accessories for the flue gas exhaust system, see the section "Flue gas exhaust systems" in the Catalogue

#### **HYDRAULIC DISTRIBUTION MODULES**

Description	Zone management	Notes	Code
BAG <sup>3</sup> HYBRID 1D	1 direct zone	(1)(2)	20130805
BAG <sup>3</sup> HYBRID 2D	2 direct zone	(1)(2)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	1 direct zone + 1 mixed zone	(1)(3)	20130807
IN-WALL INSTALLATION BOX		(4)	20130808

- Supplied without in-wall installation box
- (1) (2) (3) (4) Equipped as standard with limit thermostat for low temperature systems
  Mixed zone equipped as standard with limit thermostat for low temperature systems
- $In-wall\ installation\ box\ made\ of\ galvanised\ sheet\ metal\ that\ can\ be\ painted\ white;\ the\ box\ is\ compulsory\ for\ the\ installation\ of\ the\ BAG^3\ HYBRID\ installation\ of\ the\ installatio$



Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 1D	797	400	160	17
BAG <sup>3</sup> HYBRID 2D	797	400	160	18
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	18
IN-WALL INSTALLATION BOX	797	400	160	8

#### **ACCESSORIES FOR BAG<sup>3</sup> HYBRID**

Description	Code
Taps kit for BAG³ HYBRID system side and heat pump	20131752

## Hi, COMFORT CONTROLS

Drawing	Description	Notes	Code
20 OC	Hi, Comfort T100 Wi-Fi	(1)	20193354
80.80 D	Hi, Comfort T100	(2)	20193352
A, Garden	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

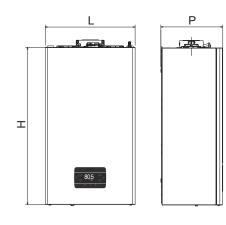
- Only ON/OFF connection with BAG<sup>3</sup> HYBRID.
- With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.

  For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem) and compatible with Hi, Comfort G100-R code 20193356.

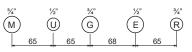
#### Wall-hung condensing boiler

# Start





M-FLOW U-DHW OUTLET G-GAS R-RETURN E-DHW INLET



Description	H mm	L mm	P mm	Net weight kg
START 25 KIS	700	400	275	28.5
START 30 KIS	700	400	275	30.0
START 25 IS	700	400	275	27.5
START 15 IS	700	400	275	27.5



- New stainless steel primary heat exchanger, compact and robust
- Combined and heating-only models, indoor, built-in and outdoor in partially protected
- Dimensions among the most compact in the segment (width of only 400 mm), also ideal for small wall units
- Hydraulic unit with sequence standard DIN connections
- Designed to operate with mixtures of natural gas and hydrogen, up to a maximum of 20%
- Class 6 NOx

START is the new proposal of Riello condensing boilers for small and medium sized households. It has been completely renewed from a technological and functional point of view.

START is available in 3 sizes of power 15, 25, 30 kW, in combined (KIS) and heating-only (IS) versions.

One of the distinguishing features of the new START is the innovative digital control panel with touch buttons designed with an emphasis on ease of use.

- High-efficiency sanitary exchanger developed by Riello
- Modern and intuitive touchscreen HMI, with representative icons and capacitive buttons with acoustic ""buzzer"" to confirm
- Modern and linear design with under-boiler lower connection cover available as an accessory for optimal aesthetic integration
- Sanitary specific electronic functions: sanitary delay, anti-pendulum function and smart fan
- Hydraulic group with DIN standard sequence
- Low-consumption circulator (IEE≤0.20) 7 m high head available as an accessory
- Easy installation, easy integration even in small spaces and easy replacement, thanks to a wide range of accessories optionally available
- Modulation ratio 1:8
- Easy maintenance and cleaning of the combustion chamber thanks to frontal access to the exchanger
- 93% seasonal efficiency
- 8 litre lateral expansion tank
- Standard flue gas flange with dedicated flue system
- Temperature control as standard in combination with the external probe, available as an accessory
- Possibility of built-in installation (model 25 KIS and 30 KIS) and outside in partially protected places (IPX5D)
- Mounting crossbar already integrated in the boiler and power supply cable included
- Natural gas operation as standard with possibility of conversion to LPG (G31) and propane air through accessories. This modification must be carried out by the installer or by the technical assistance service.
- IPX5D electrical protection

#### **TECHNICAL DATA**

Description	Heat input Heating/DHW	Useful eff	iciency	DHW production	Fuel		ergy cy class	Note	Code
	min-max kW	Pn (50°/30 °C) %	30% Pn (return 30 °C) %	ΔT 25° I/min		°000	<b>~</b>		
COMBI HEATING AND ISTANT	ANEOUS DOMESTIC HOT WAT	ER VERSION							
START 25 KIS	3.1÷20.0/3.1÷25.0	104.6-98.0	109.1	14.3	NG	А	А	(1)	20197878
START 25 KIS	3.1÷20.0/3.1÷25.0	104.6-98.0	109.1	14.3	LPG	А	А	(1)	20197880
START 30 KIS	3.95÷25.0/3.95÷30.0	107.1-103.6	108.8	17.2	NG	A	A	(1)	20197879
HEATING ONLY VERSION									
START 15 IS	3.1÷15.0/3.1÷25.0	105.7-98.0	109.6	-	NG	А	-	(1)	20187773
START 25 IS	3.1÷20.0/3.1÷25.0	104.6-98.0	109.1	-	NG	А	-	(1)	20187774

<sup>(1)</sup> Outdoor temperature sensor is not supplied as standard (code 1220559 available as an accessory).

#### **ACCESSORIES**

Description	Notes	Code
IN-WALL INSTALLATION		
In-wall installation unit	(1)	20161604
Crossbar for in-wall installation		20191887
MECHANICAL ACCESSORIES		
Air filter	(2)	20190324
Hydraulic low fittings cover		20191519
Dummy boiler Start 25 KIS		20191885
Nall mounting frame 1 pc.		20191891
Nall mounting frame 5 pcs.		20191892
HYDRAULIC ACCESSORIES		
Compact polyphosphate doser kit		20191518
Compact magnetic filter		20191517
High residual pump 7 m		20189142
Crossover kit (DIN vs Riello)	(3)	20191890
Connection kit with heating system, domestic water and gas cocks (for KIS models)		20133516
Connection kit with heating system and gas cocks (for IS models)		20133517
Connection kit with domestic water and gas cocks (for KIS models)		20132005
Connection kit with gas cock (for IS models)		20133386
Condensate booster pump kit		20097192
Nell probe for remote heater (for heating only version)		1220599
Solar diverter valve kit for instant wall-hung combined boilers		20035644
COMPLEMENTARY ACCESSORIES		
Board BE09 with double multi-function relay	(6)	20192808
Antifreeze heaters -15 °C	(7)	20191888
external probe		1220559
Building site kit with analogue hydrometer		20191520
Limit thermostat for low temperature installations		1220639
SPECIFIC FLUES		
Fixed split system kit Ø80 mm		20129765
980 mm clapet with condensate trap		20164664
Ø80/125 mm clapet with condensate trap		20164662
Nall-hung collector Ø60/100 mm		20129175
Telescopic wall-hung collector Ø60/100 mm		20129176
/ertical collector Ø60/100 mm		20129177
/ertical connection stub pipe kit Ø60/100 mm	(4)	20129174
00° bend kit Ø60/100 mm for boiler start	(5)	20129172
Adjustable splitter kit from Ø60/100 mm to Ø80/80 mm		20134830
Adapter kit B23 Ø80 mm		20129769
Split kit B23 Ø80 mm for in-wall installation box		20129768
Compact swelling kit Ø60/100 - Ø80/80		20190475

TERMINAL UNITS

Description	Notes	Code
GAS TRANSFORMATION		
Propane air conversion kit (25 KIS - IS)		20192718
Propane air conversion kit (30 KIS)		20192719
LPG conversion kit (25 KIS - IS)		20192715
LPG conversion kit (30 KIS)		20192717

- Unit supplied with door.
- Ideal to avoid introducing impurities from the intake air into the exchanger and burner.
- Flexible connections (sanitary, gas and heating) kit required to facilitate the replacement of Start boilers with previous boilers with Riello standard hydraulic connection sequence.
- Code necessary for vertical exhaust with flue system. Accessory already included in kit 20129177.

- Code necessary for horizontal exhaust with flue system 60/100. Accessory already included in kit 20129175 and 20129176.

  Ideal board for managing additional circulator or zone valve and alarm remote kit.

  The antifreeze heater kit allows to protect the sanitary circuit from the risk of freezing in case of temperatures below 0°C (down to -15°C), using the copper fitting accessory kits (not flexible) included in the offer.

#### **HI, COMFORT CONTROLS**

#### Room controls with capability of remote boiler interface (\*) and management through APP

Drawing	Description	Notes	Code
20.0	Hi, Comfort T100 Wi-Fi	(1)	20193354
E 208	Hi, Comfort T100	(2)	20193352
16, familier	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

- Only ON/OFF connection with BAG3 HYBRID.
- With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
  For wired connection with boiler, compatible in radio-frequency connection with Hi, Comfort G100-W, code 20193355 (accessory not included and necessary for internet connection by means of ADSL Wi-Fi router) and compatible i with Hi, Comfort G100-R, code 20193356.

#### Smart key with possible management via APP

Image	Description	Notes	Code
and the second	Hi, Comfort K100	(1)	20168501

Availability during 2022.



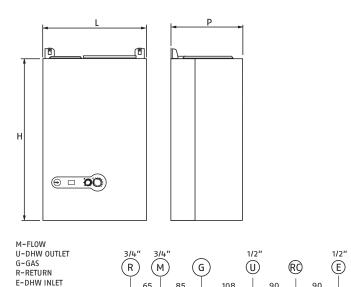
Condensing wall-hung boilers

# **Start Aqua Condens**





- In conformity with Directive 2009/125/EC
- Low polluting emissions
- Condensing aluminum heat exchanger and premix burner
- Combi model with 45 or 60 liters stainless steel DHW tank



Description	H mm	L mm	P mm	Net weight kg
START AQUA CONDENS 25/45 BIS	940	600	450	66
START AQUA CONDENS 25/60 BIS	940	600	450	70

Start Aqua Condens is a condensing wall-hung boiler featuring a 45 or 60 liters stainless steel DHW tank. The Riello heat exchanger, aluminum made, guarantees efficiency, durability, high head and polluting emissions reduction. Start Aqua Condens is available with 25 kW output.

- High efficiency circulator (EEI ≤ 0,20)
- Thermoregulation control supplied as standard fitted with the external probe (as optional)
- Arranged system for the use of natural gas, which can be converted to LPG through the specific kit (spare-part optional), to be mounted by the technical assistance

#### **TECHNICAL DATA**

Description	Heat input Heating/DHW			DHW production	Fuel	Energy efficiency class		Code
	min-max kW	Pn (50°/30 °C) %	30% Pn (return 30 °C) %	ΔT 25° I/min		·M1	7	
ROOM SEALED - HEATING AND DHW PRODUCTION WITH TANK								
START AQUA CONDENS 25/45 BIS	6.0-25.0	105.0	107.1	14.3	NG	А	А	20142452

#### **ACCESSORIES**

Description	Code
CONTROL DEVICES	
CHRONORIELLO 7D (7-day digital room thermostat)	20063873
CHRONORIELLO 7D WIRELESS (7-day digital room thermostat wireless)	20101747
COMBUSTION ACCESSORIES	
LPG conversion kit	20002606
ELECTRICAL ACCESSORIES	
External probe	1220559
Zone valves management kit	20000785
HYDRAULIC ACCESSORIES	
Central heating taps	4047476
Central heating taps with filter	4047475
Condensate evacuation pump	20097192
DHW recirculation kit (Aqua model)	4047994
High head pump kit	20105879
MECHANICAL ACCESSORIES	
Hydraulic connection cover	4047505
Mounting template kit	4047440

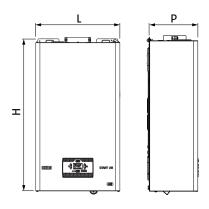
#### **Hi, COMFORT CONTROLS**

Drawing	Description	Notes	Code
20.0	Hi, Comfort T100 Wi-Fi	(1)	20193354
E 208	Hi, Comfort T100	(2)	20193352
N, Garden	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

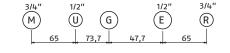
- (\*) Functions available only in case of OTBus connection with a Riello boiler. Possibility to connect to generic boilers and other devices only in ON/OFF mode.
- (1) Hi, Comfort G100-W included to connect to the home Wi-Fi.
  (2) Compatible with RF connection to the Hi, Comfort G100-W Cod. 20193355 (accessory not included, necessary to connect to the home Wi-Fi).

Wall-hung condensing boilers

# **Start AR**







Description	H	L	P	Net weight
	mm	mm	mm	kg
START AR 25 KIS	715	405	250	33





- In conformity with Directive 2009/125/CE
- Combi models
- Low N0x emissions
- Innovative post heat-exchanger in stainless steel material

New START AR is the condensing boiler designed specifically to operate with high temperature systems and therefore with radiator systems. Furhermore improved in terms of performances it's available with 25 kW outputs with low NOx emissions < 56 mg/kWh.

- New digital interface
- Very compact dimensions
- Innovative gas-air combustion system
- DIN hydraulic connection
- Cooled burner
- Low consumption circulator (IEE  $\leq$ 0.20)
- Climatic adjustment managed directly from the control box
- Fixing crossbar, electrical power cable supplied as standard
- Hydraulic connection available as accessories
- Electric protection level IPX5D

## TECHNICAL DATA

Description	Heat input Heating/DHW			DHW production		Energy efficiency class		Code	
	min-max kW	Pn (80°/60 °C) %	30% Pn (return 30 °C) %	ΔT 25° I/min		1111	7		
VERSION WITH GAS-TIGHT CHAMBER AND FORCED DRAUGHT-HEATING AND PRODUCTION OF BOILER DOMESTIC HOT WATER									
START AR 25 KIS	7.5-25.0/7.5-25.0	95.8	101.4	14.3	NG	В	A	20171062	
START AR 25 KIS	7.5-25.0/7.5-25.0	95.8	101.4	14.3	LPG	В	Α	20176940	

# **ACCESSORIES**

**RIELLO** 

Description	Notes	Code
HYDRAULIC ACCESSORIES		
Hydraulic connections kit		20114510
Central heating taps		4047476
Central heating taps with filter		4047475
Connections kit with heating system, domestic hot water and gas taps		20133516
Connections kit with domestic hot water and gas taps		20132005
Magnetic filter and polyphosphates doser kit		20135495
Polyphosphates doser kit		20135496
Condensate evacuation pump		20097192
Ultra high head pump (7 metres)		20178827
Solar diverter valve kit for instant wall-hung combined boilers		20035644
ELECTRICAL ACCESSORIES		
External probe		1220559
Frost protection kit		20183138
MECHANICAL ACCESSORIES		
Hydraulic fittings cover		20012594
Upper cover		20012595
LPG transformation kit		20182988
In-wall box	(1)	20082309
FLUES AND INTAKE AIR (*)		
Adjustable splitter device kit from Ø60/100 mm to Ø80/80 mm		20134830
Wall collector Ø60/100 mm		20129175
Telescopic wall collector Ø60/100 mm		20129176
Vertical collector Ø60/100 mm		20129177
Vertical connection manifold kit Ø60/100 mm	(2)	20129174
90° boiler start bend kit Ø60/100 mm	(3)	20129172
Adaptor kit B23 Ø80 mm		20129769

Unit supplied complete with door.

Code necessary for vertical discharge with flue system ø60/100. Accessory already included in the kit 20129177.

Code necessary for horizontal discharge with flue system Ø60/100. Accessory already included in the kit 20129175 and 20129176.

Dedicated flue gases accessories, compatible with the Start AR flange. For further accessories for the flue gas exhaust system, see the section "Flue gas exhaust systems" in the Catalogue.

#### Hi, COMFORT CONTROLS

Room controls with capability of remote boiler interface (\*) and management through APP

Drawing	Description	Notes	Code
2000	Hi, Comfort T100 Wi-Fi	(1)	20193354
20.8	Hi, Comfort T100	(2)	20193352
A) classical	Hi, Comfort G100-W		20193355
6444	Hi, Comfort G100-R		20193356

Only ON/OFF connection with BAG3 HYBRID.

With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.

For cable Offsus connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem) and compatible with Hi, Comfort G100-R code 20193356.

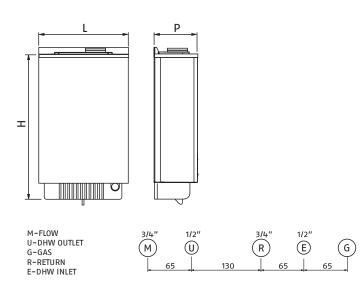
Wall-hung condensing boilers

# Residence Externa Condens





- Compliant with Directive 2009/125/EC
- Low polluting emissions
- Aluminium condensing, with premixed burner
- Heating-only models and combined models for outdoor installation



Description	H mm	L mm	P mm	Net weight kg
RESIDENCE EXTERNA CONDENS 25 KIS	785	553	275	44
RESIDENCE EXTERNA CONDENS 32 KIS	785	553	275	46

Residence Externa Condens is specially designed for outdoor installation in a partially protected place.

The new primary heat exchanger fully made of aluminium with front accessibility to the combustion chamber ensures better efficiency and durability. Residence Externa Condens is available with output from 25 to 32 kW.

- Remote control panel supplied as standard
- 1:8 modulation ratio that allows the boiler to respond to all heat requests
- Self-modulating circulator, low consumption (IEE≤0.20)
- Anti-freeze function that protects the heating and domestic water circuits down to -5 °C with the possibility of extending the protection down to -15  $^{\circ}\text{C}$  (optional)
- "Winter with Pre-heating" function: allows you to keep the domestic water exchanger at the right temperature, reducing the waiting time during extraction (instantaneous combined models)
- Possible "open air" installation by means of the special sealed kit (optional)
- Thermoregulation as standard in the board in combination with the external probe (optional)
- Assembling template, hydraulic connection and power cable included
- IPX5D electrical protection level

#### **TECHNICAL DATA**

Description	Heat input Heating/DHW min-max kW	Useful efficiency  Pn (50°/30°C) % (return 30°C) %		DHW production AT 25° I/min	Fuel		ergy cy class	Code	
VERSION WITH SEALED CHAMBER AND FORCED DRAUGHT-HEATING AND DOMESTIC HOT WATER PRODUCTION									
RESIDENCE EXTERNA CONDENS 25 KIS	3.1-20.0/3.1-25.0	105.0	109.6	14.3	NG	Α	Α	20096734	
RESIDENCE EXTERNA CONDENS 32 KIS	3.7-30.0/3.7-32.0	104.7	109.5	18.3	NG	А	A	20096735	

NOTE: availability until stocks last.

#### **ACCESSORIES**

**RIELLO** 

Description	Code
Heating system tap kit	4047252
Antifreeze heater kit KIS version	20164827
Antifreeze heater kit IS version	20164828
Open-air installation kit	20011638
External probe	1220559
Condensate evacuation pump	20097192
Kit for managing second pump or zone valves	20062614
Immersion probe for remote storage cylinder (for heating only version)	1220599
Solar diverter valve kit for instant wall-hung combined boilers	20035644
LPG conversion kit Residence Externa Condens 25 KIS-20 IS	20102669
LPG conversion kit Residence Externa Condens 32 KIS	20102674
Propane air transformation kit Residence Externa Condens 25 KIS	20102673
Caplet kit	20162838

#### **Hi, COMFORT CONTROLS**

Drawing	Description	Notes	Code
The state of the s	Hi, Comfort T100 Wi-Fi	(1)	20193354
E CO. 8	Hi, Comfort T100	(2)	20193352
N, Conderl	Hi, Comfort G100-W		20193355
enn (	Hi, Comfort G100-R		20193356

- (\*) Possibility of connection via OTBus or in ON/OFF mode.
   (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
   (2) For cable OTBus connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem) and compatible with Hi, Comfort G100-R code 20193356.

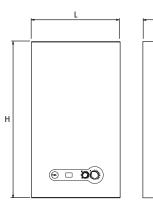
## STANDARD-EFFICIENCY WALL-HUNG BOILERS



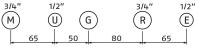
- Combi: Heating and DHW Production conventional flue Combi: Heating and DHW Production room sealed
- KIS
- \* The distinguish between EU and Extra EU Countries is based only on the enforcement of the Ecodesign Regulation. The conformity to any other national Regulation must be confirmed.

Standard wall-hung boilers

# Start LN



M-FLOW U-DHW OUTLET G-GAS R-RETURN E-DHW INLET



Description	H mm	L mm	P mm	Ø mm	Net weight kg
START 24 KI LN	740	400	332	130	30
START 28 KI LN	740	450	332	140	32



- Open chamber
- Combi model
- Only for replacement on CCR
- Low N0x emissions

Start LN has a simple modern that is ideal for heating and the production of domestic hot water in small and medium size households. Start LN is available with 24 and 28 kW outputs with low NOx emissions <56 mg/kWh.

- Double heat exchanger: domestic hot water production with plate heat exchanger to minimise the formation of limescale
- CTR system for a rapid attainment of the desired comfort and a reduction in consumption, and temperature changes in the heating bodies
- 8 litre expansion tank
- Low consumption circulator (IEE≤0.20)
- Anti-freeze function that protects the heating and domestic hot water circuits down to 0  $^{\circ}$ C
- Thermoregulation as standard in boiler board in combination with the outdoor temperature sensor (optional)
- Can interface with the Remote Control Panel
- Hydraulic connections available as an accessory kit
- Operation with methane as standard with the possibility of conversion to LPG (G31), this modification is done by the installer or the technical assistance centre
- Electric protection level IPX5D

#### ΤΕCΗΝΙζΔΙ ΒΔΤΔ

Description	Heat input	Useful e	fficiency	DHW	Fuel		efficiency	Code
	Heating/DHW min-max kW	Pn (80°/60 °C) %	30% Pn (rit. 50 °C) %	production ΔT 25° I/min		100	ass Ç	
VERSION WITH OPEN CHAMBER-HEAT	TING AND PRODUCTION OF	BOILER DOM	ESTIC HOT WA	ATER		•		
START 24 KI LN	10.7-26.7/9.0-26.7	90.1	89.2	13.8	NG	С	В	20151434
START 28 KI LN	14.0-31.9/9.0-31.9	90.5	89.5	16.6	NG	С	В	20151435

#### **ACCESSORIES**

Description	Code
CONTROL DEVICES	
CHRONORIELLO 7D (7-day digital room thermostat)	20063873
CHRONORIELLO 7D WIRELESS (7-day digital room thermostat wireless)	20101747
COMBUSTION ACCESSORIES	
LPG conversion kit for Start 24 KI LN model	20155079
LPG conversion kit for Start 28 KI LN model	20155101
ELECTRICAL ACCESSORIES	
External probe	1220559
Kit for managing second pump or zone valves	20062614
HYDRAULIC ACCESSORIES	
Central heating taps	4047476
Central heating taps with filter	4047475
High head pump kit	20105879
Polyphosphates doser kit	20135496
Magnetic filter and polyphosphates doser kit	20135495
Solar diverter valve kit for instantaneous wall-hung combi boilers	20025113
Top hydraulic fittings kit	20008795

#### **Hi, COMFORT CONTROLS**

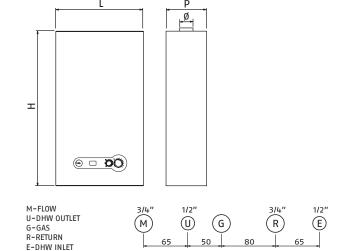
Drawing	Description	Notes	Code
o com	Hi, Comfort T100 Wi-Fi	(1)	20193354
8.05	Hi, Comfort T100	(2)	20193352
III III III III III III III III III II	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

- (\*) Possibility of connection via OTBus or in ON/OFF mode.
  (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
  (2) For cable OTBus connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem) and compatible with Hi, Comfort G100-R code 20193356.

Standard efficiency wall-hung boilers

# Start





- Conventional flue and room-sealed models
- Models: heating-only and combi
- Digital display

Description	Н	L	P	Ø	Net weight
	mm	mm	mm	mm	kg
START 24 KIS	715	405	248	-	31
START 28 KIS	740	400	328	-	33
START 35 KIS	780	505	328	-	42
START 28 KI	740	450	328	140	30

The Start range features a modern and functional design completed by a digital screen including essential information. The stylish casing, the compact size and special finishing details allows its installation into any setting.

The new Start is available both conventional flue and room sealed with 24, 28 and 35 kW output with heating only or heating and DHW production models.

- Double-heat exchanger (CH and DHW stainless steel plate heat-exchangers)
- CTR system to achieve faster desired comfort and reduce fuel consumption
- Frost protection function which protects the heating and DHW circuits down to -3 °C, with the possibility of extending protection down to -10 °C (as optional)
- Thermoregulation control supplied as standard fitted with the external probe (as optional).

#### **TECHNICAL DATA**

Description	0utput 80°/60° min – max kW	Efficiency Pn (80°/60°) %	Efficiency Pn 30% (47 °C return) %	DHW production (∆t 25°) I/min	Fuel	Code	
ROOM-SEALED - HEATING AN	ND DHW PRODUCTION						
START 24 KIS	7.5-24.0	92.8	91.8	13.7	NG	20122798	
START 24 KIS	7.5-24.0	92.8	91.8	13.7	LPG	20190002	
START 28 KIS	11.0-27.9	93.0	91.9	16.0	NG	20122801	
START 28 KIS	11.0-27.9	93.0	91.9	16.0	LPG	20190003	
START 35 KIS	10.8-34.9	92.9	92.5	20.0	NG	20122802	
CONVENTIONAL FLUE - HEATING AND DHW PRODUCTION							
START 28 KI	8.7-28.6	92.4	89.4	16.4	NG	20122800	

#### **ACCESSORIES**

Description	Code
CONTROL DEVICES	
CHRONORIELLO 7D (7-day digital room thermostat)	20063873
CHRONORIELLO 7D WIRELESS (7-day digital room thermostat wireless)	20101747
COMBUSTION ACCESSORIES	
LPG conversion kit (for START 24 KIS)	20015586
ELECTRICAL ACCESSORIES	
External probe	1220559
HYDRAULIC ACCESSORIES	
Central heating taps	4047476
Central heating taps with filter	4047475
Solar diverter valve kit for instantaneous wall-hung combi boilers	20025113

#### **HI, COMFORT CONTROLS**

Drawing	Description	Notes	Code
20 0	Hi, Comfort T100 Wi-Fi	(1)	20193354
20.8	Hi, Comfort T100	(2)	20193352
II, Garden	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

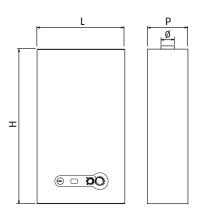
- (\*) Functions available only in case of OTBus connection with a Riello boiler. Possibility to connect to generic boilers and other devices only in ON/OFF mode.
  (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
  (2) Compatible with RF connection to the Hi, Comfort G100-W codice 20193355 accessory not included, necessary to connect to the home Wi-Fi).

Standard efficiency wall-hung boilers

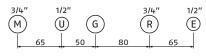
# **Fastech**



- Conventional flue and room sealed models
- Combi boiler



M-FLOW U-DHW OUTLET G-GAS R-RETURN E-DHW INLET



Description	H mm	L mm	P mm	ø mm	Net weight kg
FASTECH 24 KI	740	400	332	130	30
FASTECH 24 KIS	715	405	248	_	28

Fastech is the new wall-hung boiler dedicated to new housing. Featuring a modern and essential design, Fastech satisfies the heating and DHW demand of small and mid-sized houses. Fastech is available with 24 kW output.

- High-efficiency, bithermic copper heat-exchanger
- The CTR system allows to reach faster the desidered temperature and to reduce consumption, limestone production inside the boiler and thermic variations in the heating terminals
- 8 liters expansion vessel
- Frost protection of the heating and sanitary circuits
- Thermoregulation control supplied as standard fitted with the external probe (as optional)
- Remote Control Panel to be interfaced
- IPX5D electrical protection rating
- Arranged system for the use of natural gas, which can be converted to LPG through the specific kit (optional), to be mounted by the technical assistance

#### **TECHNICAL DATA**

Description	0utput 80°/60° min – max kW	Efficiency Pn (80°/60°) %	Efficiency P30% %	DHW production (∆t 25°) I/min	Fuel	Code		
CONVENTIONAL FLUE - HEATING	CONVENTIONAL FLUE - HEATING AND DHW PRODUCTION							
FASTECH 24 KI	8.0-24.6	92.0	90.8	14.1	NG	20122804		
ROOM SEALED - HEATING AND DHW PRODUCTION								
FASTECH 24 KIS	7.5-23.9	92.8	91.8	13.7	NG	20122807		

#### **ACCESSORIES**

Description	Code
CONTROL DEVICES	
CHRONORIELLO 7D (7-day digital room thermostat)	20063873
CHRONORIELLO 7D WIRELESS (7-day digital room thermostat wireless)	20101747
COMBUSTION ACCESSORIES	
LPG conversion kit (for FASTECH 24 KI)	20015587
LPG conversion kit (for FASTECH 24 KIS)	20015586
ELECTRICAL ACCESSORIES	
External probe	1220559
Zone valves management kit	20000785
HYDRAULIC ACCESSORIES	
Central heating taps	4047476
Central heating taps with filter	4047475
Solar diverter valve kit for instantaneous wall-hung combi boilers	20025113
Top hydraulic fittings kit	20008795
MECHANICAL ACCESSORIES	
Hydraulic fittings cover	20012594
Mounting template kit for 24 KIS model (10 pcs)	20017311

#### **HI, COMFORT CONTROLS**

Drawing	Description	Notes	Code
20 D	Hi, Comfort T100 Wi-Fi	(1)	20193354
E CO. 16	Hi, Comfort T100	(2)	20193352
II, desided	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

- (\*) Functions available only in case of OTBus connection with a Riello boiler. Possibility to connect to generic boilers and other devices only in ON/OFF mode.
  (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
  (2) Compatible with RF connection to the Hi, Comfort G100-W codice 20193355 accessory not included, necessary to connect to the home Wi-Fi).

HYBRID SYSTEMS

# SYSTEM COMPLEMENTARY ITEMS

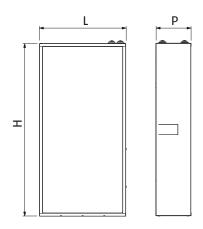


**TERMINAL UNITS** 

System complementary items

# Bag<sup>3</sup> Hybrid







- Manageable via Modbus by boilers and heat pumps with REC10 control panel
- · Setting of independent climatic curves for each
- Motorized mixing valves on mix zone
- Low-consumption self-modulating circulators

Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> HYBRID 1D	797	400	160	8,8
BAG <sup>3</sup> HYBRID 2D	797	400	160	11,2
BAG <sup>3</sup> HYBRID 1D+1M	797	400	160	12,4
IN-WALL INSTALLATION BOX	797	400	160	8,0

The distribution BAG3 is a specific accessory designed for hybrid systems intended for pairing with wall-hung and floor-standing boilers with versions for recessed or outdoor installation (IPX5D electrical protection).

- External housing that groups all components in galvanised sheet metal, for recessed or wall-hung installation
- Distribution collector (mixture bottle)
- Low-consumption self-modulating circulators
- Motorized mixing valve on the mixed zone
- Setting of independent climatic curves for each zone
- To be paired with REC10 H hybrid system control
- Possible connection of zone thermostats

With BAG<sup>3</sup> the hybrid systems can be expanded with the addition of:

- single coil domestic hot water heater for pre-heating by the heat pump
- solar thermal collectors, solar circulation pump and electronic kit for solar thermal management
- interface with photovoltaic system to favour the use of the electrical source
- double coil domestic hot water heater for pre-heating by a solar thermal system and the heat pump.

#### **TECHNICAL DATA**

Description	Notes	Code
OUTDOOR RECESSED VERSIONS		
BAG <sup>3</sup> HYBRID 1D	(1)	20130805
BAG <sup>3</sup> HYBRID 2D	(1)	20130806
BAG <sup>3</sup> HYBRID 1D+1M	(1)(2)	20130807
IN-WALL INSTALLATION BOX		20130808

To install the module, it is necessary to purchase the in-wall installation box code 20130808.

(1) Refer to the hybrid system section of the catalogue for compatible boiler pairing.

Limit thermostat on mixed zone only.

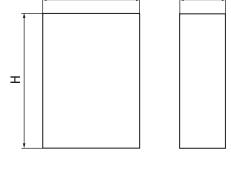
#### **ACCESSORIES**

Description	Code
Cock kit for BAG <sup>3</sup> HYBRID on system and heat pump side	20131752

System complementary items

# Bag<sup>3</sup>







- Hydraulic separator
- Low-energy circulators

Description	H mm	L mm	P mm	Net weight kg
BAG <sup>3</sup> AP - BAG <sup>3</sup> 2 AP - BAG <sup>3</sup> 3 AP	720	400	160	10, 12, 14
BAG <sup>3</sup> MIX BASIC - BAG <sup>3</sup> MIX CLIMA	720	400	160	16
BAG³ 2 MIX BASIC - BAG³ 2 MIX CLIMA	720	400	160	17
BAG <sup>3</sup> MIX FAMILY COND	616	440	160	16
IN-WALL INSTALLATION BOX	720	400	160	6

P

BAG hydraulic separator is an accessory to be matched with wall-hung and floor-standing boilers that can be installed outdoor or in a in-wall place.

- BAG<sup>3</sup> for high-flow rate direct circuit (1, 2 or 3 zones) works as a hydraulic separator between boiler and high-flow rate circuits. Equipped with self modulating energy-efficient circulators.
- BAG3 MIX and BAG3 2 MIX for high-flow rate direct and mixed circuits, work as hydraulic separators between boiler and double or triple  $temperature\ circuits.\ Equipped\ with\ self\ modulating\ energy-efficient\ circulators.$
- BAG<sup>3</sup> MIX Family Condens for direct and mixed circuit: mixing valve and mixed circuit pump are controlled by the electronic board supplied as standard, that can be located inside the boiler.
- Energy-efficient circulators
- Suitable for in-wall and outdoor installation
- Galvanized sheet that can be white painted
- BAG³ and BAG³ M are supplied as standard with limit thermostat for low temperature circuits.

#### **TECHNICAL DATA**

Description	Notes	Code
VERSION FOR OUTDOOR IN-WALL INSTALLATION		
BAG³ AP	(1)	20082277
BAG <sup>3</sup> 2 AP	(1)	20082280
BAG <sup>3</sup> 3 AP	(1)	20082282
BAG <sup>3</sup> MIX BASIC	(1)	20082286
BAG³ MIX CLIMA	(1)	20082283
BAG <sup>3</sup> 2 MIX BASIC	(1)	20082288
BAG <sup>3</sup> 2 MIX CLIMA	(1)	20082284
BAG <sup>3</sup> MIX FAMILY CONDENS	(2)	20102824
IN-WALL INSTALLATION BOX		20007305

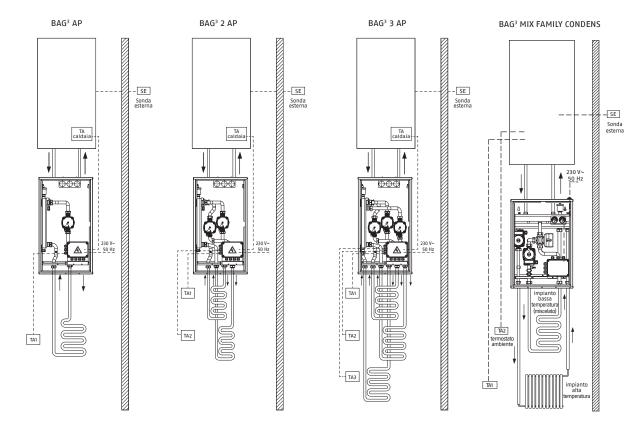
- Supplied without in-wall installation box
- Supplied with in-wall installation box

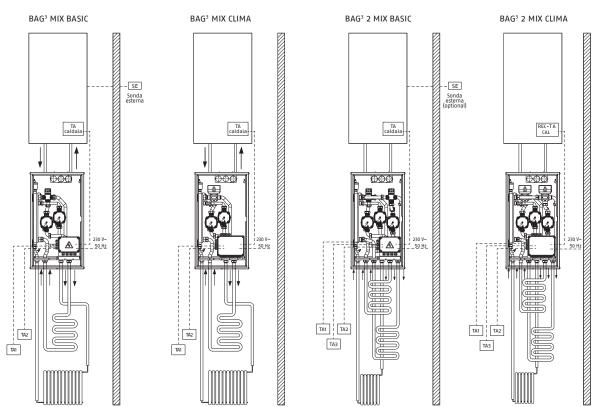
#### **ACCESSORIES**

**RIELLO** 

Description	Notes	Code
Interface board ITRF11	(1)	20164477
Insulation kit for in-wall installation box		20085456

It is necessary in case of installation of BAG<sup>3</sup> MIX CLIMA (20082283 code) and BAG<sup>3</sup> 2 MIX CLIMA (20082284 code) with Family Aqua Condens, Family Externa Condens and Family In Condens to manage high and low temperature circuits according to the boiler flow temperature.





# **FLUE OPTIONS SYSTEM**



MAY 2022 EDITION

#### METAL Ø80 mm TWIN FLUE SYSTEM SPECIFIC FOR CONDENSING BOILERS

Drawing	Description	Material		10					Code
				Family Aqua Condens			ens		
				Con	(5)		Condens		
			Ξ	Aque	) eo		lua (	~	
			Family (1)	nily (	Residence	Start (1)	Start Aqua	rt AR	
			Fan	Fan	Res	Sta	Sta	Start	
교 量	Ø80 mm twin system kit	Met	•	•	•	•	•	•	20162456
	Flore advantage (CO) www.vith.ein.in.in.lat	Met							204624.6
	Flue adapter Ø80 mm with air inlet	Met	•	•	•	•	•		20162448
<b>(</b> *)	45° Ø80 mm bend	Met	•	•	•	•	•	•	20162295
	90° Ø80 mm bend	Met						•	20162296
	90 you min bend	1466					Ĺ		20102290
	Extension 50 cm Ø80 mm	Met	•	•	•	•	•	•	20162298
	Extension 100 cm Ø80 mm	Met	•	•	•	•	•	•	20162299
	Horizontal flue terminal Ø80 mm	Met	•	•	•	•	•	•	20162442
*									
<b>↓</b>	Spacers for pipe Ø80 mm	Met	•	•	•	•	•	•	20137532
ЩЭ	90° bend with inspection door Ø80 mm	Met	•	•	•	•	•	•	20162297

(1) For boiler start-up, see the section on the flue 60/100 and only afterwords switch to diameter 80/125.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443)

NOTE: please, refer to boiler installation manual for maximum flue line length.

## PLASTIC Ø80 mm TWIN FLUE SYSTEM SPECIFIC FOR CONDENSING BOILERS - H1 CLASS (\*)

Drawing	Description	Material (*)		ns			s		Notes	Code
		,		Family Aqua Condens			Start Aqua Condens			
				, Aqua	ance		dua Co	2		
			Family	Family	Residence	Start	Start A	Start AR		
	Adjustable splitter device kit from Ø60/100 mm to Ø80/-80 mm	PP	•		•	•			(1)	20134830
	Compact swelling kit Ø60/100 - Ø80/80	PP	•		•	•			(1)	20190475
	Fixed twin system Ø80 mm kit	PP	•		•	•			(1)	20129765
	Splitter device kit B23 Ø80 mm for in-wall installation box	PP	•		•	•			(1)	20129768
999	Twin system Ø80 mm kit	PP	•		•	•			(1)	20137501
二 🗏	Ø80 mm twin system kit	PP		•				•	(1)	20137523
	Flue gas exhaust kit B23 Ø80 mm	PP	•		•	•			(1)	20129769
	45° Ø80 mm bend	PP	•	•	•	•	•	•	(1)	20137503
	90° Ø80 mm bend	PP	•	•	•	•	•	•	(1)	20137506
	Extension 50 cm Ø80 mm	PP	•	•	•	•	•	•	(1)	20137508
	Extension 100 cm Ø80 mm	PP	•	•	•	•	•	•	(1)	20137509
	Extension 200 cm Ø80 mm	PP	•	•	•	•	•	•	(1)	20137511
	Horizontal flue collector Ø80 mm	PP	•	•	•	•	•	•	(1)	20137517
	Horizontal air inlet collector Ø80 mm	PP	•	•	•	•	•	•	(1)	20137515
	Ø80 mm clapet with condensate trap	PP	•	•	•	•	•	•	(1)	20164664

<sup>(\*)</sup> PP material: colour may change over time because of sun's rays exposure. Class H1 - High Positive pressure (max 5,000 Pa).
(1) H1 pressure level according to EN 1443.
NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).
NOTE: please, refer to boiler installation manual for maximum flue line length.

## PP/Met Ø60/100 mm CONCENTRIC FLUE SYSTEM SPECIFIC FOR CONDENSING BOILERS - H1 CLASS (\*)

Drawing	Description	Material (*)	Family Aqua Condens	Start Aqua Condens	Notes	Code
	45° Ø60/100 mm concentric bend	PP/Met	•	•	(1)(2)	20142823
	90° Ø60/100 mm concentric bend	PP/Met	•	•	(1)(2)	20142825
	Concentric extension 50 cm, Ø60/100 mm	PP/Met	•	•	(1)(2)	20142829
	Concentric extension 100 cm, Ø60/100 mm	PP/Met	•	•	(1)(2)	20142830
	Concentric extension 200 cm, Ø60/100 mm	PP/Met	•	•	(1)(2)	20142831
	Ø60/100 mm horizontal flue terminal	PP/Met	•	•	(1)(2)	20142836
	Ø60/100 mm vertical flue terminal	PP/Met	•	•	(1)(2)	20142839
	Ø60/100 mm inspection extension	PP/Met	•	•	(1)(2)	20142835
	90° bend with inspection door Ø60/100 mm	PP/Met	•	•	(1)(2)	20142828
Д	Flat roof tile	Nylon	•	•		20135579
	Pitched roof tile	Nylon	•	•		20132050

PP material: colour may change over time because of sun's rays exposure. Class H1 - High Positive pressure (max 5,000 Pa). P1 pressure level according to EN 1443. Until stocks are exhausted.

NOTE: please, refer to boiler installation manual for maximum flue line length.

## PP/PP Ø60/100 mm CONCENTRIC FLUE SYSTEM SPECIFIC FOR CONDENSING BOILERS - H1 CLASS (\*)

Drawing	Description	Material (*)	Family	Family Aqua Condens	Residence	Start	Start Aqua Condens	Start AR	Notes	Code
$\bigcirc$	45° Ø60/100 mm concentric bend	PP/PP	•	•	•	•	•	•	(1)	20132012
	90° boiler start bend kit Ø60/100 mm	PP/PP	•		•	•		•	(1)	20129172
	90° Ø60/100 mm concentric bend	PP/PP		•			•		(1)	20132013
	Concentric extension 50 cm, Ø60/100 mm	PP/PP	•	•	•	•	•	•	(1)	20132043
	Concentric extension 100 cm, Ø60/100 mm	PP/PP	•	•	•	•	•	•	(1)	20132044
	Concentric extension 200 cm, Ø60/100 mm	PP/PP	•	•	•	•	•	•	(1)	20132045
	Wall collector Ø60/100 mm	PP/PP	•		•	•		•	(1)	20129175
	Telescopic wall collector Ø60/100 mm	PP/PP	•		•	•		•	(1)	20129176
	Ø60/100 mm horizontal flue terminal	PP/PP		•			•		(1)	20132018
	Vertical collector Ø60/100 mm	PP/PP	•		•	•		•	(1)	20129177
	Ø60/100 mm vertical flue terminal – Ø125 mm external straight pipe	PP/PP		•			•		(1)	20132020
	Vertical connection Ø60/100 mm	PP/PP	•		•	•		•	(1)	20129174
	Ø60/100 mm inspection extension	PP/PP	•	•	•	•	•	•	(1)	20132015
	Flat roof tile	Nylon	•	•	•	•	•	•		20135579
	Pitched roof tile	Nylon	•	•	•	•	•	•		20132050

PP material: colour may change over time because of sun's rays exposure. Class H1 - High Positive pressure (max 5,000 Pa). H1 pressure level according to EN 1443.

NOTE: If in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.

**TERMINAL UNITS** 

## PP/Met Ø80/125 mm CONCENTRIC FLUE SYSTEM SPECIFIC FOR CONDENSING BOILERS - H1 CLASS (\*)

				J111		TIT CLASS ( )				
Drawing	Description	Material (*)	Family (**)	Family Aqua Condens	Residence (**)	Start (**)	Start Aqua Condens	Start AR	Notes	Code
	45° Ø80/125 mm concentric bend	PP/Met	•	•	•	•	•	•	(1)	20164651
	87° Ø80/125 mm concentric bend	PP/Met	•	•	•	•	•	•	(1)	20164653
	Concentric extension 50 cm, Ø80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164657
	Concentric extension 100 cm, Ø80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164659
	Concentric extension 200 cm, Ø80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164660
	87° concentric bend with inspection door Ø80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164655
	Concentric extension with inspection door Ø80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164661
	Ø80/125 mm vertical flue terminal	PP/Met	•	•	•	•	•	•	(1)	20164669
	Ø80/125 mm horizontal flue terminal	PP/Met	•	•	•	•	•	•	(1)	20164673
$\bigcirc\!$	Spacers Ø80–125 mm (5 pcs)	Met	•	•	•	•	•	•		20164665
	Flue adapter from Ø60/100 mm to 80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164666
	Flue adapter from Ø60/100 mm to Ø80/125 mm	PP/Met	•	•	•	•	•	•	(1)	20164666
	Ø80/125 mm clapet with condensate trap	PP/Met	•	•	•	•	•	•	(1)	20164662
	Flat roof tile	Nylon	•	•	•	•	•	•		20135579
	Pitched roof tile	Nylon	•	•	•	•	•	•		20132050

<sup>(\*)</sup> PP material: colour may change over time because of sun's rays exposure. Class H1 - High Positive pressure (max 5,000 Pa).

(\*\*) 60/100 boiler connection kit (cod. 20129174) and 60/100 to 80/125 adapter (cod. 20164666) are mandatory.

(1) H1 pressure level according to EN 1443.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.

#### PLASTIC (PP) Ø80 mm FLUE RANGE FOR INSIDE-CHIMNEY INSTALLATION, SPECIFIC FOR CONDENSING **BOILERS - H1 CLASS (\*)**

Drawing	Description	Material (*)		ens			SI		Notes	Code
				Family Aqua Condens			Start Aqua Condens			
				Aqua	eo		lua Co			
			Family	mily /	Residence	Ę	ırt Aq	Start AR		
						Start				
	45° Ø80 mm bend	PP	•	•	•	•	•	•	(2)	2016457
	90° Ø80 mm bend	PP	•	•	•	•	•	•	(2)	2016457
	Extension 50 cm Ø80 mm	PP	•	•	•	•	•	•	(2)	2016457
	Extension 100 cm Ø80 mm	PP	•	•	•	•	•	•	(2)	2016457
	Extension 200 cm Ø80 mm	PP	•	•	•	•	•	•	(2)	2016457
	Ø80/125 mm chimney adapter	PP	•	•	•	•	•	•	(2)	2013252
	T connection Ø60 mm	PP	•	•	•	•	•	•	(2)	2016458
	Ø60/80 mm adapter	PP	•	•	•	•	•	•	(2)	2016458
	Chimney support kit Ø80 mm	PP	•	•	•	•	•	•	(2)	2013250
	Pipe spacers	PP	•	•	•	•	•	•		2013250
	Ø80 mm inspection extension	PP	•	•	•	•	•	•	(2)	2013250
	Ø80 mm roof tile	PP	•	•	•	•	•	•	(2)	2013250
	Ø80 mm flexible extension (12,5m) with 8 spacers	PP	•	•	•	•	•	•	(2)	2013250
	Rigid/flexible connection Ø80 mm M	PP	•	•	•	•	•	•	(2)	2013251
	Flexible/rigid connection Ø80 mm F	PP	•	•	•	•	•	•	(2)	2013251
	Syphon kit	PP	•	•	•	•	•	•		2004678
	T connection Ø80 mm	PP	•	•	•	•	•	•	(1)	2016301
귵	Condensate trap cap for T-connection Ø80 mm	PP	•	•	•	•	•	•	(1)	2016301
	Shelf support kit for condensate trap	Met	•	•	•	•	•	•		2014588
	Flue cover panel kit		•	•	•	•	•	•		2014588

PP material: colour may change over time because of sun's rays exposure. Class H1 - High Positive pressure (max 5,000 Pa).

<sup>(</sup>r) PP Interfact Colour may change over time because of sun's rays exposure. Class H = High Positive pressure (max 5,000 Pa).

(1) P1 pressure level according to EN 1443.

(2) H1 pressure level according to EN 1443.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.

**TERMINAL UNITS** 

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### **RIELLO**

#### PLASTIC (PP) Ø60 mm FLUE RANGE FOR INSIDE-CHIMNEY INSTALLATION, SPECIFIC FOR CONDENSING **BOILERS - H1 CLASS (\*)**

Drawing	Description	Material		SU				Notes	Code
		(*)	Family	Family Aqua Condens	Residence	Start Aqua Condens	Start AR		
	45° Ø60 mm bend	PP	•	•	•	•	•	(1)	20145877
	90° Ø60 mm bend	PP	•	•	•	•	•	(1)	20145876
	Extension 50 cm Ø60 mm	PP	•	•	•	•	•	(1)	20145879
	Extension 100 cm Ø60 mm	PP	•	•	•	•	•	(1)	20145882
	Extension 200 cm Ø60 mm	PP	•	•	•	•	•	(1)	20145883
	Ø60/100 mm vertical flue terminal – Ø100 mm external straight pipe	PP/PP	•	•	•	•	•	(1)	20145884
	3 spacers kit for inside-chimney Ø60 mm	PP	•	•	•	•	•		20145886
	Shelf support kit for inside-chimney	PP	•	•	•	•	•		20145888
	Chimney front cover kit	PP	•	•	•	•	•		20145889
	5 hose clamps kit Ø60 mm	PP	•	•	•	•	•		20145890
	Chimney connection kit Ø80-60 mm with bend 90° Ø60 mm	PP	•	•	•	•	•	(1)	20145892
	T-connection Ø60 mm with condensate trap	PP	•	•	•	•	•	(1)	20145894
	Syphon kit	PP	•	•	•	•	•		20046782
	Flue reduction kit 80-60 mm	PP	•	•	•	•	•	(1)	20145897

PP material: colour may change over time because of sun's rays exposure. Class H1 - High Positive pressure (max 5,000 Pa). H1 pressure level according to EN 1443.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.



#### METAL Ø80 mm TWIN FLUE SYSTEM SPECIFIC FOR STANDARD-EFFICIENCY BOILERS

Drawing	Description	Material	ylir	+	Fastech	Notes	Code
			Family	Start	Fast		
	Ø80 mm twin system kit	Met	•	•		(1)	20162667
	Air box twin system kit	Met	•	•	•	(1)	20162666
	45° bend Ø80 mm with gasket	Met	•	•	•	(1)	20162295
	90° bend Ø80 mm with gasket	Met	•	•	•	(1)	20162296
	Ø80 mm extension 100 cm with gasket	Met	•	•	•	(1)	20162299
	Ø80 mm extension 50 cm with gasket	Met	•	•	•	(1)	20162298
	Ø80 mm extension 195 cm with gasket	Met	•	•	•	(1)	20162300
	Air intake collector	Met	•	•	•	(1)	20162665
	Flue collector horizontal	Met	•	•	•	(1)	20162664
0	Spacers for Ø80 mm pipe (10 pcs)	Met	•	•	•		20137532
	Ø80 mm condensate trap horizontal	Met	•	•	•	(1)	20162662
	Ø80 mm condensate trap vertical	Met	•	•	•	(1)	20162663
	Ø80 mm pipes terminal	Met	•	•	•	(1)	20162443
	90° bend with inspection door Ø80 mm (Slovenia)	Met	•	•	•	(1)	20162297

(1) P1 pressure level according to EN 1443.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443)

NOTE: please, refer to boiler installation manual for maximum flue line length

**TERMINAL UNITS** 



**RIELLO** 

#### MET/MET Ø60/100 mm CONCENTRIC FLUE SYSTEM SPECIFIC FOR STANDARD-EFFICIENCY BOILERS

### ### ### ### #### #################	Drawing	Description	Material	Family	Start	Fastech	Notes	Code
Telescopic collector horizontal extensible from 43 to 73,5 cm  Met/Met • • • (1) 20163410  B Concentric extension Ø60-100 mm (75 cm) Met/Met • • • (1) 20163391  B Concentric extension Ø60-100 mm (147 cm) Met/Met • • • (1) 20163393  90° bend Ø60-100 mm  Met/Met • • • (1) 20163393  90° bend kit Ø60-100 mm for installation replacement Met • • (1) 20163388  90° bend kit Ø60-100 mm for installation replacement Met/Met • • • (1) 20163327  45° bend Ø60-100 mm condensate trap vertical Met/Met • • • (1) 20163403  Ø60-100 mm condensate trap horizontal Met/Met • • • (1) 20163400  Clip kit H 45 mm with gasket Ø100 mm (4 pcs) • • • 20163429  Pipe spacers Ø100 mm (4 pcs) Met • • • (1) 20163396  Ø60-100 mm telescopic extension (from 165 to 220 mm) Met/Met • • • (1) 20163390  Ø60-100 mm 90° bend with inspection door Met/Met • • • (1) 20163390  Flat roof tile Nylon • • • 20163425	Ħ		Met/Met	•	•	•	(1)	20163422
Telescopic collector horizontal extensible from 43 to 73,5 cm  Met/Met  Occupantic extension Ø60-100 mm (75 cm)  Met/Met  Occupantic extension Ø60-100 mm (147 cm)  Met/Met  Occupantic extension Ø60-100 mm (147 cm)  Met/Met  Occupantic extension Ø60-100 mm (147 cm)  Met/Met  Occupantic extension Ø60-100 mm  O		Standard collector horizontal	Met/Met	•	•	•	(1)	20163408
Concentric extension Ø60-100 mm (147 cm)   Met/Met		Telescopic collector horizontal extensible from 43 to 73,5 cm	Met/Met	•	•	•	(1)	20163410
90° bend Ø60-100 mm  Met/Met • • • (1) 20163333  90° bend kit Ø60-100 mm for installation replacement  Met  45° bend Ø60-100  Met/Met • • • (1) 20163327  Ø60-100 mm condensate trap vertical  Met/Met • • • (1) 20163327  Ø60-100 mm condensate trap horizontal  Met/Met • • • (1) 20163403  Clip kit H 45 mm with gasket Ø100 mm (4 pcs)  Pipe spacers Ø100 mm (4 pcs)  Met/Met • • • (1) 20163429  Wet/Met • • • (1) 20163429  Met/Met • • • (1) 20163396  Ø60-100 mm telescopic extension (from 165 to 220 mm)  Met/Met • • • (1) 20163390  G60-100 mm 90° bend with inspection door  Met/Met • • • (1) 20163390  Flat roof tile  Nylon • • • 20135579	8	Concentric extension Ø60-100 mm (75 cm)	Met/Met	•	•	•	(1)	20163391
90° bend kit Ø60-100 mm for installation replacement  Met  (1) 20163388  45° bend Ø60-100  Met/Met  (1) 20163327  Ø60-100 mm condensate trap vertical  Met/Met  (1) 20163327  Ø60-100 mm condensate trap horizontal  Met/Met  (1) 20163403  Met/Met  (1) 20163403  Clip kit H 45 mm with gasket Ø100 mm (4 pcs)  Pipe spacers Ø100 mm (4 pcs)  Met  Ø60-100 mm telescopic extension (from 165 to 220 mm)  Met/Met  (1) 20163409  O60-100 mm telescopic extension (from 165 to 220 mm)  Met/Met  (1) 20163400  O60-100 mm 90° bend with inspection door  Met/Met  (1) 20163429  O60-100 mm 90° bend with inspection door  Met/Met  (1) 20163429  O60-100 mm 90° bend with inspection door  Met/Met  (1) 20163429  O60-100 mm 90° bend with inspection door  Met/Met  (1) 20163429  O60-100 mm 90° bend with inspection door  Met/Met  (1) 20163429	8	Concentric extension Ø60-100 mm (147 cm)	Met/Met	•	•	•	(1)	20163393
### ### ##############################		90° bend Ø60-100 mm	Met/Met	•	•	•	(1)	20163333
Met/Met		90° bend kit Ø60-100 mm for installation replacement	Met			•	(1)	20163388
### ### ##############################		45° bend Ø60−100	Met/Met	•	•	•	(1)	20163327
Clip kit H 45 mm with gasket Ø100 mm (4 pcs)  Pipe spacers Ø100 mm (4 pcs)  Met  Ø60-100 mm telescopic extension (from 165 to 220 mm)  Ø60-100 mm 90° bend with inspection door  Met/Met  Onnection clip kit boiler-flue Ø60-100 mm  Flat roof tile  Nylon  Output  Display 100 mm (4 pcs)  Met/Met  Output  Display 100 mm (4 pcs)  Met/Met  Output  Display 100 mm (4 pcs)  Output  Display		Ø60-100 mm condensate trap vertical	Met/Met	•	•	•	(1)	20163403
Pipe spacers Ø100 mm (4 pcs)  Met  Ø60-100 mm telescopic extension (from 165 to 220 mm)  Ø60-100 mm 90° bend with inspection door  Met/Met  (1)  20163396  Connection clip kit boiler-flue Ø60-100 mm  Flat roof tile  Nylon  Verification clip kit boiler-flue Ø60-100 mm  Pipe spacers Ø100 mm (4 pcs)  Met/Met  Verification clip kit boiler-flue Ø60-100 mm  Pipe spacers Ø100 mm (4 pcs)  Met/Met  Verification clip kit boiler-flue Ø60-100 mm  Pipe spacers Ø100 mm (4 pcs)  Met/Met  Verification clip kit boiler-flue Ø60-100 mm  Pipe spacers Ø100 mm (4 pcs)  Met/Met  Verification clip kit boiler-flue Ø60-100 mm  Pipe spacers Ø100 mm (4 pcs)  Met/Met  Verification clip kit boiler-flue Ø60-100 mm  Pipe spacers Ø100 mm (4 pcs)  Met/Met  Verification clip kit boiler-flue Ø60-100 mm		Ø60-100 mm condensate trap horizontal	Met/Met	•	•	•	(1)	20163400
Ø60-100 mm telescopic extension (from 165 to 220 mm)       Met/Met       • • • (1)       20163396         Ø60-100 mm 90° bend with inspection door       Met/Met       • • • (1)       20163390         Connection clip kit boiler-flue Ø60-100 mm       • • • • 20163425         Flat roof tile       Nylon       • • • 20135579		Clip kit H 45 mm with gasket Ø100 mm (4 pcs)		•	•	•		20163429
Ø60-100 mm 90° bend with inspection door  Met/Met • • • (1) 20163390  Connection clip kit boiler-flue Ø60-100 mm  Flat roof tile  Nylon • • • 20135579	0	Pipe spacers Ø100 mm (4 pcs)	Met	•	•	•		20135584
Connection clip kit boiler-flue Ø60-100 mm  Flat roof tile  Nylon  20163425		Ø60-100 mm telescopic extension (from 165 to 220 mm)	Met/Met	•	•	•	(1)	20163396
Flat roof tile Nylon • • • 20135579		Ø60-100 mm 90° bend with inspection door	Met/Met	•	•	•	(1)	20163390
	#=	Connection clip kit boiler-flue Ø60-100 mm		•	•	•		20163425
Pitched roof tile Nylon • • • 20132050	□□	Flat roof tile	Nylon	•	•	•		20135579
		Pitched roof tile	Nylon	•	•	•		20132050

(1) P1 pressure level according to EN 1443.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.



#### MET/PP Ø60/100 mm CONCENTRIC FLUE SYSTEM SPECIFIC FOR STANDARD-EFFICIENCY BOILERS

Drawing	Description	Material	Family	Start	Fastech	Notes	Code
	45° Ø60-100 mm concentric bend in Met/PPu	Met/PP	•	•	•	(1)	20162785
	90° Ø60–100 mm concentric bend in Met/PPu	Met/PP	•	•	•	(1)	20162786
	90° Ø60–100 mm concentric bend in Met/PPu – for boiler connection	Met/PP	•	•	•	(1)	20162791
	Concentric extension M-F Ø60-100 mm in Met/PPu (500 mm)	Met/PP	•	•	•	(1)	20162793
	Concentric extension M-F Ø60-100 mm in Met/PPu (1000 mm)	Met/PP	•	•	•	(1)	20162795
	Concentric extension M-F Ø60-100 mm in Met/PPu (2000 mm)	Met/PP	•	•	•	(1)	20162796
	Ø60-100 mm vertical flue terminal; Ø125 mm external straight pipe	Met/PP	•	•	•	(1)	20162797
	Ø60-100 mm concentric horizontal flue terminal in Met/PPu	Met/PP	•	•	•	(1)	20162798
	Ø60-100 mm telescopic horizontal flue terminal in Met/PPu (extensible from 500 mm to 800 mm)	Met/PP	•	•	•	(1)	20162799
Д	Flat roof tile	Nylon	•	•	•		20135579
	Pitched roof tile	Nylon	•	•	•		20132050

(1) P1 pressure level according to EN 1443.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.



FLOOR-STANDING BOILERS

FLOOR-STANDING CONDENSING BOILERS

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FLOOR-STANDING STANDARD EFFICIENCY BOILERS

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### FLOOR-STANDING CONDENSING BOILERS



#### STEEL OIL BOILERS

WITH 3 WAY VALVE

HEATNG ONLY



#### INSIEME EVO COND

INSIEME EVO COND 20 V LN (20 kW)\*
INSIEME EVO COND 25 V LN (25 kW)\*
INSIEME EVO COND 35 V LN (34,9 kW)\*

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#### INSIEME EVO COND

INSIEME EVO COND 45 LN (43,7 kW)\*
INSIEME EVO COND 55 LN (38,9-53,3 kW)\*\*
INSIEME EVO COND 70 LN (53,4-67,7 kW)\*\*

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HEATING AND DHW
PRODUCTION
130 LITERS SORAGE
TANK



#### INSIEME EVO COND

INSIEME EVO COND 25 B/130 LN (25 kW)\*
INSIEME EVO COND 35 B/130 LN (34,9 kW)\*

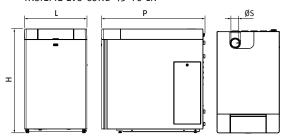
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- \* Max useful power 80/60 °C
- \*\* Min/max useful power 80/60 °C

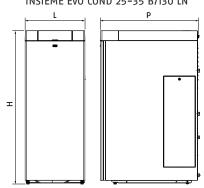
Steel floor-standing oil condensing boilers

### Insieme Evo Cond

INSIEME EVO COND 20-35 V LN INSIEME EVO COND 45-70 LN



INSIEME EVO COND 25-35 B/130 LN







- In conformity with Directive 2009/125/EC
- · Steel boilers with oil burner for heating and for the production of domestic hot water
- Low NOx version class 3 according to EN 267

Description	H mm	L mm	P mm	ØA (*) mm	ØS mm	Net weight kg
Insieme EVO COND 20 V LN	1000	600	994	80	80	120
Insieme EVO COND 25 V LN	1000	600	994	80	80	120
Insieme EVO COND 35 V LN	1000	600	994	80	80	150
Insieme EVO COND 45 LN	1138	600	1155	110	110	195
Insieme EVO COND 55 LN	1138	600	1155	110	110	198
Insieme EVO COND 70 LN	1138	600	1155	110	110	202
Insieme EVO COND 25 B/130 LN	1540	600	975	80	80	150
Insieme EVO COND 35 B/130 LN	1540	600	975	80	80	195

<sup>(\*)</sup> Type C transformation kit as optional.

Oil condensing thermal group equipped with single stage burner for heat outputs up to 45 kW, dual stage for 55.70 kW models with low pollutant emissions.

The stainless steel boiler body has an horizontal layout, coated with insulating and sound absorbing material. Insieme EVO COND is available with open chamber configuration as standard, convertible as sealed chamber with specifics accessory kits. "Heating only" or combined versions are available for the production of domestic hot water with storage tank.

All models are equipped with a new electronic panel with a backlit graphic display with five buttons and LEDs for operation status display.

The control system provides the climatic regulation, the management of up to 3 zones distribution with specific accessory kits, the management of the sanitary hot water.

The electronics also provides the possibility of the remote management by means of the 0-10 V input, or with the Modbus protocol.

- Low sound emissions
- Flexible and cheapness installation. All the accessories for the operation and the safety are included in the furniture
- Simple maintainability: combustion chamber, flue manifold, control panel and hydraulic connextions are easily accessible
- Low pollutant emissions (class 3 according to EN 267 with NOx emissions ≤100 mg/kWh)
- Maximum working pressure: 3 bar
- Complete with flexible oil hoses

Insieme EVO COND 20-35 V LN: thermal groups for the room heating with integrated 3 way valve for the connection with an external tank (optional)

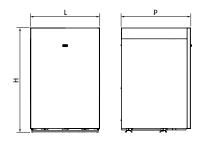
Insieme EVO COND 25-35 B/130 LN: thermal group for the combined heating and domestic hot water production by means of an integrated 130 liters storage tank

Insieme EVO COND 45-70 LN: thermal groups for the room heating.

#### **TECHNICAL DATA**

Description	Output kW		Effici	Efficiency		Tank capacity	Energy efficiency class		Notes	Code	
	Useful 80°/60° max	Furnace min-max	Pn (80/60 °C) %	Useful 30% Pn (30°C) %	l/min	(liters)	1111	رً			
LOW NOX VERSION - HEATING ONLY											
Insieme EVO COND 20 V LN	19.5	20.0	97.3	105.9	_	-	A	_	(1)	20145974	
Insieme EVO COND 25 V LN	24.2	25.0	96.9	105.6	_	-	A	-	(1)	20145975	
Insieme EVO COND 35 V LN	33.8	34.9	96.5	104.8	_	-	A	_	(1)	20145976	
Insieme EVO COND 45 LN	43.7	45	97.2	104.8	_	-	A	_		20145977	
Insieme EVO COND 55 LN	53.3	40-55	96.9	104.9	_	-	A	-		20145978	
Insieme EVO COND 70 LN	67.7	55-70	96.8	104.8	_	-	A	_		20145979	
LOW NOX VERSION - HEATING AND DO	MESTIC HO	T WATER PR	ODUCTION V	VITH STORA	GE TANK						
Insieme EVO COND 25 B/130 LN	24.2	25.0	96.9	105.6	10.0	130	A	В	(2)	20145980	
Insieme EVO COND 35 B/130 LN	33.8	34.9	96.5	104.8	11.4	130	A	В	(2)	20145981	

#### **ACCESSORIES**



Description	H	L	P	Net weight
	mm	mm	mm	kg
120 It storage tank	900	600	600	68

#### **TECHNICAL DATA**

Description	Capacity liters	Maximum power consumption kW	DHW production I/h	Energy efficiency class	Notes	Code
120 It storage tank	120,0	29,8	730	С	(1)(2)	20132804
Boiler - storage tank hydraulic connection					(1)	20132805

Coupable with integrated 3 way valve models ("V" version). Grey painted tank (RAL 7047).

Integrated 3 way valve. Domestic hot water production with reference to  $\Delta T$  35 °C.

#### **ACCESSORIES**

Description	Notes	Code
SECONDARY CIRCUIT MANAGEMENT		
External probe		1220559
Domestic hot water probe		1220599
1st direct/mixed zone management		20132795
2 <sup>nd</sup> /3 <sup>rd</sup> direct/mixed zone management		20132796
SEALED TRANSFORMATION (TYPE C)		
Ø80 mm type C transformation	(1)	20163226
Ø110 mm type C transformation	(2)	20163285
SAFETY DEVICES		
Fuel shut-off valve kit (VIC) - ØG.1"		20009486
Pressure gauge- safety valve kit (2,5 bar)	(3)	20181008
Safety devices kit	(2)(4)	20180519
Safety kit adapter	(2)	20165826
FUEL FILTER		
Oil filter		20132792
FLUE DISCHARGE	`	
Ø80 - Ø80/125 mm adapter	(1)	20159698
Ø110 – Ø110/160 mm adapter	(2)	20160472
HYDRAULIC ACCESSORIES		
DN70 hydraulic separator		4047314
CASCADE MANAGEMENT		
RIELLOtech CLIMA COMFORT	(2)	4031069
CLIMA COMFORT	(2)	20010903
CLIMA DISPLAY	(2)	20010906
Kit controllo ambiente RC3	(2)	20155028
Kit comunicazione per comunicazione bus tra Insiem Evo Cond e RIELLOtech	(2)(5)	20021674
Sonda per pozzetto collettore solare NTC (10kΩ)	(2)(6)	4031913
Sonda per pozzetto NTC (10kΩ) 5 metri	(2)(7)	20010068
Sonda a bracciale NTC (10kΩ)	(2)(8)	20010068
Sonda bollitore NTC (10kΩ) 5 metri	(2)(9)	20010103
CONDENSATE NEUTRALIZER		
DN0 1 neutralization kit (up to 50 kW)		20182660
DN0 2 neutralization kit (up to 300 kW)		20182661
HN0 1.6 neutralization kit (up to 200 kW)	(10)	20182664
	1	

- For 20-25-35 models. For 45-55-70 models.

- To be combined with code 20180519.
  It contains: pressure switch, minimum pressure switch and thermometer.
- It contains wiring and communication kit.
- (1) (2) (3) (4) (5) (6) (7) (8) (9) Probe for solar system.
  Primary probe (hydraulic separator).
- Mixed zone probe. Cylinder probe.
- (10) Equipped with extraction pump.

#### **Hi, COMFORT CONTROLS**

#### Room controls with capability of remote boiler interface (\*) and management through APP

Drawing	Description	Notes	Code
20.8	Hi, Comfort T100 Wi-Fi	(1)	20193354
50.6 S	Hi, Comfort T100	(2)	20193352
M. Conton	Hi, Comfort G100-W		20193355
	Hi, Comfort G100-R		20193356

- (\*) Functions available only in case of OTBus connection with a Riello boiler. Possibility to connect to generic boilers and other devices only in ON/OFF mode.
   (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
   (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

# FLOOR-STANDING STANDARD EFFICIENCY BOILERS



		GAS BOILERS		OIL BOILE	RS	
		C	AST IRON		STEEL	CAST IRON
Щ		ONLY TRA EU	ATR		INSIEME EVOe LN	GITRÈ
ONLY HEATNG		CONTRIB	ATR 44 IN (43,6 kW) ATR 52 IN (52,2 kW) ATR 64 IN (63,5 kW) ATR 71 IN (71,1 kW)		INSIEME EVOe 25 LN (26,5 kW)* INSIEME EVOe 32 V LN (33,9 kW)*	GITRÈ 4 (25,0 KW) GITRÈ 5 (32,0 KW) GITRÈ 6 (40,0 KW)
O O O			page 192		page 194	page 197
					INSIEME EVOe LN	
	INSTANTANEOUS				INSIEME EVOE 25 K LN (26,5 KW)* INSIEME EVOE 32 K LN (33,9 KW)*	
I FLUE	STANTA					
NTIONA	Ž				page 194	
ONVE					INSIEME EVOe LN	
ION C	RS				INSIEME EVOE 25 B/70 LN (26,5 KW)*	
RODUCT	70 LITERS STORAGE TANK					
DHW P	S				page 194	
AND	10 >2				INSIEME EVOe LN	GITRÈ
HEATING AND DHW PRODUCTION CONVENTIONAL FLUE	100–130 LITERS STORAGE TANK				INSIEME EVOE 32 B/110 LN (33,9 KW)*	GITRÈ 5 B/100 (32 KW)
	00-1					
	-01				page 194	page 197

<sup>\*</sup> All versions can be transformed into a sealed chamber version with a dedicated accessory kit.

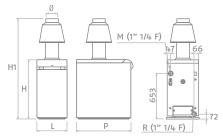
#### Atmospheric gas floor-standing boilers

### **ATR**



ATR 44 IN M (1" 1/4 F) R (1" 1/4 F)

ATR 52 IN - 64 IN - 71 IN



Description	H mm	H1 mm	L mm	P mm	ø mm	Net weight kg
ATR 44 IN	850	-	450	780	180	166
ATR 52 IN	850	1475	450	701	180	190
ATR 64 IN	850	1475	450	748	180	225
ATR 71 IN	850	1700	450	867	200	251

• Standard efficiency conventional flue cast-iron gas floor-standing boilers for light commercial and commercial applications. Equipped with stainless steel atmospheric burner and builtin control panel, they are suitable for the installation in any kind of plant room.

ATR features a high efficiency cast iron heat-exchanger, with ionization flame control. The thermostatic control board is provided with a total shut-off function.

- Standard efficiency, higher than 90%.
- Noiseless operation.
- Compact sizes.
- Possible conversion to LPG through the specific kit to be ordered separately.
- Antirefouleur kit for ATR 52-64-71 IN models.

#### **TECHNICAL DATA**

Description	Output kW	Input kW	Efficiency Pn (Tm=70 °C) %	Efficiency (30% Pn) %	Notes	Code				
HIGH EFFICIENCY (>90%) - CONVENTIONAL FLUE										
ATR 44 IN	43.6	48.3	90.3	90.1	(1)	4045145				
ATR 52 IN	52.2	57.9	90.2	90.1	(2)	4045146				
ATR 64 IN	63.5	70.5	90.1	90.0	(2)	4045147				
ATR 71 IN	71.1	79.0	90.0	90.0	(3)	4045148				

- Built-in anti-refouleur kit Ø 180 mm.
- In addition to the boilers ATR 52 IN and ATR 64 IN. it is necessary to order the code 480213: anti-refouleur kit Ø 180 mm.
- (3) In addition to the boiler ATR 71 IN it is necessary to order the code 480214: anti-refouleur kit Ø 200 mm. NOTE: the electrical interface kit for tank is required for the use of ATRB 120 tank.

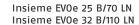
Description	Notes	Code
Interface kit for DHW-tank		4047695
Global shut-off kit	(1)	4047697
Hydraulic kit for ATRB 120		4047692
LPG transformation kit for ATR 44		20185318
LPG transformation kit for ATR 52		20185315
LPG transformation kit for ATR 64		20185316
LPG transformation kit for ATR 71		20185317
Anti-refouleur kit Ø180 mm	(2)	480213
Anti-refouleur kit Ø200 mm	(3)	480214

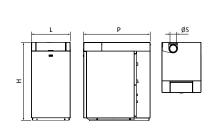
The "global shut-off kit" is necessary when you installed the electrical interface kit for DHW-tank (code 4047695) to keep the funcion "global shut-off". For hydraulic accessories, please contact Sales Department.
Only for ATR 52 IN and ATR 64 IN.
Only for ATR 71 IN.

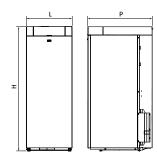
Steel floor-standing standard boilers

# **Insieme EV0e LN**

Insieme EVOe 25 LN - 32 V LN Insieme EVOe 25/32 K LN









- In conformity with Directive 2009/125/EC
- Steel boilers with light oil burner for heating and for the production of domestic hot water
- Low N0x version class 3 according to EN 267

Description	H mm	L mm	P mm	Ø A mm	Ø S mm	Net weight kg
Insieme EVOe 25 LN	900	450	660	80	80	104
Insieme EVOe 32 V LN	900	600	760	80	120	136
Insieme EVOe 25 K LN	900	450	660	80	80	106
Insieme EVOe 32 K LN	900	600	760	80	120	138
Insieme EV0e 25 B/70 LN	1355	500	735	80	80	155
Insieme EVOe 32 B/110 LN	1490	600	700	80	120	206

Type C conversion accessory kit

Steel boiler with low combustion pollutant emission one-stage light oil burner. The body of the boiler is vertical and is covered in insulating and sound-proofing material.

The standard Insieme EVOe is available with an open chamber that can be converted into a sealed chamber with the accessory kit. Versions are available for heating only or combined with instantaneous domestic hot water production or with storage. All models have a new electronic panel with backlit graphic display and five keys and LEDs for displaying the operating status. The control system provides climatic adjustment, the management of the distribution of up to 3 zones using special accessory kits, and the regulation of the domestic hot water. The electronics also provide the possibility of remote management using a 0–10 V input or else with the Modbus protocol.

- Low sound emission
- Easy and inexpensive to install. The delivery includes all the accessories for it to operate safely
- Easy to maintain: combustion chamber, flue gases manifold, control panel and hydraulic connections are can be easily accessed
- Low pollutant emissions, class 3 according to EN 267 (N0x≤100mg/kWh)
- Maximum operating pressure: 3 bar

Insieme EVOe 25 LN: boiler for room heating.

Insieme EV0e 32 V LN: boiler for room heating. Equipped with 3-way valve for combination with an external domestic hot water storage cylinder (accessory kit).

**Insieme EV0e 25/32 K LN:** boilers for room heating and the instantaneous priority production of domestic hot water using an instantaneous plate heat exchanger with a diverter valve and control of the modulating pump (PWM).

Insieme EVOe 25 B/70 LN: boilers for room heating and the production of domestic hot water with a 70 litre integrated storage cylinder.

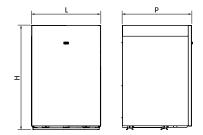
**Insieme EV0e 32 B/110 LN:** boilers for room heating and the production of domestic hot water with a 110 litre integrated storage cylinder.

#### **TECHNICAL DATA**

Description	Output kW		Efficie	Efficiency %		Tank capacity	Energy efficiency class		Notes	Code
	Useful 80°/60° max	Furnace min-max			l/min	liters	900	7		
LOW NOX VERSION - ONLY HEA	ATING									
nsieme EVOe 25 LN	25.3	26.5	95.4	96.6	-	-	В	-		20118240
nsieme EVOe 32 V LN	32.5	33.9	95.7	97.3	-	-	В	-		20130415
LOW NOX VERSION - HEATING	AND INSTA	NTANEOUS I	DOMESTIC H	OT WATER P	RODUCTION			-		
nsieme EVOe 25 K LN	25.3	26.5	95.4	96.6	9.4	-	В	В	(1)	20118244
nsieme EVOe 32 K LN	32.5	33.9	95.7	97.3	12.7	-	В	В	(1)	20118245
LOW NOX VERSION - HEATING	AND DOME	STIC HOT W	ATER PRODU	CTION WITH	STORAGE CY	LINDER		,		
nsieme EVOe 25 B/70 LN	25.3	26.5	95.4	96.6	9.4	69	В	В	(1)	20118246
Insieme EVOe 32 B/110 LN	32.5	33.9	95.7	97.3	12.7	106	В	В	(1)	20118250

<sup>(1)</sup> Domestic hot water production with reference to  $\Delta T$  35 °C

#### **ACCESSORIES**



Description	H	L	P	Net weight
	mm	mm	mm	kg
120 lt storage tank	900	600	600	68

#### **TECHNICAL DATA**

Description	Capacity liters	Maximum power consumption kW	DHW production I/h	Energy efficiency class	Notes	Code
120 It storage tank	120,0	29,8	730	С	(1)(2)	20132804
Boiler - storage tank hydraulic connection					(1)	20132805

Coupable with integrated 3 way valve models ("V" version). Grey painted tank (RAL 7047).

Description	Code
SECONDARY CIRCUIT MANAGEMENT	
External probe	1220559
Domestic hot water probe	1220599
1st direct/mixed zone management	20132795
2nd/3rd direct/mixed zone management	20132796
SEALED TRANSFORMATION (TYPE C)	
Type C transformation M0D 25	20132799
Type C transformation M0D 32	20132800
FUEL FILTER	
Oil filter	20132792
Ø80 mm SINGLE DISCHARGE OR TWIN SUCTION/DISCHARGE	
Ø120/80 - Ø80/80 mm twin adapter	20180504
45° bend Ø80	20162295
90° bend Ø80	20162296
90° bend Ø80 with inspection	20162297
Extension L = 500 mm Ø80 mm	20162298
Extension L = 1000 mm Ø80 mm	20162299

Description	Code
Extension L = 2000 mm Ø80 mm	20162300
Horizontal terminal Ø80 mm	20162442
SINGLE EXHAUST OR CONCENTRIC INTAKE/EXHAUST SYSTEM Ø80/125 mm	
Concentric exhaust adapter Ø80/125 mm	20132801
HYDRAULIC ACCESSORIES	
Hydraulic separator	20132798

#### **HI, COMFORT CONTROLS**

Room controls with capability of remote boiler interface (\*) and management through APP

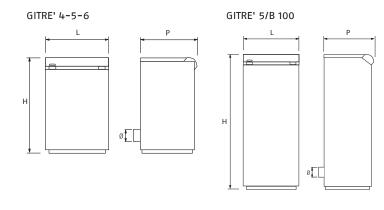
Drawing	Description	Notes	Code
20 DC	Hi, Comfort T100 Wi-Fi	(1)	20193354
50.80 50.80 50.80	Hi, Comfort T100	(2)	20193352
II, Guedari	Hi, Comfort G100-W		20193355
4000	Hi, Comfort G100-R		20193356

- (\*) Functions available only in case of OTBus connection with a Riello boiler. Possibility to connect to generic boilers and other devices only in ON/OFF mode.
   (1) With Hi, Comfort G100-W, included, for intrnet connection by means of ADSL Wi-Fi router.
   (2) For cable connection to the boiler. Compatible for radio frequency connection with Hi, Comfort G100-W code 20193355 (accessory not included and necessary for internet connection via home ADSL modem).

Cast iron floor-standing standard boilers

# Gitrè







- In conformity with Directive 2009/125/EC
- Cast iron oil floor standing boilers, with three flue gas passes, removable turbolators and winged pipes

Description	H mm	L mm	P mm	ø mm	Net weight kg
GITRÈ 4	850	450	800	130	182
GITRÈ 5	850	450	900	130	214
GITRÈ 6	850	450	1000	130	248
GITRÈ 5 B/100	1500	600	900	130	286

Cast iron floor standing boiler with three flue gas passes and single stage oil burner, with standard combustion and low polluting emissions; wet horizontal combustion chamber and highly insulated boiler body. GITRÈ is available in only heating models or combined for DHW production, provided with an enameled 100 liters storage tanks featuring a double-layer insulation.

- All models are equipped with a thermostatic control panel, with IP XOD protection
- Energy efficiency class B both in heating and DHW production
- Return temperature up to 37 °C
- Ease of maintenance: combustion chamber, flues battery, control panel and hydraulic fittings are easy to access
- Available as accessory the electronic kit to control up to three direct zones

GITRÈ 4-5-6: cast iron oil floor standing boilers for space heating.

GITRÈ 5 B/100: cast iron oil floor standing boilers for space heating and DHW production with the integrated 100 liters storage tank.

#### **TECHNICAL DATA**

Description	0utput 80°/60° max	Input min - max	Efficiency Pn (80/60 °C)	Efficiency 30% Pn	DHW production	Tank capacity liters		efficiency ass	Code
	kW	kW	%	(37 °C return) %	∆t 35 °C I/min			Ţ	
LOW NOX VERSION - HEATING ONLY									
GITRÈ 4	23.8	25	95.3	97.4	-	-	В	-	20123950
GITRÈ 5	30.7	32	96.1	97.2	-	-	В	-	20123952
GITRÈ 6	38.5	40	96.2	97.3	-	-	В	-	20123953
LOW NOX VERSION - HEATING AND DHW PRODUCTION WITH TANK									
GITRÈ 5 B/100	30.7	32	96.1	97.2	10.2	100	В	В	20123954

Description	Code
ELECTRICAL ACCESSORIES	
Electrical multi-zone kit	20168656



WATER-HEATERS	
HEAT PUMPS	201
LOW NOX INSTANTANEOUS - GAS	205

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**FLUE OPTION SYSTEMS** 

# **HEAT PUMPS**



#### AIR/WATER HEAT PUMP

DOMESTIC HOT WATER



NEXAQUA

NEXAQUA 80-120

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NEXPRO 300 PLUS

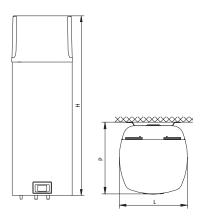
NEXPRO 300 PLUS

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MAY 2022 EDITION

DHW air-water heat pump

# **NexAqua**







• Highest efficiency energy efficiency class A+

Description	H mm	L mm	P mm
NexAqua 80-80 Plus	1197	506	533
NexAqua 120-120 Plus	1497	506	533

NexAqua is Riello solution specifically designed to enhance DHW production in domestic applications. The unit consists mainly of a mini heat pump and a tank. The mini-heatpump, located in the upper part of the tank, heat the water contained in the in the 80-120 liters tank up to 55 °C in heat pump operation and up to 75 °C thanks to the additional electrical resistances. A centrifugal fan sucks the air and allows the heat pump to operate in recirculation or in particular installation places, through pipes up to 15 m length with a DN 125 diameter. The energy recovered in this way is then transferred to water by an external exchanger located around the external surface of the tank, thus allowing a money-saving maintenance. The high efficiency of NexAqua derives from a refrigeration circuit in R134A, which heat water up to 55 °C.

The tank is provided with 2 electrical resistances of 1,0 kW (each) as standard supply.

- Touch Screen Display
- High efficiency coefficient
- 2 additional electrical resistances of 1,0 kW (each) as standard
- Centrifugal fan with high available pressure for air duct systems
- Corrosion protection with magnesium anode and enamelled tank
- Highest efficiency energy efficiency class A+

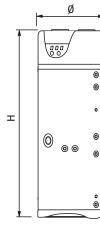
#### **TECHNICAL DATA**

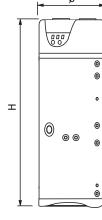
Description	Firing rate	Maximum power absorption average (2) W	Efficiency coefficient (1) COP	Air flow rate m³/h	Recovery time h:min (1)	Volume liters	Energy efficiency class (3)	Code
NexAqua 80	+7/35 °C	350	3.1	100-230	4:40	80	A+	20075560
NexAqua 80 Plus	<b>-</b> 7/35 °C	350	3.1	100-230	4:40	80	A+	20075563
NexAqua 120	+7/35 °C	350	3.1	100-230	6:40	120	A+	20075562
NexAqua 120 Plus	<b>-</b> 7/35 °C	350	3.1	100-230	6:40	120	A+	20075565

- Performance values refer to the following conditions: (1) Compliance with EN 16147: room air temperature 15 °C with 74% humidity, DHW from 10 °C to 55 °C
- (2) Value refers to heat pump operation without additional electrical resistances (3) M load profile

DHW air-water heat pump

# NexPro 300 Plus







• Highest efficiency energy efficiency class A+

Description	H mm	ø mm	Net weight kg
NexPro 300 Plus	1870	660	122
NexPro 300 S Plus	1870	660	137
NexPro 300 CS Plus	1870	660	155

NexPro 300 Plus is the Riello solution dedicated to domestic hot water production in residential applications.

The unit consists of a heat pump and a tank with 300 I capacity. The heat pump, placed directly on the upper part of the tank, uses the thermal energy of the air to heat the water contained in the tank.

The air is sucked by a centrifugal fan that allows the heat pump to operate in recirculation or through pipes up to 10 m length with a DN 160 diameter. The energy recovered is then transferred to water by an external exchanger located around the external surface of the tank, thus avoiding maintenance costs.

The high efficiency of NexPro 300 Plus derives from a refrigeration circuit in R134A, a high efficiency compressor, an electronic expansion valve and a bypass valve for hot gases to allow the operation up to -5 °C.

The tank is provided with a double enameled coating (DIN 4753) and a 1,5 kW electrical resistance as standard supply. The resistance accomplishes the four main functions: additional heating, frost protection, emergency heating and anti-legionella protection.

The whole system is managed and adjusted by an "intelligent" control device, to allow the best operation of each component.

- DHW production up to a temperature of 60 °C
- High efficiency coefficient
- Additional electrical resistance of 1,5 kW as standard
- Centrifugal fan with high available pressure for air duct systems
- Double enameled DHW tank (DIN 4753)
- Solar integration through RSS pump station
- Operation range -5 °C/+32 °C
- Corrosion protection with magnesium anode and enamelled tank
- Highest efficiency energy efficiency class A+

#### **TECHNICAL DATA**

**RIELLO** 

Description	Average heating capacity 50 °C (1) W	Efficiency coefficient (1) COP	Power absorption average (1) W	Recovery time (1) h:m	Air flow rate m³/h	Volume liters	Energy efficiency class (2)	Code
DHW								
NexPro 300 Plus	1950	2.92	488	7:22	450	300	A+	20125639
DHW + SOLAR SYSTEM								
NexPro 300 S Plus	1950	2.92	488	7:22	450	295	A+	20125640
DHW + BOILER + SOLAR SYSTEM								
NexPro 300 CS Plus	1950	2.92	488	7:22	450	290	A+	20125642

Performance values refer to the following conditions:
(1) Compliance with EN 16147: room air temperature 15 °C with 71% humidity, DHW from 15 °C to 54 °C
(2) Load profile

Description	Code
RSS MRS	20116166

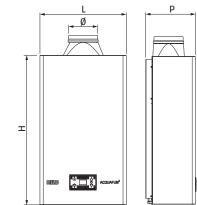
# **LOW NOX INSTANTANEOUS - GAS**

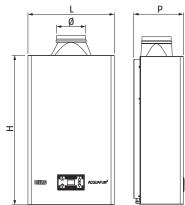


	INDOOR		OUTDOOR	
TIONAL FLUE		ACQUAFUN <sup>2</sup> LN  ACQUAFUN <sup>2</sup> 11 (19,4 kW-11 I/min)*  ACQUAFUN <sup>2</sup> 14 (24,4 kW-14 I/min)*		
CONVENTIONAL		page 206		
	Tem.	RIELLO MINI LN	····	RIELLO MINI EVO EXT LN
ROOM-SEALED		RIELLO MINI 11 LN (19,9 kW-11 I/min)* RIELLO MINI 13 LN (22,5 kW-13 I/min)* RIELLO MINI 17 LN (27,6 kW-17 I/min)*	100 (B) .	RIELLO MINI 11 EVO EXT LN (19,9 kW-11 I/min)* RIELLO MINI 11 EVO EXT LN (22,5 kW-13 I/min)* RIELLO MINI 17 EVO EXT LN (27,6 kW-17 I/min)*
RC		page 207		page 208

<sup>\*</sup> DHW production with  $\Delta T$  = 25 °C

# Acquafun<sup>2</sup> LN









- Natural gas and LPG
- Conventional flue
- Automatic battery-powered ignition
- Reduced NOx emissions

Description	H mm	L mm	P mm	ø mm	Net weight kg
ACQUAFUN <sup>2</sup> 11 LN	675	350	230	110	12
ACQUAFUN <sup>2</sup> 14 LN	675	400	230	130	12

Conventional flue low NOx instantaneous gas water heater

Acquafun2 LN is the open chamber water heater that is quick and easy to install without electrical connections because the power supply comes from a battery. It is available in two models: 11 and 14 litres. Water heater with low NOx emissions <56 mg/kWh.

- Instantaneous gas water heater for indoor installation
- User interface with backlit display, intuitive control keys and battery replacement LED
- Auto-adaptive system with thermostatic device
- Automatic ignition using the battery; 2 batteries supplied (1.5 Volt size D)
- The continuous flame modulation allows the selected temperature to remain constant when the water pressure ad output varies optimising the combination at the mechanical and thermostatic mixers
- Good flame stability
- Temperature probe on the water outlet
- Thanks to its particularly compact dimensions it can be installed in confined areas of the home

#### **TECHNICAL DATA**

Description	Useful output furnace kW	DHW flow rate I/min.	Fuel	Energy efficiency class	Code			
VERSION WITH ROOM-SEALED WITH NATURAL DRAFT - AUTOMATIC BATTERY IGNITION								
ACQUAFUN <sup>2</sup> 11 LN	19.4-22.0	11.0	NG	А	20149827			
ACQUAFUN <sup>2</sup> 11 LN	18.3-21.0	11.0	LPG	А	20149831			
ACQUAFUN <sup>2</sup> 14 LN	24.4-28.0	14.0	NG	А	20149833			
ACQUAFUN <sup>2</sup> 14 LN	24.7-28.0	14.0	LPG	А	20149834			

Room sealed low N0x instantaneous gas water heater

### RIELLO MINI LN







- Natural gas and LPG
- Room-sealed
- Electronic ignition
- Reduced N0x emissions

	L	P
Ŧ		

Description	H mm	L mm	P mm	Net weight kg
RIELLO MINI 11 LN	642	340	237	19
RIELLO MINI 13 LN	642	340	237	19
RIELLO MINI 17 LN	640	400	246	21

Riello Mini is a small boiler intended specifically to generate domestic hot water. It is available in models with 11, 13 and 17 litres per minute. Water heater with low NOx emissions <56 mg/kWh.

- Instantaneous gas water heater for indoor installation
- New electronics and icon interface with backlit display and four keys for carrying out adjustments
- Broad flame modulation that provides excellent stability of the domestic hot water delivery temperature, even with minimum draw-off
- Assembly template and power cable supplied.

#### **TECHNICAL DATA**

Description	Useful output furnace kW	DHW flow rate I/min.	Fuel	Energy efficiency class	Notes	Code
VERSION WITH FORCED DRAFT CONVENTIONAL	FLUE - ELECTRONIC IGNITI	ON				
RIELLO MINI 11 LN	19.9-22.2	11.0	NG	А	(1)(2)	20143047
RIELLO MINI 11 LN	19.9-22.2	11.0	LPG	А	(1)(2)	20143048
RIELLO MINI 13 LN	22.5-25.0	13.0	NG	А	(1)(2)	20143049
RIELLO MINI 13 LN	22.5-25.0	13.0	LPG	А	(1)(2)	20143050
RIELLO MINI 17 LN	27.6-30.0	17.0	NG	А	(1)(2)	20143051
RIELLO MINI 17 LN	27.6-30.0	17.0	LPG	А	(1)(2)	20143052

For low temperature installation (down to -10 °C), the anti-freeze resistors kit is available (code 20148036)

The water heater can be installed also outdoors in a partially protected place, where it is not exposed directly to the elements. For these installations we recommend using anti-freeze systems that can adequately protect the appliance from the risk of freezing. Contact the pre-sales service for clarification or support.

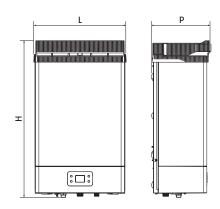
Description	Code
ELECTRICAL ACCESSORIES	
Anti-freeze resistors kit	20148036
HYDRAULIC ACCESSORIES	
Water connection with tap	4047624

RIELLO INTERNATIONAL PRODUCT CATALOGUE

# RIELLO MINI EVO EXT LN

Outdoor room sealed low NOx instantaneous gas water heater









- Gas-tight chamber
- Electronic ignition
- Type A2 outdoor installation
- Low N0x emissions

Description	H mm	L mm	P mm	Net weight kg
RIELLO MINI 11 EVO EXT LN	699	408	260	21
RIELLO MINI 13 EVO EXT LN	699	408	260	21
RIELLO MINI 17 EVO EXT LN	699	408	260	21

Riello Mini Evo Ext is a small boiler intended specifically to produce domestic hot water. It is available in models with 11, 13 and 17 litres per minute, for type A2 outdoor installations. Water heater with low NOx emissions <56 mg/kWh.

- Instantaneous gas water heater for outdoor installation
- New electronics and icon interface with backlit display and four keys for carrying out adjustments
- Broad flame modulation that provides excellent stability of the domestic hot water delivery temperature, even with minimum draw-off
- Anti-freeze resistors as standard to provide operation with outdoor temperatures as low as -10 °C on 11 and 13 l/min versions and -7 °C on the 17 I/min version
- Assembly template and power cable supplied.

#### **TECHNICAL DATA**

Description	Useful output furnace kW	DHW flow rate I/min.	Fuel	Energy efficiency class	Code		
VERSION WITH FORCED DRAUGHT-ELECTRONIC IGNITION GAS-TIGHT	VERSION WITH FORCED DRAUGHT-ELECTRONIC IGNITION GAS-TIGHT CHAMBER						
RIELLO MINI 11 EVO EXT LN	19.9-22.2	11.0	NG	A	20144208		
RIELLO MINI 13 EVO EXT LN	22.5-25.8	13.0	NG	A	20144210		
RIELLO MINI 17 EVO EXT LN	27.6-30.0	17.0	NG	А	20144234		

Description	Code
COMBUSTION ACCESSORIES	
LPG conversion kit (MINI 11 EVO EXT LN)	20155581
LPG conversion kit (MINI 13 EVO EXT LN)	20155583
LPG conversion kit (MINI 17 EVO EXT LN)	20157837
HYDRAULIC ACCESSORIES	
Water connection with tap	4047624

# **FLUE OPTION SYSTEMS**



**TERMINAL UNITS** 

#### TWIN FLUE GAS EXHAUST SYSTEM Ø80 mm MADE OF METAL FOR WATER HEATER (ONLY FOR RIELLO MINI LN)

Drawing	Description	Material	Notes	Code
	Twin system without flue gas analysis outlet	Met	(1)	1220329
66	Twin system connection kit	Met	(1)(3)	20162668
	Twin system connection kit	Met	(1)(4)	20162669
	Bend 45° Ø80 with gasket	Met	(1)	20162295
	Bend 90° with gasket	Met	(1)	1220079
	Extension 100 cm with gasket	Met	(1)	1220269
	Extension 50 cm with gasket	Met	(1)	1220149
	Extension 195 cm with gasket	Met	(1)	1220229
	Type B22 flue gas exhaust kit for open air installation	Met	(1)	20162455
	Air suction terminal	Met	(1)	1220109
	Flue gas exhaust terminal	Met	(1)	1220119
<b>\$</b>	Spacer ring/support for Ø80 pipes (4 pieces)			20137532
	Horizontal condensation collection kit	Met		1220039
	Vertical condensation collection kit	Met		1220049
	Terminal for Ø80 mm pipes	Met	(1)	20162443
	Bend 90° Ø80 mm with inspection	Met	(1)	20162297

P1 pressure level according to EN 1443 H1 pressure level according to EN 1443 For Mini 11–13 LN versions For Mini 17 LN version (1) (2) (3) (4)

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443)

NOTE: please, refer to boiler installation manual for maximum flue line length

### COAXIAL FLUE GAS EXHAUST SYSTEM Ø60/100 mm MADE OF PP/METAL FOR WATER HEATER (ONLY FOR RIELLO MINI LN)

Drawing	Description	Material	Notes	Code
Ħ	Vertical discharge kit	Met/Met	(1)	20163422
E D	Coaxial discharge terminal kit	Met/Met	(1)	20163409
	Telescopic coaxial discharge terminal kit (from 430 to 735 mm)	Met/Met	(1)	20163412
	Coaxial extension (75 cm)	Met/Met	(1)	20163392
8	Double coaxial extension (147 cm)	Met/Met	(1)	20163394
	Coaxial bend 90°	Met/Met	(1)	20163334
	Coaxial bend 45°	Met/Met	(1)	20163330
	Tile for flat roof	Nylon		20135579
	Universal lead tile	Nylon		20132050
	Vertical coaxial condensation collection kit	Met/Met		20163403
	Horizontal coaxial condensation collection kit	Met/Met		20163400
	Clamps kit H 45 mm with gasket Ø100 mm (4 pieces)			20163427
ф—-	Spacer ring/support for Ø100 pipes (10 pieces)			20135584
	Telescopic manifold 60-100 mm (from 165 to 220 mm)	Met/Met	(1)	20163396
	Combustion analysis sockets kit			20163430
	Bend 90° Ø60 −100 mm with inspection	Met/Met	(1)	20163390
6-70	Bend adaptor kit Ø60-100 mm (for replacing Mini 11 and 13 with rear flue gas exhaust)	Met/Met	(1)	20122792

(1) P1 pressure level according to EN 1443
NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443)
NOTE: please, refer to boiler installation manual for maximum flue line length



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## **SOLAR SYSTEMS**



#### SYSTEMS FOR DHW PRODUCTION

#### FORCED CIRCULATION

#### 2 FITTINGS

#### SISTEMA RPS 25/2 EVO

200 liters 300 liters 430 liters

#### NATURAL CIRCULATION

#### 4 FITTINGS



150 liters 200 liters 220 liters 300 liters

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FLAT PLATE SOLAR COLLECTOR

#### RPS 25/4 SYSTEM

200 liters 300 liters 430 liters 550 liters 800 liters 1000 liters

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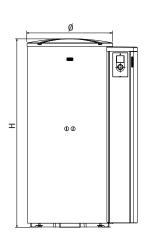
**TERMINAL UNITS** 

RIELLO

Systems for DHW production - Forced circulation

# Sistema RPS 25/2 EVO





• Domestic hot water production

Complete and integrated high profile system for the production of domestic hot water, dedicated to household customers. It consists of all the elements necessary for the construction of the solar system and is designed for a simple, fast and safe installation. The system consists of:

- High efficiency RPS 25/2 EVO solar collectors, thanks to the aluminium absorber treated with TiNOx Energy Al selective deposition and the excellent insulation lower than 40 mm with aluminium reflective element; they have a containment structure consisting of a painted aluminium frame.
- RBS 2S Ready-i double-coil steel heater, with excellent aesthetic finishes (embossed ABS), high energy performance (class B) and internal glazing. The boiler is complete with a modulating circulator pump, safety devices, load valves, non-return valve, delivery and return thermometers, pressure gauge, EVOSOL control unit; all these components are already assembled, wired and tested.
- Expansion reservoir, designed to withstand high temperatures.
- Antifreeze, non-toxic, biodegradable and biocompatible fluid.
- 3/4" thermostatic mixer to optimize the system.
- 5-year warranty on both collectors and heater.
- Wide selection of bracket kits to meet all installation needs.

For more details on heater and solar panel please refer to the dedicated product pages.

#### **TECHNICAL DATA**

Description		Glycol		Number					Notes	Code	
	Number	Gross area m²	quantity kg	vessel liters	of people	Capacity liters	H mm	ø mm	Energy efficiency class		
RPS 25/2 EVO 200	1	2.3	10	18	2-3	208	1338	604	В	(1)	20134807
RPS 25/2 EVO 300	2	4.6	10	18	4-5	301	1838	604	В	(1)	20134808
RPS 25/2 EVO 430	3	6.9	15	24	6-7	442	1644	755	В		20139716

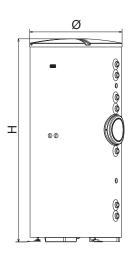
(1) Components supplied in a single pallet.

All solar systems include: solar collectors, bivalent solar heater with hydraulic unit and integrated EVOSOL solar regulator, glycol, expansion reservoir and thermostatic mixer.

Systems for DHW production - Forced circulation

# RPS 25/4 System







• Domestic hot water production

Complete and integrated system for the production of domestic hot water, dedicated to household customers. It consists of all the elements necessary for the construction of the solar system and is designed for a simple and safe installation. The system consists of:

- High-efficiency RPS 25/4 solar collectors, thanks to the selective absorber TiNOx Energy Al.
- The RSS MRS hydraulic unit is complete with a modulating circulator, safety devices, load valves, non-return valve, delivery and return thermometers, pressure gauge and EVOSOL control unit for solar system management.
- RBS 2S heater, in dual coil steel, internally glazed to ensure hygiene and facilitate cleaning of limescale deposits; with excellent aesthetic finishes (in embossed ABS) and energy performance.
- Expansion reservoir, designed to withstand high temperatures.
- Antifreeze, non-toxic, biodegradable and biocompatible fluid.
- 3/4" thermostatic mixer to optimize the system.
- 5-year warranty on both collectors and heater.
- Wide selection of bracket kits to meet all installation needs.

For more details on heater, solar panel and hydraulic unit, refer to the dedicated product pages.

#### **TECHNICAL DATA**

Description	Solar c	ollectors	Glycol	Expansion		Solar cylinder				Notes	Code
	Number	Gross area m²	quantity kg	vessel liters	of people	Capacity liters	H mm	ø mm	Energy efficiency class		
RPS 25/4 200	1	2.3	10	18	2-3	208	1338	604	В	(1)	20134809
RPS 25/4 300	2	4.6	10	18	4-5	301	1838	604	В	(1)	20134810
RPS 25/4 430	3	6.9	15	24	6-7	442	1644	755	В	(1)	20131990
RPS 25/4 550	4	9.2	20	35	8-9	551	1988	755	В	(1)	20131991
RPS 25/4 800	5	11.5	20	50	10-11	731	1846	1000	В	(2)	20131992
RPS 25/4 1000	6	13.8	20	50	12-13	883	2171	1000	В	(2)	20131993

- Components provided in a single pallet.

(2) Heater supplied with insulation disassembled.
All solar systems include: solar collectors, bivalent solar tank with RSS hydraulic group with integrated EVOSOL solar regulator, glycol, expansion tank and thermostatic

#### ACCESSORIES FOR RPS 25/2 EVO AND RPS 25/4 - VERTICAL INSTALLATION

Description	Notes	Code
Manual solar air vent kit	(1)	20026577
Fittings kit to be welded	(-)	20132142
Fittings kit for stainless steel pipe		20132143
Kit of two fittings to tighten terminals	(2)	20094627
Flexible stainless steel pipe kit DN16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)	(-)	4383254
Flexible stainless steel pipe kit DN16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383255
PARALLEL INSTALLATION ON PITCHED ROOF WITH STUD SCREW		
Brackets kit for 1 collector in //		20104603
Brackets kit for 2 collectors in //		20104604
Brackets kit for 3 collectors in //		20104605
Brackets kit for 4 collectors in //		20104606
Brackets kit for 5 collectors in //		20104610
Brackets kit for 6 collectors in //		20104611
INSTALLATION AT 30° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 30° for flat roof		20104616
Brackets kit for 2 collectors at 30° for flat roof		20104618
Brackets kit for 3 collectors at 30° for flat roof		20104619
Brackets kit for 4 collectors at 30° for flat roof		20104621
Brackets kit for 5 collectors at 30° for flat roof		20104622
Brackets kit for 6 collectors at 30° for flat roof		20104623
INSTALLATION AT 45° ON FLAT ROOF WITH STUD SCREW		20104023
Brackets kit for 1 collector at 45° for flat roof		20104624
Brackets kit for 2 collectors at 45° for flat roof		20104625
Brackets kit for 3 collectors at 45° for flat roof		20104626
Brackets kit for 4 collectors at 45° for flat roof		20104627
Brackets kit for 5 collectors at 45° for flat roof		20104628
Brackets kit for 6 collectors at 45° for flat roof		20104628
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE BRACKETS		20104029
Undertile brackets kit for 1 collector		20104630
Undertile brackets kit for 2 collectors		20104632
Undertile brackets kit for 3 collectors		20104634
Undertile brackets kit for 4 collectors Undertile brackets kit for 5 collectors		20104635
		20104636
Undertile brackets kit for 6 collectors  PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE ADJUSTABLE BRACKETS		20104637
Undertile adjustable brackets kit for 1 collector		20101-620
Undertile adjustable brackets kit for 2 collectors		20104638
-		20104640
Undertile adjustable brackets kit for 3 collectors		20104642
Undertile adjustable brackets kit for 4 collectors		20104643
Undertile adjustable brackets kit for 5 collectors		20104644
Undertile adjustable brackets kit for 6 collectors		20104645
INSET INSTALLATION FOR VENTILATED ROOFS (MINIMUM 20° SLOPE)		
Inset kit for 1 collector		20145347
Inset kit for 2 collectors		20145351
Inset kit for 3 collectors		20148401
Inset kit for 4 collectors		20148404
Inset kit for 5 collectors		20149352
Inset kit for 6 collectors		20149353

<sup>(2)</sup> Use one for each row of installed RPS 25/4 collectors. Other available accessories at page 268.

#### ACCESSORIES FOR RPS 25/2 EVO AND RPS 25/4 - HORIZONTAL INSTALLATION

Description	Notes	Code
Manual solar air vent kit	(1)	20026577
Welding fittings kit		20132221
Fittings kit for stainless steel hose		20132222
Kit of two fittings to tighten terminals	(2)	20094627
Flexible stainless steel pipe kit DN16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383254
Flexible stainless steel pipe kit DN16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383255
HORIZONTAL INSTALLATION IN PARALLEL ON PITCHED ROOF WITH STUD SCREW		
Brackets kit for 1 collector in //	(3)	20104698
Brackets kit for 2 collectors in //	(3)	20104699
Brackets kit for 3 collectors in //	(3)	20104701
Brackets kit for 4 collectors in //	(3)	20104704
Brackets kit for 5 collectors in //	(3)	20104705
Brackets kit for 6 collectors in //	(3)	20104708
HORIZONTAL INSTALLATION AT 30° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 30° for flat roof	(3)	20104711
Brackets kit for 2 collectors at 30° for flat roof	(3)	20104713
Brackets kit for 3 collectors at 30° for flat roof	(3)	20104718
Brackets kit for 4 collectors at 30° for flat roof	(3)	20104721
Brackets kit for 5 collectors at 30° for flat roof	(3)	20104722
Brackets kit for 6 collectors at 30° for flat roof	(3)	20104727
HORIZONTAL INSTALLATION AT 45° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 45° for flat roof	(3)	20104730
Brackets kit for 2 collectors at 45° for flat roof	(3)	20104732
Brackets kit for 3 collectors at 45° for flat roof	(3)	20104734
Brackets kit for 4 collectors at 45° for flat roof	(3)	20104737
Brackets kit for 5 collectors at 45° for flat roof	(3)	20104738
Brackets kit for 6 collectors at 45° for flat roof	(3)	20104150
HORIZONTAL INSTALLATION IN PARALLEL ON PITCHED ROOF WITH UNDERTILE BRACKETS		
Undertile brackets kit for 1 collector	(3)	20104741
Undertile brackets kit for 2 collectors	(3)	20104742
Undertile brackets kit for 3 collectors	(3)	20104743
Undertile brackets kit for 4 collectors	(3)	20104745
Undertile brackets kit for 5 collectors	(3)	20104746
Undertile brackets kit for 6 collectors	(3)	20104748
HORIZONTAL INSTALLATION IN PARALLEL ON PITCHED ROOF WITH UNDERTILE ADJUSTABLE BRACKETS		
Undertile adjustable brackets kit for 1 collector	(3)	20104749
Undertile adjustable brackets kit for 2 collectors	(3)	20104750
Undertile adjustable brackets kit for 3 collectors	(3)	20104761
Undertile adjustable brackets kit for 4 collectors	(3)	20104762
Undertile adjustable brackets kit for 5 collectors	(3)	20104765
Undertile adjustable brackets kit for 6 collectors	(3)	20104768

<sup>(1)</sup> Optional component, to be installed at the highest point in the solar loop.
(2) To be used for possible integration of the bracket kits. See note (3).
(3) Brackets kit complete with:

- "male" terminal fittings suitable for installations with delivery and return on the upper side of the row. For different installations, use the code 20094627 to complete;

- flexible connection fittings between the manifolds.

Other available accessories at page 268.

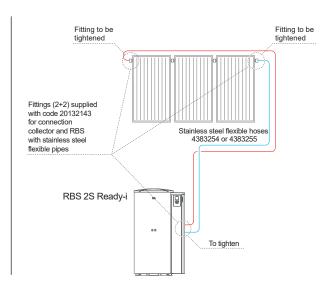
RPS 25/2 SYSTEM

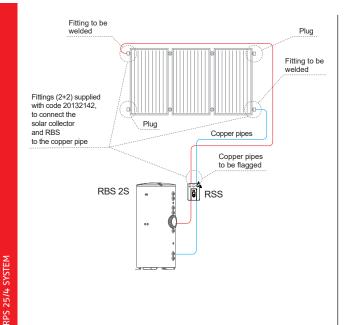
#### **SOLAR SYSTEMS CONNECTION DIAGRAMS**

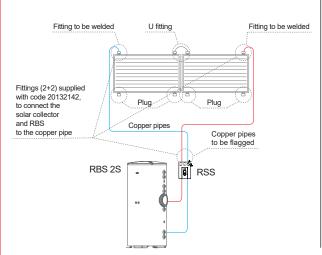
#### DN22 copper pipes connections

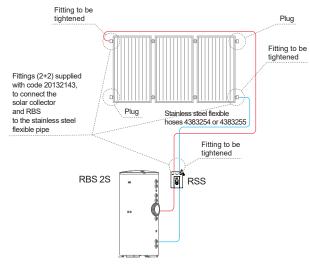
# Fitting to be welded Fitting to be welded Fittings (2+2) supplied with code 20132142, to connect the solar collector and RBS Copper pipes to the copper pipe RBS 2S Ready-i

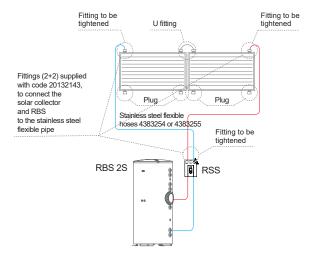
#### DN16 stainless steel pipes connections











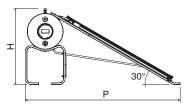
NoteS: stainless steel pipe recommended for up to 4 collectors.

# CSNA 20 RS System

Systems for DHW production - Natural circulation









- Ready-to-install solar system for domestic hot water production
- Solar Keymark according to EN 12976

Description	H mm	L mm	P mm	Net weight kg
CSNA 20 RS 150/1 0°	720	1290	2570	94
CSNA 20 RS 200/1 0°	720	1290	2570	122
CSNA 20 RS 220/2 0°	720	2400	2570	143
CSNA 20 RS 300/2 0°	720	2400	2570	193
CSNA 20 RS 300/3 0°	720	3500	2570	200
CSNA 20 RS 150/1 30°	1135	1290	2315	112
CSNA 20 RS 200/1 30°	1135	1290	2315	136
CSNA 20 RS 220/2 30°	1135	2400	2315	162
CSNA 20 RS 300/2 30°	1135	2400	2315	198
CSNA 20 RS 300/3 30°	1135	3500	2315	236

Systems designed for the production of domestic hot water (up to 5 people), even in climatic zones with non optimal weather conditions. They consist of preassembled components and do not require pumps or electronic control devices, thus ensuring a simple and fast installation. The package includes:

- High efficiency solar collector CSAL 20 RS, well insulated, provided with aluminum absorber treated with selective deposition.
- Double chamber enamelled cylinder, with polyurethane insulation and magnesium anode.
- Fixing kits for the installation of the system: in parallel to the roof or inclined at an angle of 30° on flat surfaces.
- Non-toxic, biodegradable and biocompatible frost-protection liquid.
- Single-phase supplementary electrical resistance (to be used as frost protection too) available as an accessory.
   The system is provided with Solar Keymark certification according to UNI EN 12976 and is equipped with solar panels provided with solar keymark certification according to UNI EN 12975 and 9806.

#### **TECHNICAL DATA**

Description	Solar c	ollectors	Glicol	Number of	Capacity liters	Notes	Code
	Number	Gross area m²	kg	people			
CSNA 20 RS 150/1 0°	1	1.91	2.5	2-3	153	(1)	20099761
CSNA 20 RS 200/1 0°	1	1.91	2.5	2-3	202	(1)	20157521
CSNA 20 RS 220/2 0°	2	3.82	5	3-4	223	(1)	20099764
CSNA 20 RS 300/2 0°	2	3.82	5	4-5	278	(1)	20099766
CSNA 20 RS 300/3 0°	3	5.73	7.5	4-5	278	(1)	20099767
CSNA 20 RS 150/1 30°	1	1.91	2.5	2-3	153	(2)	20087393
CSNA 20 RS 200/1 30°	1	1.91	2.5	2-3	202	(2)	20157732
CSNA 20 RS 220/2 30°	2	3.82	5	3-4	223	(2)	20087671
CSNA 20 RS 300/2 30°	2	3.82	5	4-5	278	(2)	20087672
CSNA 20 RS 300/3 30°	3	5.73	7.5	4-5	278	(2)	20087673

<sup>(1)</sup> Equipped with brackets for sloping roof

MAY 2022 EDITION

<sup>(2)</sup> Equipped with brackets for flat roof, tilt 30°

#### **ACCESSORIES**

**RIELLO** 

Description	Code
1" ¼ - 1,5 kW electrical resistance kit	20006605
1" ¼ - 3,0 kW single-phase electrical resistance kit	20094253
³/₄" thermostatic mixing valve kit	20020778
2,5 kg glycol kit	20006441
5,0 kg glycol kit	4383085

Other available accessories at page 268.

#### **SOLAR SYSTEM ACCESSORIES**

Description	Notes	Code
STAINLESS STEEL FITTINGS AND PIPES		
Fittings kit to be tightened to connect the CSV R solar collectors with copper pipes and for the connection between CSV R solar collectors		20027281
2-fittings kit to be tightened (90°) to connect the solar collectors with DN18 copper pipes		20055236
Kit of two fittings to tighten terminals RPS 25/4 and CSAL 20 RS		20094627
2-fittings kit for the connection between DN18 copper pipe and hydraulic group		20132219
Fittings kit to be tightened to connect the CSV R solar collectors with flexible stainless-steel pipes (not to be used between solar collectors)		20027289
2-fittings kit for the connection between copper pipe and hydraulic group (copper pipe DN18/ stainless steel pipe DN16)		20132220
Weld-on fittings kit (contains: 2 weld-on fittings for connection to the RPS 25/2 EVO, RPS 25/4, CSAL 20 RS collectors and 2 fittings for connection to the RSS hydraulic unit or directly to the solar tank)		20132142
Fittings kit for stainless steel pipe (contains: 2 fittings for connection to the RPS 25/2 EVO, RPS 25/4, CSAL 20 RS collectors and 2 fittings for connection to the RSS hydraulic unit or directly to the solar tank)		20132143
Flexible stainless steel pipe kit Ø16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)	(1)	4383254
Flexible stainless steel pipe kit Ø16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)	(1)	4383255
FLOW REGULATORS		
Flow rate regulator 12 (DN20; 2-12 I/min; kvs=2,2 m³/h)		20011536
Manual solar air vent kit		20026577
HEAT TRANSFER FLUIDS		
5 kg propylene glycol kit (concentrated heat-transfer liquid, with corrosion inhibitors, for flat-plate collectors)		4383085
10 kg propylene glycol kit (concentrated heat-transfer liquid, with corrosion inhibitors, for flat-plate collectors)		4383059
20 kg glycol-free heat-transfer liquid (long-lasting and non-toxic)		20094030
EXPANSION VESSELS		
18L SUN expansion vessel (ideal for solar systems, bracket equipped, 3/4" fitting)		4383052
24L SUN expansion vessel (ideal for solar systems, bracket equipped, ¾" fitting)		4383053
35L SUN expansion vessel (ideal for solar systems, bracket equipped, 3/4" fitting)		4383054
OTHER ACCESSORIES		
³/₄" thermostatic mixing valve kit		20020778
Differential electronic thermostat		20039694

<sup>(1)</sup> Stainless steel flexible hose kit, insulated, without fittings.

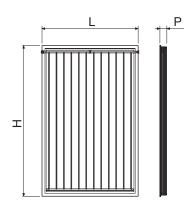
# **SOLAR COLLECTORS**



		VERTICAL		HORIZONTAL
		2 FITTINGS	4 FITTINGS	4 FITTINGS
	2,30 m²	RPS 25/2 EVO  Packages: 1 pc 2 - 5 pcs		
FLAT PLATE	SURFACE 2,30 m <sup>2</sup>		RPS 25/4  Packages: 1 pc 2 - 5 pcs  page 227	RPS 25/4  Packages: 1 pc 2 - 5 pcs  page 227
	SURFACE 1,91 m²		CSAL 20 RS  Packages: 1 pc 2 - 3 - 7 pcs  page 230	
TUBES	SURFACE 2,77 m <sup>2</sup>	CSV 25 R  Packages: 1 pc 5 pcs		
VACUUM TUBES	SURFACE 3,91 m <sup>2</sup>	CSV 35 R  Packages: 1 pc 5 pcs		

**TERMINAL UNITS** 

# **RPS 25/2 EVO**



Description	L mm	H mm	P mm	Net weight kg
RPS 25/2 EV0	2004	1195	86	41,5
RPS 25/2 EVO 2 collectors	2004	1195	86	83,0
RPS 25/2 EVO 5 collectors	2004	1195	86	207,5

Vertical flat solar panels





- Vertical installation 2.3 m<sup>2</sup>
- Aluminium frame
- Harp absorber
- 2 fittings
- · Protection film as standard

The solar collector RPS 25/2 EVO is equipped with an aluminium capturing plate with a selective finish in TiNOx Energy AI that allows an energy absorption equal to 95% of the direct exposure on the surface and limits its emission to 4%.

The harp pipes that contain the heat transfer fluid for heat transfer to the system are welded on the plate.

The solar glass is highly transparent, obtained with SEMI-SAND treatment and has a double anti-reflective layer that guarantees 96% transmissivity.

The insulation is made of glass wool, 40 mm thick and is positioned at the bottom. The glass and the insulation guarantee high efficiency even in the presence of not optimal climatic conditions.

- Two male and female 1" connections, of floating type, which facilitate the in-line connection of the collectors and their maintenance
- Possibility of connecting in series up to 6 collectors
- Aesthetic finish thanks to the painted frame
- Protective film supplied as standard to protect against overheating before commissioning the system
- Compliance with EN 12975, ISO 9806 and Solar Keymark certificate
- Wide range of accessories and fixing systems to guarantee maximum installation versatility.
- 5-year warranty.

#### **TECHNICAL DATA**

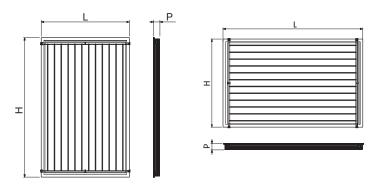
Description	Solar co	ollectors Absorber data				Stagnation	Notes	Code
	Gross area m²	Absorber area m²	η0	a1 W/m²k	a2 W/m²k²	temperature °C		
RPS 25/2 EVO	2.30	2.14	0.821	4.41	0.0060	200	(1)	20127134
RPS 25/2 EVO 2 collectors	4.60	4.30	0.821	4.41	0.0060	200	(2)	20140506
RPS 25/2 EVO 5 collectors	11.50	10.75	0.821	4.41	0.0060	200	(2)	20140508

- Collector packed individually.
- In a single pallet of 2 or 5 pieces according to the chosen solution.

Vertical / horizontal flat solar panels

# **RPS 25/4**







- Flat plate solar collectors both for vertical and horizontal installation (2,3 m²)
- Aluminium frame
- Aluminium absorber with high selective coating (TiN0x Energy AI)
- 4 fittings
- Protection film as standard

Description	L mm	H mm	P mm	Net weight kg
RPS 25/4	1195	2004	85	44
RPS 25/4 2 collectors	1195	2004	85	88
RPS 25/4 5 collectors	1195	2004	85	220

The solar collector RPS 25/4 can be used both for vertical and horizontal installations.

It is equipped with an aluminum absorber plate with high selective finishing in TiNOx Energy Al that allows 95% energy absorption on the surface and reduce its emission to 4%. On the plate are welded harp-shaped pipes through which the heat-transfer fluid runs. The high transparency sun glass guarantees high transmissivity.

Along with the rock wool insulation, that is 40 mm thickness, guarantees high efficiency even in case of bad weather conditions. The solar collector is provided with 4 x 1" floating fittings that ease the connection of collectors and the maintenance operations. It is possible to connect in series up to 6 panels in case of horizontal installations and up to 10 panels in case of vertical installations. A film is provided as standard to protect the collector from overheating before the system starts working.

A wide range of accessories and fixing systems is available to ensure maximum installation flexibility.

The solar collector complies with EN 12975, ISO 9806 and is Solar Keymark certified.

5 year warranty.

#### **TECHNICAL DATA**

Description	Solar o	Solar collectors Absorber data		Stagnation temperature	Notes	Code		
	Gross area m²	Absorber area m²	<b>η</b> 0	a1 W/m²k	a2 W/m²k²	°C		
RPS 25/4	2.30	2.14	0.802	4.28	0.0064	200	(1)	20127137
RPS 25/4 2 collectors	4.60	4.30	0.802	4.28	0.0064	200	(2)	20140510
RPS 25/4 5 collectors	11.50	10.75	0.802	4.28	0.0064	200	(2)	20140511

 $\eta 0$  = optical efficiency.

a1, a2 = heat loss coefficients.
(1) One single collector in on

One single collector in one package

Collectors supplied in pallet of 2 or 5 pcs

#### ACCESSORIES FOR RPS 25/2 EVO AND RPS 25/4 - VERTICAL INSTALLATION

Description	Notes	Code
·		
Manual solar air vent kit	(1)	20026577
Fittings kit to be welded		20132142
Fittings kit for stainless steel pipe		20132143
Kit of two fittings to tighten terminals		20094627
Flexible stainless steel pipe kit Ø16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383254
Flexible stainless steel pipe kit Ø16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383255
INSTALLATION ON PITCHED ROOF WITH STUD SCREW		
Brackets kit for 1 collector in //		20104603
Brackets kit for 2 collectors in //		20104604
Brackets kit for 3 collectors in //		20104605
Brackets kit for 4 collectors in //		20104606
Brackets kit for 5 collectors in //		20104610
Brackets kit for 6 collectors in //		20104611
INSTALLATION AT 30° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 30° for flat roof		20104616
Brackets kit for 2 collectors at 30° for flat roof		20104618
Brackets kit for 3 collectors at 30° for flat roof		20104619
Brackets kit for 4 collectors at 30° for flat roof		20104621
Brackets kit for 5 collectors at 30° for flat roof		20104622
Brackets kit for 6 collectors at 30° for flat roof		20104623
INSTALLATION AT 45° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 45° for flat roof		20104624
Brackets kit for 2 collectors at 45° for flat roof		20104625
Brackets kit for 3 collectors at 45° for flat roof		20104626
Brackets kit for 4 collectors at 45° for flat roof		20104627
Brackets kit for 5 collectors at 45° for flat roof		20104628
Brackets kit for 6 collectors at 45° for flat roof		20104629
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE BRACKETS		
Undertile brackets kit for 1 collector		20104630
Undertile brackets kit for 2 collectors		20104632
Undertile brackets kit for 3 collectors		20104634
Undertile brackets kit for 4 collectors		20104635
Undertile brackets kit for 5 collectors		20104636
Undertile brackets kit for 6 collectors		20104637
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE ADJUSTABLE BRACKETS		
Undertile adjustable brackets kit for 1 collector		20104638
Undertile adjustable brackets kit for 2 collectors		20104640
Undertile adjustable brackets kit for 3 collectors		20104642
Undertile adjustable brackets kit for 4 collectors		20104643
Undertile adjustable brackets kit for 5 collectors		20104644
Undertile adjustable brackets kit for 6 collectors		20104645
INSET INSTALLATION FOR VENTILATED ROOFS (MINIMUM 20° SLOPE)		
Inset kit for 1 collector		20145347
Inset kit for 2 collectors		20145351
Inset kit for 3 collectors		20148401
Inset kit for 4 collectors		20148404
Inset kit for 5 collectors		20149352
Inset kit for 6 collectors		20149353
(1) Optional component, to be installed at the highest point in the solar loop		

<sup>(1)</sup> Optional component, to be installed at the highest point in the solar loop
For vertical coil installations with more than 6 collectors, the following solutions are recommended:
- for battery of 7: a kit of 5 + a kit of 2 + a coupling joint (code 20093048);
- for batteries of 8: a kit of 6 + a kit of 2 + a coupling joint (code 20093048);
- for batteries of 9: a kit of 6 + a kit of 3 + a coupling joint (code 20093048);
- for batteries of 10: a kit of 6 + a kit of 4 + a coupling joint (code 20093048).

Other available accessories at page 268.

Other available accessories at page 268.

#### ACCESSORIES FOR RPS 25/2 EVO AND RPS 25/4 - HORIZONTAL INSTALLATION

Description	Notes	Code
Manual solar air vent kit	(1)	20026577
Fittings kit to be welded		20132221
Fittings kit for stainless steel pipe		20132222
Kit of two fittings to tighten terminals	(2)	20094627
Flexible stainless steel pipe kit $\emptyset$ 16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383254
Flexible stainless steel pipe kit Ø16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383255
INSTALLATION ON PITCHED ROOF WITH STUD SCREW		
Brackets kit for 1 collector in //	(3)	20104698
Brackets kit for 2 collectors in //	(3)	20104699
Brackets kit for 3 collectors in //	(3)	20104701
Brackets kit for 4 collectors in //	(3)	20104704
Brackets kit for 5 collectors in //	(3)	20104705
Brackets kit for 6 collectors in //	(3)	20104708
INSTALLATION AT 30° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 30° for flat roof	(3)	20104711
Brackets kit for 2 collectors at 30° for flat roof	(3)	20104713
Brackets kit for 3 collectors at 30° for flat roof	(3)	20104718
Brackets kit for 4 collectors at 30° for flat roof	(3)	20104721
Brackets kit for 5 collectors at 30° for flat roof	(3)	20104722
Brackets kit for 6 collectors at 30° for flat roof	(3)	20104727
INSTALLATION AT 45° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 45° for flat roof	(3)	20104730
Brackets kit for 2 collectors at 45° for flat roof	(3)	20104732
Brackets kit for 3 collectors at 45° for flat roof	(3)	20104734
Brackets kit for 4 collectors at 45° for flat roof	(3)	20104737
Brackets kit for 5 collectors at 45° for flat roof	(3)	20104738
Brackets kit for 6 collectors at 45° for flat roof	(3)	20104150
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE BRACKETS		
Undertile brackets kit for 1 collector	(3)	20104741
Undertile brackets kit for 2 collectors	(3)	20104742
Undertile brackets kit for 3 collectors	(3)	20104743
Undertile brackets kit for 4 collectors	(3)	20104745
Undertile brackets kit for 5 collectors	(3)	20104746
Undertile brackets kit for 6 collectors	(3)	20104748
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE ADJUSTABLE BRACKETS		
Undertile adjustable brackets kit for 1 collector	(3)	20104749
Undertile adjustable brackets kit for 2 collectors	(3)	20104750
Undertile adjustable brackets kit for 3 collectors	(3)	20104761
Undertile adjustable brackets kit for 4 collectors	(3)	20104762
Undertile adjustable brackets kit for 5 collectors	(3)	20104765
Undertile adjustable brackets kit for 6 collectors	(3)	20104768

Optional component, to be installed at the highest point in the solar loop. To use eventually to integrate the brackets kits; see note (3).

<sup>(</sup>a) The brackets kit include:

- "male" terminal fittings, as required in installation with flow/return on the upper side (as shown in the manual). In case of a different installation, use code 20094627;

- flexible connections between collectors.

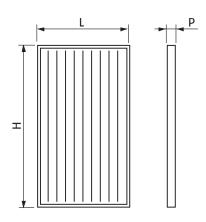
Other available accessories at page 268.

**TERMINAL UNITS** 

Solar collectors - Forced circulation

# CSAL 20 RS







- Flat plate solar collectors for vertical installation (2 m<sup>2</sup>)
- Aluminium frame
- Copper harp-shaped exchanger
- Aluminium absorber with high selective coating (TiN0x Energy AI)
- Protection film as standard

Description	L mm	H mm	P mm	Net weight kg
CSAL 20 RS	1818	1097	70	30
CSAL 20 RS 2 collectors	1818	1048	70	60
CSAL 20 RS 3 collectors	1818	1048	70	90
CSAL 20 RS 7 collectors	1818	1048	70	210

Solar collector CSAL 20 RS is provided with an alluminium absorber plate with high selective coating made of TiNOx Energy AI, wich allows an energy absorption of 95% from the sun's rays on the surface and reduces its emission to 4%. The absorber plate is ultrasonically welded to 10 copper harp-shaped pipes trough wich the heat-transfer fluid runs.

The tempered solar glass, wich is 3.2 mm thickness, along with the rock wool insulation, wich is 30 mm thickness on the bottom side, ensure high efficiency even in case of bad weather conditions.

The solar collector has been designed with four 1" fittings to make the connection in series of collectors easier (up to a max of 6) and to ensure low head losses (the heat-trasfer liquid flows trough the collectors in parallel) and high efficiency.

Two of the four connections need to be closed by brass screw plugs.

A film is provided as standard to protect the collector from overheating before the system starts working.

The solar collector complies with the EN 12975 directive and is Solar Keymark certified.

A wide range of accessories and fixing elements is available to meet all installation requirements.

#### **TECHNICAL DATA**

Description	Solar o	Solar collectors		Absorber data			Notes	Code
	Gross area m²	Absorber area m²	<b>ŋ</b> 0	a1 W/m²k	a2 W/m²k²	temperature °C		
CSAL 20 RS	1.91	1.77	0.781	4.98	0.0005	192	(1)	20094521
CSAL 20 RS 2 collectors	3.82	3.54	0.781	4.98	0.0005	192	(2)	20104593
CSAL 20 RS 3 collectors	5.73	5.31	0.781	4.98	0.0005	192	(3)	20104595
CSAL 20 RS 7 collectors	13.37	12.39	0.781	4.98	0.0005	192	(4)	20104596

- One single collector in one package.
- Collectors supplied in pallet of 2 pcs. Collectors supplied in pallet of 3 pcs.
- Collectors supplied in pallet of 7 pcs.

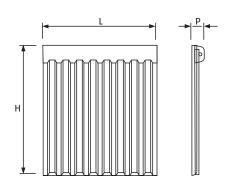
#### **ACCESSORIES**

Description	Notes	Code
Manual solar air vent kit	(1)	20026577
Fittings kit to be welded		20132142
Fittings kit for stainless steel pipe		20132143
Flexible stainless steel pipe kit Ø16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383254
Flexible stainless steel pipe kit Ø16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383255
Replacement kit for CSAL 20 R and CSL 20 R		20108733
PARALLEL INSTALLATION ON PITCHED ROOF WITH STUD SCREW		
Brackets kit for 1 collector in //		20104652
Brackets kit for 2 collectors in //		20104654
Brackets kit for 3 collectors in //		20104656
Brackets kit for 4 collectors in //		20104659
Brackets kit for 5 collectors in //		20104660
Brackets kit for 6 collectors in //		20104662
INSTALLATION AT 30° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 30° for flat roof		20104664
Brackets kit for 2 collectors at 30° for flat roof		20104666
Brackets kit for 3 collectors at 30° for flat roof		20104667
Brackets kit for 4 collectors at 30° for flat roof		20104673
Brackets kit for 5 collectors at 30° for flat roof		20104675
Brackets kit for 6 collectors at 30° for flat roof		20104676
INSTALLATION AT 45° ON FLAT ROOF WITH STUD SCREW		
Brackets kit for 1 collector at 45° for flat roof		20104677
Brackets kit for 2 collectors at 45° for flat roof		20104679
Brackets kit for 3 collectors at 45° for flat roof		20104680
Brackets kit for 4 collectors at 45° for flat roof		20104682
Brackets kit for 5 collectors at 45° for flat roof		20104683
Brackets kit for 6 collectors at 45° for flat roof		20104684
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE BRACKETS		
Undertile brackets kit for 1 collector		20104685
Undertile brackets kit for 2 collectors		20104686
Undertile brackets kit for 3 collectors		20104687
Jndertile brackets kit for 4 collectors		20104688
Indertile brackets kit for 5 collectors		20104690
Undertile brackets kit for 6 collectors		20104691
PARALLEL INSTALLATION ON PITCHED ROOF WITH UNDERTILE ADJUSTDTABLE BRACKETS		
Indertile adjustable brackets kit for 1 collector		20104692
Indertile adjustable brackets kit for 2 collectors		20104693
Indertile adjustable brackets kit for 3 collectors		20104694
Indertile adjustable brackets kit for 4 collectors		20104695
Indertile adjustable brackets kit for 5 collectors		20104696
Indertile adjustable brackets kit for 6 collectors		20104697

<sup>(1)</sup> Optional component, to be installed at the highest point in the solar loop. Other available accessories at page 268.

# **CSV R**







- Vacuum tube solar collectors for vertical installation (2,77 m<sup>2</sup> for 14 tubes and 3,91 m<sup>2</sup> for
- U-shaped copper exchanger
- Double-wall vacuum glass tubes (Sydney type)

Description	L mm	H mm	P mm	Net weight kg
CSV 25 R	1600	1730	145	52
CSV 25 R 5 collectors	8000	1730	145	260
CSV 35 R	2260	1730	145	74
CSV 35 R 5 collectors	11300	1730	145	370

Solar collectors CSV 25 R and CSV 35 R have respectively 14 and 20 vacuum double-walled glass Sydney tubes, containing a U-shaped copper pipe, which is mechanically fixed to an aluminium circumferential absorber, whose external surface is provided with the selective absorbing coat.

Copper pipes are connected in parallel and the heat-transfer liquid runs through them going downwards and then rising back again while absorbing heat from the direct solar irradiation reflected by a CPC mirror (Compound Parabolic Concentrator).

The double-walled glass tube contains a vacuum thermal insulation called "termos", ensuring high performances even in the event of sudden changes between the average operating temperature of the heat-transfer liquid and the ambient temperature, which are typical of those areas with very cold weather conditions or industrial applications.

The solar collector is provided with hydraulic fittings to be tightened on Ø18 pipes; it is possible to connect up to 6 collectors in series. Glass tubes and CPC reflecting mirror are easy to replace and do not require to empty the solar circuit.

The solar collector CSV R complies with the EN12975 directive and is Solar Keymark certified.

A wide range of accessories and fixing elements is available to meet all installation requirements.

#### **TECHNICAL DATA**

Description	Solar o	Solar collectors		Absorber data			Notes	Code
	Gross area m²	Absorber area m²	<b>ŋ</b> 0	a1 W/m²k	a2 W/m²k²	temperature °C		
CSV 25 R	2.77	2.69	0.700	1.15	0.011	268	(1)	20023353
CSV 25 R 5 collectors	13.85	13.45	0.700	1.15	0.011	268	(2)	20028583
CSV 35 R	3.91	3.84	0.700	1.15	0.011	268	(1)	20023416
CSV 35 R 5 collectors	19.55	19.20	0.700	1.15	0.011	268	(2)	20028584

- One single solar collector in one package.
- Pallet of 5 pcs of solar collectors.

#### **ACCESSORIES**

Description	Notes	Code
Manual solar air vent kit	(1)	20026577
Fittings kit to be tightened to connect the CSV R solar collectors with copper pipes and for the connection between CSV R solar collectors		20027281
Fittings kit to be tightened to connect the CSV R solar collectors with flexible stainless-steel pipes (not to be used between solar collectors)		20027289
Flexible stainless steel pipe kit $\emptyset$ 16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383254
Flexible stainless steel pipe kit Ø16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)		4383255
20 kg premixed glycol for CSV R (heat-transfer fluid ready to use, suitable for vacuum pipes collectors, frost protection up to $-28$ °C)		4383118
20 kg glycol-free heat-transfer liquid (long-lasting and non-toxic)		20094030
PARALLEL INSTALLATION ON PITCHED ROOF WITH STUD SCREW		
Fixing kit in // for 1 collector CSV 25 R		20028595
Fixing kit in // for 2 collectors CSV 25 R		20028596
Fixing kit in // for 3 collectors CSV 25 R		20028597
Fixing kit in // for 4 collectors CSV 25 R		20028598
Fixing kit in // for 5 collectors CSV 25 R		20028600
Fixing kit in // for 6 collectors CSV 25 R		20028601
Fixing kit in // for 1 collector CSV 35 R		20031614
Fixing kit in // for 2 collectors CSV 35 R		20031615
Fixing kit in // for 3 collectors CSV 35 R		20031616
Fixing kit in // for 4 collectors CSV 35 R		20031617
Fixing kit in // for 5 collectors CSV 35 R		20031618
Fixing kit in // for 6 collectors CSV 35 R		20031619
INSTALLATION AT 45° ON FLAT ROOF WITH STUD SCREW		
Fixing kit at 45° for 1 collector CSV 25 R		20028588
Fixing kit at 45° for 2 collectors CSV 25 R		20028589
Fixing kit at 45° for 3 collectors CSV 25 R		20028591
Fixing kit at 45° for 4 collectors CSV 25 R		20028592
Fixing kit at 45° for 5 collectors CSV 25 R		20028593
Fixing kit at 45° for 6 collectors CSV 25 R		20028594
Fixing kit at 45° for 1 collector CSV 35 R		20031620
Fixing kit at 45° for 2 collectors CSV 35 R		20031621
Fixing kit at 45° for 3 collectors CSV 35 R		20031622
Fixing kit at 45° for 4 collectors CSV 35 R		20031623
Fixing kit at 45° for 5 collectors CSV 35 R		20031624
Fixing kit at 45° for 6 collectors CSV 35 R		20031625

<sup>(1)</sup> Optional component, to be installed at the highest point in the solar loop. NOTE: It is necessary to order the glycol and the suitable fittings. Other available accessories at page 268.

# **SOLAR DHW AND STORAGE CYLINDERS**



#### **HEAT -EXCHANGERS (COILS)**

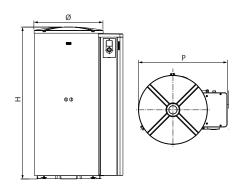
	o COIL	1 COILS	2 COILS	3 COILS	FLANGES*
		RBC 1S  150-200-300 430-550-800 1000 liters	RIELLO RBS 2S Ready-i 200-300 430 liters		7200/3F HV PLUS 800-1000-1500 2000-3000 liters
		page 243	page 236		page 241
DHW SOLAR CYLINDER		7200 HP 300-500 800 liters	RBS 2S 200-300-430-550 800-1000 liters		
DHW		page 250	page 239		
		7200 V PRIME 200-300-430 550-800 1000 liters	7200/2 HV PLUS 1500-2000 liters		
		page 248	page 241		
COMBINED STORAGE TANK		7200 KOMBI PLUS 550-800 1000 liters		7200 KOMBISOLAR <sup>35</sup> 430-550-750 1000 liters	
STC		page 254		page 252	
PUFFER		7000/S 1000-1500 liters			7000/F* 2000-3000 5000 liters
		page 256			page 256
HOT/COLD PUFFER	7000 ACI PLUS 60-120-200-300 400-500-800 1000-1500 2000 liters				

<sup>\*</sup> Flanges for the insertion of heat-exchangers (coils).

**TERMINAL UNITS** 

Double-coil solar cylinders

# Riello RBS 2S Ready-i





- Double-coil solar cylinder
- Domestic hot water production
- Equipped with pump station and differential controller
- Erp Ready Energy efficiency class B

Description	H mm	P mm	ø (*) mm	IT (**) mm	Net weight kg
RBS 200 2S Ready-i	1338	789	604	50	115
RBS 300 2S Ready-i CLASS A	1838	789	604	50	140
RBS 300 2S Ready-i	1838	789	604	50	140
RBS 430 2S Ready-i	1644	940	755	50	160

(\*) Dimensions with insulation

(\*\*) Insulation thikness

Steel double-coil solar cylinders of high energy efficiency (all models are class B), with embossed ABS finish. The thick insulation is obtained by direct foaming method and the internal glazed enamel treatment (vitrification, according to DIN 4753) ensures absolute hygiene and make cleaning easier.

The cylinder and the elliptic coils have been carefully designed to reach the best performances in terms of heat exchange, recovery time and stratification.

The column contains all the solar accessories, differential controller, in line hydraulic fittings and the inspection flange, placed between the two coils in order to facilitate cleaning and allow to use an additional electric resistance; all components are assembled, wired and tested. It is possible to install 2 cylinders of the same capacity in parallel in order to increase the volume and the exchange surface (RBS 2S Ready-i + RBS 2S + installation kit in parallel).

Specific transport handles are available as accessories; they have been studied to allow easy access through a 800 mm door.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses W	Energy efficiency class	Code
RBS 200 2S Ready-i	208	99	10	62	В	20119541
RBS 300 2S Ready-i CLASS A	301	99	10	50	Α	20119547
RBS 300 2S Ready-i	301	99	10	69	В	20119542
RBS 430 2S Ready-i	442	99	10	75	В	20119543

#### **UPPER COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation pressure bar	Notes
RBS 200 2S Ready-i	3.5	0.7	400	16.1	10	(1)
RBS 300 2S Ready-i CLASS A	4.0	0.8	572	23.0	10	(1)
RBS 300 2S Ready-i	4.0	0.8	572	23.0	10	(1)
RBS 430 2S Ready-i	5.0	1.0	774	31.4	10	(1)

<sup>(1)</sup> According to DIN 4708 with  $\Delta T = 20$  °C (80/60 °C) on exchanger.

#### LOWER COIL HEAT EXCHANGER TECHNICAL DATA

Description	Water content liters	Exchange surface m²	Max operation pressure bar
RBS 200 2S Ready-i	3.5	0.7	10
RBS 300 2S Ready-i CLASS A	5.0	1.0	10
RBS 300 2S Ready-i	5.0	1.0	10
RBS 430 2S Ready-i	7.0	1.4	10

#### **ACCESSORIES**

Description	Code
Electronic anode kit	20123853
Curve kit for electronic anode	20123851
Recirculation kit	20123849
Integration kit with circulator (for 200 model)	20123847
Integration kit with circulator (for RBS 300-430 models)	20123846
Integration kit without circulator	20123848
Additional temperature probe kit for solar collector	20125097
Additional temperature probe kit for cylinder	20123856
Single-phase electrical resistance 1,5 kW	20119911
Single-phase electrical resistance 2,2 kW	20119912
Single-phase electrical resistance 3,0 kW	20119913
Three-phase electrical resistance 3,8 kW	20119914

#### **PARALLEL INSTALLATION**

**RIELLO** 



Configuration	H mm	L mm	P mm
2x200 2S	1338	789	1218
2x300 2S	1838	789	1218
2x430 2S	1644	940	1520

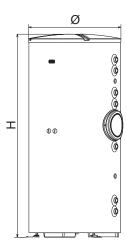
#### **PARALLEL INSTALLATION ACCESSORIES**

Description	Code
2 cylinders connection kit (models 200–300 liters)	20120542
2 cylinders connection kit (models 430 liters)	20120543

Connection kit can be completed with recirculation kit and integration kit without circulator (see Riello RBS "S Ready-i accessories). For electronic anodes utilization you can refer to the specific accessories of cylinders Riello RBS 2S Ready-i and Riello RBS 2S. For details regarding to the Riello RBS 2S Ready-i and RBS 2S consult the related pages.

Double-coil solar cylinders

# RBS 2S



Description	H mm	Ø (*) mm	IT (**) mm	Net weight
RBS 200 2S	1338	604	50	86
RBS 300 2S	1838	604	50	108
RBS 430 2S	1644	755	50	146
RBS 550 2S	1988	755	50	171
RBS 800 2S	1846	1000	100	222
RBS 1000 2S	2171	1000	100	245

- (\*) Dimensions will (\*\*) Insulation thikness Dimensions with insulation



- Double-coil solar cylinder
- Domestic hot water production
- Erp Ready Energy efficiency class B

Steel double coil solar cylinders of high energy efficiency (all models are class B) and internal glazed enamel treatment (vitrification, according to DIN 4753) to ensure maximum hygiene and facilitate cleaning of limestone deposits. The RBS cylinders, with embossed ABS finish, are provided with a thick insulation obtained by direct foaming method for models up to 550 liters and made of removable shells for models 800 and 1000 (to be assembled).

The cylinder and the elliptic coils have been carefully designed to reach the best performance in terms of heat exchange, recovery time and stratification. The hydraulic connections are arranged on a single row, as well as the inspection flange between the two coils, in order to facilitate cleaning and to insert an additional electric resistance.

Through a specific kit, RBS 2S can operate in parallel with one RBS 2S Ready-i of the same capacity up to 550 liters (RBS 2S Ready-i + RBS 2S + installation kit in parallel). Specific transport handles are available as accessories; they have been studied to allow easy access through a 800 mm door.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses W	Energy efficiency class	Notes	Code
RBS 200 2S	208	99	10	62	В		20116675
RBS 300 2S	301	99	10	69	В		20116335
RBS 430 2S	430	99	10	75	В		20117339
RBS 550 2S	551	99	10	85	В		20116587
RBS 800 2S	731	99	7	94	В	(1)	20132268
RBS 1000 2S	883	99	7	101	В	(1)	20132269

Insulation to be assembled.

TERMINAL UNITS

#### **UPPER COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation pressure bar	Notes
RBS 200 2S	3.5	0.7	400	16.1	10	(1)
RBS 300 2S	4.0	0.8	572	23.0	10	(1)
RBS 430 2S	5.0	1.0	774	31.4	10	(1)
RBS 550 2S	5.0	1.0	774	31.4	10	(1)
RBS 800 2S	8.0	1.6	1240	50.0	7	(1)
RBS 1000 2S	8.0	1.6	1240	50.0	7	(1)

<sup>(1)</sup> According to DIN 4708 with  $\Delta T = 20$  °C (80/60 °C) on exchanger.

#### LOWER COIL HEAT EXCHANGER TECHNICAL DATA

	Description	Water content liters	Exchange surface m²	Max operation pressure bar
RBS 200 2S		3.5	0.7	10
RBS 300 2S		5.0	1.0	10
RBS 430 2S		7.0	1.4	10
RBS 550 2S		9.0	1.8	10
RBS 800 2S		11.5	2.3	7
RBS 1000 2S		13.5	2.7	7

#### **ACCESSORIES**

Description	Code
Electric anode with plug	20055206
Curve for electronic anode kit	20123851
Thermometer kit	20123850
Single-phase electrical resistance 1,5 kW (for 200-550 liters models)	20119911
Single-phase electrical resistance 2,2 kW (for 200-550 liters models)	20119912
Single-phase electrical resistance 3,0 kW (for 200-550 liters models)	20119913
Three-phase electrical resistance 3,8 kW (for 200-550 liters models)	20119914
Single-phase electrical resistance 1,5 kW (for 800-1000 liters models)	20131666
Single-phase electrical resistance 2,2 kW (for 800-1000 liters models)	20131667
Single-phase electrical resistance 3,0 kW (for 800-1000 liters models)	20131669
Three-phase electrical resistance 3,8 kW (for 800-1000 liters models)	20131670

NOTE: for installation in parallel please consult the "RBS 2S Ready-i" page.

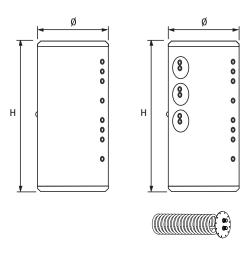
Flanged and double-coil DHW cylinders

# 7200/3F HV PLUS 7200/2 HV PLUS





- Flanged and double-coil DHW cylinders
- Domestic hot water Production
- Heat exchanger coil kit for 7200/3F to be ordered separately according to the capacity



Description	H (*) mm	Ø (*) mm	IT (**) mm	Net weight kg
7200/2 - 1500 HV PLUS	2185	1200	100	325
7200/2 - 2000 HV PLUS	2470	1300	100	540
7200/3F - 800 HV PLUS	1875	990	100	150
7200/3F - 1000 HV PLUS	2105	990	100	190
7200/3F - 1500 HV PLUS	2185	1200	100	305
7200/3F - 2000 HV PLUS	2470	1300	100	325
7200/3F - 3000 HV PLUS	2730	1450	100	543

<sup>(\*)</sup> Dimensions with insulation

Vertical steel double-coil solar cylinders, with internal double-layer enamel (according to DIN 4753) bacteriologically inert to ensure the absolute hygiene of water, to avoid limestone deposits and make cleaning easier.

The outer coating made of hard plastic provides a better aesthetic and a high solidity of the product, without compromising the installation in terms of ease of use and flexibility.

The cylinders, are already provided with CFC-free polyurethane hard and soft removable insulation (thickness of 100 mm) to make the installation easier; insulation supplied separately for the 2000-liters model. The care taken to study the geometry of solar cylinder and coils provides the best stratification, heat exchange and recovery time.

Easy maintenance thanks to the lateral flange for inspection, anticorrosion anodic protection. It is possible to use additional electrical resistance.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses W	Energy efficiency class	Notes	Code
					≋		
7200/2 - 1500 HV PLUS	1390	99	8	162	С		20136237
7200/2 - 2000 HV PLUS	1950	99	8	186	С		20136239
7200/3F - 800 HV PLUS	749	99	10	130	С	(1)	20136273
7200/3F - 1000 HV PLUS	955	99	10	142	С	(1)	20136274
7200/3F - 1500 HV PLUS	1430	99	8	162	С	(1)	20136275
7200/3F - 2000 HV PLUS	1990	99	8	186	С	(1)	20136277
7200/3F - 3000 HV PLUS	2959	99	8	344	_	(1)	20052788

<sup>(1)</sup> Flanged solar cylinder supplied without coils, to be ordered separately. NOTE: flanged solar cylinder supplied without coils, to be ordered separately.

MAY 2022 EDITION

<sup>(\*\*)</sup> Insulation thikness

WATER-HEATERS

## **UPPER COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation temperature °C	Max operation pressure bar	Notes
7200/2 - 1500 HV PLUS	10.4	1.8	1200	47	110	10	(1)
7200/2 - 2000 HV PLUS	16.9	2.8	1800	73	110	10	(1)

<sup>(1)</sup> According to DIN 4708 with  $\Delta T$ =20 °C (80/60 °C) on exchanger.

#### LOWER COIL HEAT EXCHANGER TECHNICAL DATA

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation temperature °C	Max operation pressure bar	Notes
7200/2 - 1500 HV PLUS	19.4	3.4	2200	88	110	10	(1)
7200/2 - 2000 HV PLUS	28.1	4.6	2900	120	110	10	(1)

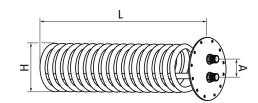
<sup>(1)</sup> According to DIN 4708 with  $\Delta T$ =20 °C (80/60 °C) on exchanger.

#### **ACCESSORIES**

Description	Notes	Code
Three-phase electrical resistence 3.8 kW of 1" ½		20020707
Tin coated copper coil kit 2.63 m² - 1.74 l - 10 bar	(1)	20055205
Tin coated copper coil kit 4.54 m² - 3.56 l - 10 bar	(1)	4383089
Tin coated copper coil kit 6.34 m² - 5.10 l - 10 bar	(1)(2)	4383087
Electric anode with plug		20055206

#### **HEAT EXCHANGER COIL**

Description	L	Н	Α	Net weight
	mm	mm	mm	kg
Tin coated copper coil kit 2,63 m²	580	DN200	80	14.9
Tin coated copper coil kit 4,54 m²	750	DN200	80	22.6
Tin coated copper coil kit 6,34 m <sup>2</sup>	980	DN200	80	29.0



#### **TECHNICAL DATA**

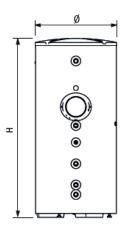
Description	Water exchanger surface m <sup>2</sup>	Absorbed power (*) kW	Necessary capacity heat exchanger (*) m³/h	DHW output (*) m³/h	Pressure loss mbar	Maximum operating pressure of coil bar	Pipe diameter mm	Pipe's number	Water capacity I
Tin coated copper coil kit 2,63 m <sup>2</sup>	2.63	53	2.3	1.3	748	10	18x1	1	1.74
Tin coated copper coil kit 4,54 m <sup>2</sup>	4.54	91	3.9	2.2	720	10	18x1	2	3.56
Tin coated copper coil kit 6,34 m <sup>2</sup>	6.34	127	5.5	3.1	2017	10	18x1	2	5.10

According to DIN 4708, to get domestic hot water with  $\Delta T$  35 °C (10/45 °C) and  $\Delta T$  20 °C (80/60 °C) on the heat-exchanger, please observe the values showed in the datasheet concerning absorbed power and necessary capacity heat-exchanger.

<sup>(1)</sup> Only for 7200/3F HV PLUS.
(2) Not suitable for 7200/3F 800 HV Plus and 7200/3F 1000 HV Plus.
Pump stations and differential controller are available at page 262. Other available accessories at page 268.

Single coil DHW cylinders

# **RBC 1S**





- Steel single coil vertical cylinders
- Domestic hot water production
- Suitable for combination with boilers and heat pumps

Description	H (*) mm	Ø (*) mm	IT (**) mm	Net weight (*) kg
RBC 150 1S	1088	604	52	62
RBC 200 1S	1338	604	52	78
RBC 300 1S	1838	604	52	103
RBC 430 1S	1644	755	52	131
RBC 550 1S	1988	755	52	157
RBC 800 1S	1835	974	92	203
RBC 1000 1S	2155	974	92	225

- (\*) Dimensions and we (\*\*) Insulation thikness Dimensions and weight with insulation

Steel single coil cylinders characterized by internal glazed enamel treatment (vitrification, according to DIN 4753) to ensure maximum hygiene and facilitate cleaning of limestone deposits.

The RBC range includes 7 models from 150 to 1000 liters (Erp Ready – Energy efficiency class B) and thanks to the geometry of the tank and the elliptic section of the exchanger, it is possible to reach the best performance in terms of heat exchange (minimal thermal losses) and recovery time.

The hydraulic connections and the inspection flange are arranged on a single row in order to facilitate cleaning and to insert an additional electric resistance (optional).

Moreover the cylinders are suitable for specific transport handles available as accessories in order to allow an easy handling. The RBC 1S range is suitable for combination with boilers and heat pumps, thus making it very adaptable to all requirements.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses (*) W	Energy efficiency class	Notes	Code
RBC 150 1S	162	99	10	55	В		20124167
RBC 200 1S	207	99	10	58	В		20124168
RBC 300 1S	305	99	10	68	В		20124169
RBC 430 1S	445	99	10	73	В		20124170
RBC 550 1S	555	99	10	84	В		20124171
RBC 800 1S	735	99	7	94	В	(1)	20132270
RBC 1000 1S	890	99	7	101	В	(1)	20132271

- According to EN 12897:2006,  $\Delta t$  = 45 °C (outdoor temperature 20 °C, storage temperature 65 °C). Insulation to be assembled.

MAY 2022 EDITION

#### **COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation pressure bar	Notes
RBC 150 1S	4.25	0.85	660	27	10	(1)
RBC 200 1S	6.90	1.38	950	39	10	(1)
RBC 300 1S	8.50	1.70	1185	49	10	(1)
RBC 430 1S	10.00	2.00	1380	56	10	(1)
RBC 550 1S	19.30	2.30	1645	66	10	(1)
RBC 800 1S	21.00	2.50	1728	69	7	(1)
RBC 1000 1S	24.40	2.90	1860	75	7	(1)

According to DIN 4708 with  $\Delta T = 20$  °C (80/60 °C) on exchanger.

#### **ACCESSORIES**

Description	Code
Thermometer kit	20123850
Electronic anode with plug	20055206
Curve for electronic anode kit	20123851
Single-phase electrical resistance 1.5 kW (for 200-550 liters models)	20119911
Single-phase electrical resistance 2.2 kW (for 200-550 liters models)	20119912
Single-phase electrical resistance 3.0 kW (for 200-550 liters models)	20119913
Three-phase electrical resistance 3.8 kW (for 200-550 liters models)	20119914
Single-phase electrical resistance 1.5 kW (for 800-1000 liters models)	20131666
Single-phase electrical resistance 2.2 kW (for 800-1000 liters models)	20131667
Single-phase electrical resistance 3.0 kW (for 800-1000 liters models)	20131669
Three-phase electrical resistance 3.8 kW (for 800-1000 liters models)	20131670

#### **RECOMMENDED COMBINATIONS - HEATER AND HEAT PUMP**

	Heater							Н	eat pun	nps NXH	М					
Description	Code	Continuous domestic water	NXHM 004	NXHM 006	NXHM 008	NXHM 010	NXHM 012	NXHM 014	NXHM 016	NXHM 012T	NXHM 014T	NXHM 016T	NXHM 018T	NXHM 022T	NXHM 026T	NXHM 030T
		output (*) (kW)	20191936	20191940	20191942	20191943	20191944	20191945	20191946	20191947	20191948	20191949	20194140	20194141	20194142	20194143
RBC 150 1S	20124167	11	•	•												
RBC 200 1S	20124168	12	•	•	•											
RBC 300 1S	20124169	18	•	•	•	•	•			•						
RBC 430 1S	20124170	20		•	•	•	•	•		•	•					
RBC 550 1S	20124171	23			•	•	•	•	•	•	•	•				
RBC 800 1S	20132270	26					•	•	•	•	•	•	•			
RBC 1000 1S	20132271	29							•			•	•	•	•	• (1)

<sup>(\*)</sup> Coil outlet temperature 55 °C  $\Delta$ T 10 °C with DHW 10-45 °C. The values with  $\Delta$ T 5 °C are to be considered an 8% increase compared to  $\Delta$ T 10 °C.

NOTE: For the correct sizing of the heater, please refer to the technical data in the product data sheets.

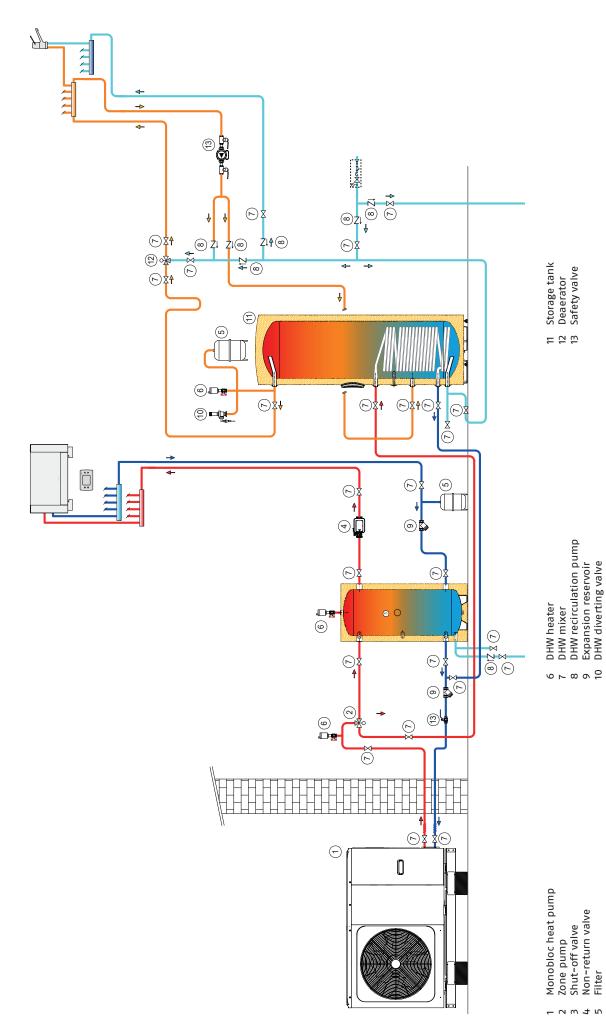
(1) Possible combination with a minimum outlet temperature at the heater of 60 °C \( \Delta T 10 \cdot C. \)

	Heater		Heat pumps FAMILY ES								
Description	Code	Continuous domestic water	FAMILY ES 5M	FAMILY ES 7M	FAMILY ES 9M	FAMILY ES 12M	FAMILY ES 15M	FAMILY ES 12T	FAMILY ES 15T	FAMILY ES 18T	FAMII ES 25
		output (*) (kW)	20181792	20181795	20181796	20181797	20181805	20181803	20181806	20181807	20181809
RBC 150 1S	20124167	11	•	•							
RBC 200 1S	20124168	12	•	•	•						
RBC 300 1S	20124169	18	•	•	•	•		•			
RBC 430 1S	20124170	20		•	•	•	•	•	•		
RBC 550 1S	20124171	23			•	•	•	•	•	•	
RBC 800 1S	20132270	26				•	•	•	•	•	
RBC 1000 1S	20132271	29								•	•

<sup>(\*)</sup> Coil outlet temperature 55 °C  $\Delta$ T 10 °C with DHW 10-45 °C. The values with  $\Delta$ T 5 °C are to be considered an 8% increase compared to  $\Delta$ T 10 °C. NOTE: For the correct sizing of the heater, please refer to the technical data in the product data sheets.

# SYSTEM EXAMPLES

# MONOVALENT HEATING, COOLING AND DHW PRODUCTION SYSTEM COMBINED WITH HEAT PUMP



Fuel shut-off valve (VIC)

Safety valve Deaerator Zone pump

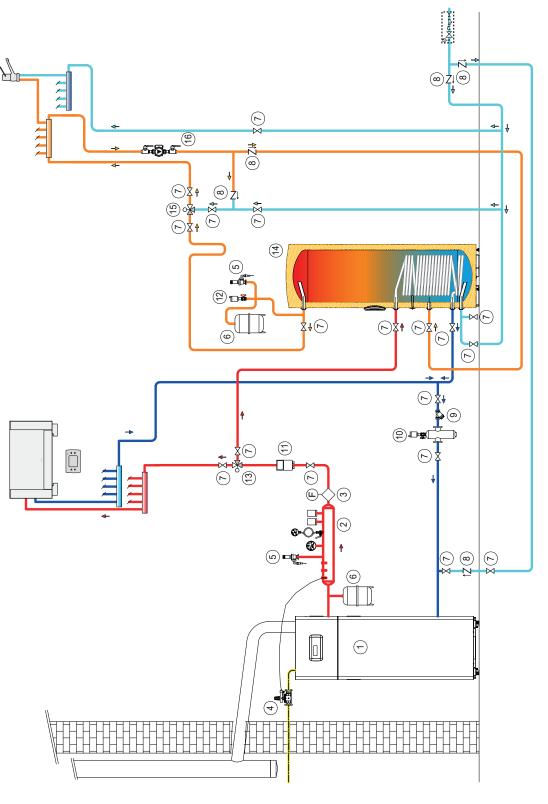
8 10 11 12

# **RIELLO**

DHW heater DHW diverting valve DHW recirculation pump DHW mixer

5 4 5 6

Magnetic sludge separator filter combined with deaerator Expansion reservoir



High-water content floor-standing boiler

Safety unit Safety flowmeter Shut-off valve

Non-return valve Filter

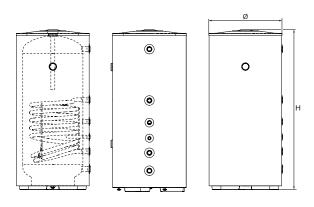
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MONOVALENT HEATING AND DHW PRODUCTION SYSTEM COMBINED WITH FLOOR-STANDING BOILER

One-coil DHW cylinders

# **7200 V PRIME**







- Vertical double-layer enamelled steel cylinders
- One-coil cylinder for domestic hot water production

Description	H (*) mm	Ø (*) mm	IT (**) mm	Net weight (*) kg
7200.200 V PRIME	1335	605	50	68
7200.300 V PRIME	1835	605	50	91
7200.430 V PRIME	1645	755	50	121
7200.550 V PRIME	1990	755	50	142
7200.800 V PRIME	1835	1000	100	182
7200.1000 V PRIME	2165	1000	100	207

- (\*) Dimensions and weight with insulation
- (\*\*) Insulation thickness

Vertical storage DHW cylinders made in steel, protected by a inner enamel coating (according to DIN 4753), which is smooth, antiadherent and bacteriologically inert to ensure the absolute hygiene of the DHW and to avoid any possible limestone deposits and make cleaning easier. The care taken to study the geometry of the tank and the coil (with a large exchange surface) provides the best performance in terms of stratification, heat exchange and recovery time.

The efficient CFC-free polyurethane insulation, made through a direct foaming method for the models up to 550-liters and provided with excellent finishes and a hard removable insulation for the 800 and 1000 liters models, permits the reduction of heat losses to the minimum and enhances as a consequence efficiency.

- Anticorrosion anodic protection
- Analog pressure gauge standard supplied
- An electrical control board to manage the domestic hot water temperature is available as an accessory.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses W	Energy efficiency class <u>≅</u>	Code
7200.200 V PRIME	210	99	10	58	В	20096892
7200.300 V PRIME	304	99	10	68	В	20096894
7200.430 V PRIME	444	99	10	73	В	20096895
7200.550 V PRIME	556	99	10	84	В	20096897
7200.800 V PRIME	735	99	7	93	В	20096899
7200.1000 V PRIME	890	99	7	98	В	20096900

#### **COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production (*) I/h	Coil power input kW	Max operation pressure bar	Notes
7200.200 V PRIME	4.8	0.78	590	590	10	(1)
7200.300 V PRIME	6.9	1.13	831	831	10	(1)
7200.430 V PRIME	9.8	1.49	1260	1260	10	(1)
7200.550 V PRIME	9.8	1.49	1260	1260	10	(1)
7200.800 V PRIME	16.3	2.47	1700	1700	10	(1)
7200.1000 V PRIME	16.3	2.47	1700	1700	10	(1)

#### **ACCESSORIES**

Destination	Notes	Code
Electric control panel for storage cylinders	(1)	4030011
Electronic anode with plug		20055206

(1) Suitable for models up to 500 liters.

According to DIN 4708 with  $\Delta T$ =35 °C (80/45 °C) on exchanger Hot water production data with primary circuit inlet temperature at of 80 °C and  $\Delta T$ =35 °C on the secondary circuit.

**ERP** 

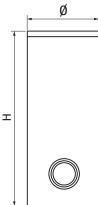
• Cylinder for heat pump

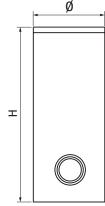
• Domestic hot water production

# 7200 HP

DHW solar cylinder

# Ø





Description	H (*) mm	Ø (*) mm	IT (**) mm	Net weight (*) kg
7200 300 HP	1615	600	50	119
7200 500 HP	1690	750	50	166
7200 800 HP	1875	990	100	220

Dimensions and weight with insulation

Insulation thikness

DHW steel cylinders for vertical installation, protected by inner enamel and equipped with a coil (with a large exchange surface) for a suitable combination with a heat pump and with a flange in the bottom part to allow the insertion of an exchanger (optional) for the combination with the solar thermal. Specifically designed for the application in systems with heat pumps, they allow a high heat transfer thanks to the wide exchange surface.

They are complete with sockets, a magnesium anode and with a 1"1/2 connection for the insertion of an electrical resistance (optional). The insulation is made of rigid polyurethane for the sizes 300 and 500 and soft polyurethane for size 800.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses W	Energy efficiency class	Notes	Code
7200 300 HP	263	99	10	85	С	(1)	4383500
7200 500 HP	470	99	10	112	С	(2)	4383501
7200 800 HP	702	99	10	130	С		20136293

To combine with heat-pump Family ES and NHX.

To combine with heat-pump Family ES and NHX.

#### **COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation temperature °C	Max operation pressure bar	Notes
7200 300 HP	23.0	4	500	19	110	10	(1)
7200 500 HP	51.5	6	800	31	110	10	(1)
7200 800 HP	60.0	7	900	38	110	10	(1)

(1) According to DIN 4708 with  $\Delta T$ =10 °C (60/50 °C) on exchanger.

#### **ACCESSORIES**

Description	Code
Single-phase electrical resistance 1,5 kW of 1" ½	4383270
Three-phase electrical resistence 3,8 kW of 1" ½	20020707
0,8 m² solar heat exchanger (for HP 300 model)	4383504
1,2 m² solar heat exchanger (for HP 500-800 models)	4383505
Electronic anode with plug	20055206

Other available accessories at page 268.

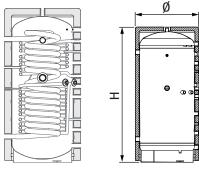
**TERMINAL UNITS** 

RIELLO

Combined solar storage tanks

### 7200 KombiSolar<sup>25</sup>







- Combined storage tank
- Instantaneous production of domestic hot water and heating supplement

Description	H (*) mm	Ø (*) mm	IT (**) mm	Net weight (*) kg
7200 KOMBISOLAR 430 2S	1635	755	50	155
7200 KOMBISOLAR 550 2S	1985	755	50	177
7200 KOMBISOLAR 750 2S	1845	1000	100	218
7200 KOMBISOLAR 1000 2S	2170	1000	100	248

- Dimensions and weight with insulation

7200 KombiSolar<sup>25</sup> is a combi storage tank designed for the instantaneous production of domestic hot water and the heating supplement. It contains three coils: one at the bottom for the solar circuit, one at the top for the heating circuit and one in stainless steel for the production of domestic hot water.

The rapid-exchange corrugated coil in stainless steel AISI 316L, for the production of domestic hot water (bacteriologically inert), ensures the absolute hygiene of water, while preventing bacteria from reproducing and limestone deposits from occurring, together with providing a fast, efficient and comfortable domestic hot water production.

The storage tank is specifically designed to enhance flexibility in installation through the synergetic and organic combination of thermal solar systems, traditional or biomass generators (also with open vessel) and heat pumps.

The presence of an integrated diffusion tube permits a high stratification of temperature along the solar tank height.

The CFC-free polyurethane insulation reduces heat losses and, as a consequence, enhances efficiency; the hard insulation makes the installation easier.

It is possible to use additional electrical resistances.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Maximum temperature °C	Maximum pressure bar	Thermal losses W	Energy efficiency class	Notes	Code
7200 KOMBISOLAR 430 2S	415	99	3	78	В		20088789
7200 KOMBISOLAR 550 2S	528	99	3	85	В		20088790
7200 KOMBISOLAR 750 2S	742	99	5	93	В	(1)(2)	20145329
7200 KOMBISOLAR 1000 2S	908	99	5	98	В	(1)	20145332

- Supplied with insulation removed.
- Progressively available when the corresponding previous model runs out.

#### COIL HEAT EXCHANGER FOR SANITARY APPLICATION TECHNICAL DATA

Description	Water content liters	Exchange surface m²	Max operation temperature °C	Max operation pressure bar
7200 KOMBISOLAR 430 2S	23.6	4.5	99	6
7200 KOMBISOLAR 550 2S	23.6	4.5	99	6
7200 KOMBISOLAR 750 2S	30.4	5.8	99	6
7200 KOMBISOLAR 1000 2S	30.4	5.8	99	6

#### COIL HEAT EXCHANGER FOR PRIMARY CIRCUIT TECHNICAL DATA

Description	Water content liters	Exchange surface m²	Max operation pressure bar
7200 KOMBISOLAR 430 2S	11.0	1.80	10
7200 KOMBISOLAR 550 2S	12.8	2.10	10
7200 KOMBISOLAR 750 2S	17.4	2.90	10
7200 KOMBISOLAR 1000 2S	19.8	3.34	10

#### **ACCESSORIES**

Description	Code
Single-phase electrical resistance 1,5 kW of 1" ½	4383270
Single-phase electrical resistance 2,2 kW of 1" ½	4383271
Single-phase electrical resistance 3,0 kW of 1" ½	4383272
Three-phase electrical resistence 3,8 kW of 1" ½	20020707
18L rectangular expansion vessel kit (including: mounting template for vertical solar cylinder and F-F ¾" connection pipe, 110 mm)	20005831
Flexible pipe kit to connect the solar expansion vessel (F-F ¾", 800 mm, not insulated)	20011797
Electronic anode with plug	20055206

Other available accessories at page 268.

254

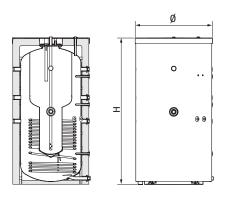
Combined solar storage tanks

# 7200 Kombi Plus





- Combined storage tank
- Production of domestic hot water and heating supplement



Description	Н	Ø (*)	IT (**)	Net weight
	mm	mm	mm	kg
7200.550 Kombi Plus	2055	755	50	192
7200.800 Kombi Plus	1870	990	100	210
7200.1000 Kombi Plus	2196	990	100	265

- Dimensions with insulation
- Insulation thikness

7200 Kombi Plus is a combi storage tank (tank-in-tank technology) designed for the production of domestic hot water and the heating supplement. The completely enamelled internal tank (bacteriologically inert) is suitable to contain domestic hot water as it ensures the absolute hygiene of the water, while avoiding limestone deposits and making cleanliness easier.

The storage tank is specifically designed to enhance flexibility of installation through the synergetic and organic integration with thermal solar systems, heat generators and heat pumps.

The exchange surfaces and the geometry of tank provide the best performance in terms of stratification, heat exchange, recovery time and domestic hot water production (up to 2700 liters/hour).

The CFC-free polyurethane insulation reduces heat losses and, as a consequence, enhances efficiency; the hard insulation makes the installation easier. Anticorrosion anodic protection.

Easy maintenance thanks to the lateral flange for inspection. It is possible to use additional electrical resistances.

#### **TECHNICAL DATA**

Description	Cylinder capacity liters	DHW capacity liters	Maximum temperature °C	Maximum pressure of inertial storage cylinder bar	Thermal losses W	Energy efficiency class <u>≅</u>	Code
7200.550 Kombi Plus	388	160	99	3	95	С	20090256
7200.800 Kombi Plus	560	240	99	3	123	С	20145308
7200.1000 Kombi Plus	695	285	99	3	143	С	20145313

#### **COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Notes
7200.550 Kombi Plus	12.8	2.10	660	(1)
7200.800 Kombi Plus	16.0	2.80	800	(2)
7200.1000 Kombi Plus	19.0	3.16	1000	(2)

- According to DIN 4708 with  $\Delta T$ =35 °C (80/45 °C) on exchanger. According to DIN 4708 with  $\Delta T$ =20 °C (80/60 °C) on exchanger.

#### **ACCESSORIES**

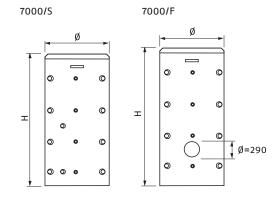
Description	Code
Single-phase electrical resistance 1,5 kW of 1" ½	4383270
Single-phase electrical resistance 2,2 kW of 1" 1/2	4383271
Single-phase electrical resistance 3,0 kW of 1" ½	4383272
Three-phase electrical resistence 3,8 kW of 1" ½	20020707
18L rectangular expansion vessel kit (including: mounting template for vertical solar cylinder and F-F ¾" connection pipe, 110mm)	20005831
Flexible pipe kit to connect the solar expansion vessel (F-F 3/4", 800mm, not insulated)	20011797
Electronic anode with plug	20055206

Other available accessories at page 268.

**Puffers** 

# 7000 Puffer







· Inertial storage for heating supplement

Description	H (*) mm	Ø (*) mm	IT (**) mm	Net weight (*) kg
7000.1000/S	2190	990	100	172
7000.1500/S	2165	1200	100	239
7000.2000/F	2489	1300	100	330
7000.3000/F	2720	1450	100	415
7000.5000/F	2870	1800	100	570

Dimensions and weight with insulation

Insulation thikness

Storage tanks 7000 Puffer can be easily integrated into solar systems and are designed for heating supplement (not for DHW production or storage). The care taken to study the geometry of the tank (also provided with inner diaphragm) and coil (only for IS models) provides the best performance in terms of stratification, heat exchange and recovery time.

The connection at various heights permits the use of different heat generators and avoids affecting stratification.

The CFC-free polyurethane insulation reduces heat losses and, as a consequence, enhances efficiency; the hard insulation makes the installation easier (/F models).

The use of the flange (only for /F models) makes maintenance easier and allows to connect an additional exchanger. It is possible to use additional electrical resistances.

#### **TECHNICAL DATA**

Description	Cylinder capacity I	Coil surface (m²)	Maximum temperature °C	Maximum pressure bar	Thermal losses (*) W	Notes	Energy efficiency class <u>≅</u>	Code
INERTIAL PUFFER WITH SOLAR	EXCHANGER CO	IL						
7000.300/S	270	1.8	95	3	93	(1)(D)	С	20182681
7000.500/S	476	1.8	95	3	110	(1)(D)	С	20182682
7000.1000/S	920	2.6	99	3	143	(1)(D)	С	20136260
7000.1500/S	1410	3.8	99	3	167	(1)(D)	С	20136261
INERTIAL PUFFER WITH ONE F	LANGE							
7000.2000/F	2010	-	99	3	190	(2)(D)	С	20136256
7000.3000/F	2959	-	99	3	344	(2)(D)	-	4383411
7000.5000/F	5055		99	3	646		-	4383412

- Supplied with assembled insulation.
- Supplied with separated insulation.
- Availability of the material at our warehouse: 20 working days from the date of the order's validation. Discharges according to EN 12897:2006 (ΔT=45 °C, ambient 20 °C and storage at 65 °C).

#### **COIL HEAT EXCHANGER TECHNICAL DATA**

Description	Water content liters	Exchange surface m²	DHW production I/h	Coil power input kW	Max operation temperature °C	Max operation pressure bar	Notes
7000.1000/S	14,6	2,6	2900	68	110	6	(1)
7000.1500/S	21,6	3,8	4200	99	110	6	(1)

(1) According to DIN 4708 with  $\Delta T$ =20 °C (80/60 °C) on exchanger.

#### **ACCESSORIES**

Description	Notes	Code
4,54 m² - tin plated copper coil kit with flange coupling for models/F (coil exchanger power 91 kW)	(1)	4383089
6,34 m² - tin plated copper coil kit with flange coupling for models/F (coil exchanger power 127 kW)	(1)	4383087
Electronic anode with plug		20055206

(1) To use only with 7000.2000/F, 7000.3000/F and 7000.5000/F models. Other available accessories at page 268.

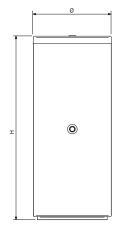
ERP

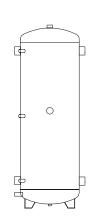
Inertial storage

**TERMINAL UNITS** 

**Puffers** 

# 7000 ACI Plus





Description	H(*) mm	Ø(*) mm	Weight (empty) kg
7000 ACI 60 PLUS	935	400	25
7000 ACI 120 PLUS	1095	500	35
7000 ACI 200 PLUS	1395	550	45
7000 ACI 300 PLUS	1560	600	55
7000 ACI 400 PLUS	1540	700	95
7000 ACI 500 PLUS	1840	700	100
7000 ACI 800 PLUS	1800	990	115
7000 ACI 1000 PLUS	2050	990	170
7000 ACI 1500 PLUS	2165	1200	185
7000 ACI 2000 PLUS	2480	1300	305

(\*) Dimensions with insulation.

Storage tanks 7000 ACI Plus can be easily integrated both into traditional systems (heat generators) and into systems using renewable sources (chillers, heat pumps). Therefore it is necessary to cope with the lack of time balance between demand and supply of energy with the help of suitable storage systems.

This product, which is supplied in a single package, is provided with a closed-cell insulation made of CFC-and-HCFC-free polyurethane and is suitable for heating/cooling systems as it provides particularly excellent performances in terms of low heat losses (according to JINLTS 11300)

The care taken to study the geometry of the tank provides the best stratification, heat exchange and recovery time.

New hydraulic connections, having a larger diameter, allow the reduction of head losses when operating with reduced ∆T; their positioning at various heights permits the use of different heat generators at the same time without affecting stratification. Ease of use is ensured by reduced weights and dimensions.

It is possible to use additional electrical resistances.

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#### **TECHNICAL DATA**

Description	Cylinder capacity liters	Thermal losses W	Maximum temperature °C	Maximum pressure bar	Energy efficiency class <u>≅</u>	Code
7000 ACI 60 PLUS	57	34	99	6	В	20090056
7000 ACI 120 PLUS	123	50	99	6	В	20082450
7000 ACI 200 PLUS	203	68	99	6	С	20028093
7000 ACI 300 PLUS	277	82	99	6	С	20028094
7000 ACI 400 PLUS	390	105	99	6	С	20028095
7000 ACI 500 PLUS	473	114	99	6	С	20028096
7000 ACI 800 PLUS	732	131	99	6	С	20137619
7000 ACI 1000 PLUS	855	139	99	6	С	20137620
7000 ACI 1500 PLUS	1420	168	99	6	С	20137622
7000 ACI 2000 PLUS	2013	190	99	6	С	20137624

#### **ACCESSORIES**

Description	Notes	Code
Single-phase electrical resistance 1,5 kW of 1" ½	(1)	4383270
Single-phase electrical resistance 2,2 kW of 1" ½	(1)	4383271
Single-phase electrical resistance 3,0 kW of 1" ½	(1)	4383272
Three-phase electrical resistence 3,8 kW of 1" ½	(1)	20020707
Electronic anode with plug		20055206

(1) Not compatible with 7000 ACI 60 Plus Other available accessories at page 268.

# **COMPLEMENTARY ITEMS**



Pump stations and differential controllers

# **RSS & EVOSOL**





- Pump station RSS
- Differential controller EVOSOL

Description	H mm	L mm	P mm	Net weight kg
RSS MRS	418	313	185	5,0
RSS MR	418	313	185	4,7
RSS R	364	228	183	4,1
RSS MR 14 MT	290	390	250	0,8
EVOSOL	170	106	52	0,3

EVOSOL is a solar regulation able to manage 9 kinds of plant layouts and meet all different domestic and professional requirements. EVOSOL is able to manage a modulating solar circulator with constant  $\Delta T$  regulation between solar collector and cylinder, thus allowing the operation of the system even in case of low radiation.

The user-friendly menu and the display allow to control easily the available functions and the selected layout. The frontal access to components eases the electrical wiring; the wide range of accessories allows to customize any system.

RSS is a solar pump station available in four versions: flow and return with differential controller EVOSOL assembled on the system (MRS), flow and return (MR) and only return (R).

The pump stations RSS MRS and MR are provided with circulator pump with PWM controlling, safety devices, filling taps, non-return valve, flow and return temperature gauge. RSS R is provided with circulator pump both for ON/OFF and PWM controlling, safety devices, filling taps, flow regulator and flow meter, non-return valve and temperature gauge.

#### **TECHNICAL DATA**

Description	Connection and ball valve	Net area connectable collectors m²	Notes	Code
RSS MRS	Flow/Return	55	(1)	20116166
RSS MR	Flow/Return	55	(2)	20116167
RSS R	Only return	20	(3)	20116168
RSS MR 14 MT	Flow/Return	30	(2)(4)	20156553

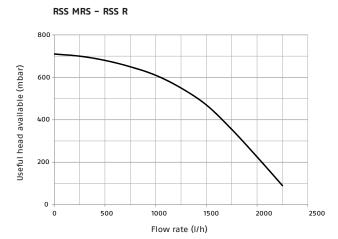
- 1) Equipped with differential controller EVOSOL.
- (2) Suitable only for PWM controlling.
- (3) Suitable for PWM or ON/OFF controlling.
- (4) Equipped with modulating circulator pump with PWM controlling (a wall mount solar controller has to be installed separately) .

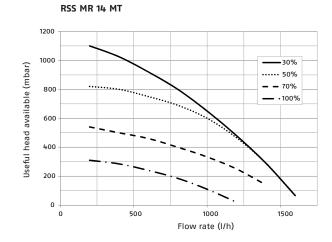
#### **TECHNICAL DATA**

Description	Relay standard output nr.	Probe inputs nr.	Supplied probe nr.	Configured schemes nr.	Code
EVOSOL	2	4	1x collector + 2x cylinders	9	20120499

**USEFUL HEAD AVAILABLE** 

Solar delivery and return station. Values referred to a mix of water and 30% glycol.





#### **ACCESSORIES**

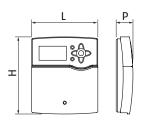
Description	Notes	Code
Electronic anode	(1)	20123853
Electronic anode with plug	(2)	20055206
Immersion temperature probe in Platinum Pt1000, cable 2,5 m PUR $(-10/+80  ^{\circ}\text{C})$ for tanks or return pipe (FRP6 Pt1000)		4383196
Contact temperature probe with platinum gauge Pt1000, olflex cable 2,5 m ( $-10/+80$ °C) for tanks or return pipe (FRP21 Pt1000)		4383197
Well temperature probe for high temperature in Platinum Pt1000 PTFE cable 1,5 m (-50/+230 °C) for vacuum collectors (FKP6/H Pt1000)		4383199
Probes protection kit against overvoltage (SP1)		4383415
Additional temperature probe kit for solar collector		20125097
Additional temperature probe kit for cylinder		20123856

- Suitable for pump station with differential controller (MRS type). Suitable for pump station without differential controller (R and MR type).

### Solar differential controller

# Sun Pro







• Solar controller Sun Pro

Description	H mm	L mm	P mm
SUN 5 PRO 5 RS	227	156	62
SUN 14 PRO 14 RS	260	216	64

SUN PRO is a solar controller able to meet all different domestic and professional requirements, able to manage several system schemes. The design is simple and stylish and suits all environments.

The menu is user-friendly, the display allows the user to easily control the functions and the selected scheme.

Easy access to the electrical wiring from the front side.

Wide range of accessories to customize any system.

#### **TECHNICAL DATA**

Description	Relay standard output nr.	Probe inputs nr.	Supplied probe (*) (for flat collector) nr.	Configured schemes nr.	Code
SUN 5 PRO 5 RS	5	9	2x collector + 3x cylinders	7 (+variants)	20099595
SUN 14 PRO 14 RS	14	12	2x collector + 4x cylinders	9 (+variants)	20099607

<sup>(\*)</sup> Specific probes for flat collectors

#### **ACCESSORIES**

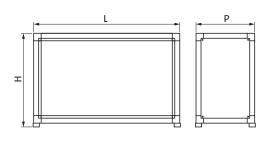
Description	Notes	Code
Electronic anode to be wired with differential controller	(1)	20123853
Electronic anode with plug	(2)	20055206
Immersion temperature probe in Platinum Pt1000, cable 2,5 m PUR (-10/+80 °C) for tanks or return pipe (FRP6 Pt1000)		4383196
Contact temperature probe with platinum gauge Pt1000, olflex cable 2,5 m (-10/+80 °C) for tanks or return pipe (FRP21 Pt1000)		4383197
Well temperature probe for high temperature in Platinum Pt1000 PTFE cable 1,5 m (-50/+230 °C) for vacuum collectors (FKP6/H Pt1000)		4383199
Probes protection kit against overvoltage (SP1)		4383415

Suitable for pump station with differential controller (MRS type). Suitable for pump station without differential controller (R and MR type).

Complementary items

# Riello SC Sun Riello SC Acs







- Solar heat exchange units
- DHW heat exchange units
- High efficiency pump

Description	H mm	L mm	P mm	Net weight kg
SC SUN 50	600	400	260	22.8
SC SUN 120	835	475	195	32
SC SUN 120 ACS	835	475	195	32
SC SUN 300	1140	1000	500	155
SC ACS 25	600	400	250	16.1
SC ACS 35	600	400	250	19.1
SC ACS 40	600	400	250	19.2
SC ACS 80	835	475	226	30
SC ACS 160	1100	1000	500	158
SC ACS 225	1100	1000	500	176

Riello offers complete and ready-to-install solutions when using puffer storage tanks, while optimizing stratification: heat exchange units both on the solar and the DHW sides.

Riello SC Sun is the solar heat exchanger designed for puffer storage tanks. Its components are sized and managed to transfer the heat with maximum efficiency. The range offers three sizes: up to 50, 120 and 300 m2 of exposed area.

There is also a heat-exchanger that produces directly istantaneous DHW; it can work up to 120 m² of exposed area.

Riello SC ACS is the heat exchanger for the instantaneous production of domestic hot water.

It is designed to be connected with puffer storage tanks and ensures maximum hygiene of the treated water.

The range offers five sizes: 25, 40, 80, 160 and 225 l/min.

#### TECHNICAL DATA

Description	Exchanged power (*) kW	Max primary output I/h	Temperature Primary min-max °C	Exchange surface m²	Max pressure primary/ secondary bar	NoteS	Code		
HEAT EXCHANGER FOR SOLAR CIRCUIT									
SC SUN 50	32	1.500	2/110	0.9	6/3	(D)	20156326		
SC SUN 120	52	2.400	2/110	3.0	6/6	(D)	20156327		
SC SUN 300	129	6.000	2-110	-	10/10		20156330		
DHW HEAT EXCHANGER									
SC SUN 120 ACS	52	2.400	2/110	3.0	6/6	(D)	20156331		

- (\*) Referred to  $\Delta T$ =20 °C and 30% glicol.
- D) Availability of the material at our warehouse: 25 working days from the date of the order's validation.

**TERMINAL UNITS** 

#### **TECHNICAL DATA**

**RIELLO** 

Description	DHW production I/min	Min DHW production output I/min	DHW temperature set °C	Max primary delivery output I/h	Plate exchange surface m <sup>2</sup>	Max. operating pressure bar	Notes	Code	
FOR TECHNICAL WATER-DOMESTIC WATER HEAT EXCHANGE									
SC ACS 25	19	2,5	4055	1.200	0.9	10	(D)	20156322	
SC ACS 35	28	2,5	4055	1.700	1.8	10	(D)	20156324	
SC ACS 40	38	2	3090	1.850	1.8	6	(1)	20156325	
SC ACS 80	60	5	3090	3.600	3	6	(D)(1)	20182669	
SC ACS 160	100	10	3085	8.000	-	10	(D)(1)	20176021	
SC ACS 225	150	10	3085	10.500	-	10	(D)(1)	20156329	

- DHW production at 45 °C, with water inlet at 10 °C and storage tank temperature at 55 °C.

- Max primary/secondary pressure.

  Availability of the material at our warehouse: 25 working days from the date of the order's validation.

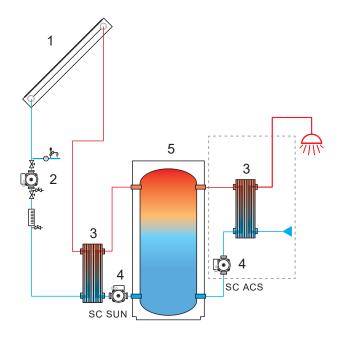
  Heat exchange module that can be assembled in cascade with the appropriate accessories (see accessories).

#### **ACCESSORIES**

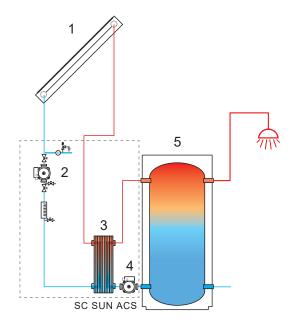
Description	Notes	Code
Thermostatic sanitary recirculation kit (for SC ACS 25-35)	(D)	20083502
Electronic DHW recirculation kit (only for SC ACS 40)		20182673
2 modules cascade connection kit (only for SC ACS 40)		20182674
3 modules cascade connection kit (only for SC ACS 40)	(D)	20182675
Recirculation kit (only for SC ACS 80)	(D)	20182676
2 modules cascade connection kit (only for SC ACS 80)	(D)	20182677
3 modules cascade connection kit (only for SC ACS 80)	(D)	20182678

(D) Availability of the material at our warehouse: 25 working days from the date of the order's validation. Other available accessories at page 268.

#### PRINCIPLE EXEMPLARY SCHEME



- Riello solar collector
- High efficiency solar circulator 2.
- Plate heat-exchanger 3.
- High efficiency circulator 4.
- 7000 Puffer



- Riello solar collector
- High efficiency solar circulator 2.
- Plate heat-exchanger 3.
- High efficiency circulator 7200/3F HV PLUS 4.
- 5.

# **ACCESSORIES**



MAY 2022 EDITION

**TERMINAL UNITS** 

#### **SOLAR THERMAL ACCESSORIES**

Description	Notes	Code
FITTINGS AND STAINLESS STEEL PIPES		
2 straight fittings kit to be tightened to connect the solar collectors with DN18 copper pipes		20027281
2-fittings kit to be tightened (90°) to connect the solar collectors with DN18 copper pipes		20055236
Kit of two fittings to tighten terminals	(2)	20094627
2-fittings kit for the connection between DN18 copper pipe and hydraulic group		20132219
2 straight fittings kit to connect the solar collectors with stainless steel pipes (copper pipe DN18/ stainless steel pipe DN16)		20027289
2-fittings kit for the connection between copper pipe and hydraulic group (copper pipe DN18/ stainless steel pipe DN16)		20132220
Fittings kit to be welded		20132142
Fittings kit for stainless steel pipe	(1)	20132143
Flexible stainless steel pipe kit DN16 of 15 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)	(2)	4383254
Flexible stainless steel pipe kit DN16 of 20 m (contains: stainless steel wavy double-pipe for flow and return, solar probe cable and suitable insulation for solar applications)	(2)	4383255
FLOW RATE REGULATORS		
Flow rate regulator 12 (DN20; 2–12 l/min; kvs=2,2 m³/h)		20011536
Flow rate regulator 20 (DN20, 8-20 l/min, kvs=5 m³/h)		20011538
Manual solar air vent kit		20026577
GLYCOL		
5 kg propylene glycol kit (concentrated heat-transfer liquid, with corrosion inhibitors, for flat-plate collectors)		4383085
10 kg propylene glycol kit (concentrated heat-transfer liquid, with corrosion inhibitors, for flat-plate collectors)		4383059
20 kg pre-mixed glycol for CSV R (ready-to-use heat transfer liquid, suitable for vacuum collectors, frost-protection up to -28 $^{\circ}$ C)		4383118
20 kg glycol-free heat-transfer liquid (long-lasting and non-toxic)		20094030
EXPANSION VESSELS		
18L SUN expansion vessel (ideal for solar systems, bracket equipped, ¾" fitting)		4383052
24L SUN expansion vessel (ideal for solar systems, bracket equipped, ¾" fitting)		4383053
35L SUN expansion vessel (ideal for solar systems, bracket equipped, ¾" fitting)		4383054
50L expansion vessel (ideal for solar systems, provided with supporting base and 1" fitting)		4383256
100L expansion vessel (ideal for solar systems, provided with supporting base and 1" fitting)		4383257
150L expansion vessel (ideal for solar systems, provided with supporting base and 1" fitting)		4383258
300L expansion vessel (ideal for solar systems, provided with supporting base and 1" fitting)		4383259
OTHER ACCESSORIES		
³¼" thermostatic mixing valve kit		20020778
Differential electronic thermostat		20039694

<sup>(1)</sup> Fittings kit to be ordered with the stainless steel flexible pipe. (2) Stainless steel flexible pipe, insulated, without fittings.



CENTRALIZED HEATING	δ
WALL-HUNG MODULAR SYSTEM	274
FLOOR-STANDING MODULAR SYSTEM	289
FLOOR-STANDING BOILERS	321
STEEL JET BURNER BOILERS GAS/OIL	343
CAST IRON JET BURNER BOILERS GAS/OIL	387
CONTROL PANELS AND THERMOREGULATIONS	
FLUE OPTIONS SYSTEM	403

### WALL-HANG/FLOOR-STANDING CONDENSATION MODULES

δ

	GAS INDOOR		GAS OUTDOOR	
WALL-HUNG THERMAL MODULES STAINLESS STEEL		CONDEXA PRO (55.7-1098.0 kW)**		CONDEXA PRO* (55.7-1098.0 kW)**
MODI		page 274		page 274
FLOOR-STANDING THERMAL MODULES STAINLESS STEEL		STEEL PRO POWER (111.4-1290.0 kW)** page 289		STEEL PRO POWER* (111.4-1290.0 kW)** page 289
FLOOR-STANDING THERMAL MODULES ALUMINUM		ALU PRO POWER (112.1-585.0 kW)** page 304		

- Provided with kit for outdoor installation. The output data are referred to the min-max (80°/60 °C) of cascade applications.

INTERNATIONAL PRODUCT CATALOGUE

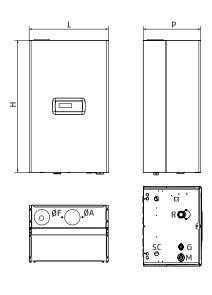
Indoor wall-hung gas condensing modules

### Condexa Pro





- In conformity with Directive 2009/125/EC
- Condensing thermal modules for indoor use (for outdoors with optional kit)
- Possible cascade up to 1120 kW
- · Modular design to ensure an easy and fast installation
- Low polluting emissions, Class 6 (DIN EN 15502)



M-FLOW G 1" 1/2 G-GAS G 1' R-RETURN G 1" 1/2 SC-CONDENSATE DISCHARGE Ø24 mm ØA-AIR (opz)

Description	H mm	L mm	P mm	ø mm	Net weight kg
CONDEXA PRO 57 P	1000	600	435	80	64
CONDEXA PRO 70 P	1000	600	435	80	64
CONDEXA PRO 90	1000	600	435	110	69
CONDEXA PRO 100	1000	600	435	110	69
CONDEXA PRO 115	1170	600	435	110	84
CONDEXA PRO 135	1170	600	435	110	90

The Condexa Pro System is the new Riello high performance wall-hung condensing modular system that can cover a vast range of applications, and which can be installed indoors or outdoors, with an open or sealed combustion chamber, with a single boiler or in cascade up to 1120 kW.

The range consists of 6 models with thermal modules from 57 to 131 kW.

Each thermal module has a new heat exchanger, with patented structures, composed of two smooth concentric stainless steel pipes, having respectively an internal pentagonal section and a circular outside section, designed to maximise the heat exchange surface and provide maximum resistance to corrosion.

The primary circuit pump with modulating adjustment allows you top operate with a settable consent ΔT, thereby reducing the system's steady state times and maximising the condensation. The standard electronics includes climatic regulation, management of the cascade of the modules, with integrated master/slave functions, the automatic switching between summer/winter and the possibility of managing a direct zone and a DHW storage cylinder.

The electronics also provides the possibility of the remote management using the 0-10V input or with the Modbus protocol. Included as standard are: boiler discharge tap, LPG conversion kit and wall support.

Completing the system are accessories specifically designed for modular and cascade applications, with the possibility of working with various hydraulic management logics, namely thermal modules with circulators or no shut-off.

With specific accessories it is also possible to manage the distribution of the secondary circuit, up to 16 mixed zones. The optimal management of the combustion and the high modulation ratios, up to 1 to 50 for the version with 10 thermal modules, provide high levels of efficiency and low levels of polluting emissions (Class 6 UNI EN 15502).

- Continuity of service is guaranteed by system modularity: even in the event of fault of a module, overall operation shall not be compromised
- The anti-freeze and anti-seizing functions ensure it operates in all weather conditions
- A wide range of accessories is available to ensure the installation is simple, fast and complete with cascade
- Maximum operating pressure: 6 bar.

#### **TECHNICAL DATA**

Description		Power - k	W	Efficiency - %			Energy	Language	Code
	Output useful 80°/60° max	0utput useful 50°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (50°/30°)	Useful 30% Pn (50°/30°)	efficiency class		
CONDEXA PRO 57 P	55.7	61.9	14.0-57.0	98.3	108.6	109.2	A	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115223 20150685 20151706 20151726 20151754 20151824 20192124
CONDEXA PRO 70 P	67.0	73.9	14.0-68.0	97.9	108.1	108.8	A	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115224 20150686 20151707 20151727 20151756 20151825 20192125
CONDEXA PRO 90	88.3	97.4	19.4-90.0	98.0	108.3	108.9	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115225 20150687 20151709 20151728 20151759 20151826 20192126
CONDEXA PRO 100	95.3	105.1	19.4-97.0	97.9	108.2	108.8	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115226 20150688 20151721 20151730 20151762 20151827 20192127
CONDEXA PRO 115	109.8	121.1	22.4-112.0	98.3	108.6	108.8	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115228 20150689 20151722 20151731 20151767 20151828 20192128
CONDEXA PRO 135	129.0	142.1	26.2-131.0	97.9	108.3	108.9	-	IT/EN FR/DE ES/PT RU/UA PL/RO SK/CZ/GR/SI/CR CH/BE/HU	20115229 20150690 20151723 20151732 20151768 20151829 20192129

**TERMINAL UNITS** 

### STAND ALONE BOILER CONFIGURATION GUIDE AND ACCESSORIES SELECTION



- 1. STAND ALONE BOILER CONFIGURATION
- 2. ACCESSORIES TO COMPLETE THE SYSTEM
- 3. OPTIONAL ACCESSORIES
- 3.1 Shunt pumps
- 3.2 Additional safety devices
- 3.3 Hydraulic separator or plate heat exchanger
- 3.4 Secondary circuit management
- 3.5 Indoor/outdoor installation
- 3.6 Sealed chamber conversion kit
- 3.7 Flue system
- 3.8 Treatment systems for condensate neutralization

#### 1. STAND ALONE BOILER CONFIGURATION

Powers obtainable with stand alone installation

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
Thermal flow kW	57	68	90	97	112	131

#### 2. ACCESSORIES TO COMPLETE THE SYSTEM

Description	Notes	Code
External probe		20132778
Condensate drain kit for stand alone boiler	(1)	20133102

Mandatory on all models.

#### 3. OPTIONAL ACCESSORIES

#### 3.1 Shunt pumps (only for 90-135 kW)

Description	Notes	Code
Injection pump kit (90-115 kW)	(1)(2)	20125034
Injection pump kit with high residual head (115 kW) and low residual head (135 kW)	(1)(3)	20125035
Injection pump kit with high residual head (135 kW)	(1)(4)	20125040

On the models Condexa Pro 57-70 P the shunt pump is already onboard.

This shunt pump, that can be fitted within the boiler, offers a high residual head on Condexa Pro 90 – 100 and with these boilers it can be combined with the (optional) plate heat exchanger; if used with Condexa Pro 115, it can be combined with the (optional) hydraulic separator but not with the plate heat exchanger.

If combined with Condexa Pro 135, this shunt pump can be fitted within the boiler and offers a very low residual head (10 mbar); It has to be used ONLY in case of combination with horizontal hydraulic separator code: 20131897.

This shunt pump cannot be fitted within the boiler, it has to be installed under the gas fired boiler.

#### 3.2 Additional safety devices

Description	Notes	Code
SA installation kit for stand-alone boiler	(1)(2)	20142219
Manifold kit with safety devices (INAIL) for stand alone boiler	(3)	20131898
Manifold kit with safety devices for stand alone boiler	(4)(5)	20189780
Safety valve 5.4 bar ØG.¾'' FF		20143981
Kit with connection pipe to hydraulic separator for stand alone boiler		20131899
Shut-off cock		20190221

- (1)

- This kit is necessary for the stand-alone installation. It contains: connection pipe kit (1x code 20131899), hydraulic separator kit for stand alone boiler (1x code 20131897), condensate drain syphone (1x code 20133102), safety valve 5.4 bar (1x code 20143981) and 2 ball valves.

  Condensate drain syphone (code 20133102) is not included in the boilers.

  Includes all the safety devices, including safety valve and VIC mandatory for the Italian market.

  Includes pressure gauge, thermometer and 3 bar safety valve (3/4 "FF). Coupled with the under boiler cover kits (20145587 or 20133224) it allows the display of temperature and pressure values

  If an operating pressure> 3 bar is required, it can be combined with the safety valve code 20143981. (3)

#### 3.3 Hydraulic separator or plate heat exchanger

Description	Notes	Code
Horizontal hydraulic separator kit for stand alone boiler		20131897
Frame kit for front cascades	(1)	20131663
Frame conversion kit for B2B cascades		20131664
2/3 way valve kit	(2)	20125037
Brazed plate heat exchanger kit for stand alone boiler (20 plates)	(3)	20132368
Brazed plate heat exchanger kit for stand alone boiler (30 plates)	(3)	20132369
Brazed plate heat exchanger kit for stand alone boiler (40 plates)	(3)	20132370
Brazed plate heat exchanger kit for stand alone boiler (50 plates)	(3)	20132371
Brazed plate heat exchanger kit for stand alone boiler (60 plates)	(3)(4)	20132372
Delivery/return line fittings kit for direct installation (57–135 kW)		20136823
Cover for plate heat exchanger		20145587
Cover for safety kit/hydraulic separator unit for stand alone boiler		20133224

- The frame is necessary in the case of installation with plate heat exchanger. Kit combinable with plate heat exchanger kits for stand alone boiler for DHW production. (1) (2) (3) (4)
- To be installed mandatory with code 20131663.
  To be mandatory combined with the circulator code 20125040.

#### COMBINATIONS OF PUMPS AND PLATE HEAT EXCHANGERS FOR BOILER OPERATION WITH PRIMARY $\Delta T$ = 20 °C

Description		5	afety devices		Fra	me		Pumps				Plate	e heat	exchar	igers		
	S	afety de	vices	INAIL	-												
			_	(E)	A				ΔT primary/secondary = 10 °C			dary	ΔT primary/secondary = 7.2 °C			dary	
						\$				800	°C □°C		0°C	859	°C → 100 5°C		°C →
	Kit with connection pipe to hydraulic separator for stand alone boiler	Safety valve 5.4 bar ØG.¾" FF	Manifold kit with safety devices for stand alone boiler	Manifold kit with INAL safety devices for stand alone boiler	Frame kit for front cascades	Frame conversion kit for B2B cascades	Injection pump kit (90-115 kW)	Injection pump kit with high residual head (115 kW) and low residual head (135 kW)	Injection pump kit with high residual head (135 kW)	Brazed plate heat exchanger kit for stand alone boiler (20 plates)	Brazed plate heat exchanger kit for stand alone boiler (30 plates)	Brazed plate heat exchanger kit for stand alone boiler (40 plates)	Brazed plate heat exchanger kit for stand alone boiler (60 plates)	Brazed plate heat exchanger kit for stand alone boiler (30 plates)	Brazed plate heat exchanger kit for stand alone boiler (40 plates)	Brazed plate heat exchanger kit for stand alone boiler (50 plates)	Brazed plate heat exchanger kit for stand alone boiler (60 plates)
	20131899	20143981	20189780	20131898	20131663	20131664	20125034	20125035	20125040	20132368	20132369	20132370	20132372	20132369	20132370	20132371	20132372
CONDEXA PRO 57 P	•	•	•	•	•	• (*)	•			•				•			
CONDEXA PRO 70 P	•	•	•	•	•	• (*)	•			•				•			
CONDEXA PRO 90	•	•	•	•	•	• (*)	•				•				•		
CONDEXA PRO 100	•	•	•	•	•	• (*)	•				•				•		
CONDEXA PRO 115	•	•	•	•	•	• (*)		•				•				•	
CONDEXA PRO 135	•	•	•	•	•	• (*)			•				•				•

<sup>(\*)</sup> To be used in case where the frame is not bound to the wall.

#### 3.4 Secondary circuit management

Description	Notes	Code
Immersion probe	(1)	1220599
Electronic kit for managing additional direct or mixed zone	(2)	20130811

#### 3.5 Outdoor installation

Description					
IPX5D kit for outdoor installation (57–70 kW)					
IPX5D kit for outdoor installation (90–135 kW)					

#### 3.6 Sealed chamber conversion kit (C type)

Description	Code
Conversion kit C type (57–70 kW)	20131665
Conversion kit C type (90–135 kW)	20131668

#### 3.7 Flue system

Description	Notes	Code
Spacer kit for fixing to wall	(1)	20131270

(1) Kit required for rear wall concentric discharge NOTE: for each type check the maximum equivalent lengths by consulting the technical data sheet and/or contacting the pre-sales service. For the flue gas system, refer to page 403.

#### 3.8 Treatment systems for condensate neutralization

Description	Notes	Code
Condensate neutralizer HN2 (up to 270 kW)	(1)	4031811
Condensate neutralizer N2 (up to 450 kW)		4031810

<sup>(1)</sup> Equipped with extraction pumps.

Utilized for the management of secondary/tank circuit. The maximum number of kits that can be installed is 16

NOTE: for adjusting the ambient temperature use Riello thermostats and chronothermostats on page 477.

#### **BOILERS CASCADE CONFIGURATION GUIDE AND ACCESSORIES SELECTION**



- 1. BOILERS CASCADE CONFIGURATION
- 2. SELECTION OF THE LAYOUT FRONT OR BACK-TO-BACK
- 3. ACCESSORIES TO COMPLETE THE SYSTEM
- 4. ACCESSORIES
- 4.1 Support frame
- 4.2 Shunt pumps
- 4.3 Connection pipes
- 4.4 Water collectors (delivery/return) -gas-condensate
- 4.5 Additional safety devices
- 4.6 Hydraulic separator or plate heat exchanger
- 4.7 Secondary circuit management
- 4.8 Sealed chamber conversion kit
- 4.9 Flue gas exhaust systems
- 4.10 Treatment systems for condensate neutralization

#### 1. BOILERS CASCADE CONFIGURATION

Powers obtainable with cascade system installation

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135				
Nr. boilers		TOTAL POWER								
2	114	136	180	194	224	262				
3	171	204	270	291	336	393				
4	228	272	360	388	448	524				
5	285	340	450	485	560	655				
6	342	408	540	582	672	786				
7	399	476	630	679	784	917				
8	456	544	720	776	896	1048				
9	513	612	810	873	1008	ND				
10	570	680	900	970	1120	ND				

Key to lay-out

Solution that provides the least number of boilers

A solution that provides, with the same power, a greater number of boilers and therefore a greater modulation ratio

Solution that provides, with the same power mdi, the maximum modulation ratio

Solution not available

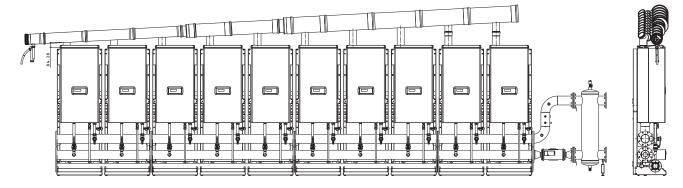
ND

**TERMINAL UNITS** 

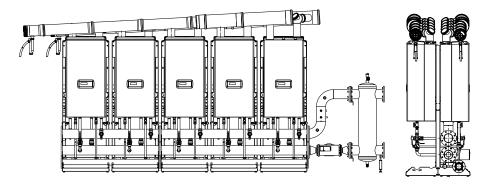
#### 2. SELECTION OF THE LAYOUT FRONT OR BACK-TO-BACK, In relation to the space available

#### **FRONT** configuration

**RIELLO** 



#### BACK-TO-BACK configuration



### 3. ACCESSORIES TO COMPLETE THE SYSTEM

Description	Language	Notes	Code
Condensate drain kit for cascade boiler		(1)	20131267
External probe		(2)	20132778
Primary probe	IT/EN (	(2)(3)	20175714
Set of manuals for the CONDEXA PRO CASCADE	FR/NL/DE		20150950
Set of manuals for the CONDEXA PRO CASCADE	ES/PT		20151280
Set of manuals for the CONDEXA PRO CASCADE	RU/UA		20151282
Set of manuals for the CONDEXA PRO CASCADE	PL/HU/RO		20151281
Set of manuals for the CONDEXA PRO CASCADE	SK/CZ/GR/SI/CR		20151949

- To be ordered for each boiler of the cascade system (q.ty = no. boilers)
  One probe for each system in cascade, to be connected to the master boiler
  It must be associated mandatorly with the appropriate "Set of manuals for the CONDEXA PRO CASCADE".

#### 4. ACCESSORIES

#### 4.1 Support frame

Description	Code
Frame kit for front cascades	20131663
Frame conversion kit for B2B cascades	20131664

	FRONT	BACK-TO-BACK		
No. boilers	20131663 Q.ty frame	20131663 Q.ty frame	20131664 Q.ty conversion kit	
2	2	1	1	
3	3	2	2	
4	4	2	2	
5	5	3	3	
6	6	3	3	
7	7	4	4	
8	8	4	4	
9	9	5	5	
10	10	5	5	

#### 4.2 Shunt pumps for single boiler (only for 90-135 kW)

Description	Notes	Code
Injection pump kit (90-115 kW)	(1)	20125034
Injection pump kit with high residual head (115 kW) and low residual head (135 kW)	(1)	20125035
Injection pump kit with high residual head (135 kW)	(2)	20125040

- To be ordered for each boiler of the cascade system (q.ty = no. boilers); pump to be installed inside the boiler. To be ordered for each boiler of the cascade system (q.ty = no. boilers); pump to be installed outside the boiler.

#### 4.3 Connection pipes

Description	Notes	Code
FRONT CONFIGURATION	· · · · · ·	
Pipes without shut-off (57-135 kW)	(1)	20130658
Pipes with shut-off (57-135 kW)	(1)	20131124
Pipes without shut-off (135 kW) (external pump)	(2)	20131121
Pipes with shut-off (135 kW) (external pump)	(2)	20131125
BACK-TO-BACK CONFIGURATION		
Pipes without shut-off (57-135 kW)	(3)	20130658
Pipes with shut-off (57-135 kW)	(3)	20131124
Pipes without shut-off (135 kW) (external pump)	(4)	20131121
Pipes with shut-off (135 kW) (external pump)	(4)	20131125
Pipes without shut-off (57-135 kW) (B2B)	(5)	20131787
Pipes with shut-off (35-135 kW) (B2B)	(5)	20131791
Pipes without shut-off (135 kW) (external pump) (B2B)	(6)	20131788
Pipes with shut-off (135 kW) (external pump) (B2B)	(6)	20131792

- To be ordered for each boiler of the cascade system (q.ty = no. boilers) with pump or valve installed inside the boiler. To be ordered for each boiler of the cascade system (q.ty = no. boilers) with pump or valve installed outside the boiler. To be ordered for each boiler on collectors side with pump or valve installed inside the boiler. To be ordered for each boiler on collectors side with pump or valve installed outside the boiler. To be ordered for each boiler on the side opposite the collectors with pump or valve installed inside the boiler. To be ordered for each boiler on the side opposite the collectors with pump or valve installed outside the boiler. (1) (2) (3) (4) (5) (6)

#### 4.4 Water collectors (delivery/return) - gas - condensate

Description	Notes	Code
3" collectors kit for cascades for 1 boiler	(1)	20133220
3" collectors kit for cascades for 2 boilers	(2)	20130220
3" collectors kit for cascades for 3 boilers	(2)	20130221
5" collectors kit for cascades for 2 boilers	(3)	20130222
5" collectors kit for cascades for 3 boilers	(3)	20130223
3" closing plugs kit		20070903
3" through-flanges kit		20082190
5" closing plugs kit		20070907
5" through-flanges kit		20082191
Cover with insulation for cascade collectors/pipes		20132377

- To be used for the BACK TO BACK configuration with 2 boilers; includes 3" flanged deliver/return collectors DN80, 2" threaded gas collector, condensate drain collector.
- (2) (3) To be used with a maximum output of up to 485 kW. Includes 3" flanged deliver/return collectors DN80, 2" threaded gas collector, condensate drain collector. To be used with a maximum output of over 485 kW. Includes 5" flanged deliver/return collectors DN125, 3" threaded gas collector DN80, condensate drain

#### TABLE OF COMBINATION OF BOILER CASCADE COLLECTORS

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
Boiler heat output kW	57	68	90	97	112	131
No. boilers		TO	TAL CASCADE OUTPUT/D	IAMETER H <sub>2</sub> O COLLECTO	RS	
2	114/3"	136/3"	180/3"	194/3"	224/3"	262/3"
3	171/3"	204/3"	270/3"	291/3"	336/3"	393/3"
4	228/3"	272/3"	360/3"	388/3"	448/3"	524/5"
5	285/3"	340/3"	450/3"	485/3"	560/5"	655/5"
6	342/3"	408/3"	540/5"	582/5"	672/5"	786/5"
7	399/3"	476/3"	630/5"	679/5"	784/5"	917/5"
8	456/3"	544/5"	720/5"	776/5"	896/5"	1048/5"
9	513/5"	612/5"	810/5"	873/5"	1008/5"	-
10	570/5"	680/5"	970/5"	970/5"	1120/5"	-

#### TABLE OF COMBINATION OF COLLECTOR CODES IN RELATION TO THE NUMBER OF BOILERS IN CASCADE, IN A FRONT CONFIGURATION

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
Boiler heat output kW	57	68	90	97	112	131
No. boilers		SELECTI	ON OF COLLECTOR CODE	S FOR FRONT CONFIGU	RATION	
2	1 x 20130220					
3	1 x 20130221					
4	2 x 20130220	2 x 20130222				
5	1 x 20130220 1 x 20130221	1 x 20130222 1 x 20130223	1 x 20130222 1 x 20130223			
6	2 x 20130221	2 x 20130221	2 x 20130223	2 x 20130223	2 x 20130223	2 x 20130223
7	2 x 20130220 1 x 20130221	2 x 20130220 1 x 20130221	2 x 20130222 1 x 20130223			
8	1 x 20130220 2 x 20130221	1 x 20130222 2 x 20130223				
9	3 x 20130223	-				
10	2 x 20130222 2 x 20130223	-				

#### TABLE OF COMBINATION OF COLLECTOR CODES IN RELATION TO THE NUMBER OF BOILERS IN CASCADE, IN A BACK TO BACK CONFIGURATION

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
Boiler heat output kW	57	68	90	97	112	131
No. boilers		SELECTION OF	H20 COLLECTOR CODES	FOR BACK TO BACK COM	IFIGURATIONS	
2	1 x 20133220	1 x 20133220				
3	1 x 20130220	1 x 20130220				
4	1 x 20130220	1 x 20130222				
5	1 x 20130221	1 x 20130221	1 x 20130221	1 x 20130221	1 x 20130223	1 x 20130223
6	1 x 20130221	1 x 20130221	1 x 20130223	1 x 20130223	1 x 20130223	1 x 20130223
7	2 x 20130220	2 x 20130220	2 x 20130222	2 x 20130222	2 x 20130222	2 x 20130222
8	2 x 20130220	2 x 20130222	2 x 20130222	2 x 20130222	2 x 20130222	2 x 20130222
9	1 x 20130222 1 x 20130223	-				
10	1 x 20130222 1 x 20130223	-				

#### 4.5 Additional safety devices

Description		Code
Manifold kit for 3" safety devices housing		20070910
Manifold kit for 5" safety devices housing		20070912
Safety devices kit	(1)	20071190
Safety valve up to 460 kW (5,4 bar ØG.¾" F)		20023104
Safety valve up to 580 kW (5,4 bar ØG.1" F)		20023106
Fuel shut-off valve kit (VIC) - ØG.1"	(2)(6)	20009486
Fuel shut-off valve kit (VIC) - ØG.1" 1/2	(3)(6)	20009482
Fuel shut-off valve kit (VIC) - ØG.2"	(4)(6)	20009483
Fuel shut-off valve kit (VIC) - ØG.3"	(5)(6)	20061640
Flanged 3" DN80 PN6/flanged ØG.3" DN80 PN16 adapter kit for VIC valve	(7)	20161191

- Does not include safety valve and VIC.
- Recommended up to a maximum output of 131 kW, calculated taking into consideration the gas supply pressure = 20 mbar. Recommended up to a maximum output of 230 kW, calculated taking into consideration the gas supply pressure = 20 mbar. Recommended up to a maximum output of 580 kW, calculated taking into consideration the gas supply pressure = 20 mbar.
- (2) (3) (4) (5) (6) Recommended up to a maximum output of 1150 kW, calculated taking into consideration the gas supply pressure = 20 mbar. Intervention temperature 97 °C - Capillary length 5 m.

  To be istalled in combiantion with flanged 3" DN80 PN6/flanged ØG.3" DN80 PN16 adapter kit for VIC valve code 20061640.

NOTE: to calculate the maximum admissible output of the VIC, with supply pressures other than 20 mbar, contact the pre-sales service.

#### TABLE FOR SELECTING THE SAFETY VALVES

Total cascade heat output (kW)	0-460	461-580	581-920	921-1160
(No.) Diameter	1 x ³/4"	1 x 1"	2 x ³/₄"	2 x 1"
safety valve	1 x code 20023104	1 x code 20023106	2 x code 20023104	2 x code 20023106

#### 4.6 Hydraulic separator or plate heat exchanger

Description	Notes	Code
Hydraulic separator kit 5"-up to 485 kW	(1)	20009467
Hydraulic separator kit 10"-up to 580 kW	(2)	20069073
Hydraulic separator kit 10"-up to 1120 kW	(3)	20069074
Fittings kit for plate heat exchanger (DN80 collectors side – 3"/DN50 plate heat exchanger side)	(4)	20132373
Fittings kit for plate heat exchanger (DN125 collectors side – 5"/DN65 plate heat exchanger side)	(4)	20132375
Fittings kit for plate heat exchanger (DN125 collectors side – 5"/DN100 plate heat exchanger side)	(5)	20132376
Ground fixing kit (SP 35-40 models)		20120282
Ground fixing kit (SP 60 models)		20120284

- (1) (2) (3) (4) (5) To be used with a maximum output of up to 485 kW in combination with 3" collectors.
- To be used with a maximum output of up to 485 kW in Combination with 3" collectors.

  To be used with a maximum output of over 485 and up to 580 kW in combination with 5" collectors.

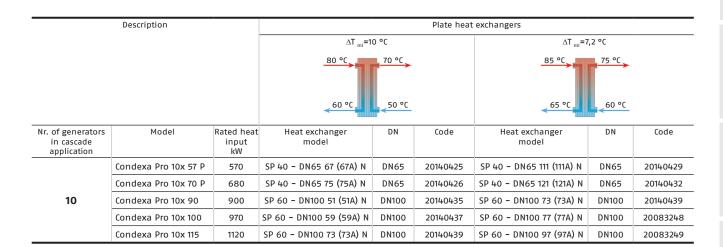
  To be used with a maximum output of over 580 kW and up to 1120 kW in combination with 5" collectors.

  To be mandatory ordered with "Ground fixing kit SP 35-40" code 20120282.

  To be mandatory ordered with "Ground fixing kit SP 60" code 20120284.

Description			Plate heat exchangers					
			ΔT <sub>ml</sub> =10 °C ΔT <sub>ml</sub> =7,2 °C					
			80 °C	70 °C		85 °C	75 °C	
			<del></del>			<u> </u>		
			60 °C 50 °C			65 °C 60 °C		
application	Condova Dro 2v F7 D	kW	SD 35 DNEO 35 (35A) N	DNEO	201/-0/-10	CD 2F DNEO 2F (2FA) N	DNEO	201/-0/
	Condexa Pro 2x 57 P	114	SP 35 - DN50 25 (25A) N	DN50	20140410	SP 35 - DN50 35 (35A) N	DN50	201404
2	Condexa Pro 2x 70 P	136	SP 35 - DN50 25 (25A) N	DN50	20140410	SP 35 - DN50 39 (39A) N	DN50	201404
	Condexa Pro 2x 90	180	SP 35 - DN50 31 (31A) N	DN50	20140411	SP 35 - DN50 49 (49A) N	DN50	20140
	Condexa Pro 2x 100	194	SP 35 - DN50 35 (35A) N	DN50	20140412	SP 35 - DN50 57 (57A) N	DN50	201404
	Condexa Pro 2x 115	224	SP 35 - DN50 39 (39A) N	DN50	20140413	SP 35 - DN50 65 (65A) N	DN50	201404
	Condexa Pro 2x 135	262	SP 35 - DN50 45 (45A) N	DN50	20140414	SP 35 - DN50 75 (75A) N	DN50	201404
	Condexa Pro 3x 57 P	171	SP 35 - DN50 31 (31A) N	DN50	20140411	SP 35 - DN50 49 (49A) N	DN50	201404
	Condexa Pro 3x 70 P	204	SP 35 - DN50 35 (35A) N	DN50	20140412	SP 35 - DN50 57 (57A) N	DN50	201404
3	Condexa Pro 3x 90	270	SP 35 - DN50 45 (45A) N	DN50	20140414	SP 35 - DN50 75 (75A) N	DN50	201404
,	Condexa Pro 3x 100	291	SP 35 - DN50 49 (49A) N	DN50	20140415	SP 35 - DN50 81 (81A) N	DN50	201404
	Condexa Pro 3x 115	336	SP 35 - DN50 57 (57A) N	DN50	20140416	SP 35 - DN50 93 (93A) N	DN50	20140
	Condexa Pro 3x 135	393	SP 35 - DN50 65 (65A) N	DN50	20140418	SP 35 - DN50 105 (105A) N	DN50	201404
	Condexa Pro 4x 57 P	228	SP 35 - DN50 39 (39A) N	DN50	20140413	SP 35 - DN50 65 (65A) N	DN50	201404
	Condexa Pro 4x 70 P	272	SP 35 - DN50 45 (45A) N	DN50	20140414	SP 35 - DN50 75 (75A) N	DN50	201404
_	Condexa Pro 4x 90	360	SP 35 - DN50 57 (57A) N	DN50	20140416	SP 35 - DN50 93 (93A) N	DN50	20140
4	Condexa Pro 4x 100	388	SP 35 - DN50 65 (65A) N	DN50	20140418	SP 35 - DN50 105 (105A) N	DN50	201404
	Condexa Pro 4x 115	448	SP 35 - DN50 75 (75A) N	DN50	20140419	SP 35 - DN50 121 (121A) N	DN50	201404
	Condexa Pro 4x 135	524	SP 40 - DN65 59 (59A) N	DN65	20014231	SP 40 - DN65 99 (99A) N	DN65	201404
	Condexa Pro 5x 57 P	285	SP 35 - DN50 49 (49A) N	DN50	20140415	SP 35 - DN50 75 (75A) N	DN50	201404
	Condexa Pro 5x 70 P	340	SP 35 - DN50 57 (57A) N	DN50	20140416	SP 35 - DN50 93 (93A) N	DN50	20140
	Condexa Pro 5x 90	450	SP 35 - DN50 75 (75A) N	DN50	20140419	SP 35 - DN50 121 (121A) N	DN50	201404
5	Condexa Pro 5x 100	485	SP 35 - DN50 81 (81A) N	DN50	20140420	SP 35 - DN50 121 (121A) N	DN50	201404
	Condexa Pro 5x 115	560	SP 40 - DN65 67 (67A) N	DN65	20140420	SP 40 - DN65 99 (99A) N	DN65	201404
			1 1	DN65	20140425		DN65	
	Condexa Pro 5x 135	655	SP 40 - DN65 75 (75A) N			SP 40 - DN65 121 (121A) N		201404
	Condexa Pro 6x 57 P	342	SP 35 - DN50 57 (57A) N	DN50	20140416	SP 35 - DN50 93 (93A) N	DN50	20140
	Condexa Pro 6x 70 P	408	SP 35 - DN50 65 (65A) N	DN50	20140418	SP 35 - DN50 105 (105A) N	DN50	201404
6	Condexa Pro 6x 90	540	SP 40 - DN65 67 (67A) N	DN65	20140425	SP 40 - DN65 99 (99A) N	DN65	201404
	Condexa Pro 6x 100	582	SP 40 - DN65 67 (67A) N	DN65	20140425	SP 40 - DN65 111 (111A) N	DN65	201404
	Condexa Pro 6x 115	672	SP 40 - DN65 75 (75A) N	DN65	20140426	SP 40 - DN65 121 (121A) N	DN65	201404
	Condexa Pro 6x 135	786	SP 40 - DN65 93 (93A) N	DN65	20140427	SP 40 - DN65 145 (145A) N	DN65	201404
	Condexa Pro 7x 57 P	399	SP 35 - DN50 65 (65A) N	DN50	20140418	SP 35 - DN50 105 (105A) N	DN50	201404
	Condexa Pro 7x 70 P	476	SP 35 - DN50 81 (81A) N	DN50	20140420	SP 35 - DN50 121 (121A) N	DN50	201404
7	Condexa Pro 7x 90	630	SP 40 - DN65 75 (75A) N	DN65	20140426	SP 40 - DN65 111 (111A) N	DN65	201404
•	Condexa Pro 7x 100	679	SP 40 - DN65 75 (75A) N	DN65	20140426	SP 40 - DN65 121 (121A) N	DN65	201404
	Condexa Pro 7x 115	784	SP 40 - DN65 93 (93A) N	DN65	20140427	SP 40 - DN65 145 (145A) N	DN65	201404
	Condexa Pro 7x 135	917	SP 60 - DN100 51 (51A) N	DN100	20140435	SP 60 - DN100 73 (73A) N	DN100	201404
	Condexa Pro 8x 57 P	456	SP 35 - DN50 75 (75A) N	DN50	20140419	SP 35 - DN50 121 (121A) N	DN50	201404
	Condexa Pro 8x 70 P	544	SP 40 - DN65 67 (67A) N	DN65	20140425	SP 40 - DN65 99 (99A) N	DN65	201404
0	Condexa Pro 8x 90	720	SP 40 - DN65 93 (93A) N	DN65	20140427	SP 40 - DN65 145 (145A) N	DN65	201404
8	Condexa Pro 8x 100	776	SP 40 - DN65 93 (93A) N	DN65	20140427	SP 40 - DN65 145 (145A) N	DN65	201404
	Condexa Pro 8x 115	896	SP 60 - DN100 59 (59A) N	DN100	20140437	SP 60 - DN100 73 (73A) N	DN100	201404
	Condexa Pro 8x 135	1048	SP 60 - DN100 59 (59A) N	DN100	20140437	SP 60 - DN100 85 (85A) N	DN100	201404
	Condexa Pro 9x 57 P	513	SP 40 - DN65 59 (59A) N	DN65	20014231	SP 40 - DN65 99 (99A) N	DN65	201404
	Condexa Pro 9x 70 P	612	SP 40 - DN65 75 (75A) N	DN65	20140426	SP 40 - DN65 111 (111A) N	DN65	201404
9	Condexa Pro 9x 90	810	SP 60 - DN100 51 (51A) N	DN100	20140435	SP 60 - DN100 65 (65A) N	DN100	201404
9	Condexa Pro 9x 100	873	SP 60 - DN100 51 (51A) N	DN100	20140435	SP 60 - DN100 73 (73A) N	DN100	201404
	Condexa Pro 9x 115	1008	SP 60 - DN100 65 (65A) N	DN100	20140438	SP 60 - DN100 85 (85A) N	DN100	201404

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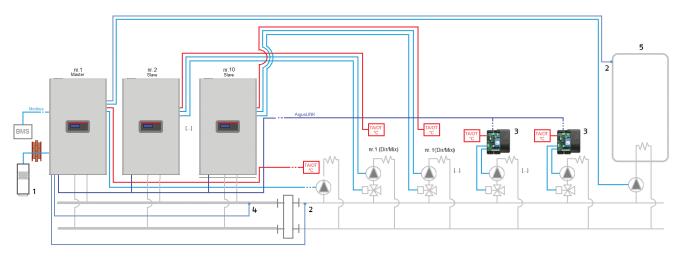


#### 4.7 Secondary circuit management

Description	Notes	Code
Immersion probe	(1)	1220599
Electronic kit for managing additional direct or mixed zone (max 16)	(2)	20130811

- Utilized for the management of secondary/tank circuit.
- Kit required whenever the number of the heating zones, direct or mixed, is higher than the number of slave boilers.

NOTE: for adjusting the ambient temperature use Riello thermostats and chronothermostats.



#### Key to layout

- External probe code 20132778
- 2. Immersion probe code 1220599
- 3. Electronic kit for managing additional direct or mixed zone (max 16) code 20130811
- 4. Primary probe code 20175714
- 5. DHW cylinder

#### 4.8 Sealed chamber conversion kit

Description	Code
Conversion kit C type (57–70 kW)	20131665
Conversion kit C type (90–135 kW)	20131668

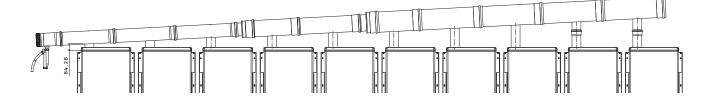
#### 4.9 Flue gas exhaust systems

Description	Notes	Code
Adaptor Ø80/110	(1)	20131238
Cascade terminal Ø160 with condensate drain		20062338
Collector Ø160 for 1 boiler		20131266
Eccentric adaptor Ø160/200		20132391
Collector Ø200 for 1 boiler		20131901
Eccentric adaptor Ø200/250		20132393

Description	Notes	Code
Collector Ø250 for 1 boiler		20131903
Y-fitting Ø160/160		20132381
Y-fitting Ø160/200		20132384
Y-fitting Ø160/250		20132385
Y-fitting Ø200/250		20132386

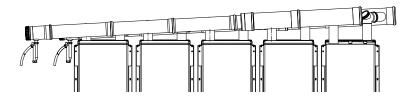
<sup>(1)</sup> Mandatory only for models 57-70.

#### FRONT configuration - max 10 boilers

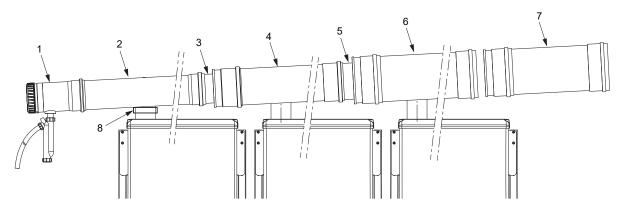


#### BACK-TO-BACK configuration - max 5 + 5 boilers

NOTE: the BACK TO BACK configuration has separate lines for each row of boilers, collectors side and the opposite side.



#### **FLUE CONFIGURATION LAY-OUT**



- Code 20062338 Cascade terminal ø160 with condensate drain
- 2 Code 20131266 Collector ø160 for 1 boiler
- 3 Code 20132391 Eccentric adaptor ø160/200
- 4 Code 20131901 Collector ø200 for 1 boiler
- Code 20132393 Eccentric adaptor ø200/250
- Code 20131903 Collector ø250 for 1 boiler

- Only for BACK TO BACK layout Code 20132381 Y-fitting ø160/160 Code 20132384 Y-fitting ø160/200 Code 20132385 Y-fitting ø160/250 Code 20132386 Y-fitting ø200/250
- Code 20131238 Adaptor ø80/110 (only for models 57-70)

#### TABLE FOR SELECTING THE FLUE GASES COLLECTORS DIAMETERS IN RELATION TO THE NUMBER OF BOILERS ON EACH COLLECTOR

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135				
Boiler heat output kW	57	68	90	97	112	131				
No. boilers		FLUE GASES/AIR DIAMETERS								
1 <sup>a</sup>	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160				
<b>2</b> ª	160	160	160	160	160	160				
3ª	160	160	160	160	160	160				
4ª	160	160	160	160	160	200				
5ª	160	160	200	200	200	200				
6ª	160	160	200	200	200	250				
7ª	160	200	200	200	250	250				
8ª	200	200	250	250	250	250				
9ª	200	200	250	250	250	-				
10ª	200	200	250	250	250	-				

#### TABLE FOR SELECTING THE FLUE GASES COLLECTORS CODES IN RELATION TO THE NUMBER OF BOILERS IN FRONT CONFIGURATION

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
Boiler heat output kW	57	68	90	97	112	131
No. boilers		SELECTION OF I	FLUE GASES COLLECTOF	CODES FOR FRONT CO	NFIGURATIONS	
	2 x 20131238	2 x 20131238	1 x 20062338	1 x 20062338	1 x 20062338	1 x 20062338
2	1 x 20062338 2 x 20131266	1 x 20062338 2 x 20131266	2 x 20131266	2 x 20131266	2 x 20131266	2 x 20131266
3	3 x 20131238 1 x 20062338 3 x 20131266	3 x 20131238 1 x 20062338 3 x 20131266	1 x 20062338 3 x 20131266	1 x 20062338 3 x 20131266	1 x 20062338 3 x 20131266	1 x 20062338 3 x 20131266
4	4 x 20131238 1 x 20062338 4 x 20131266	4 x 20131238 1 x 20062338 4 x 20131266	1 x 20062338 4 x 20131266	1 x 20062338 4 x 20131266	1 x 20062338 4 x 20131266	1 x 20062338 3 x 20131266 1 x 20132391 1 x 20131901
5	5 x 20131238 1 x 20062338 5 x 20131266	5 x 20131238 1 x 20062338 5 x 20131266	1 x 20062338 4 x 20131266 1 x 20132391 1 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 1 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 1 x 20131901	1 x 20062338 3 x 20131266 1 x 20132391 2 x 20131901
6	6 x 20131238 1 x 20062338 6 x 20131266	6 x 20131238 1 x 20062338 6 x 20131266	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901	1 x 20062338 3 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 1 x 20131903
7	7 x 20131238 1 x 20062338 7 x 20131266	7 x 20131238 1 x 20062338 6 x 20131266 1 x 20132391 1 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 1 x 20131903	1 x 20062338 3 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 2 x 20131903
8	8 x 20131238 1 x 20062338 7 x 20131266 1 x 20132391 1 x 20131901	8 x 20131238 1 x 20062338 6 x 20131266 1 x 20132391 2 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901 1 x 20132393 1 x 20131903	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901 1 x 20132393 1 x 20131903	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 2 x 20131903	1 x 20062338 3 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 3 x 20131903
9	9 x 20131238 1 x 20062338 7 x 20131266 1 x 20132391 2 x 20131901	9 x 20131238 1 x 20062338 6 x 20131266 1 x 20132391 3 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901 1 x 20132393 2 x 20131903	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901 1 x 20132393 2 x 20131903	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 3 x 20131903	nd
10	10 x 20131238 1 x 20062338 7 x 20131266 1 x 20132391 3 x 20131901	10 x 20131238 1 x 20062338 6 x 20131266 1 x 20132391 4 x 20131901	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901 1 x 20132393 3 x 20131903	1 x 20062338 4 x 20131266 1 x 20132391 3 x 20131901 1 x 20132393 3 x 20131903	1 x 20062338 4 x 20131266 1 x 20132391 2 x 20131901 1 x 20132393 4 x 20131903	nd

NOTE: in the case of a channelled suction line and gas-tight combustion (type C) double the amounts indicated in the table.

#### TABLE FOR SELECTING THE FLUE GASES COLLECTORS CODES IN RELATION TO THE NUMBER OF BOILERS IN BACK TO BACK CONFIGURATION

Model	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135			
Boiler heat output kW	57	68	90	97	112	131			
No. boilers	SELECTION OF FLUE GASES COLLECTOR CODES FOR BACK TO BACK CONFIGURATIONS								
2	2 x 20131238 2 x 20062338 2 x 20131266 1 x 20132381	2 x 20131238 2 x 20062338 2 x 20131266 1 x 20132381	2 x 20062338 2 x 20131266 1 x 20132381	2 x 20062338 2 x 20131266 1 x 20132381	2 x 20062338 2 x 20131266 1 x 20132381	2 x 20062338 2 x 20131266 1 x 20132381			
3	3 x 20131238 2 x 20062338 3 x 20131266 1 x 20132381	3 x 20131238 2 x 20062338 3 x 20131266 1 x 20132381	2 x 20062338 3 x 20131266 1 x 20132381	2 x 20062338 3 x 20131266 1 x 20132381	2 x 20062338 3 x 20131266 1 x 20132381	2 x 20062338 3 x 20131266 1 x 20132381			
4	4 x 20131238 2 x 20062338 4 x 20131266 1 x 20132381	4 x 20131238 2 x 20062338 4 x 20131266 1 x 20132381	2 x 20062338 4 x 20131266 1 x 20132381	2 x 20062338 4 x 20131266 1 x 20132381	2 x 20062338 4 x 20131266 1 x 20132381	2 x 20062338 4 x 20131266 1 x 20132384			
5	5 x 20131238 2 x 20062338 5 x 20131266 1 x 20132381	5 x 20131238 2 x 20062338 5 x 20131266 1 x 20132381	2 x 20062338 5 x 20131266 1 x 20132384						
6	6 x 20131238 2 x 20062338 6 x 20131266 1 x 20132381	6 x 20131238 2 x 20062338 6 x 20131266 1 x 20132381	2 x 20062338 6 x 20131266 1 x 20132384	2 x 20062338 6 x 20131266 1 x 20132384	2 x 20062338 6 x 20131266 1 x 20132384	2 x 20062338 6 x 20131266 1 x 20132385			
7	7 x 20131238 2 x 20062338 7 x 20131266 1 x 20132381	7 x 20131238 2 x 20062338 7 x 20131266 1 x 20132384	2 x 20062338 7 x 20131266 1 x 20132384	2 x 20062338 7 x 20131266 1 x 20132384	2 x 20062338 7 x 20131266 1 x 20132385	2 x 20062338 5 x 20131266 2 x 20132391 2 x 20131901 1 x 20132386			
8	8 x 20131238 2 x 20062338 8 x 20131266 1 x 20132384	8 x 20131238 2 x 20062338 8 x 20131266 1 x 20132384	2 x 20062338 8 x 20131266 1 x 20132385	2 x 20062338 8 x 20131266 1 x 20132385	2 x 20062338 8 x 20131266 1 x 20132385	2 x 20062338 6 x 20131266 2 x 20132391 2 x 20131901 1 x 20132386			
9	9 x 20131238 2 x 20062338 9 x 20131266 1 x 20132384	9 x 20131238 2 x 20062338 9 x 20131266 1 x 20132384	2 x 20062338 7 x 20131266 2 x 20131901 2 x 20132391 1 x 20132386	2 x 20062338 7 x 20131266 2 x 20131901 2 x 20132391 1 x 20132386	2 x 20062338 7 x 20131266 2 x 20131901 2 x 20132391 1 x 20132386	nd			
10	10 x 20131238 2 x 20062338 10 x 20131266 1 x 20132384	10 x 20131238 2 x 20062338 10 x 20131266 1 x 20132384	2 x 20062338 8 x 20131266 2 x 20131901 2 x 20132391 1 x 20132386	2 x 20062338 8 x 20131266 2 x 20131901 2 x 20132391 1 x 20132386	2 x 20062338 8 x 20131266 2 x 20131901 2 x 20132391 1 x 20132386	nd			

NOTE: in the case of a channelled suction line and gas-tight combustion (type C) double the amounts indicated in the table.

#### 4.10 Treatment systems for condensate neutralization

Description	Notes	Code
Condensate neutralizer HN2 (up to 270 kW)	(1)	4031811
Condensate neutralizer N2 (up to 450 kW)		4031810
Condensate neutralizer N3 (450-1500 kW)		4031812
Condensate neutralizer HN3 (270-750 kW)	(1)(D)	4031813

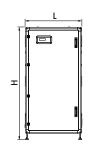
Equipped with extraction pumps.

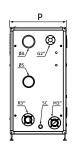
Availability of the material at our warehouse: 30 working days from the date of the order's validation.

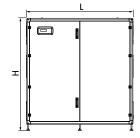
Floor-standing gas condensing units for indoor use

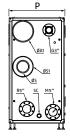
### **Steel Pro Power**











G = GA

M = FLOW

R = RETURN SC = CONDENSATE DISCHARGE



- In conformity with Directive 2009/125/EC
- Condensing modular thermal units for indoor applications (outdoor with optional kit) composed of painted technical cabinet, thermal modules from 57 kW up to 131 kW and system accessories
- Low polluting emissions, class 6 (UNI EN 15502)

Description	H mm	L mm	P mm	ØA mm	ØA1 mm	ØS mm	ØS1 mm	Net weight kg
STEEL PRO POWER 114-2	1800	900	890	160	_	160	-	270
STEEL PRO POWER 140-2	1800	900	890	160	_	160	-	270
STEEL PRO POWER 180-2	1800	900	890	160	_	160	-	280
STEEL PRO POWER 230-2	1800	900	890	160	_	160	-	300
STEEL PRO POWER 270-2	1800	900	890	-	300	160	300	350
STEEL PRO POWER 300-3	1800	1700	890	160	_	160	_	450
STEEL PRO POWER 345-3	1800	1700	890	160	_	160	-	490
STEEL PRO POWER 405-3	1800	1700	890	-	300	160	300	540
STEEL PRO POWER 460-4	1800	1700	890	160	_	160	-	560
STEEL PRO POWER 540-4	1800	1700	890	-	300	160	300	600

Steel Pro Power is the new Riello modular condensing system, specially designed and developed to achieve very high energy efficiency values, minimizing the space occupied.

The system, ready for a simple and quick installation, consists of technical cabinets designed according to the principles of modularity, consisting of an anodised aluminium frame assembly and painted panels.

The standard product is suitable for open chamber indoor installation and it can be transformed into sealed or outdoor installation version with the fitting of specific accessory kits. The cabinets are equipped with 2, 3 or 4 heating elements from 57 up to 131 kW, for a total heat input from 114 up to 524 kW and are available in the versions that associate to each thermal module low consumption circulators ("P" models) or 2-way valves ("V" models); the standard supply also includes electronic control, hydraulic supply and return, gas, fumes and condensate discharge manifolds.

The heat exchangers, with patented geometries, consist of two smooth concentric stainless steel pipes, having the pentagonal section of the inside and the circular section outside of the chamber; they have been specially designed to maximize the exchange surface, offering maximum corrosion resistance and minimum load losses. These features allow you to work with high  $\Delta T$ , reducing the time of system start-up.

The models with 131 kW exchanger (270-405-540) are designed for side-by-side cascade installation, up to a maximum of 10 units and a power of 1310 kW in total. The control electronics, compatible with the MOD-BUS protocol, allow the climatic regulation with cascade management of the thermal modules, automatic summer/winter switching, possibility of remote management via 0..10V input and alarm output signal.

The control system manages the heat distribution on the secondary circuit, controlling: one direct zone, one or more mixed zones (from 1 to 3 depending on the model) and the cylinder circuit.

Through special accessories there is also the possibility to manage additional mixed zones (up to max 16).

Optimal combustion management and high modulation ratios (up to 1:50) allow high efficiency and low pollutant emissions (Class 6 according to UNI EN 15502). The continuity of service is ensured by the system modularity: even in the event of a module failure, the overall operation is not compromised. The accessories designed to guarantee a simple, rapid and complete installation of the thermal power plant are also available. Maximum operating pressure 6 bar.

#### **TECHNICAL DATA**

Description		Power -	kW	Efficiency - %			Notes	Language	Code
	Output useful 80°/60° max	Output useful 50°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (50°/30°)	Useful 30% Pn (50°/30°)			
INDOOR UNITS - MODULATING F	UMP VERSI	ON							
STEEL PRO POWER 114-2 P	111.4	123.8	13.7-114	97.7	108.6	109.4	(1)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138572 20162048 20162091 20162140 20162171 20162191 20192691
STEEL PRO POWER 140-2 P	134.0	147.8	13.7-136	98.5	108.1	109.3	(1)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138573 20162051 20162092 20162141 20162172 20162192 20192692
STEEL PRO POWER 180-2 P	176.6	194.8	19.4-180	98.1	108.3	108.9	(1)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138574 20162052 20162093 20162143 20162173 20162193 20192693
STEEL PRO POWER 230-2 P	219.6	242.2	22.4-223.2	98.4	108.6	108.9	(1)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138575 20162060 20162094 20162144 20162174 20162194 20192694
STEEL PRO POWER 270-2 P	258.0	284.2	26.3-262	98.5	108.3	109.4	(1)(4)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138576 20162063 20162095 20162145 20162175 20162195 20192695
STEEL PRO POWER 300-3 P	285.9	315.3	19.4-291	98.2	108.2	108.9	(2)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138577 20162064 20162097 20162146 20162176 20162196 20192696
STEEL PRO POWER 345-3 P	329.4	363.6	22.4-334.8	98.4	108.6	108.9	(2)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138578 20162065 20162098 20162148 20162177 20162197 20192697
STEEL PRO POWER 405-3 P	387.0	426.3	26.3-393	98.5	108.3	109.4	(2)(4)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138579 20162066 20162101 20162151 20162178 20162198 20192698

Description		Power - I	¢W		Efficiency -	%	Notes	Language	Code
	Output useful 80°/60° max	Output useful 50°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (50°/30°)	Useful 30% Pn (50°/30°)			
INDOOR UNITS - MODULATING P	UMP VERSI	ON							
STEEL PRO POWER 460-4 P	439.2	484.4	22.4-446.4	98.4	108.6	108.9	(3)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138580 20162074 20162103 20162152 20162179 20162199 20192699
STEEL PRO POWER 540-4 P	516.0	568.4	26.3-524	98.5	108.3	109.4	(3)(4)	IT/EN FR/DE ES/PT RU/UA PL/RO GR/CR CH/BE/HU	20138581 20162077 20162104 20162153 20162180 20162200 20192700

<sup>(1)</sup> Model with 2 thermal elements.

#### (4) Models usable for cascaded systems.

#### SYSTEM CONFIGURATION GUIDE AND ACCESSORIES SELECTION



- 1. BOILER CONFIGURATION
- 2. SEALED COMBUSTION TRANSFORMATION KIT (TYPE C)
- 3. HYDRAULIC INTERCEPTION OF THERMAL MODULES
- 4. MANIFOLDS, SAFETY KITS AND HYDRAULIC ACCESSORIES
- 5. HYDRAULIC SEPARATORS/PLATE HEAT EXCHANGERS
- 6. AUXILIARY ACCESSORIES FOR TECHNICAL BOX
- 7. AUXILIARY ACCESSORIES FOR OUTDOOR INSTALLATION
- 8. SECONDARY CIRCUIT MANAGEMENT ACCESSORIES
- 9. TREATMENT SYSTEMS FOR CONDENSATE NEUTRALIZATION

<sup>(2)</sup> Model with 3 thermal elements.

<sup>3)</sup> Model with 4 thermal elements.

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### **RIELLO**

#### 1. BOILER CONFIGURATION

Choice of the type of installation: A - Stand alone

B - Cascade

#### A - STAND ALONE HEAT INPUT

Description		STEEL PRO POWER								
	114-2	114-2 140-2 180-2 230-2 270-2 300-3 345-3 405-3 460-4 540-4							540-4	
Rated heat input kW	114	136	180	224	262	291	336	393	448	524

#### **B - CASCADE SYSTEM HEAT INPUT**

Description	Heat input kW	STEEL PRO POWER 270-2 P/270-2 V	STEEL PRO POWER 405-3 P/405-3 V	STEEL PRO POWER 540-4 P/540-4 V			
		N. of units					
STEEL PRO POWER SYSTEM 675	655	1	1	-			
STEEL PRO POWER SYSTEM 810	786	1	-	1			
STEEL PRO POWER SYSTEM 945	917	-	1	1			
STEEL PRO POWER SYSTEM 1080	1048	-	-	2			
STEEL PRO POWER SYSTEM 1215	1179	1	1	1			
STEEL PRO POWER SYSTEM 1350	1310	1	-	2			

#### 2. SEALED COMBUSTION TRANSFORMATION KIT (TYPE C)

Description	Code
Ø50/80 mm air adapter	20145144
Air hose kit for fan/collector connection Ø160 mm	20145141
Air hose kit for fan/manifold connection Ø300 mm	20145137
Air manifold for Ø160 mm models – for models with 2 thermal modules	20145185
Air manifold for Ø160 mm models – for models with ¾ thermal modules	20145186
Air manifold for Ø300 mm models – for models with 2 thermal modules	20145187
Air manifold for Ø300 mm models – for models with ¾ thermal modules	20145189

#### MATCHING TABLE OF SEALED TRANSFORMATION KIT CODES IN RELATION TO THE UNIT MODEL

Description		Kit code/Quantity								
	20145144	20145141	20145137	20145185	20145186	20145187	20145189			
STEEL PRO POWER 114-2	2x <b>●</b>	2x <b>●</b>		1x ●						
STEEL PRO POWER 140-2	2x <b>●</b>	2x <b>●</b>		1x ●						
STEEL PRO POWER 180-2		2x•		1x ●						
STEEL PRO POWER 230-2		2x®		1x ●						
STEEL PRO POWER 270-2			2x•			1x ●				
STEEL PRO POWER 300-3		3x <b>●</b>			1x ●					
STEEL PRO POWER 345-3		3x <b>●</b>			1x ●					
STEEL PRO POWER 405-3			3x●				1x ●			
STEEL PRO POWER 460-4		4x ●			1x ●					
STEEL PRO POWER 540-4			4x ●				1x ●			
STEEL PRO POWER SYSTEM 675			5x ●			1x ●	1x ●			
STEEL PRO POWER SYSTEM 810			6x●			1x ●	1x ●			
STEEL PRO POWER SYSTEM 945			7x●				2x ●			
STEEL PRO POWER SYSTEM 1080			8x•				2x <b>●</b>			
STEEL PRO POWER SYSTEM 1215			9x●			1x ●	2x●			
STEEL PRO POWER SYSTEM 1350			10x●			1x ●	2x●			

#### 3. HYDRAULIC INTERCEPTION OF THERMAL MODULES

Description	Notes	Code
2-way valve kit for hydraulic interception kit	(1)	20145169

<sup>(1)</sup> To be ordered in number equal to the number of modules in the system.

#### 4. MANIFOLDS, SAFETY KITS AND HYDRAULIC ACCESSORIES

Description	Notes	Code
Junction kit for cascade (Fume Ø300 – Air Ø300 – Condensation Ø50)		20157593
Junction kit for cascade with spacer (150 mm)	(1)	20145237
Safety kit	(2)	20071190
Safety valve up to 460 kW (5.4 bar ØG.³/₄" F)		20023104
Safety valve up to 580 kW (5.4 bar ØG.1" F)		20023106
Fuel shut-off valve kit (VIC) - ØG.1"	(3)(4)	20009486
Fuel shut-off valve kit (VIC) - ØG.1" ½	(4)(5)	20009482
Fuel shut-off valve kit (VIC) - ØG.2"	(4)(6)	20009483
Fuel shut-off valve kit (VIC) - ØG.3"	(4)(7)	20061640
Flanged reduction kit 3"/2" (DN80/DN50)		20145184
Flanged 2" DN50 PN6/threaded ØG.2" adapter kit for VIC valve		20094187
Flanged 3" DN80 PN6/flanged ØG.3" DN80 PN16 adapter kit for VIC valve		20161191
2 "- 1" gas adapter for VIC valve		20147994
2 "- 1" ½ gas adapter for VIC valve		20147990
Adapter kit for VIC valve flanged from DN80 to threaded ØG.2 "		20146852
Flanged reduction kit 5"/3" (DN125/DN80)		20145183
3" closing plugs kit	(8)	20070903
5" closing plugs kit	(8)	20070907
Flange kit 3"		20082190
Flange kit 5"		20082191
Extension kit 3"	(9)(11)	20167872
Extension kit 5"	(10)(11)	20167873
Hydraulic flow manifold 3"		20145172
Hydraulic flow manifold 5"		20145177
Hydraulic return manifold 3"		20145181
Hydraulic return manifold 5"		20145182

- Availability of the material at our warehouse: 25 working days from the date of the order's validation. Includes connections H<sub>2</sub>0 5" Gas 3" Fumes Ø300 Condensation Ø50.

  It does not include a safety valve and VIC.

  Recommended up to a maximum power of 131 kW, calculated considering gas supply pressure = 20 mbar.

  Operating temperature at 97 ° C Capillary tube 5 m.

  Recommended up to maximum power of 230 kW, calculated considering gas supply pressure = 20 mbar.

  Recommended up to a maximum power of 580 kW, calculated considering gas supply pressure = 20 mbar.

  Recommended up to maximum power of 1310 kW, calculated considering gas supply pressure = 20 mbar.

  Kit to close the unused side. (D) (1) (2) (3) (4) (5) (6) (7) (8) (9)

- To be installed in case of remote primary / secondary circuit interface with or without technical cabinet up to 485 kW.
- (10) To be installed in case of remote primary / secondary circuit interface with or without technical cabinet up to 1310 kW. (11) On the delivery pipe there are specific sleeves for housing safety kit devices.

NOTE: to calculate the maximum permissible power of the VICs, with different pressure supply from 20 mbar, contact the pre-sales service.

#### 5. HYDRAULIC SEPARATORS/PLATE HEAT EXCHANGERS

Description	Notes	Code
3" hydraulic separator (up to 485 kW)		20145255
5" hydraulic separator (up to 1310 kW)		20145260
Left technical box with hydraulic separator (up to 485 kW)	(1)	20145252
Left technical box with hydraulic separator (up to 1310 kW)	(D)(1)	20145254
Right technical box with hydraulic separator (up to 485 kW)	(1)	20145247
Right technical box with hydraulic separator (up to 1310 kW)	(D)(1)	20145250
Connection kit for plate heat exchanger DN80/DN50		20146827
Connection kit for plate heat exchanger DN125/DN65		20146828
Connection kit for plate heat exchanger DN125/DN100		20146829
Left technical box for plate heat exchanger (up to 485 kW)		20146833
Left technical box for plate heat exchanger (up to 800 kW)	(D)	20146835
Left technical box for plate heat exchanger (up to 1310 kW)	(D)	20146836
Right technical box for plate heat exchanger (up to 485 kW)		20146830
Right technical box for plate heat exchanger (up to 800 kW)	(D)	20146831
Right technical box for plate heat exchanger (up to 1310 kW)	(D)	20146832
Right/left technical box or 3" extension kit (270/485 kW)	(D)(2)(3)	20158562
Right/left technical box or 5" extension kit (580/1310 kW)	(D)(2)(3)	20158564

- Availability of the material at our warehouse: 25 working days from the date of the order's validation. Contain the hydraulic separator within them.

  Single or twin type pump.

  They do not contain the circulator inside them.

#### MATCHING TABLE OF SAFETY DEVICES IN RELATION TO THE UNIT MODEL

Description	Safety kit		fety Ives					VIC valve	s			
			MANDAT	TORY ACCE	SSORIES			ACCES	SORIES TO	BE SELEC		DING TO
		Jar			Ę.	5	- m	With	out techn	ical box	With tech	nnical box
	Safety kit	Safety valve up to 460 kW (5.4 bar ØG.¾" F)	Safety valve up to 580 kW (5.4 bar ØG.1" F)	Fuel shut-off valve kit (VIC) - ØG.1"	Fuel shut-off valve kit (VIC) - ØG.1" ½	Fuel shut-off valve kit (VIC) - ØG.2"	Fuel shut-off valve kit (VIC) - ØG.3"	3"/2" flanged reduction kit (DN80/DN50)	Flanged 2" DN50 PN6/ threaded ØG.2" adapter kit	Flanged 3" DN80 PN6/flanged ØG.3" DN80 PN16 adapter kit	3"/2" flanged reduction kit (DN80/DN50)	Flanged DN80/threaded ØG.2" adapter kit
	20071190	20023104	20023106	20009486	20009482	20009483	20061640	20145184	20094187	20161191	20145184	20146852
STEEL PRO POWER 114-2	1x ●	1x ●		1x ●					1x ●			
STEEL PRO POWER 140-2	1x ●	1x ●			1x ●				1x ●			
STEEL PRO POWER 180-2	1x ●	1x •			1x ●				1x ●			
STEEL PRO POWER 230-2	1x ●	1x •			1x ●				1x ●			
STEEL PRO POWER 270-2	1x ●	1x ●				1x ●		1x ●	1x ●		1x ●	
STEEL PRO POWER 300-3	1x ●	1x ●				1x ●			1x ●			
STEEL PRO POWER 345-3	1x ●	1x ●				1x ●			1x ●			
STEEL PRO POWER 405-3	1x ●	1x ●				1x ●		1x ●	1x ●		1x ●	
STEEL PRO POWER 460-4	1x ●	1x ●				1x ●			1x ●			
STEEL PRO POWER 540-4	1x ●		1x ●			1x ●		1x ●	1x ●			1x ●
STEEL PRO POWER SYSTEM 675	1x ●	2x ●					1x ●			1x ●		
STEEL PRO POWER SYSTEM 810	1x ●	2x ●					1x ●			1x ●		
STEEL PRO POWER SYSTEM 945	1x ●	2x ●					1x ●			1x ●		
STEEL PRO POWER SYSTEM 1080	1x ●	3x ●					1x ●			1x ●		
STEEL PRO POWER SYSTEM 1215	1x ●	3x ●					1x ●			1x ●		
STEEL PRO POWER SYSTEM 1350	1x ●	3x ●					1x ●			1x •		

#### MATCHING TABLE OF FLANGE, HYDRAULIC REDUCTION CODES IN RELATION TO THE UNIT MODEL

Description	Flanged reduction kit 5"/3" (DN125/DN80)	3" closing plugs kit	5" closing plugs kit	3" through-flanges kit	5" through-flanges kit
	20145183	20070903	20070907	20082190	20082191
STEEL PRO POWER 114-2		1x ●		2x <b>●</b>	
STEEL PRO POWER 140-2		1x ●		2x●	
STEEL PRO POWER 180-2		1x ●		2x <b>●</b>	
STEEL PRO POWER 230-2		1x ●		2x <b>●</b>	
STEEL PRO POWER 270-2	2x <b>●(*)</b>		1x ●	2x•	
STEEL PRO POWER 300-3		1x ●		2x•	
STEEL PRO POWER 345-3		1x ●		2x <b>●</b>	
STEEL PRO POWER 405-3	2x <b>●(*)</b>		1x ●	2x●	
STEEL PRO POWER 460-4		1x ●		2x <b>●</b>	
STEEL PRO POWER 540-4			1x ●		2x <b>●</b>
STEEL PRO POWER SYSTEM 675			1x ●		2x•
STEEL PRO POWER SYSTEM 810			1x ●		2x•
STEEL PRO POWER SYSTEM 945			1x ●		2x •
STEEL PRO POWER SYSTEM 1080			1x ●		2x•
STEEL PRO POWER SYSTEM 1215			1x ●		2x•
STEEL PRO POWER SYSTEM 1350			1x ●		2x <b>●</b>

<sup>(\*)</sup> Accessories necessary for the hydraulic connection to technical box.

#### **EXTENSION KIT SELECTION TABLE**

Description	With/without	technical box		With tech	chnical box					
	Extension kit 3"	Extension kit 5"	Right/left technical box or 3" extension kit	Right/left technical box or 5" extension kit	2 "- 1" 1/2 gas adapter for VIC valve	2 "- 1" gas adapter for VIC valve				
	20167872	20167873	20158562	20158564	20147990	20147994				
STEEL PRO POWER 114-2	•		•		•					
STEEL PRO POWER 140-2	•		•			•				
STEEL PRO POWER 180-2	•		•			•				
STEEL PRO POWER 230-2	•		•			•				
STEEL PRO POWER 270-2	•		•							
STEEL PRO POWER 300-3	•		•							
STEEL PRO POWER 345-3	•		•							
STEEL PRO POWER 405-3	•		•							
STEEL PRO POWER 460-4	•		•							
STEEL PRO POWER 540-4		•		•						
STEEL PRO POWER SYSTEM 675		•		•						
STEEL PRO POWER SYSTEM 810		•		•						
STEEL PRO POWER SYSTEM 945		•		•						
STEEL PRO POWER SYSTEM 1080		•		•						
STEEL PRO POWER SYSTEM 1215		•		•						
STEEL PRO POWER SYSTEM 1350		•		•						

TECHNICAL CABINET SELECTION TABLE FOR EXTENSION KIT HOUSING

Description	2 "- 1" gas adapter for VIC valve	2 "- 1" ½ gas adapter for VIC valve	Right/left technical box or 3" extension kit	Right/left technical box or 5" extension kit
	20147994	20147990	20158562	20158564
STEEL PRO POWER 114-2	•		•	
STEEL PRO POWER 140-2		•	•	
STEEL PRO POWER 180-2		•	•	
STEEL PRO POWER 230-2		•	•	
STEEL PRO POWER 270-2			•	
STEEL PRO POWER 300-3			•	
STEEL PRO POWER 345-3			•	
STEEL PRO POWER 405-3			•	
STEEL PRO POWER 460-4			•	
STEEL PRO POWER 540-4				•
STEEL PRO POWER SYSTEM 675				•
STEEL PRO POWER SYSTEM 810				•
STEEL PRO POWER SYSTEM 945				•
STEEL PRO POWER SYSTEM 1080				•
STEEL PRO POWER SYSTEM 1215				•
STEEL PRO POWER SYSTEM 1350				•

#### MATCHING TABLE OF HYDRAULIC SEPARATOR AND ACCESSORIES IN RELATION TO THE UNIT MODEL

Description		Wi	thout te	chnical l	оох		With technical box					
			Left/rig instal	tht side			Left instal		Right instal	t side lation		
	3" connections up to 485 kW	5" connections up to 1310 kW	3" hydraulic flow manifold	5" hydraulic flow manifold	3" hydraulic return manifold	5" hydraulic return manifold	Left technical box for hydraulic separator up to 485 kW	Left technical box for hydraulic separator up to 1310 kW	Right technical box for hydraulic separator up to 485 kW	Right technical box for hydraulic separator up to 1310 kW		
	20145255	20145260	20145172	20145177	20145181	20145182	20145252	20145254	20145247	20145250		
STEEL PRO POWER 114-2	•		•		•		•		•			
STEEL PRO POWER 140-2	•		•		•		•		•			
STEEL PRO POWER 180-2	•		•		•		•		•			
STEEL PRO POWER 230-2	•		•		•		•		•			
STEEL PRO POWER 270-2	•		•		•		•		•			
STEEL PRO POWER 300-3	•		•		•		•		•			
STEEL PRO POWER 345-3	•		•		•		•		•			
STEEL PRO POWER 405-3	•		•		•		•		•			
STEEL PRO POWER 460-4	•		•		•		•		•			
STEEL PRO POWER 540-4		•		•		•		•		•		
STEEL PRO POWER SYSTEM 675		•		•		•		•		•		
STEEL PRO POWER SYSTEM 810		•		•		•		•		•		
STEEL PRO POWER SYSTEM 945		•		•		•		•		•		
STEEL PRO POWER SYSTEM 1080		•		•		•		•		•		
STEEL PRO POWER SYSTEM 1215		•		•		•		•		•		
STEEL PRO POWER SYSTEM 1350		•		•		•		•		•		

## PLATE HEAT EXCHANGER COMBINATIONS FOR FOR BOILER OPERATION WITH PRIMARY ( $\Delta T$ = 10 °C average between primary and secondary)

Description							Plate h ∆Ti	eat exc ml = 10		r					
							80°C		70°C						
	SP 35-DN50 25 (25A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 39 (39A) N	SP 35-DN50 45 (45A) N	SP 35-DN50 49 (49A) N	SP 35-DN50 57 (57A) N	SP 35-DN50 65 (65A) N	SP 35-DN50 75 (75A) N	SP 40-DN65 59 (59A) N	SP 40-DN65 75 (75A) N	SP 40-DN65 93 (93A) N	SP 60-DN100 51 (51A) N	SP 60-DN100 59 (59A) N	SP 60-DN100 65 (65A) N	SP 60-DN100 73 (73A) N
	20140410	20140411	20140413	20140414	20140415	20140416	20140418	20140419	20014231	20140426	20140427	20140435	20140437	20140438	20140439
STEEL PRO POWER 114-2	•														
STEEL PRO POWER 140-2	•														
STEEL PRO POWER 180-2		•													
STEEL PRO POWER 230-2			•												
STEEL PRO POWER 270-2				•											
STEEL PRO POWER 300-3					•										
STEEL PRO POWER 345-3						•									
STEEL PRO POWER 405-3							•								
STEEL PRO POWER 460-4								•							
STEEL PRO POWER 540-4									•						
STEEL PRO POWER SYSTEM 675										•					
STEEL PRO POWER SYSTEM 810											•				
STEEL PRO POWER SYSTEM 945												•			
STEEL PRO POWER SYSTEM 1080													•		
STEEL PRO POWER SYSTEM 1215														•	
STEEL PRO POWER SYSTEM 1350															•

NOTE: once the exchanger has been selected it is necessary to associate the accessories shown in the "Hydraulic accessories selection table for heat exchanger

installation".

## PLATE HEAT EXCHANGER COMBINATIONS FOR FOR BOILER OPERATION WITH PRIMARY

( $\Delta T = 7.2$  °C AVERAGE BETWEEN PRIMARY AND SECONDARY)

Description								eat exc ml = 7.2	changei 2°C	-					
							85°C		75°C						
	SP 35-DN50 35 (35A) N	SP 35-DN50 39 (39A) N	SP 35-DN50 49 (49A) N	SP 35-DN50 65 (65A) N	SP 35-DN50 75 (75A) N	SP 35-DN50 81 (81A) N	SP 35-DN50 93 (93A) N	SP 35-DN50 105 (105A) N	SP 35-DN50 121 (121A) N	SP 40-DN65 99 (99A) N	SP 40-DN65 121 (121A) N	SP 40-DN65 145 (145A) N	SP 60-DN100 73 (73A) N	SP 60-DN100 85 (85A) N	SP 60-DN100 97 (97A) N
	20140412	20140413	20140415	20140418	20140419	20140420	20140421	20140423	20140424	20140428	20140432	20140433	20140439	20140440	20083249
STEEL PRO POWER 114-2	•														
STEEL PRO POWER 140-2		•													
STEEL PRO POWER 180-2			•												
STEEL PRO POWER 230-2				•											
STEEL PRO POWER 270-2					•										
STEEL PRO POWER 300-3						•									
STEEL PRO POWER 345-3							•								
STEEL PRO POWER 405-3								•							
STEEL PRO POWER 460-4									•						
STEEL PRO POWER 540-4										•					
STEEL PRO POWER SYSTEM 675											•				
STEEL PRO POWER SYSTEM 810												•			
STEEL PRO POWER SYSTEM 945													•		
STEEL PRO POWER SYSTEM 1080														•	
STEEL PRO POWER SYSTEM 1215															•
STEEL PRO POWER SYSTEM 1350															•

NOTE: once the exchanger has been selected, it is necessary to associate the accessories shown in the "Hydraulic accessories selection table for heat exchanger

#### MATCHING TABLE OF HYDRAULIC ACCESSORIES FOR HEAT EXCHANGER INSTALLATION IN RELATION TO THE UNIT MODEL

Description	Withou	ıt techni	cal box			With tech	nical bo	<	
				Left si	de insta	llation	Right	ide insta	allation
	Connection kit for plate heat exchanger DN80 (\$\text{(\$\pi\$3")/DN50}	Connection kit for plate heat exchanger DN125 (Ø5")/DN65	Connection kit for plate heat exchanger DN125 (Ø5")/DN100	Left technical box for plate heat exchanger up to 485 kW	Left technical box for plate heat exchanger up to 800 kW	Left technical box for plate heat exchanger up to 1310 kW	Right technical box for plate heat exchanger up to 485 kW	Right technical box for plate heat exchanger up to 800 kW	Right technical box for plate heat exchanger up to 1310 kW
	20146827	20146828	20146829	20146833	20146835	20146836	20146830	20146831	20146832
STEEL PRO POWER 114-2	•			•			•		
STEEL PRO POWER 140-2	•			•			•		
STEEL PRO POWER 180-2	•			•			•		
STEEL PRO POWER 230-2	•			•			•		
STEEL PRO POWER 270-2	•			•			•		
STEEL PRO POWER 300-3	•			•			•		
STEEL PRO POWER 345-3	•			•			•		
STEEL PRO POWER 405-3	•			•			•		
STEEL PRO POWER 460-4	•			•			•		
STEEL PRO POWER 540-4		•			•			•	
STEEL PRO POWER SYSTEM 675		•			•			•	
STEEL PRO POWER SYSTEM 810		•			•			•	
STEEL PRO POWER SYSTEM 945			•			•			•
STEEL PRO POWER SYSTEM 1080			•			•			•
STEEL PRO POWER SYSTEM 1215			•			•			•
STEEL PRO POWER SYSTEM 1350			•			•			•

#### **6. AUXILIARY ACCESSORIES FOR TECHNICAL BOX**

Description	Notes	Code
Air/flue manifold technical box Ø160 mm L = 900 mm	(1)	20147030
Air/flue manifold technical box Ø300 mm L = 900 mm	(1)	20147028
Air/flue manifold technical box Ø160 mm L = 1800 mm	(1)	20157595
Air/flue manifold technical box Ø300 mm L = 1800 mm	(1)	20157598
"S" flue manifold technical box Ø300 mm L = 1800 mm (SP60-DN100)	(1)	20157599
Bands for crane lifting handling		20146844
Handling wheels	(2)	20146845
Internal light emergency and service kit		20146846

To be used as indicated in the tables below. To be used during installation.

#### **OPEN CHAMBER BOILER CONFIGURATION**

Selection table	Exhaust flue side	Technical box side
Table A	Right	Right
Table A	Left	Left
	Left	Right
Collectors not necessary	Right	Left

#### **ROOM SEALED BOILER CONFIGURATION**

Selection table	Exhaust flue side	Air suction side	Technical box side	
	Right	Right	Right	
able A	Left	Left	Left	
	Left	Right	Right	
akla D	Left	Right	Left	
able B	Right	Left	Right	
	Right	Left	Left	
Callactors not nacessary	Left	Left	Right	
Collectors not necessary	Right	Right	Left	

#### **LEFT SIDE CONFIGURATION**

Technical box for hydraulic separator



Technical box for plate heat exchanger

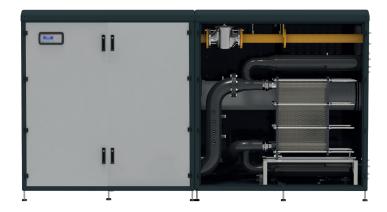


#### RIGHT SIDE CONFIGURATION

Technical box for hydraulic separator



Technical box for plate heat exchanger



#### TABLE A

Code and number of the air/fume manifold		nical box (only "V"			fo	Techni r hydraul		itor		Technical box for heat exchanger				
Chamber type	Open chamber Room sealed		sealed	Open chamber Room sealed			Open chamber			Ro	om seal	ed		
	20147030	20147028	20147030	20147028	20147030	20147028	20147030	20147028	20157595	20157598	20157599	20157595	20157598	20157599
STEEL PRO POWER 114-2	1x ●		2x•		1x •		2x •		1x •			2x •		
STEEL PRO POWER 140-2	1x ●		2x•		1x •		2x •		1x •			2x •		
STEEL PRO POWER 180-2	1x ●		2x●		1x ●		2x●		1x ●			2x●		
STEEL PRO POWER 230-2	1x ●		2x•		1x ●		2x •		1x ●			2x •		
STEEL PRO POWER 270-2 (*)	1x ●				1x ●				1x ●					
STEEL PRO POWER 300-3	1x ●		2x●		1x ●		2x●		1x ●			2x●		
STEEL PRO POWER 345-3	1x ●		2x●		1x ●		2x●		1x ●			2x ●		
STEEL PRO POWER 405-3 (*)	1x ●				1x ●				1x ●					
STEEL PRO POWER 460-4	1x ●		2x●		1x ●		2x●		1x ●			2x●		
STEEL PRO POWER 540-4		1x ●		2x●		1x ●		2x●		1x ●			2x ●	
STEEL PRO POWER SYSTEM 675		1x •		2x●		1x ●		2x•		1x ●			2x ●	
STEEL PRO POWER SYSTEM 810		1x •		2x●		1x •		2x●		1x •			2x●	
STEEL PRO POWER SYSTEM 945		1x ●		2x●		1x ●		2x●			1x ●			(**)
STEEL PRO POWER SYSTEM 1080		1x •		2x●		1x ●		2x●			1x ●			(**)
STEEL PRO POWER SYSTEM 1215		1x •		2x●		1x •		2x●			1x ●			(**)
STEEL PRO POWER SYSTEM 1350		1x ●		2x●		1x ●		2x●			1x ●			(**)

NOTE: to be used only if the fume outlet side is the same as the hydraulic outlet side.

(\*) Flue discharge/ air intake on the technical box side not available in case of sealed chamber, the air intake is mandatory on the boiler side.

(\*\*) In case of a technical box with plate heat exchanger and sealed installation, the air intake must take place on the boiler side and not on the technical box side.

In this case also for the pump technical box, if present, is necessary to adopt only one code 20147028.

#### TABLE B

Code and number of the air/fume manifold		nical box (only "V"			Tech	nical box sepa		raulic		Technic	al box fo	x for heat exchanger				
Chamber type	0pen c	hamber	Room	sealed	0pen c	hamber	Room	sealed	0р	en cham	ber	Ro	oom sea	led		
	20147030	20147028	20147030	20147028	20147030	20147028	20147030	20147028	20157595	20157598	20157599	20157595	20157598	20157599		
STEEL PRO POWER 114-2	1x •		1x •		1x •		1x ●		1x ●			1x ●				
STEEL PRO POWER 140-2	1x •		1x •		1x •		1x •		1x •			1x ●				
STEEL PRO POWER 180-2	1x •		1x ●		1x ●		1x ●		1x •			1x ●				
STEEL PRO POWER 230-2	1x •		1x •		1x ●		1x ●		1x ●			1x ●				
STEEL PRO POWER 270-2	1x ●		1x ●		1x ●		1x ●		1x ●			1x ●				
STEEL PRO POWER 300-3	1x •		1x ●		1x ●		1x ●		1x •			1x ●				
STEEL PRO POWER 345-3	1x ●		1x ●		1x ●		1x ●		1x ●			1x ●				
STEEL PRO POWER 405-3	1x ●		1x ●		1x ●		1x ●		1x ●			1x ●				
STEEL PRO POWER 460-4	1x ●		1x ●		1x ●		1x ●		1x ●			1x ●				
STEEL PRO POWER 540-4		1x ●		1x ●		1x ●		1x •		1x ●			1x ●			
STEEL PRO POWER SYSTEM 675		1x ●		1x ●		1x ●		1x •		1x ●			1x ●			
STEEL PRO POWER SYSTEM 810		1x •		1x ●		1x •		1x •		1x ●			1x ●			
STEEL PRO POWER SYSTEM 945		1x •		1x ●		1x •		1x •			1x ●			1x ●		
STEEL PRO POWER SYSTEM 1080		1x ●		1x ●		1x •		1x •			1x ●			1x ●		
STEEL PRO POWER SYSTEM 1215		1x •		1x •		1x •		1x •			1x ●			1x •		
STEEL PRO POWER SYSTEM 1350		1x •		1x ●		1x •		1x •			1x ●			1x ●		

TERMINAL UNITS

#### 7. AUXILIARY ACCESSORIES FOR OUTDOOR INSTALLATION

Description	Code
Kit IPX5D upper coverage for outdoor installation L = 900 mm	20146841
Kit IPX5D upper coverage for outdoor installation L = 1800 mm	20146842
Kit IPX5D display coverage	20146843
Outdoor insulation kit for 3" blind flanges	20146953
Outdoor insulation kit for 5" blind flanges	20146954

NOTE: to be used only in the case of outdoor installation.

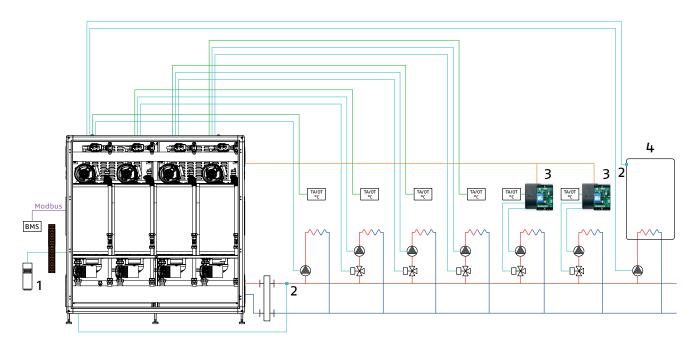
#### MATCHING TABLE OF BOX + DISPLAY COVERS SELECTION TABLE FOR OUTDOOR INSTALLATION

Description	Con		on with t Iraulic se				figuration for plate			
	2014 68 41	20146842	20146843	20146953	20146954	20146841	20146842	20146843	20146953	20146954
STEEL PRO POWER 114-2 P	2x ●		1x ●	1x •		1x •	1x ●	1x ●	1x ●	
STEEL PRO POWER 140-2 P	2x ●		1x ●	1x •		1x ●	1x •	1x ●	1x •	
STEEL PRO POWER 180-2 P	2x ●		1x ●	1x •		1x ●	1x ●	1x ●	1x ●	
STEEL PRO POWER 230-2 P	2x ●		1x ●	1x •		1x ●	1x ●	1x ●	1x ●	
STEEL PRO POWER 270-2 P	2x ●		1x ●		1x ●	1x ●	1x ●	1x ●		1x ●
STEEL PRO POWER 300-3 P	1x ●	1x ●	1x ●	1x •			2x ●	1x ●	1x ●	
STEEL PRO POWER 345-3 P	1x ●	1x ●	1x ●	1x •			2x ●	1x ●	1x ●	
STEEL PRO POWER 405-3 P	1x ●	1x ●	1x ●		1x ●		2x •	1x ●		1x ●
STEEL PRO POWER 460-4 P	1x ●	1x ●	1x ●	1x •			2x •	1x ●	1x ●	
STEEL PRO POWER 540-4 P	1x ●	1x ●	1x ●		1x •		2x •	1x ●		1x •
STEEL PRO POWER SYSTEM 675	2x ●	1x ●	2x •		1x ●	1x ●	2x •	2x •		1x ●
STEEL PRO POWER SYSTEM 810	2x ●	1x ●	2x •		1x ●	1x ●	2x •	2x •		1x ●
STEEL PRO POWER SYSTEM 945	1x ●	2x •	2x •		1x ●		3x ●	2x •		1x ●
STEEL PRO POWER SYSTEM 1080	1x ●	2x •	2x •		1x •		3x ●	2x •		1x ●
STEEL PRO POWER SYSTEM 1215	2x ●	2x ●	3x ●		1x ●	1x ●	3x ●	3x ●		1x ●
STEEL PRO POWER SYSTEM 1350	2x ●	2x •	3x ●		1x ●	1x •	3x ●	3x ●		1x •

#### 8. SECONDARY CIRCUIT MANAGEMENT ACCESSORIES

Description	Notes	Code
External probe		20132778
Immersion probe	(1)	1220599
Electronic management kit for single direct or additional mixed zone (max 16)		20130811

(1) Utilized for the management of secondary/tank circuit.



#### Key to layout

- 1. External probe code 20132778
- 2. Immersion probe code 1220599
- 3. Electronic kit for managing additional direct or mixed zone (max 16) code 20130811
- 4. DHW cylinder

#### 9. TREATMENT SYSTEMS FOR CONDENSATE NEUTRALIZATION

Description	Notes	Code
Condensate neutralizer N2 (up to 450 kW)		4031810
Condensate neutralizer N3 (450-1500 kW)	(D)	4031812
Condensate neutralizer HN2 (up to 270 kW)	(1)	4031811
Condensate neutralizer HN3 (270-750 kW)	(D)(1)	4031813

Availability of the material at our warehouse: 30 working days from the date of the order's validation. Equipped with condensate pump.

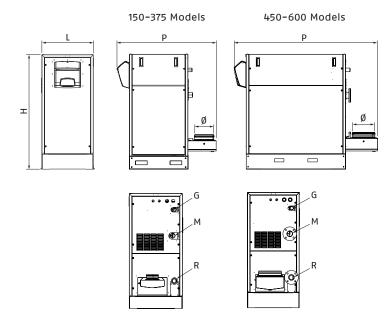
Modular condensing floor-standing boilers for indoor installation

### **Alu Pro Power**





- In conformity with Directive 2009/125/EC
- Modular floor-standing condensing boilers, featuring a heat-exchanger made of a special aluminium and silicon alloy with a wide modulation range (up to 1:40) and extremely reduced dimensions



Description	H mm	L mm	P mm	ø mm	M/R Flow/Return connection	G Gas connection	Weight (empty) kg
ALU 115 PRO POWER	1534,5	690	1264	150	Ø 2" G	Ø 1" ½ G	240
ALU 150 PRO POWER	1534,5	690	1264	150	Ø 2" G	Ø 1" ½ G	240
ALU 225 PRO POWER	1534,5	690	1264	200	Ø 2" G	Ø 1" ½ G	310
ALU 300 PRO POWER	1534,5	690	1654	250	Ø 2" G	Ø 1" ½ G	395
ALU 349 PRO POWER	1534,5	690	1654	250	Ø 2" G	Ø 1" ½ G	470
ALU 375 PRO POWER	1534,5	690	1654	250	Ø 2" G	Ø 1" ½ G	470
ALU 450 PRO POWER	1534,5	690	2103	300	Flange PN10 DN65	Ø 1" ½ G	565
ALU 525 PRO POWER	1534,5	690	2103	300	Flange PN10 DN65	Ø 1" ½ G	640
ALU 600 PRO POWER	1534,5	690	2298	300	Flange PN10 DN65	Ø 1" ½ G	735

The heat-generator is composed by a cascade of independent 75-kW thermal modules, managed in cascade sequence, ensuring the best adaptation to the heat request and maximum reliability and peace of mind.

Continuous pre-mix burner in stainless steel ensures efficient, noiseless and high-efficiency combustion with low polluting emissions allowing to achieve Class 5 NOx (according to UNI EN 297). It is provided with thermoregulation suitable for the control of a modulating pump for the primary ring circuit.

The RIELLOtech regulation can control up to 8 boilers in a cascade application.

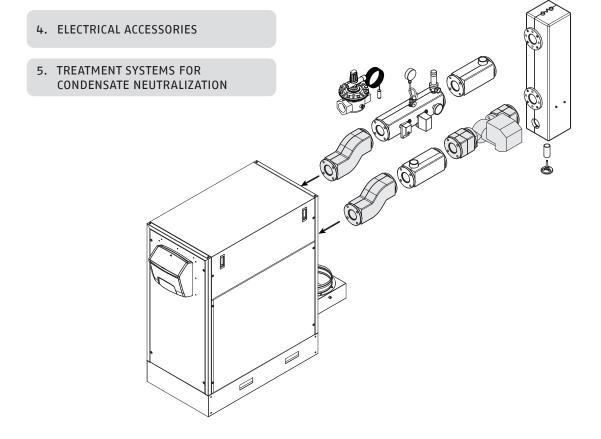
- Type of Appliance B23, B23P
- Low head losses
- Wide range of accessories for an easy, fast, flexible and complete installation
- Compact dimensions, reduced weight and the basement make the transport and the placement easier
- Maximum operating pressure: 6 bar.

#### **TECHNICAL DATA**

Description		Power - kW			Efficiency - %		Code
	Output useful 80°/60° max	0utput useful 50°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (50°/30°)	Useful 30% Pn (50°/30°)	
ALU 115 PRO POWER	112.1	119.6	15 - 115	97.5	104.0	108.0	20021781
ALU 150 PRO POWER	146.3	156.0	15 - 150	97.5	104.0	108.0	20020843
ALU 225 PRO POWER	219.4	234.0	15 - 225	97.8	104.0	108.0	20020844
ALU 300 PRO POWER	293.0	312.0	15 - 300	98.0	104.0	108.0	20020845
ALU 349 PRO POWER	340.3	363.0	15 - 349	98.3	104.0	108.0	20029287
ALU 375 PRO POWER	365.6	390.0	15 - 375	98.3	104.0	108.0	20020846
ALU 450 PRO POWER	438.8	468.0	15 - 450	98.3	104.0	108.0	20020847
ALU 525 PRO POWER	511.9	546.0	15 - 525	98.3	104.0	108.0	20020848
ALU 600 PRO POWER	585.0	624.0	15 - 600	98.3	104.0	108.0	20020849

#### SYSTEM CONFIGURATION GUIDE AND ACCESSORIES SELECTION

- 1. BOILER CONFIGURATION
- 2. MANIFOLDS, SAFETY KITS AND HYDRAULIC ACCESSORIES
- 3. HYDRAULIC SEPARATORS/PLATE HEAT EXCHANGERS



WATER-HEATERS

#### 1. BOILER CONFIGURATION

Choice of the type of installation:

A - Stand alone

B - Cascade

**RIELLO** 

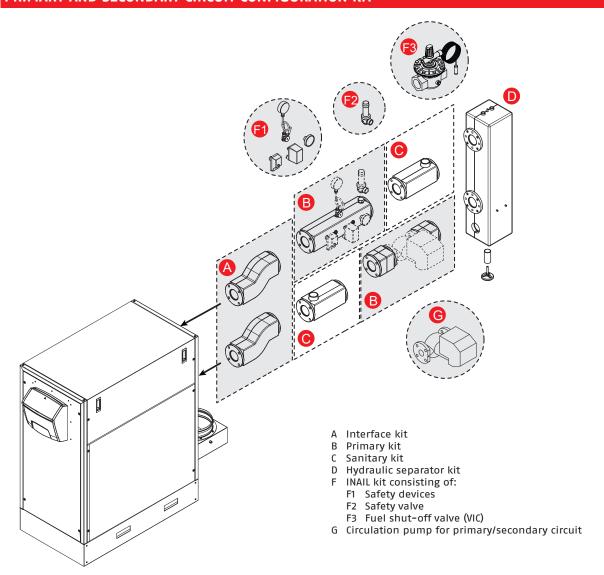
#### A - STAND ALONE HEAT INPUT

Description	ALU 115 PRO	ALU 150 PRO	ALU 225 PRO	ALU 300 PRO	ALU 349 PRO	ALU 375 PRO	ALU 450 PRO	ALU 525 PRO	ALU 600 PRO
	POWER								
Rated heat input kW	115.0	150.0	225.0	300.0	349.0	375.0	450.0	525.0	600.0

#### **B - CASCADE SYSTEM HEAT INPUT**

Description	ALU 115 PRO POWER	ALU 150 PRO POWER	ALU 225 PRO POWER	ALU 300 PRO POWER	ALU 349 PRO POWER	ALU 375 PRO POWER	ALU 450 PRO POWER	ALU 525 PRO POWER	ALU 600 PRO POWER
Boiler heat output kW	115	150	225	300	349	375	450	525	600
No. boilers				7	OTAL POWE	R			
2	230	300	450	600	698	750	900	1050	1200
3	345	450	675	900	1047	1125	1350	1575	1800
4	460	600	900	1200	1396	1500	1800	2100	2400
5	575	750	1125	1500	1745	1875	2250	2625	3000
6	690	900	1350	1800	2094	2250	2700	3150	3600
7	805	1050	1575	2100	2443	2625	3150	3675	4200
8	920	1200	1800	2400	2792	3000	3600	4200	4800

#### PRIMARY AND SECONDARY CIRCUIT CONFIGURATION KIT



#### 2. MANIFOLDS, SAFETY KITS AND HYDRAULIC ACCESSORIES

Description	Notes	Code
Interface primary circuit kit up to 375 kW	(1)	20021753
Interface primary circuit kit up to 600 kW	(1)	20021752
Primary kit up to 300 kW	(2)	20021751
Primary kit up to 600 kW	(2)	20021750
Safety kit	(3)	4030091
Safety valve up to 460 kW (5.4 bar ØG.¾" F)	(4)	20023104
Safety valve up to 580 kW (5.4 bar ØG.1" F)	(4)	20023106
Fuel shut-off valve kit (VIC) - ØG.1"	(5)(9)	20009486
Fuel shut-off valve kit (VIC) - ØG.1" ½	(5)(10)	20009482
Fuel shut-off valve kit (VIC) - ØG.2"	(5)(11)	20009483
Fuel shut-off valve kit (VIC) - ØG.3"	(5)(12)	20061640
Domestic water connection kit	(6)	20022521
Primary circuit pump MAGNA3 40–120 F	(8)	20183650
Primary circuit pump MAGNA3 65-120 F	(8)	20183652

Refer to the paragraph "PRIMARY AND SECONDARY CIRCUIT CONFIGURATION KIT", specifically:

- Accessory type A. Accessory type B. (1) (2) (3) (4) (5) (6) (8) (9) (10)
- Accessory type F1. To be completed with safety valve (F2) and VIC fuel shut-off valve (F3).
- Accessory type F2.

  Accessory type F3. Tripping temperature at 97 °C Capillary length 5 m.
- Accessory type C. Accessory type G.
- Recommended up to maximum power of 131 kW, calculated considering gas supply pressure = 20 mbar.

  Recommended up to a maximum power of 230 kW, calculated considering gas supply pressure = 20 mbar.
- Recommended up to a maximum power of 580 kW, calculated considering gas supply pressure = 20 mbar. Recommended up to maximum power of 1310 kW, calculated considering gas supply pressure = 20 mbar.

#### 3. HYDRAULIC SEPARATORS/PLATE HEAT EXCHANGERS

Description	Notes	Code
Hydraulic separator (up to 300 kW)	(1)	20009385
Hydraulic separator (up to 600 kW)	(1)	20009431
SP 20-DN32 49 (49A) N	(2)	20014240
SP 35-DN50 25 (25A) N	(2)	20140410
SP 35-DN50 31 (31A) N	(2)	20140411
SP 35-DN50 35 (35A) N	(2)	20140412
SP 35-DN50 39 (39A) N	(2)	20140413
SP 35-DN50 45 (45A) N	(2)	20140414
SP 35-DN50 49 (49A) N	(2)	20140415
SP 35-DN50 57 (57A) N	(2)	20140416
SP 35-DN50 65 (65A) N	(2)	20140418
SP 35-DN50 75 (75A) N	(2)	20140419
SP 35-DN50 81 (81A) N	(2)	20140420
SP 35-DN50 93 (93A) N	(2)	20140421
SP 35-DN50 105 (105A) N	(2)	20140423
SP 35-DN50 121 (121A) N	(2)	20140424
SP 40-DN65 59 (59A) N	(2)	20014231
SP 40-DN65 75 (75A) N	(2)	20140426
SP 40-DN65 93 (93A) N	(2)	20140427
SP 40-DN65 99 (99A) N	(2)	20140428
SP 40-DN65 111 (111A) N	(2)	20140429
SP 40-DN65 121 (121A) N	(2)	20140432
SP 40-DN65 145 (145A) N	(2)	20140433
SP 60-DN100 73 (73A) N	(2)	20140439
SP 60-DN100 85 (85A) N	(2)	20140440

Refer to the paragraph "PRIMARY AND SECONDARY CIRCUIT CONFIGURATION KIT", specifically:

Accessory type D.
Plate heat exchangers for physical separation of primary and secondary circuits. To be used as an alternative to the hydraulic separator.

TERMINAL UNITS

## MATCHING TABLE FOR PRIMARY CIRCUIT MANAGMENT (A-B-C)

Description		e primary uit kit	Prima	ary kit	Primary ci	rcuit pumps	DHW connection kit
			MANDATORY	ACCESSORI	ES		OPTIONAL
	Interface primary circuit kit up to 375 kW	Interface primary circuit kit up to 600 kW	Primary kit up to 300 kW	Primary kit up to 600 kW	Primary circuit pump MAGNA3 40-120 F	Primary circuit pump MAGNA3 65-120 F	Domestic water connection kit
	20021753	20021752	20021751	20021750	20183650	20183652	20022521
ALU 115 PRO POWER	1x ●		1x ●		1x ●		1x ●
ALU 150 PRO POWER	1x ●		1x ●		1x ●		1x ●
ALU 225 PRO POWER	1x ●		1x ●		1x ●		1x ●
ALU 300 PRO POWER	1x ●		1x ●		1x ●		1x ●
ALU 349 PRO POWER	1x ●			1x ●		1x ●	1x ●
ALU 375 PRO POWER	1x ●			1x ●		1x ●	1x ●
ALU 450 PRO POWER		1x ●		1x ●		1x ●	1x ●
ALU 525 PRO POWER		1x ●		1x ●		1x ●	1x ●
ALU 600 PRO POWER		1x ●		1x ●		1x ●	1x ●

#### MATCHING TABLE OF SAFETY DEVICES (F)

Description	Safety kit	Safety	valves		Fuel shut	off valve	
	Safety kit	Safety valve up to 460 kW (5.4 bar ØG.3/4" F)	Safety valve up to 580 kW (5.4 bar ØG.1" F)	Fuel shut-off valve kit (VIC) – ØG.1"	Fuel shut-off valve kit (VIC) – ØG.1" 1/2	Fuel shut-off valve kit (VIC) – ØG.2"	Fuel shut-off valve kit (VIC) – ØG.3"
	4030091	20023104	20023106	20009486	20009482	20009483	20061640
ALU 115 PRO POWER	1x ●	1x ●		1x ●			
ALU 150 PRO POWER	1x ●	1x ●			1x ●		
ALU 225 PRO POWER	1x ●	1x ●			1x ●		
ALU 300 PRO POWER	1x ●	1x ●				1x ●	
ALU 349 PRO POWER	1x ●	1x ●				1x ●	
ALU 375 PRO POWER	1x ●	1x ●				1x ●	
ALU 450 PRO POWER	1x ●	1x ●				1x ●	
ALU 525 PRO POWER	1x ●		1x ●			1x ●	
ALU 600 PRO POWER	1x ●	2x ●					1x ●

#### MATCHING TABLE OF HYDRAULIC SEPARATOR (D)

Description	Hydraulic	separators
	Hydraulic separator (up to 300 kW)	Hydraulic separator (up to 600 kW) kW
	20009385	20009431
ALU 115 PRO POWER	1x ●	
ALU 150 PRO POWER	1x ●	
ALU 225 PRO POWER	1x ●	
ALU 300 PRO POWER	1x ●	
ALU 349 PRO POWER		1x ●
ALU 375 PRO POWER		1x ●
ALU 450 PRO POWER		1x ●
ALU 525 PRO POWER		1x ●
ALU 600 PRO POWER		1x ●

#### MATCHING PLATE EXCHANGERS FOR BOILER OPERATION WITH PRIMARY $\Delta T$ = 15 °C

Description							P	late h	eat exc	hange	rs						
		Δ	T prim	ary/sed	condar	y = 10 °	,C				∆Т рі	imary/	secono	dary =	7,2 °C		
			80	°C →		55°C						85°C		75°C			
	SP 35-DN50 25 (25A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 45 (45A) N	SP 35-DN50 57 (57A) N	SP 35-DN50 75 (75A) N	SP 40-DN65 93 (93A) N	SP 40-DN65 111 (111A) N	SP 40-DN65 121 (121A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 45 (45A) N	SP 35-DN50 65 (65A) N	SP 35-DN50 81 (81A) N	SP 35-DN50 105 (105A) N	SP 35-DN50 121 (121A) N	SP 40-DN65 145 (145A) N	SP 60-DN100 73 (73A) N	SP 60-DN100 85 (85A) N
	20140410	20140411	20140414	20140416	20140419	20140427	20140429	20140432	20140411	20140414	20140418	20140420	20140423	20140424	20140433	20140439	20140440
ALU 115 PRO POWER	•								•								
ALU 150 PRO POWER		•								•							
ALU 225 PRO POWER			•								•						
ALU 300 PRO POWER				•								•					
ALU 349 PRO POWER					•								•				
ALU 375 PRO POWER					•									•			
ALU 450 PRO POWER						•									•		
ALU 525 PRO POWER							•									•	
ALU 600 PRO POWER								•									•

### MATCHING PLATE EXCHANGERS FOR BOILER OPERATION WITH PRIMARY $\Delta T$ = 20 °C

Description							F	late he	eat exc	hangei	rs						
		Δ	T prim	ary/sed	ondar	y = 10 °	c				∆Т рі	imary/	secon	dary =	7,2 °C		
		80°C 75°C 85°C 75°C 60°C															
	SP20-DN32 49 (49A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 45 (45A) N	SP 35-DN50 57 (57A) N	SP 35-DN50 75 (75A) N	SP 40-DN65 93 (93A) N	SP 40-DN65 111 (111A) N	SP 40-DN65 121 (121A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 45 (45A) N	SP 35-DN50 65 (65A) N	SP 35-DN50 81 (81A) N	SP 35-DN50 105 (105A) N	SP 35-DN50 121 (121A) N	SP 40-DN65 145 (145A) N	SP 60-DN100 73 (73A) N	SP 60-DN100 85 (85A) N
	20014240	20140411	20140414	20140416	20140419	20140427	20140429	20140432	20140411	20140414	20140418	20140420	20140423	20140424	20140433	20140439	20140440
ALU 115 PRO POWER	•								•								
ALU 150 PRO POWER		•								•							
ALU 225 PRO POWER			•								•						
ALU 300 PRO POWER				•								•					
ALU 349 PRO POWER					•								•				
ALU 375 PRO POWER					•									•			
ALU 450 PRO POWER						•									•		
ALU 525 PRO POWER							•									•	
ALU 600 PRO POWER								•									•

#### MATCHING TABLE FOR SECONDARY CIRCUIT MANAGEMENT (E)

Description	Secondary circuit	Secondary circuit pumps
	Primary circuit pump MAGNA3 40-120 F	Primary circuit pump MAGNA3 65-120 F
	20183650	20183652
ALU 115 PRO POWER	1x ●	
ALU 150 PRO POWER	1x •	
ALU 225 PRO POWER	1x ●	
ALU 300 PRO POWER	1x •	
ALU 349 PRO POWER		1x ●
ALU 375 PRO POWER		1x ●
ALU 450 PRO POWER		1x ●
ALU 525 PRO POWER		1x ●
ALU 600 PRO POWER		1x ●

**4. ELECTRICAL ACCESSORIES** 

Description	Notes	Code
RIELLOtech CLIMA COMFORT		4031069
CLIMA COMFORT		20010903
CLIMA DISPLAY		20010906
RC3 remote control kit		20155028
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	(1)	20021674
NTC solar collector immersion probe (10kΩ)	(2)	4031913
NTC immersion probe (10kΩ) – 5 metres	(3)	20010068
NTC 0-ring probe (10kΩ)	(4)	20168680
NTC DHW-tank probe (10kΩ) - 5 metres	(5)	20010103

- Includes wiring and communication kit.
  Solar system probe.
  Primary probe (separator).
  Mixed zone probe.
  Storage tank probe.

- (1) (2) (3) (4) (5)

#### 5. TREATMENT SYSTEMS FOR CONDENSATE NEUTRALIZATION

Description	Notes	Code
N2 neutralisation kit (up to 450 kW)		4031810
HN2 neutralisation kit (up to 270 kW)		4031811
N3 neutraliser kit (from 450 to 1500 kW)		4031812
HN3 neutraliser kit (from 270 to 750 kW)	(1)	4031813

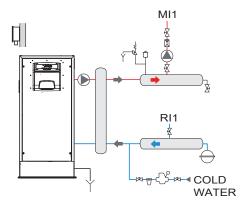
(1) Equipped with extraction pumps.

#### POSSIBLE SYSTEM COMPOSITIONS

#### **DIRECT SYSTEM BASE CONFIGURATION 1**

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300-600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460–580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Primary circuit pump	1	(2)

- Refer to table "A STAND ALONE HEAT INPUT". Refer to the matching tables on the previous pages.



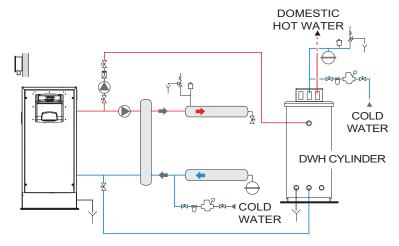
**TERMINAL UNITS** 

### **RIELLO**

#### DHW BASE CONFIGURATION WITH HEATER UPSTREAM OF THE HYDRAULIC COMPENSATOR

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300–600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460–580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Domestic water connection kit	1	20022521
Sanitary kit (300-600 kW)	1	(2)
Primary circuit pump	1	(2)
NTC DHW-tank probe ( $10k\Omega$ ) - 5 metres	1	20010103

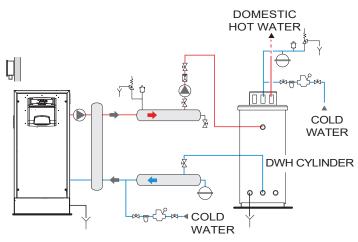
- Refer to table "A STAND ALONE HEAT INPUT".
- Refer to the matching tables on the previous pages.



#### DHW BASE CONFIGURATION WITH HEATER DOWNSTREAM OF THE HYDRAULIC COMPENSATOR

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300–600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460-580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Sanitary kit (300-600 kW)	1	(2)
Primary circuit pump	1	(2)
NTC DHW-tank probe (10kΩ) - 5 metres	1	20010103

- Refer to table "A STAND ALONE HEAT INPUT".
- Refer to the matching tables on the previous pages.

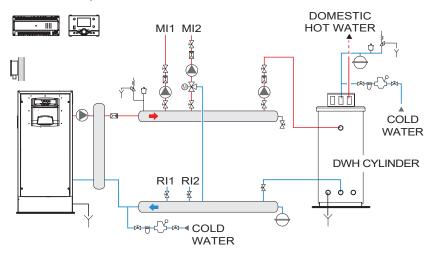


#### **CONTROL PANEL SOLUTION**

#### CONFIGURATION OF 1 DIRECT SYSTEM + 1 MIXED SYSTEM + DHW

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300-600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460–580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Primary circuit pump	1	(2)
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1	20021674
CLIMA COMFORT	1	20010903
CLIMA DISPLAY (*)	1	20010906
NTC 0-ring probe (10k $\Omega$ )	1	20168680
NTC DHW-tank probe (10kΩ) – 5 metres	1	20010103
NTC immersion probe (10k $\Omega$ ) – 5 metres	1	20010068

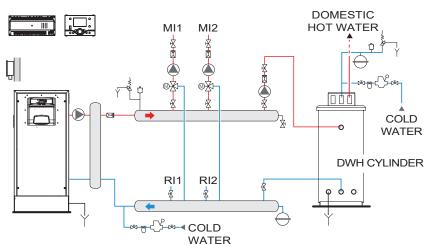
- (1) (2) (\*) Refer to table "A - STAND ALONE HEAT INPUT". Refer to the matching tables on the previous pages. To replace the CLIMA DISPLAY code 20010906, install the RC3 room control kit code 20155028.



#### **CONFIGURATION OF 2 MIXED SYSTEMS + DHW**

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300-600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460-580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Primary circuit pump	1	(2)
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1	20021674
CLIMA COMFORT	1	20010903
CLIMA DISPLAY (*)	1	20010906
NTC 0-ring probe (10kΩ)	2	20168680
NTC DHW-tank probe (10kΩ) - 5 metres	1	20010103
NTC immersion probe (10kΩ) – 5 metres	1	20010068

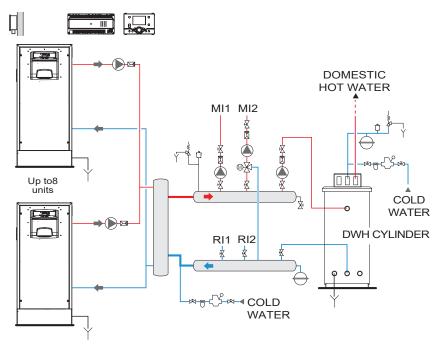
- Refer to table "A STAND ALONE HEAT INPUT". Refer to the matching tables on the previous pages. To replace the CLIMA DISPLAY code 20010906, install the RC3 room control kit code 20155028.



### CASCADE CONFIGURATION OF 1 DIRECT SYSTEM + 1 MIXED SYSTEM + DHW (maximum 8 generators)

Description	Quantity	Code	
ALU PRO POWER 115-600	1-8	(1)	
Interface primary circuit kit (375–600 kW)	1-8	(2)	
Primary kit (300-600 kW)	1-8	(2)	
Safety kit	1-8	4030091	
Safety valve (460-580 kW)	1-8	(2)	
Fuel shut-off valve kit (1"-3")	1-8	(2)	
Primary circuit pump	1-8	(2)	
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1-8	20021674	
CLIMA COMFORT	1	20010903	
CLIMA DISPLAY (*)	1	20010906	
NTC immersion probe (10kΩ) – 5 metres	1	20010068	
NTC 0-ring probe (10kΩ)	1	20168680	
NTC DHW-tank probe ( $10k\Omega$ ) – 5 metres	1	20010103	

- Refer to table "B CASCADE SYSTEM HEAT INPUT". Refer to the matching tables on the previous pages. To replace the CLIMA DISPLAY code 20010906, install the RC3 room control kit code 20155028.



**TERMINAL UNITS** 

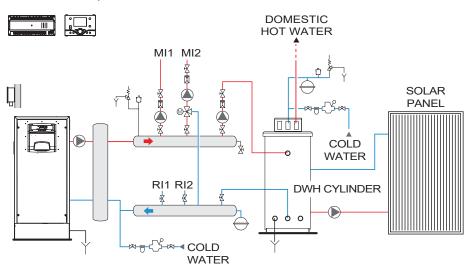
#### CONFIGURATION OF 1 DIRECT SYSTEM + 1 MIXED SYSTEM + DHW WITH SOLAR PANEL

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300-600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460-580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Primary circuit pump	1	(2)
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1	20021674
CLIMA COMFORT	1	20010903
CLIMA DISPLAY (*)	1	20010906
NTC 0-ring probe (10kΩ)	1	20168680
NTC DHW-tank probe (10kΩ) - 5 metres	1	20010103
NTC immersion probe (10kΩ) – 5 metres	1	20010068
NTC solar collector immersion probe (10kΩ)	1	4031913

Refer to table "A - STAND ALONE HEAT INPUT".

Refer to the matching tables on the previous pages.

To replace the CLIMA DISPLAY code 20010906, install the RC3 room control kit code 20155028.

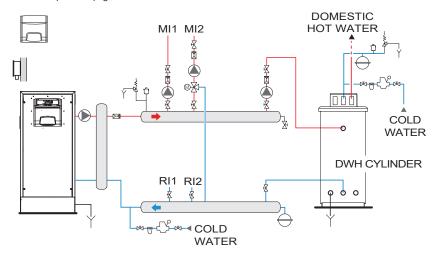


#### WALL MOUNTED SOLUTION

#### CONFIGURATION OF 1 DIRECT SYSTEM + 1 MIXED SYSTEM + DHW

Description		Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300-600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460–580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Primary circuit pump	1	(2)
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1	20021674
RIELLOtech CLIMA COMFORT	1	4031069
NTC 0-ring probe ( $10k\Omega$ )	1	20168680
NTC DHW-tank probe (10k $\Omega$ ) - 5 metres	1	20010103
NTC immersion probe (10kΩ) – 5 metres	1	20010068

- Refer to table "A STAND ALONE HEAT INPUT". Refer to the matching tables on the previous pages.

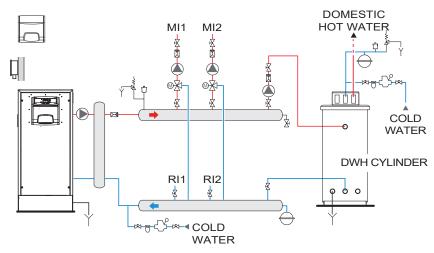


**TERMINAL UNITS** 

#### **CONFIGURATION OF 2 MIXED SYSTEMS + DHW**

Description	Quantity	Code
ALU PRO POWER 115-600	1	(1)
Interface primary circuit kit (375–600 kW)	1	(2)
Primary kit (300-600 kW)	1	(2)
Safety kit	1	4030091
Safety valve (460–580 kW)	1	(2)
Fuel shut-off valve kit (1"-3")	1	(2)
Primary circuit pump	1	(2)
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1	20021674
RIELLOtech CLIMA COMFORT	1	4031069
NTC 0-ring probe (10k $\Omega$ )	2	20168680
NTC DHW-tank probe (10k $\Omega$ ) – 5 metres	1	20010103
NTC immersion probe (10kΩ) – 5 metres	1	20010068

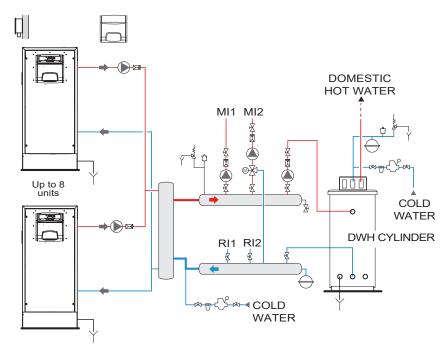
Refer to table "A - STAND ALONE HEAT INPUT". Refer to the matching tables on the previous pages.



### CASCADE CONFIGURATION OF 1 DIRECT SYSTEM + 1 MIXED SYSTEM + DHW (maximum 8 generators)

Description	Quantity	Code	
ALU PRO POWER 115-600	1-8	(1)	
Interface primary circuit kit (375–600 kW)	1-8	(2)	
Primary kit (300-600 kW)	1-8	(2)	
Safety kit	1-8	4030091	
Safety valve (460-580 kW)	1-8	(2)	
Fuel shut-off valve kit (1"-3")	1-8	(2)	
Primary circuit pump	1-8	(2)	
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1-8	20021674	
RIELLOtech CLIMA COMFORT	1	4031069	
NTC immersion probe (10kΩ) – 5 metres	1	20010068	
NTC 0-ring probe (10kΩ)	1	20168680	
NTC DHW-tank probe (10kΩ) - 5 metres	1	20010103	

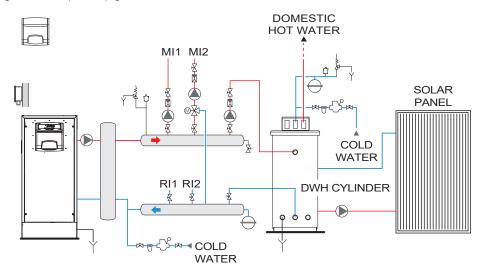
- (1) Refer to table "B CASCADE SYSTEM HEAT INPUT".
- (2) Refer to the matching tables on the previous pages.



#### CONFIGURATION OF 1 DIRECT SYSTEM + 1 MIXED SYSTEM + DHW WITH SOLAR PANEL

Description	Quantity	Code	
ALU PRO POWER 115-600	1	(1)	
Interface primary circuit kit (375–600 kW)	1	(2)	
Primary kit (300-600 kW)	1	(2)	
Safety kit	1	4030091	
Safety valve (460-580 kW)	1	(2)	
Fuel shut-off valve kit (1"-3")	1	(2)	
Primary circuit pump	1	(2)	
Interface kit for bus comunication between Alu Pro Power and RIELLOtech	1	20021674	
RIELLOtech CLIMA COMFORT	1	4031069	
NTC 0-ring probe (10kΩ)	1	20168680	
NTC DHW-tank probe ( $10k\Omega$ ) - 5 metres	1	20010103	
NTC immersion probe (10kΩ) – 5 metres	1	20010068	
NTC solar collector immersion probe ( $10k\Omega$ )	1	4031913	

- Refer to table "A STAND ALONE HEAT INPUT". Refer to the matching tables on the previous pages.



### FLOOR-STANDING BOILERS

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#### GAS



#### TAU UNIT

TAU UNIT 35 (3,4-34,1 KW)\*\* TAU UNIT 190 (18,6-185,8 KW)\*\*

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#### TAU N

TAU 115 N (78,4-112,4 kW)\*\*\*
TAU 150 N (108,2-146,6 kW)\*\*\* TAU 210 N (1U82,2-146,6 kW)\*\*\*
TAU 270 N (207,2-264,3 kW)\*\*\*
TAU 350 N (266,4-342,7 kW)\*\*\*
TAU 450 N (345,0-441,9 kW)\*\*\*
TAU 600 N (443,3-589,2 kW)\*\*\* TAU 800 N (590,8-785,6 kW)\*\*\*
TAU 1000 N (787,4-982,0 kW)\*\*\* TAU 1150 N (984,3-1129,3 kW)\*\*\* TAU 1250 N (1131,8-1227,5 kW)\*\*\* TAU 1450 N (1229,7-1423,9 kW)\*\*\*
TAU 1750 N (1424,0-1718,5 kW)\*\*\*
TAU 2100 N (1721,2-2062,2 kW)\*\*\* TAU 2600 N (2065,3-2553,2 kW)\*\*\*
TAU 3000 N (2056,8-2946,0 kW)\*\*\*

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ONLY HEATING

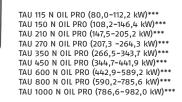
#### TAU N PREMIX

TAU 115 N PREMIX (78,4-112,4 kW)\*\*\* TAU 150 N PREMIX (108,2-146,6 kW)\*\*\* TAU 210 N PREMIX (147,5-205,2 kW)\*\*\*
TAU 270 N PREMIX (207,2-264,3 kW)\*\*\* TAU 270 N PREMIX LPG (207,2-264,3 kW)\*\*\* TAU 350 N PREMIX (266,4-342,7 kW)\*\*\*
TAU 450 N PREMIX (345,0-441,9 kW)\*\*\*
TAU 600 N PREMIX (443,3-589,2 kW)\*\*\*
TAU 800 N PREMIX (590,8-785,6 kW)\*\*\* TAU 1000 N PREMIX (787,4-982,0 kW)\*\*\*
TAU 1150 N PREMIX (984,3-1129,3 kW)\*\*\* TAU 1250 N PREMIX (1131,8-1227,5 kW)\*\*\*
TAU 1450 N PREMIX (1229,7-1423,9 kW)\*\*\* TAU 1750 N PREMIX (1424,0-1718,5 kW)\*\*\* TAU 2100 N PREMIX (1721,2-2062,2 kW)\*\*\*
TAU 2600 N PREMIX (2065,3-2553,2 kW)\*\*\* TAU 3000 N PREMIX (2056,8-2946,0 kW)\*\*\*

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TAU N OIL PRO



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- Min/max useful power 80/60 °C
- Max useful power 80/60 °C (approved power band)

MAY 2022 EDITION

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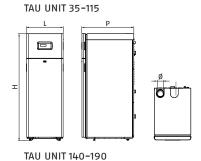
WATER-HEATERS

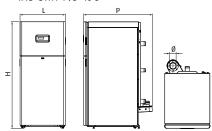
### RIELLO

### Floor standing gas condensing boilers

### Tau Unit







Description	H mm	L mm	P mm	ø mm	Net weight kg
TAU UNIT 35	1365	600	760	80	135
TAU UNIT 50	1550	600	890	80	155
TAU UNIT 70	1550	600	890	80	165
TAU UNIT 100	1810	600	870	110	245
TAU UNIT 115	1810	600	870	110	245
TAU UNIT 140	1880	800	1250	110	420
TAU UNIT 190	1880	800	1250	160	450



- In conformity with Regulation (EU) 2016/426
- Gas condensing boilers with a high water content titanium stabilised stainless steel body (AISI 316 "Ti" + AISI 444) and a low pollutant emission (Class 6 according to UNI EN 15502) modulating premix burner

The high water content body has a vertical smoke pipe, and has two return lines to provide the best possible operation in condensing mode. The water stratifies at a high temperature at the top of the body, while the cold water accumulates at the bottom where the condensation occurs.

The boiler board, which has an easy-to-use interface, allows you to optimise the combustion, manage a remote storage cylinder for the production of domestic hot water and the supply temperature in climatic mode. The basic electronics includes include climatic regulation, management of the cascade of the modules, with integrated master/slave functions, the automatic switching between summer/winter and the possibility of managing a direct zone and a DHW storage cylinder.

The electronics also provides the possibility of the remote management using the 0-10V input or with the Modbus protocol.

With specific accessories it is also possible to manage the distribution of the secondary circuit, up to 16 mixed zones.

The optimal combustion management and the high modulation ratio of 1:10 (for models 35-115), provide a high performance and low polluting emissions (NOx in Class 6 according to UNI EN 15502). All models include the external probe. The range can operate with both methane gas and LPG (with the relative accessory).

- High quality and precision finishings
- 1:10 modulation ratio (up to model 115)
- Easy to maintain because all the internal components are fully accessible
- Smaller overall dimensions
- Maximum operating pressure: 5 bar.

### **TECHNICAL DATA**

Description		Power - kV	I		Efficiency - %	)	Energy efficiency	Code
	Output useful 80°/60° max	Output useful 50°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (50°/30°)	Useful 30% Pn (50°/30°)	class	
TAU UNIT 35	34.0	37.0	3.5-34.8	97.7	106.3	107.7	A	20145133
TAU UNIT 50	48.5	54.5	4.9-49.0	97.1	109.2	108.9	Α	20144105
TAU UNIT 70	68.0	76.5	6.9-69.9	97.3	109.4	108.5	A	20144106
TAU UNIT 100	97.5	106.5	10.0-100.0	97.5	109.2	108.6	-	20144107
TAU UNIT 115	112.0	125.4	11.5-115.0	97.4	109.0	108.8	-	20144108
TAU UNIT 140	136.9	152.0	28.0-140.0	97.8	108.6	108.8	-	20145135
TAU UNIT 190	185.8	205.2	38.0-190.0	97.8	108.0	108.4	-	20145136

### **ACCESSORIES**

Description	Notes	Code
SAFETY ACCESSORIES		
Safety devices kit	(1)	20180519
Pressure gauge and safety valve set 4,5 bar	(2)	20181867
Pressure gauge and safety valve set 4 bar	(3)	20181010
Reduction fitting 2" - 1" ½	(4)	20182680
Reduction fitting 2"½ - 1"½	(5)	20154992
Fuel shut-off valve kit (VIC) - ØG.1"	(6)	20009486
Fuel shut-off valve kit (VIC) - ØG.1" ½	(7)	20009482
DN15 flowmeter		20149998
DN20 flowmeter		20149996
DN25 flowmeter		20146343
DN32 flowmeter		20146345
HYDRAULIC ACCESSORIES		
Expansion vessel (only for TAU UNIT 35)		20154816
Circulation pump (only for TAU UNIT 35)		20154812
Condensate neutralizer HN2 (up to 270 kW)	(8)	4031811
Condensate neutralizer N2 (up to 450 kW)		4031810
Condensate neutralizer N3 (450–1500 kW)		4031812
Condensate neutralizer HN3 (270–750 kW)	(8)(D)	4031813
LPG TRANSFORMATION KIT		
LPG transformation kit (TAU UNIT 35)		20145150
LPG transformation kit (TAU UNIT 50)		20144699
LPG transformation kit (TAU UNIT 70)		20144700
LPG transformation kit (TAU UNIT 100)		20144703
LPG transformation kit (TAU UNIT 115)		20144704
CASCADE CONFIGURATION, SECONDARY CIRCUIT AND ELECTRONIC ACCESSORIES		
External probe		20132778
Electronic kit for managing additional direct or mixed zone (max 16)	(9)	20130811
Immersion probe	(10)(11)	1220599
SEALED ROOM TRANSFORMATION KIT (TYPE C)		
Type C conversion kit (TAU UNIT 35-50)	(12)	20144759
Type C conversion kit (TAU UNIT 70)	(12)	20144760
Type C conversion kit (TAU UNIT 100–115)	(12)	20144761
Type C conversion kit (TAU UNIT 140–190)	(12)	20145154
FLUE DISCHARGE SYSTEM		
Conversion kit for back flue discharge (TAU UNIT 35)	(13)	20160064
Conversion kit for back flue discharge (TAU UNIT 50-70)	(13)	20147234
Conversion kit for back flue discharge (TAU UNIT 100–115)	(13)	20147235
PRIMARY CIRCUIT PUMPS FOR PLATE HEAT EXCHANGERS		
Primary circuit pump UPM3 FLEX AS 15–70 130 H6	(14)	20147597
Primary circuit pump UPML 32–105/180	(14)	20125034
Primary circuit pump UPM GEO 25-85/130	(14)	20147604

WATER-HEATERS

Description	Notes	Code
Primary circuit pump STRATOS PARA 30/1–12	(14)	20125040
Primary circuit pump MAGNA3 32–120 F	(14)	20183636
Primary circuit pump MAGNA3 40–120 F	(14)	20183650

- Availability of the material at our warehouse: 30 working days from the date of the order's validation.
- Includes stub pipe with safety kit, excluding: safety valve set + pressure gauge, fuel shut-off valves and flow meter set (to be ordered separately). To be provided for Tau Unit 50-70 models

  To be provided for Tau Unit 100-190 models

- (2) (3) (4) (5) To be provided in case of safety kit installation for Tau Unit 100 and 115 models. To be provided in case of safety kit installation for Tau Unit 140 and 190 models.
- (6) (7) Recommended up to maximum power of 131 kW, calculated considering gas supply pressure = 20 mbar. Recommended up to maximum power of 230 kW, calculated considering gas supply pressure = 20 mbar.
- (8) (9) (10)
- Equipped with extraction pumps.

  For ambient temperature adjustment, use Riello thermostats and timed thermostats.
- Used for secondary and heater management.
- (11) (12)
- Used as primary probe for cascade system management.

  Accessories for split discharge, for concentric discharge, to complete the installation, for the flue gas system, refer to page 403.

  For each type, check the maximum equivalent lengths by referring to the technical data sheet and/or by contacting the pre-sales service. For the flue gas system, refer to page 403.
- (14) To be paired with HEATgate plate heat exchangers, depending on the operating conditions (primary/secondary  $\Delta T^{\circ}$ ).

NOTE: Tau Unit 140 and 190 do not require the accessory kit for LPG conversion.

### **COMBINATIONS SAFETY KIT ACCESSORIES**

Description	Safety basic kit	Hydrau	lic fitting		alve and e gauge		nut-off Ive						Flow	meter					
		<b>(</b> )		å															
			72	-					ΔT =	20 °C			ΔT =	15 °C			ΔT =	10 °C	
	20180519 Safety devices kit	20182680 Reduction fitting 2" - 1" 1/3	20154992 Reduction fitting 2"1/2 - 1"1/2	20181867 4,5 bar pressure gauge and	20181010 Pressure gauge and safety valve set 4 bar	20009486 Gas shutting valve (VIC) - ØG.1"	20009482 Fuel shut-off valve kit (VIC) · ØG.1" 1/2	20149998 DN15 flowmeter	20149996 DN20 flowmeter	20146343 DN25 flowmeter	20146345 DN32 flowmeter	20149998 DN15 flowmeter	20149996 DN20 flowmeter	20146343 DN25 flowmeter	20146345 DN32 flowmeter	20149998 DN15 flowmeter	20149996 DN20 flowmeter	20146343 DN25 flowmeter	20146345 DN32 flowmeter
		50	70		50		50		50	50	50.	50.		50	20.	50.		50.	50
TAU UNIT 50	•			•		•		•					•				•		
TAU UNIT 70	•			•		•			•				•					•	
TAU UNIT 100	•	•			•	•			•					•					•
TAU UNIT 115	•	•			•	•				•				•					•
TAU UNIT 140	•		•		•		•			•				•					•
TAU UNIT 190	•		•		•		•				•				•				•

### COMBINATIONS OF PUMPS AND PLATE HEAT EXCHANGERS FOR BOILER OPERATION WITH PRIMARY $\Delta T$ = 10 °C

Description			Pump								Plate	heat	excha	ngers					
							∆T pri	mary/	secon	dary :	= 10 °(	2		∆T pri	mary/	secon	dary	= 7,2°(	Ē.
					80°C 70°C 70°C 60°C							75°C 78°C 68°C							
	UPM3 FLEX AS 15-70 130 H6	UPML 32-105/180	STRATOS PARA 30/1-12	MAGNA3 32-120 F	MAGNA3 40-120 F	SP20-DN32 21 (21A) N	SP 20-DN32 29(29A) N	SP 20-DN32 41 (41A) N	SP 35-DN50 25 (25A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 35 (35A) N	SP 35-DN50 45 (45A) N	SP 20-DN32 21 (21A) N	SP 20-DN32 29 (29A) N	SP 20-DN32 41 (41A) N	SP 35-DN50 25 (25A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 35 (35A) N	SP 35-DN50 45 (45A) N
	20147597	20125034	20125040	20183636	20183650	20016742	20014216	20014217	20140410	20140411	20140412	20140414	20016742	20014216	20014217	20140410	20140411	20140412	20140414
TAU UNIT 35	•					•							•						
TAU UNIT 50		•					•							•					
TAU UNIT 70			•					•							•				
TAU UNIT 100			•						•							•			
TAU UNIT 115			•							•							•		
TAU UNIT 140				•							•							•	
TAU UNIT 190					•							•							•

### COMBINATIONS OF PUMPS AND PLATE HEAT EXCHANGERS FOR BOILER OPERATION WITH PRIMARY $\Delta T$ = 15 °C

	Description		Pu	mp						Plate	heat	excha	ngers				
	Description					ΔT primary/secondary = 10 °C ΔT primary/secondary = 7										ry = 7	,2°C
							80°			0°C 55°C			85°			65°C	
		UPM3 FLEX AS	UPM GE0 25-85/130	UPML 32-105/180	STRATOS PARA 30/1-12	SP 20-DN32 21 (21A) N	SP 20-DN32 29 (29A) N	SP 20-DN32 41 (41A) N	SP 20-DN32 49 (49A) N	SP 35-DN50 25 (25A) N	SP 35-DN50 35 (35A) N	SP 20-DN32 21 (21A) N	SP 20-DN32 29 (29A) N	SP 20-DN32 41 (41A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 39 (39A) N	SP 35-DN50 57 (57A) N
		20147597	20147604	20125034	20125040	20016742	20014216	20014217	20014240	20140410	20140412	20016742	20014216	20014217	20140411	20140413	20140416
TAU UNIT 35		•				•						•					
TAU UNIT 50		•				•							•				
TAU UNIT 70			•				•							•			
TAU UNIT 100				•				•							•		
TAU UNIT 115					•				•						•		
TAU UNIT 140					•					•						•	
TAU UNIT 190					•						•						•

**TERMINAL UNITS** 

## **RIELLO**

### COMBINATIONS OF PUMPS AND PLATE HEAT EXCHANGERS FOR BOILER OPERATION WITH PRIMARY $\Delta T$ = 20 °C

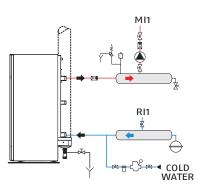
Description		Pu	тр						Pla	te he	at exc	hang	ers				
					ΔΤ	prima	ry/sec	onda	ry = 10	) °C	-	ΔT pri	mary/	secon	dary :	= 7,2°(	=
						80°0			0°C →				5°C >		75°0		
	UPM3 FLEX AS 15-70 130 H6	UPM GE0 25-85/130	UPML 32-105/180	STRATOS PARA 30/1-12	SP 20-DN32 21 (21A) N	SP 20-DN32 29 (29A) N	SP 20-DN32 41 (41A) N	SP 20-DN32 49 (49A) N	SP 35-DN50 25 (25A) N	SP 35-DN50 35 (35A) N	SP 20-DN32 29 (29A) N	SP 20-DN32 41 (41A) N	SP 20-DN32 49 (49A) N	SP 35-DN50 31 (31A) N	SP 35-DN50 35 (35A) N	SP 35-DN50 39 (39A) N	SP 35-DN50 57 (57A) N
	20147597	20147604	20125034	20125040	20016742	20014216	20014217	20014240	20140410	20140412	20014216	20014217	20014240	20140411	20140412	20140413	20140416
TAU UNIT 35	•				•						•						
TAU UNIT 50	•					•						•					
TAU UNIT 70	•					•							•				
TAU UNIT 100		•					•							•			
TAU UNIT 115			•					•							•		
TAU UNIT 140				•					•							•	
TAU UNIT 190				•						•							•

### **POSSIBLE SYSTEM COMPOSITIONS**

### STANDARD CONFIGURATION 1 DIRECT SYSTEM

Description	Quantity	Code
TAU UNIT 35-190	1	(1)
External probe	1	20132778
Safety devices kit (only for TAU UNIT 50–190)	1	20180519
Hydraulic fitting	1	(2)
Safety valve and pressure gauge	1	(2)
Fuel shut-off valve (only for TAU UNIT 50–190)	1	20009486
Flowmeter (only for TAU UNIT 50-190)	1	(2)

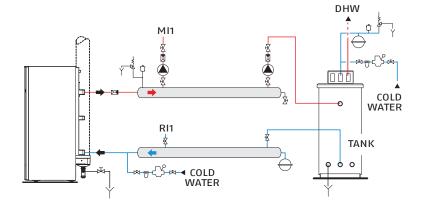
Refer to the "TECHNICAL DATA" table.
Refer to the "COMBINATIONS SAFETY KIT ACCESSORIES" table in the "ACCESSORIES" section.



### **CONFIGURATION 1 DIRECT + DHW SYSTEM**

Description	Quantity	Code
TAU UNIT 35-190	1	(1)
External probe	1	20132778
Immersion probe	1	1220599
Safety devices kit (only for TAU UNIT 50-190)	1	20180519
Hydraulic fitting	1	(2)
Safety valve and pressure gauge	1	(2)
Fuel shut-off valve (only for TAU UNIT 50-190)	1	20009486
Flowmeter (only for TAU UNIT 50-190)	1	(2)

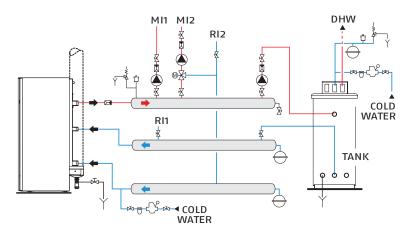
- Refer to the "TECHNICAL DATA" table.
  Refer to the "COMBINATIONS SAFETY KIT ACCESSORIES" table in the "ACCESSORIES" section.



### CONFIGURATION 1 DIRECT SYSTEM + 1 MIXED + DHW SYSTEM

Description	Quantity	Code
TAU UNIT 35-190	1	(1)
External probe	1	20132778
Safety devices kit (only for TAU UNIT 50–190)	1	20180519
Hydraulic fitting	1	(2)
Safety valve and pressure gauge	1	(2)
Fuel shut-off valve (only for TAU UNIT 50-190)	1	20009486
Immersion probe	1	1220599
Electronic kit for managing additional direct or mixed zone (max 16)	1	20130811
Flowmeter (only for TAU UNIT 50-190)	1	(2)

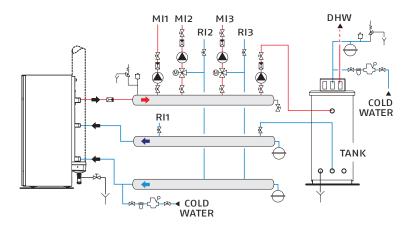
- Refer to the "TECHNICAL DATA" table.
  Refer to the "COMBINATIONS SAFETY KIT ACCESSORIES" table in the "ACCESSORIES" section.



### CONFIGURATION 1 DIRECT SYSTEM + 2 MIXED + DHW SYSTEMS

Description	Quantity	Code
TAU UNIT 35-190	1	(1)
External probe	1	20132778
Safety devices kit (only for TAU UNIT 50–190)	1	20180519
Hydraulic fitting	1	(2)
Safety valve and pressure gauge	1	(2)
Fuel shut-off valve (only for TAU UNIT 50-190)	1	20009486
Immersion probe	1	1220599
Electronic kit for managing additional direct or mixed zone (max 16)	2	20130811
Flowmeter (only for TAU UNIT 50-190)	1	(2)

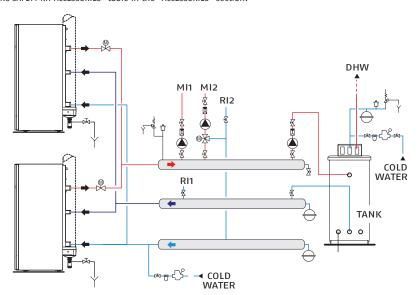
Refer to the "TECHNICAL DATA" table.
Refer to the "COMBINATIONS SAFETY KIT ACCESSORIES" table in the "ACCESSORIES" section.



### CASCADE CONFIGURATION 1 DIRECT SYSTEM + 1 MIXED + DHW SYSTEM (maximum 16 generators)

Description	Quantity	Code
TAU UNIT 35-190	2	(1)
External probe	1	20132778
Safety devices kit (only for TAU UNIT 50–190)	2	20180519
Hydraulic fitting	2	(2)
Safety valve and pressure gauge	2	(2)
Fuel shut-off valve (only for TAU UNIT 50-190)	1	20009486
Immersion probe	2	1220599
Electronic kit for managing additional direct or mixed zone (max 16)	1	20130811
Flowmeter (1 for each boiler; only for TAU UNIT 50–190)	2	(2)

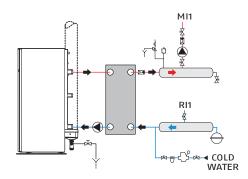
Refer to the "TECHNICAL DATA" table.
Refer to the "COMBINATIONS SAFETY KIT ACCESSORIES" table in the "ACCESSORIES" section.



### STANDARD CONFIGURATION 1 DIRECT SYSTEM WITH PLATE HEAT EXCHANGER

Description	Quantity	Code
TAU UNIT 35-190	1	(1)
External probe	1	20132778
Safety devices kit (only for TAU UNIT 50–190)	1	20180519
Hydraulic fitting	1	(2)
Safety valve and pressure gauge	1	(2)
Fuel shut-off valve (only for TAU UNIT 50-190)	1	20009486
Pump	1	(3)
Plate heat exchanger	1	(3)
Electronic kit for managing additional direct or mixed zone (max 16)	1	20130811
Flowmeter (only for TAU UNIT 50–190)	1	(2)

- Refer to the "TECHNICAL DATA" table.
  Refer to the "COMBINATIONS SAFETY KIT ACCESSORIES" table in the "ACCESSORIES" section.
  Refer to the "COMBINATIONS OF PUMPS AND PLATE HEAT EXCHANGERS" table in the "ACCESSORIES" section.



1

• In conformity with Directive 2009/125/EC

• Condensing boilers made of stainless steel

with three flue gas passes, with a high water content, suitable for the operation with gas jet

ERP

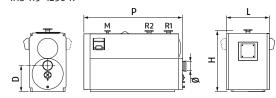
burners

**TERMINAL UNITS** 

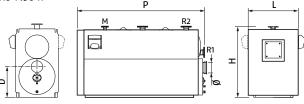
Condensing three flue gas passes stainless steel jet burners boilers

## Tau N

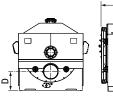
### TAU 115-1250 N

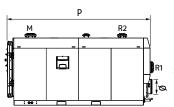


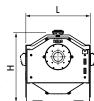












Description	Н	L	Р	D	Ø	М	R1	R2	Net weight
	mm	mm	mm	mm	mm	DN	DN	DN	kg
TAU 115 N	1315	740	1455	505	160	65	65	50	545
TAU 150 N	1315	740	1455	505	200	65	65	50	545
TAU 210 N	1315	740	1455	505	200	65	65	50	580
TAU 270 N	1450	850	1630	545	250	65	65	50	737
TAU 350 N	1450	850	1830	545	250	80	80	65	823
TAU 450 N	1630	900	2035	645	300	100	100	80	1185
TAU 600 N	1630	900	2235	645	300	100	100	80	1370
TAU 800 N	1910	1060	2560	680	350	125	125	80	2010
TAU 1000 N	1910	1060	2810	680	350	125	125	80	2245
TAU 1150 N	2030	1180	3010	720	400	150	150	100	2730
TAU 1250 N	2030	1180	3010	720	400	150	150	100	2730
TAU 1450 N	2180	1225	3175	805	450	150	150	100	3280
TAU 1750 N	1945	1750	3620	521	400	200	200	150	4265
TAU 2100 N	1945	1750	4020	521	400	200	200	150	4750
TAU 2600 N	2128	1850	4425	552	450	200	200	150	5550
TAU 3000 N	2170	1950	4640	600	450	200	200	150	6750

- Low temperature return system. High temperature return system.

TAU N is a condensing floor standing boiler, with high water content for heating room installation; suitable for heating and domestic hot water production in combination with a proper water tank.

Three-pass boiler, in which all the components in contact with the flue gas smokes are in titanium-stabilized stainless steel, designed on the principle of heat stratification: the combustion chamber at the top and the tube bundle at the bottom (smooth pipes with removable turbulators), allow to optimize heat exchange and energy efficiency, so as to obtain high efficiency, thanks to the condensation technique. The generator has been designed with a structure capable of containing thermal expansions; particular attention has been paid to the thermal insulation of the boiler body, the painted steel panels and the door, with the use of high density glass wool mats.

Some models are also available in a modular version. The models up to 1450 kW are developed with a vertical structure with overlapping planes, to facilitate handling and make easier the introduction into the heating room.

The new 1750-3000 models are developed on a "square" structure with a single planking, to maintain the high water content and, at the same time, guarantee maximum efficiency.

To make easier the inspections, maintenance and cleaning of the internal parts, the front door and the closing of the smoke chamber can be fully opened.

- Reduced average temperature of the body and quick start-up time
- Several solutions thanks to the combination with RIELLOtech control panels
- Built-in drain condensate
- Maximum operating pressure 6 bar.

### **TECHNICAL DATA**

Description		Power - kW			Efficiency - %		Back-pressure	Notes	Code
	0utput useful 80°/60° max	Output useful 40°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (40°/30°) %	Useful 30% Pn (30°C)	in combustion chamber mbar		
TAU 115 N	112.1	123.1	115	97.5	107	108	2.2		20120144
TAU 150 N	146.3	159.7	150	97.5	106.5	108.5	2.0		4031860.0
TAU 210 N	205.2	223.6	210	97.7	106.5	109.3	2.7		4031861.0
TAU 270 N	265.1	290.2	270	98.2	107.5	109.2	3.2		4031862.0
TAU 350 N	344.1	375.2	349	98.3	107.5	108.5	4.6		4031863.0
TAU 450 N	442.4	481.5	450	98.3	107	108.5	5.0		4031864.0
TAU 600 N	589.8	642	600	98.3	107	108.5	5.5		4031865.0
TAU 800 N	786.4	860	800	98.3	107	108.5	5.7	(D)(T)	4031866.0
TAU 1000 N	983	1070	1000	98.3	107	108.5	6.3	(D)(T)	4031867.0
TAU 1150 N	1129.3	1230.5	1150	98.3	107	108.5	6.6	(D)(T)	20136528
TAU 1250 N	1229.7	1337.5	1250	98.3	107	108.5	6.8	(D)(T)	4031868.0
TAU 1450 N	1425.6	1551.5	1450	98.3	107	108.5	7.4	(D)(T)	4031869.0
TAU 1750 N	1718.5	1881.2	1750	98.3	107.5	108.7	8.4	(D)(T)	20162157
TAU 2100 N	2062.2	2258.7	2100	98.3	107.5	108.7	9.6	(D)(T)	20162158
TAU 2600 N	2553.2	2796.5	2600	98.3	107.5	108.7	11.5	(D)(T)	20162159
TAU 3000 N	2946.0	3226.8	3000	98.3	107.5	108.7	11.6	(D)(T)	20162160

<sup>(</sup>D) Availability of the material at our warehouse: 25 working days from the date of the order's validation.

### **ACCESSORIES**

Description	Notes	Code
HYDRAULIC ACCESSORIES		
N2 neutralisation kit up to 450 kW		4031810
N3 neutraliser kit from 450 to 1500 kW		4031812
HN2 neutralisation kit up to 270 kW	(1)	4031811
HN3 neutraliser kit from 280 to 750 kW	(1)(D)	4031813
MECHANICAL ACCESSORIES		
Burner flange		4031196
Burner flange		20178775
Burner flange		20163867

<sup>(1)</sup> Equipped with extraction pumps.

### **CONTROL PANELS**

Description	Installation	Code
RIELLOtech CLIMA COMFORT	Vertical	4031069

<sup>(</sup>T) Product not subject to standard transport rates. For transport enhancement contact the Order Management Office. Maximum operating pressure 6 bar.

<sup>(</sup>D) Availability of the material at our warehouse: 30 working days from the date of the order's validation.

### **RECOMMENDED COMBINATIONS WITH BURNERS - EU COUNTRIES**

Description	Back-pressure in combustion								Gas	bur	ner									ner	Con	
	chamber						Υ	ellov	v fla	me (	Stan	dar	1)						III	ige	pai	1612
	(mbar)				Two	stag	е						Мо	dula <sup>.</sup>	ting							
						-						М	echa	anica	al ca	m						
										-		1	1									
		RS 50 TC	RS 70 TC	RS 100 TC	RS 130 TC	RS 310/M MZ FS1	RS 410/M MZ FS1	RS 250/M MZ TC	RS 190 TC	RS 50/M MZ TC	RS 70/M TC	RS 100/M TC	RS 130/M TC	RS 190/M TL	RS 190/M TC	RS 250/M MZ TL	RS 310/M MZ FS1	RS 410/M MZ FS1	Burner flange	Burner flange	Riellotech Clima Comfort	3-point modulation kit
		3784702	3785102	3785302	3785502	20068351	20068361	3788410	3785813	3781622	3789610	3789710	3789810	20052616	3787623	3788411	20068351	20068361	20178757	20178775	4031069	20013035
TAU 450 N	5.0	•																			•	
1A0 450 N	5.0									•											•	•
TAU 600 N	5.5		•																		•	
	5.5										•										•	•
TAU 800 N	5.7			•																	•	
	5.7											•									•	•
TAU 1000 N	6.3			•																	•	
	6.3											•									•	•
TAU 1150 N	6.6				•														•		•	
	6.6												•						•		•	•
TAU 1250 N	6.8				•														•		•	
	6.8												•						•		•	•
TAU 1450 N	7.4								•											•	•	
	7.4														•					•	•	•
TAU 1750 N	8.4								•												•	
	8.4													•							•	•
TAU 2100 N	9.6							•													•	
	9.6															•					•	•
TAU 2600 N	11.5					•															•	
	11.5																•	$\sqcup$			•	•
TAU 3000 N	11.6						•											$\perp$			•	
	11.6																	•			•	•

Description	Back-pressure in combustion													(	as	bur	rne	r										_					urne				urne			trol
	chamber (mbar)	Ĺ											Blu	_			Low		)x)													466	-23	Jiy		"	ang	-	Pul	.013
	(IIIDai)	_			1ecl	220	ical	-						- 1	1od	ula	ting	g	Ele	octr	oni	c ca																		
					Teci	Iaii	icai	cai			-								LIC	CUI	_			trol		C	) <sub>2</sub> cc	ntr	ol -	+										
		-																									Inv	vert	er						_	Н		$\dashv$		_
																																Variable speed drive 3,0 kW	Variable speed drive 5,5 kW	Variable speed drive 7,5 kW	N/S				ť	
																											, ,	_				ve 3,	ve 5,	ve 7,5	ve 11				mfo	ξ÷
			ي	2	.,		U		닏	-S1	-S-								S	S	D 75	님	J.	D TC	ΠŢ	RS 120/EV 02 BLU TC	RS 160/EV 02 BLU TC	RS 200/EV 02 BLU TL	LU TC	RS 410/EV 02 BLU TC	l kit	d driv	d dri	d dri	d dri				na Cc	ation
			BLU 1	RS 160/M BLU TC	RS 25/M BLU TC	3EU T	RS 68/M BLU TC	RS 55/M BLU TC	RS 200/M BLU TL	BLU F	BLU F	3.0	BLU	BLU	3	3	3	3	3LU F	RS 410/E BLU FS1	RS 120/E 02 BLU TC	RS 160/E 02 BLU TL	02 BI	)2 BL	)2 BL	02 B	02 B	, 02 E	02 B	02 B	ontro	spee	spee	spee	spee	ange	Burner flange	ange	Clir	Inpo
		Σ	Μ/0	M/0	3/M E	3/M	8/M	3/M	M/00	M/0	0/W	0/E	0/E	30/E	RS 25/E BLU	3/E B	8/E B	RS 55/E BLU	0/E	0/E	0/E	0/E	30/E	0/E	0/E (	0/EV	0/EV	00/E\	0/EV	0/EV	en C	ple :	ple	ple	ple	er fl	er fl	er fl	otech	int m
		BS3/M	RS 120/M BLU TC	RS 16	RS 25	RS 35/M BLU TC	RS 68	RS 55	RS 20	RS 310/M BLU FS1	RS 410/M BLU FS1	RS 120/E BLU	RS 160/E BLU	RS 200/E BLU	RS 25	RS 35/E BLU	RS 68/E BLU	RS 55	RS 310/E BLU FS1	RS 41	RS 12	RS 16	RS 200/E 02 BLU TL	RS 310/E 02 BLU TC	RS 410/E 02 BLU TL	RS 12	RS 16	RS 20	RS 310/EV 02 BLU TC	RS 41	Oxygen Control kit	Varia	Varia	Varia	Variable speed drive 11 kW	Burner flange	Burn	Burner flange	Riellotech Clima Comfort	3-point modulation kit
			٠,0	,0			,,	34	П	6	2	_		_				2	_	6	9	2	8	20			9						_	4	m.	П	10	7.	_	
		3762350	3897606	3788006	3910510	3910610	3897406	20038484	3899711	20068219	20068270	3897632	3788032	3899810	3910710	3910810	3897432	20038491	20068217	20068279	20165996	20164535	20166368	20166002	20158157	20154943	20158956	20156077	20166004	20174935	20045187	20163064	20163071	20163074	20163093	4031196	20178775	20163867	4031069	20013035
			386	378	391	391	386	200	386	200	200	386	378	386	391	391	386	200	200	200	201	201	201	201	201	201	201	201	201	201	200	201	201	201	201	40	201	201	40	200
TAU 115 N	2.2	•			L	L					4	_																						Ш			Ш	$\perp$	•	•
TAU 150 N	2.0	•			•				Н	-	_	4				_	Н							Н									Н	Н		Н	Н	$\dashv$	•	•
TAU 210 N	2.7				•				Н	-	_	$\dashv$			•	$\dashv$	H							Н									Н	Н		Н	Н	$\dashv$	•	•
	3.2				•						+	$\dashv$		_	-	$\dashv$	H							H	_						Н		Н	H	-	Н	Н	$\dashv$	•	•
TAU 270 N	3.2				Ť				Н	-	+	$\dashv$			•	$\dashv$	Н							Н									Н	Н		Н	Н		•	•
	4.6					•			Н	+	+	$\dashv$		_			Н							Н			Н						Н			Н	Н		•	•
TAU 350 N	4.6										+					•								Н									П			Н	П		•	•
	5.0							•									П																П			•	П		•	•
TAU 450 N	5.0										$\exists$						П	•						П												•			•	•
FALL COO N	5.5						•										П							П									П			•	П		•	•
TAU 600 N	5.5															П	•																П			•			•	•
	5.7		•																																	•			•	•
TAU 800 N	5.7											•																								•			•	•
	5.7																				•										•		Ш			•			•	•
	5.7																							Ш		•					•	•	Ш			•	Ш	$\perp$	•	•
	6.3		•							_	_																									•	Ш	$\perp$	•	•
TAU 1000 N	6.3					L					+	•		_							_				_							_		$\square$		•	Н	$\vdash$	•	•
	6.3			H	H	H				-	+	-	-	_		$\dashv$		H		H	•			Н	_						•	_	Н	$\vdash$	_	Н	Н	$\dashv$	•	•
	6.6		H	•	H	H	H		Н	-	+	-	-	_	$\dashv$	$\dashv$						H		Н	_	•	Н	Н			•	_	Н	Н	_	Н	•	$\dashv$	•	•
	6.6	-	-	Ť		H				-	+	-	•	_		$\dashv$	Н							Н	_		Н				Н	_	Н	Н		Н	•	$\dashv$	•	•
TAU 1150 N	6.6			H	$\vdash$	H			Н	-	+			_		$\dashv$	Н					•		Н	_		Н				•	_	Н	Н		Н	•	+	•	•
	6.6										+	1				$\exists$	Н							Н			•				•	_	•			Н	•		•	•
	6.8			•							$\forall$													Н									П			П	•		•	•
	6.8					T			П			$\exists$	•			$\exists$	П							П			П				П		П	П		П	•		•	•
TAU 1250 N	6.8								П			7					П					•		П		П		П			•		П	П		П	•		•	•
	6.8																										•				•		•				•		•	•
	7.4			•																																	•		•	•
TAU 1450 N	7.4								Ш				•			$\Box$								Ш									Ш	Ш			•	$\Box$	•	•
	7.4																					•									•		Ш				•	$\perp$	•	•
	7.4																										•				•		•			Ш	•		•	•
	8.4								•		_	4		_			Ш							Н			Ш						Н	Ш		Ш	Ш	$\dashv$	•	•
TAU 1750 N	8.4								Н	_	_	4		•			H	H		H			_	Н			Н						Н	Н		$\vdash$	Н		•	•
	8.4			-					Н	-	_	$\dashv$		_			H	H		H			•	Н	_		Н	•			•		Н	_	_	$\vdash$	Н		•	•
	8.4								Н	•	+	$\dashv$		_		$\dashv$	H	H		H				Н	_		Н	•			•	_	$\vdash$	•		Н	Н	•	•	•
	9.6								Н	-	+	$\dashv$		_	$\dashv$	$\dashv$	H	H	•	H				Н	_		H				Н		Н	$\vdash$		Н	H	•	•	•
AU 2100 N	9.6								H	+	+	$\dashv$		_			H	H	Ť	H				•	_		Н				•		Н	$\vdash$		Н	H		•	•
	9.6			$\vdash$					Н	+	+	$\dashv$		_	H	$\dashv$	H	H		H				H	_		Н		•		•		Н	•	-	H		_	•	•
	11.5								Н		•	$\dashv$				$\exists$	Н							Н									Н	Н		Н	Н		•	•
AU 2600 N	11.5								Н		+	$\dashv$		_	$\exists$	$\exists$	Н	Н		•				Н	_		Н				Н		П	Н		П	Н		•	•

Description	Back-pressure													Œ	ias	bur	ner																ırne				ırne		Con	
	in combustion chamber												BΙι	ıe f	lam	e (L	.ow	NO:	k)													acc	esso	ory		TI	ang	e	par	iei
	(mbar)													٨	1od	ulat	ting																							
				М	1ech	nani	ical	caı	m										Ele	ctro		ca																		
											_										(	0₂ c	ont	rol		0	-	ntr ert		۲										
		3762350 BS3/M	3897606 RS 120/M BLU TC	3788006 RS 160/M BLU TC	3910510 RS 25/M BLU TC	3910610 RS 35/M BLU TC	3897406 RS 68/M BLU TC	20038484 RS 55/M BLU TC	3899711 RS 200/M BLU TL	20068219 RS 310/M BLU FS1	20068270 RS 410/M BLU FS1	3897632 RS 120/E BLU	3788032 RS 160/E BLU	3899810 RS 200/E BLU	8	$\neg$	æ	$\neg$	8	7	RS 120/E 02	RS 160/E 02	8	20166002 RS 310/E 02 BLU TC		20154943 RS 120/EV 02 BLU TC	20158956 RS 160/EV 02 BLU TC	20156077 RS 200/EV 02 BLU TL	20166004 RS 310/EV 02 BLU TC	20174935   RS 410/EV 02 BLU TC	20045187   Oxygen Control kit	<ul> <li>Variable speed drive</li> </ul>		20163074   Variable speed drive 7,5 kW	20163093 Variable speed drive 11 kW	4031196 Burner flange		20163867 Burner flange	4031069 Riellotech Clima Comfort	20043035 3-point modulation kit
		376	38	378	39.	39	38	20	38	20	20	38	378	38	39.	39	38	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	40	20	20	70	-
AU 2600 N	11.5																								•						•								•	•
	11.5																													•	•				•				•	•
	11.6										•																												•	•
AU 2000 N	11.6																			•																			•	•
AU 3000 N	11.6																								•						•								•	•
	11.6																													•	•				•				•	•

### **RECOMMENDED COMBINATIONS WITH BURNERS - EXTRA EU COUNTRIES**

Description	Back-pressure in combustion											bui												ner nge	Con	trol nels
	chamber								Y	ellov	v fla	me	(Star	dar	d)										pu.	
	(mbar)	_					stag	е									dulat									
		_										Ļ			М	echa	nica	al ca	m							
																									omfort	ı kit
		RS 44 MZ TC	RS 50 TC	RS 70 TC	RS 100 TC	RS 130 TC	RS5D	RS 310/M MZ FS1	RS 410/M MZ FS1	RS 250/M MZ TC	RS 190 TC	RS 34/M MZ TC	RS 44/M MZ TC	RS 50/M MZ TC	RS 70/M TC	RS 100/M TC	RS 130/M TC	RS 190/M TL	RS 190/M TC	RS 250/M MZ TL	RS 310/M MZ FS1	RS 410/M MZ FS1	Burner flange	Burner flange	Riellotech Clima Comfort	3-point modulation kit
		3789110	3784702	3785102	3785302	3785502	3762016	20068351	20068361	3788410	3785813	3788710	3788810	3781622	3789610	3789710	3789810	20052616	3787623	3788411	20068351	20068361	20178757	20178775	4031069	20013035
TAU 270 N	3.2						•																		•	
IAU 270 N	3.2											•													•	•
TAU 350 N	4.6	•																							•	
	4.6												•												•	•
TAU 450 N	5.0		•																						•	
	5.0													•											•	•
TAU 600 N	5.5			•																					•	
	5.5														•										•	•
TAU 800 N	5.7				•																				•	
	5.7															•									•	•
TAU 1000 N	6.3				•																				•	
	6.3															•									•	•
TAU 1150 N	6.6					•																	•		•	
	6.6																•						•		•	•
TAU 1250 N	6.8					•																	•		•	
	6.8																•						•		•	•
TALL 1450 N	7.4										•													•	•	
TAU 1450 N	7.4																		•					•	•	•
TAU 4750 N	8.4										•														•	
TAU 1750 N	8.4																	•							•	•
TAU 2100 N	9.6									•															•	
TAU 2100 N	9.6																			•					•	•
TAU 2600 N	11.5							•																	•	
TAU 2600 N	11.5																				•				•	•
TAIL 2000 N	11.6								•																•	
TAU 3000 N	11.6																					•			•	•

	chamber									_			D1.	16 5			ner	107											-		urn cess				Bur flar			Cont pan	
	(mbar)	H											Blt			ulati		NUX)											-										
	(	-			1ech	nan	ical	cai	m					M	ioa	ulati	ng	E	ect	ron	ic c	am							-										
											-											con	trol			cor													
			RS 25/M BLU TC	RS 35/M BLU TC	RS 55/M BLU TC	RS 68/M BLU TC	RS 120/M BLU TC	RS 160/M BLU TC	RS 200/M BLU TL	RS 310/M BLU FS1	RS 410/M BLU FS1	BLU	BLU	: BLU	E BLU	E BLU	E 81.0	KS 200/E BLU FS1	RS 410/E BLU FS1	RS 120/E 02 BLU TC	RS 160/E 02 BLU TL	RS 200/E 02 BLU TL	RS 310/E 02 BLU TC	RS 410/E 02 BLU TL	RS 120/EV 02 BLU TC	RS 160/EV 02 BLU TC	/ev 02 BLU IL	RS 310/EV 02 BLU IC	Oxygen Control kit	Variable speed drive 3,0 kW	Variable speed drive 5,5 kW	Variable speed drive 7,5 kW	Variable speed drive 11 kW	Burner flange	Burner flange	Burner flange	Burner flange	Riellotech Clima Comfort	3-noint modulation kit
		3762350 BS3/M		3910610 RS 35/I	4	3897406 RS 68/I	3897606 RS 120/		3899711 RS 200	20068219 RS 310/	0			_		$\neg$	3788032 RS 160/E BLU	20068261 RS 310/	Η.	+			20166002 RS 310/	П	$\dashv$		+	20166004 RS 3107	$\top$	Τ.		20163074 Variabl	20163093 Variabl	4031196 Burner	20178757 Burner	20178775 Burner	20163867 Burner		20013035 3-point
TAIL 445 N	2.2	376	39,	39,	200	38	38	378	38	200	20(	39,	39,	20(	38	38	200	200	200	207	201	201	201	201	20,	207	70	20	200	207	201	201	201	40	201	201	201	0+0	9 200
TAU 115 N	2.2	•												-			+	+	+	-	+				-	+	+	+	+	+	-	Н					_	•	•
TAU 150 N	2.0	Ť	•							H		-		+	+		+	+	-	+	-			H	+	+	+	+	+	+	-	-		H		H		•	•
TAU 210 N	2.7									Н		•	+	$\dashv$	+	+	$\dagger$	+	t					$\forall$	+	+	+	+	+							H	+	•	•
	3.2		•														$^{\dagger}$								1	$\top$	T		$^{\dagger}$								$\dashv$	•	•
TAU 270 N	3.2											•		$\exists$			T									$\top$			T				П				$\exists$	•	•
TAU 250 N	4.6			•													T									T	T		T				П	П				•	•
TAU 350 N	4.6												•																									•	•
TAU 450 N	5.0				•																													•				•	•
1AU 450 N	5.0													•																				•				•	•
TAU 600 N	5.5					•																												•				•	•
	5.5														•															L				•				•	•
	5.7						•																						L					•				•	•
TAU 800 N	5.7															•	_												_					•				•	•
	5.7													_			4			•	L					4		$\perp$	•					•			_	•	•
	5.7													_			+	-	-		-				•	$\perp$		_	•	•			L	•			_	•	•
	6.3						•							_			+	-	-	-	-					$\perp$		+	+	-			L	•			_	•	•
TAU 1000 N	6.3													_		•	+	+	+	+	-				-	+	+	+	+	+			H	•			+	•	•
	6.3	H			H		H		H	Н		-		$\dashv$	-	+	+	+	+	•	╁		H	H		+	+	+	•	+	-	H	H	•		Н	+	•	•
	6.3							•				-	-	$\dashv$	-	+	+	+	+	+	$\vdash$			$\vdash$	•	+	+	+	-	•	-	_	H	•	H	•	+	•	•
	6.6							-	H					$\dashv$		۲,	•	+	+	+	$\vdash$		H	$\vdash$	+	+	+	+	+	+	-	-	H		H	•	+	•	•
TAU 1150 N	6.6	-					-		-	Н				+		-	+	+	+	+	•		-		1	+	+	+	•	+	╁	H	Н			•	+	•	•
	6.6									Н				$\dashv$		+	+	+	+	+	Ť				+	•	+	+		+	•					•	+	•	•
	6.8							•						$\dashv$		+	$^{+}$	+	+	+	+			H	+	+	+	+	+	+	$\vdash$		Н			•	$\dashv$	•	•
	6.8									Н				$\dashv$		١,	•	+	+	+	+				1	+	+	+		╁	$\vdash$	Н				•	+	•	•
TAU 1250 N	6.8													$\forall$			$^{\dagger}$		$^{\dagger}$		•					$^{+}$		$^{\dagger}$	•							•	$\forall$	•	•
	6.8																$\dagger$							$\Box$		•	$\dagger$		•		•		П			•		•	•
	7.4	Г						•		П				$\exists$			1		T						$\exists$	$\top$	T		T			П	П	П	П	•	$\exists$	•	•
TAIL 4/ =0 **	7.4															1	•										1									•		•	•
TAU 1450 N	7.4																				•								•							•		•	•
	7.4																									•	I		•		•					•		•	•
	8.4	L							•																											П		•	•
TAU 1750 N	8.4	L															•	•																				•	•
	8.4									Щ				_			1					•				_	1	_	•	+			L			Ц		•	•
	8.4									Ш				_			_	_								•	•	_	•		_	•	L		L	Ц		•	•
	9.6									•				_		_	+	-	-	-	-					_	+	+	+	-			L			Ц	•	•	•
TAU 2100 N	9.6													_			+	•	-						_	_	+	_	-			_	L		L	Ц	•	•	•
	9.6									Ш				_			+	-	-	-	-		•		_	_	4	_	•	-	-	L	L	L	L	Ш	•	•	•
	9.6									Щ			_	_	_	-	+	+	-	-	-			$\sqcup$	_	$\perp$	1	•	•		-	•	H		H	Н	•	•	•
TAU 2600 N	11.5									Ш	•			_			+	-	•	-	-				_	_	4	_	+	+	-		Ш	Ш		Ш	_	•	•

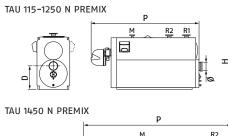
Description	Back-pressure													G	ias	bur	ner																urn				Bur			Con	
	in combustion chamber												Βlι	ıe f	lam	e (I	.ow	NO	x)													acc	ess	ory			flar	ıge		pan	iels
	(mbar)													٨	1od	ulat	ting																								
				١	1ec	har	ica	ca	m										Ele	ctro	onic	са	m																		
											-											0 <sub>2</sub> c	ont	rol			-	ntro erte		+											
		3762350 BS3/M	3910510 RS 25/M BLU TC	3910610 RS 35/M BLU TC	75	_	3897606 RS 120/M BLU TC	3788006 RS 160/M BLU TC	3899711 RS 200/M BLU TL	20068219 RS 310/M BLU FS1	0 RS	3910710 RS 25/E BLU	3910810 RS 35/E BLU	20038491 RS 55/E BLU	3897432 RS 68/E BLU	3897632 RS 120/E BLU			20068261 RS 310/E BLU FS1	20068294 RS 410/E BLU FS1	20165996 RS 120/E 02 BLU TC	20164535 RS 160/E 02 BLU TL	RS	۵.		$\neg$	20158956 RS 160/EV 02 BLU TC	$\neg$	20166004 RS 310/EV 02 BLU TC		20045187 Oxygen Control kit	20163064 Variable speed drive 3,0 kW	20163071 Variable speed drive 5,5 kW	20163074 Variable speed drive 7,5 kW	20163093   Variable speed drive 11 kW	4031196 Burner flange	20178757 Burner flange		20163867 Burner flange	4031069 Riellotech Clima Comfort	20013035 3-point modulation kit
	11.5	m	m	(11)	174	1 (11)	m	m	m	(4	(/1	(11)	m	74	m	(1)	m	m	7	(1		(4	74	7	•	7	[7]	7	(4	74	•	(4	- (4	- 2	- (4	4	[2]	[7]	74	•	•
TAU 2600 N	11.5			H	t						Н						+	+		_					$\dashv$	+			1	•	•				•		Н		$\exists$	•	•
	11.6										•																										П		$\exists$	•	•
	11.6					T					Н						$\exists$	$\dashv$		•					$\dashv$	7		1						Н			П	П	$\exists$	•	•
TAU 3000 N	11.6										Н														•	1					•						П	П	$\exists$	•	•
	11.6				T	T																								•	•				•		П	П	$\exists$	•	•

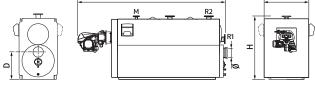
WATER-HEATERS

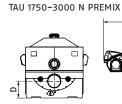
**RIELLO** 

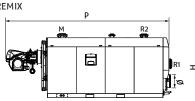
Condensing three flue gas passes stainless steel jet burners boilers

## Tau N Premix











Tau N combined with RX premixed gas burners





- In conformity with Directive 2009/125/EC
- Condensing boilers made of stainless steel with three flue gas passes, with a high water content
- Low emissions RX premix gas burner
- RIELLOtech Clima Comfort electronic control panel

Description	H mm	L mm	P mm	D mm	ø mm	M DN	R1 DN	R2 DN	Net weight kg
TAU 115 N PREMIX	1315	740	1960	505	160	65	65	50	582
TAU 150 N PREMIX	1315	740	1960	505	200	65	65	50	582
TAU 210 N PREMIX	1315	740	1960	505	200	65	65	50	617
TAU 270 N PREMIX	1450	850	2140	545	250	65	65	50	774
TAU 270 N PREMIX LPG	1450	850	2140	545	250	65	65	50	774
TAU 350 N PREMIX	1450	850	2380	545	250	80	80	65	865
TAU 450 N PREMIX	1630	900	2590	645	300	100	100	80	1233
TAU 600 N PREMIX	1630	900	2760	645	300	100	100	80	1426
TAU 800 N PREMIX	1910	1060	3080	680	350	125	125	80	2107
TAU 1000 N PREMIX	1910	1060	3330	680	350	125	125	80	2342
TAU 1150 N PREMIX	2030	1180	3900	720	400	150	150	100	2880
TAU 1250 N PREMIX	2030	1180	3900	720	400	150	150	100	2880
TAU 1450 N PREMIX	2180	1225	4060	805	450	150	150	100	3430
TAU 1750 N PREMIX	1945	1750	4800	521	400	200	200	150	4466
TAU 2100 N PREMIX	1945	1750	5200	521	400	200	200	150	4961
TAU 2600 N PREMIX	2128	1850	5610	552	450	200	200	150	5776
TAU 3000 N PREMIX	2170	1950	5820	600	450	200	200	150	6976

- Delivery. Low temperature return system.
- High temperature return system.

TAU N Premix is equipped with modulating burners with total premixing combustion, which guarantee very low emissions in atmosphere and a wide turndown ratio.

The burner is equipped with gas valves with proportional opening with pneumatic control; the gas is dosed in operation of the air introduced to the combustion head which is cylindrical radiating type. The mixing of air with gas takes place inside the burner fan (the fan is variable speed) allowing correct operation too in the presence of low gas supply pressures.

The premixed flame is characterized by a compact geometry, and a low noise level, which translates into a limited sound emission to the chimney, with obvious comfort acoustic advantages.

The modulation of the flame allows to adapt the delivery temperature according to the external temperature in order to optimize the efficiency. The flame ignition is guaranteed by an intermittent pilot flame device.

- Low polluting emissions
- Easy maintenance for total accessibility to internal components avoiding to disassemble the burner
- Equipped with the RIELLOtech Clima Comfort electronic control panel to manage cascades of boilers, complex solar systems, integration of multiple types of heat generators, two mixed zones, one direct and the production of domestic hot water
- Equipped with burner plate for premix burners
- Maximum working pressure: 6 bar.

### **TECHNICAL DATA**

Description		Power - kW			Efficiency - %	)	Notes	Code
	0utput usefu 80°/60° max	Output useful 40°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (40°/30°)	Useful 30% Pn (30 °C)		
TAU 115 N PREMIX	112.1	123.1	115	97.5	107.0	108.0	(B)(D)	20120146
TAU 150 N PREMIX	146.3	159.7	150	97.5	106.5	108.5	(B)(D)	20031981
TAU 210 N PREMIX	205.2	223.6	210	97.7	106.5	109.3	(B)(D)	20031987
TAU 270 N PREMIX	265.1	290.2	270	98.2	107.5	109.2	(C)(D)	20105079
TAU 270 N PREMIX LPG	265.1	290.2	270	98.2	107.5	109.2	(A)(D)	20105081
TAU 350 N PREMIX	344.1	375.2	349	98.3	107.5	108.5	(B)(D)	20105082
TAU 450 N PREMIX	442.4	481.5	450	98.3	107.0	108.5	(B)(D)	20105083
TAU 600 N PREMIX	589.8	642.0	600	98.3	107.0	108.5	(B)(D)	20105085
TAU 800 N PREMIX	786.4	860.0	800	98.3	107.0	108.5	(B)(D)(T)	20105086
TAU 1000 N PREMIX	983.0	1070.0	1000	98.3	107.0	108.5	(B)(D)(T)	20105089
TAU 1150 N PREMIX	1129.3	1230.5	1150	98.3	107.0	108.5	(B)(D)(T)	20166024
TAU 1250 N PREMIX	1229.7	1337.5	1250	98.3	107.0	108.5	(B)(D)(T)	20166025
TAU 1450 N PREMIX	1425.6	1551.5	1450	98.3	107.0	108.5	(B)(D)(T)	20166026
TAU 1750 N PREMIX	1718.5	1881.2	1750	98.3	107.5	108.7	(B)(D)(T)	20166039
TAU 2100 N PREMIX	2062.2	2258.7	2100	98.3	107.5	108.7	(B)(D)(T)	20166027
TAU 2600 N PREMIX	2553.2	2796.5	2600	98.3	107.5	108.7	(B)(D)(T)	20166030
TAU 3000 N PREMIX	2946.0	3226.8	3000	98.3	107.5	108.7	(B)(D)(T)	20166041

- LPG.
- Natural gas-LPG.
- (A) (B) (C) (D)
- Availability of the material at our warehouse: 25 working days from the date of the order's validation.
- Product not subject to standard transport rates. For transport enhancement contact the Order Management Office.

Maximum operating pressure 6 bar.

NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

### **ACCESSORIES**

Description	Notes	Code
HYDRAULIC ACCESSORIES		
N2 neutralisation kit (up to 450 kW)		4031810
N3 neutraliser kit (450-1500 kW)		4031812
HN2 neutralisation kit (up to 270 kW)	(1)	4031811
HN3 neutraliser kit (280-750 kW)	(1)(D)	4031813

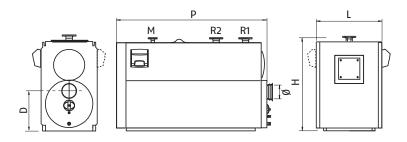
- Equipped with extraction pumps.
- Availability of the material at our warehouse: 30 working days from the date of the order's validation.

WATER-HEATERS

Condensing three flue gas passes oil and gas steel boilers

## Tau N Oil Pro







- Condensing boilers made of stainless steel with three flue gas passes, with high water content, suitable for the operation with oil and gas jet burners
- Suitable for the operation with oil for heating according to UNI 6579 (sulphur content < 1000 ppm)

Description	H mm	L mm	P mm	D mm	M Ø-DN	R1 low temp. Ø-DN	R2 high temp. Ø-DN	ø mm	Net weight kg
Tau 115 n oil pro	1315	740	1455	505	65	65	50	160	530
TAU 150 N OIL PRO	1315	740	1455	505	65	65	50	200	560
TAU 210 N OIL PRO	1315	740	1455	505	65	65	50	200	580
TAU 270 N OIL PRO	1450	850	1630	545	65	65	50	250	737
TAU 350 N OIL PRO	1450	850	1830	545	80	80	65	250	823
TAU 450 N OIL PRO	1630	900	2035	645	300	100	100	80	1185
TAU 600 N OIL PRO	1630	900	2235	645	300	100	100	80	1370
TAU 800 N OIL PRO	1910	1060	2560	680	350	125	125	80	2010
TAU 1000 N OIL PRO	1910	1060	2810	680	350	125	125	80	2245

The boiler has been designed to operate with heating standard oil, with sulphur content < 1000 ppm, thanks to the construction made of stainless steel AISI 316Ti and AISI 904 L. The boiler is based on the principle of heat stratification: in the upper part there is high temperature water, while in the lower part, where condensing take place, remains a large quantity of cold water in order to ensure the condensation.

The generator structure has been studied to contain thermal expansion.

Particular care was given to ensure thermal insulation of the boiler body, casing and door by using high-density mineral wool and ceramic fibre. The control panel should be ordered separately.

- Low polluting emissions
- Reduced average temperature of the body and quick start-up time
- Several solutions thanks to the combination with Riellotech control panels
- Built-in condensate drain
- Maximum operating pressure: 6 bar.

### **TECHNICAL DATA**

Description		Power - kW			Efficiency - %	6	Back pressure in	Notes	Code
	Output useful 80°/60° max	Output useful 40°/30° max	Furnace input min-max	Useful Pn (80°/60°)	Useful Pn (40°/30°)	Useful 30% Pn (30 °C)	the chamber mbar		
TAU 115 N OIL PRO	112.2	120.6	115	97.6	104.9	104.8	2.2	(D)	20124420
TAU 150 N OIL PRO	146.4	157.4	150	97.6	104.8	104.7	2.0	(D)	20124421
TAU 210 N OIL PRO	205.2	220.1	210	97.7	104.7	104.6	2.7	(1)(D)	20124423
TAU 270 N OIL PRO	264.3	282.7	270	97.9	104.5	104.4	3.2	(1)(D)	20124424
TAU 350 N OIL PRO	343.7	365.8	350	98.2	104.5	104.1	4.6	(1)(D)	20124425
TAU 450 N OIL PRO	441.9	470.3	450	98.2	104.5	104.1	5.0	(1)(D)	20180060
TAU 600 N OIL PRO	589.2	627.0	600	98.2	104.5	104.1	5.5	(1)(D)	20180061
TAU 800 N OIL PRO	785.6	836.0	800	98.2	104.5	104.1	5.7	(1)(D)	20164743
TAU 1000 N OIL PRO	982.0	1045.0	1000	98.2	104.5	104.1	6.3	(1)(D)	20164757

The product can benefit from tax deductions for energy redevelopment if combined with a Modulating type burner (see recommended combinations table). Availability of the material at our warehouse: 30 working days from the order receipt date.

### **ACCESSORIES**

Description	Notes	Code
HYDRAULIC ACCESSORIES	· · · · · ·	
Neutralizer kit DNO 2 (up to 300 kW)		20182661
Neutralizer kit DNO 3 (up to 1000 kW)		20182663
Neutralizer kit HNO 1.6 (up to 200 kW)	(1)	20182664
Neutralizer kit HNO 3 (up to 1000 kW)	(1)(2)(D)	20182665
MECHANICAL ACCESSORIES		
Burner flange		4031196

Equipped with extraction pumps. Contact pre-sales service.

### **CONTROL PANELS**

Description	Installation	Boiler model	Code
RIELLOtech CLIMA COMFORT	Vertical	TAU N 115-350 OIL	4031069

<sup>(1)</sup> (2) (3) (D)

On request.

Availability of the material at our warehouse: 30 working days from the order receipt date.

### **RECOMMENDED COMBINATIONS WITH BURNERS**

For combination with GAS BURNER use correspondence tables provided for similar models of the TAU N range on page 330.

Description	Back-pressure in combustion		Ligi	ht oil	burne	r			Dual fuel burner			ntrol nels	Panel board
	chamber (mbar)	Yellow flame (Standard)			Blue	flame	(Low	NOx)					accessory
		Modulating		Two	stage		1	Modul	ating				
		Mechanical cam		,	-		Ме	chani	cal cam				
		RL 100/M TL	BG7.1D	RL 22 BLU	RL 32 BLU	RL 42 BLU	RL 55/M BLU	RL 85/M BLU	RLS 120/M MX TL	Burner flange	Riellotech Clima Comfort	Riello 5000 CL-M	3-point modulation kit
		20166484	20015696	20027479	20027481	20027567	20169338		20147788	4031196	4031069	20020036	20013035
TAU 115 N OIL PRO	2.2		•								•	•	
TAU 150 N OIL PRO	2.0		•								•	•	
TAU 210 N OIL PRO	2.7			•							•	•	
TAU 270 N OIL PRO	3.2				•						•	•	
TAU 350 N OIL PRO	4.6					•					•	•	
TAU 450 N OIL PRO	5.0					•					•	•	
TAU 450 N OIL PRO	5.0						•			•	•		•
TAU 600 N OIL PRO	5.5						•				•		•
TAU 800 N OIL PRO	5.7							•		•	•		•
TAU 800 N OIL PRO	5.7								•	•	•	•	
TAU 1000 N OIL PRO	6.3	•									•		•
TAU 1000 N OIL PRO	6.3								•	•	•	•	

### STEEL JET BURNER BOILERS GAS/OIL

6

RIELLO

### THREE FLUE GAS PASSES



### RTS 3S

RTS 3S 90 (85,1 kW)\* RTS 3S 115 (108,3 kW)\* RTS 3S 166 (157,4 kW)\* RTS 3S 217 (207,5 kW)\* RTS 3S 255 (244,0 kW)\* RTS 3S 349 (334,7 kW)\*

RTS 3S 448 (427,8 kW) RTS 3S 511 (488,0 kW) RTS 3S 639 (610,2 kW) RTS 3S 850 (811,8 kW) RTS 3S 1160 (1107,8 kW) RTS 3S 1450 (1384,8 kW)

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### RTS 2S

RTS 115 2S (125 kW) RTS 150 2S (163 kW) RTS 200 2S (216 kW) RTS 247 2S (264 kW) RTS 319 2S (341 kW)

RTS 410 2S (439 kW) RTS 526 2S (563 kW) RTS 736 2S (787 kW) RTS 850 2S (909 kW) RTS 1012 2S (1082 kW) RTS 1200 2S (1283 kW) RTS 1355 2S (1449 kW) RTS 1500 2S (1609 kW) RTS 1850 2S (1980 kW)

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JET BURNER BOILERS GAS/OIL

STEEL

### RTG

RTG 1000 (1165 kW) RTG 1200 (1410 kW) RTG 3500 (4090 kW) RTG 4000 (4680 kW) RTG 4300 (5030 kW) RTG 5000 (5830 kW) RTG 1500 (1760 kW) RTG 1800 (2040 kW) RTG 2100 (2510 kW) RTG 6000 (7020 kW) RTG 2600 (3020 kW) RTG 7500 (8760 kW) RTG 3000 (3520 kW) RTG 9000 (10560 kW)

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### RTQ TK

RTO 4000 TK RTQ 4500 TK RTO 5000 TK RTQ 6000 TK RTO 7000 TK RTQ 8000 TK RTQ 9000 TK

RTO 14000 TK RTQ 16000 TK RTQ 18000 TK RTQ 20000 TK

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### RTQ T

page 364

RTQ 3000 T RTQ 3500 T RTQ 9000 T RTQ 10000 T RTQ 4000 T RTQ 11000 T RTO 5000 T RTQ 6000 T RTQ 7000 T RTQ 8000 T



### REVERSE FLAME



### RTQ 3S

RTQ 91 3S (87,1 kW) RTQ 115 3S (109,7 kW) RTQ 166 3S (158,7 kW) RTQ 217 3S (206,8 kW) RTQ 255 3S (243,3 kW) RTQ 318 3S (303,4 kW) RTQ 349 3S (332,0 kW)

RTO 448 3S (427,4 kW) RTQ 511 3S (487,5 kW) RTQ 575 3S (548,6 kW) RTQ 639 3S (609,6 kW) RTQ 766 3S (730,8 kW) RTO 896 35 (854.8 kW)

RTQ 1300 3S (1240,2 kW) RTQ 1600 3S (1526,4 kW) RTQ 2100 3S (2003,4 kW) RTQ 2400 3S (2289,6 kW) RTQ 3000 3S (2860,0 kW) RTO 3500 3S (3339 kW) RTQ 1100 3S (1049,4 kW) RTQ 4000 3S (3816 kW)

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### RTQ 2S

RTQ 50 2S (50,0 kW) RTQ 64 2S (64,0 kW) RTQ 82 2S (82,0 kW) RTQ 105 2S (105,0 kW) RTQ 154 2S (154,4 kW) RTQ 203 2S (202,7 kW) RTQ 235 2S (235,3 kW) RTO 297 25 (297.0 kW) RTQ 323 2S (322,9 kW) RTQ 357 2S (356,7 kW)

RTQ 418 2S (418,0 kW) RTQ 467 2S (467,0 kW) RTQ 537 2S (537,1 kW) RTO 597 2S (596.8 kW) RTQ 715 2S (715,4 kW) RTO 837 25 (836 9 kW) RTQ 920 2S (920 kW) RTQ 1020 2S (1020 kW) RTQ 1250 2S (1250 kW) RTQ 1500 2S (1500 kW)

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RTO 1700 2S (1700 kW) RTQ 2020 2S (2020 kW) RTQ 2320 2S (2320 kW) RTQ 2620 2S (2620kW) RTQ 2920 2S (2920 kW) RTQ 3200 2S (3200 kW) RTQ 3500 2S (3500 kW) RTQ 4000 2S (4000 kW) RTQ 4500 2S (4500 kW) RTQ 5000 2S (5000 kW)





RTO 12000 T RTQ 14000 1

RTQ 16000 T RTQ 18000 T

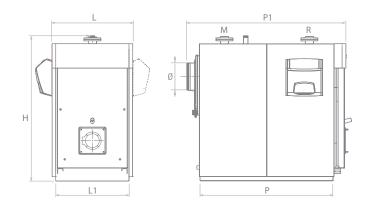
Products in conformity with ErP Directive (EU Regulation Nr. 813/2013) with oil.

NOTE: products in conformity with ErP Directive (EU Regulation Nr. 81/2013) with oil The distinguish between EU and Extra EU Countries is based only on the enforcement of the Ecodesign Regulation. The conformity to any other national Regulation must be confirmed.

## RTS 3S

Oil products are in conformity with ErP Directive (EU Regulation Nr. 813/2013). Gas products up to 400 kW only for replacement, till 1st January 2018, in conformity of point 2 (G) Article 1 of EU Regulation N. 813/2013.

Three flue gas passes steel jet burner boilers







- Oil products are in conformity with Directive 2009/125/EC
- Single-piece steel boilers with three flue gas passes
- The particular geometry of the heat exchanger allows to reduce the permanence time of flue gases in the high temperature zones while decreasing in this way the formation of NOx for low polluting emissions

Description	Н	L	P	L1	P1	М	R	Ø	Net weight
	mm	mm	mm	mm	mm	Ø	Ø	mm	kg
RTS 90 3S	1205	660	860	580	1155	2"	2"	180	335
RTS 115 3S	1285	710	1010	640	1330	2"	2"	200	450
RTS 166 3S	1390	760	1180	690	1500	2" 1/2	2" 1/2	250	515
RTS 217 3S	1390	760	1180	690	1500	2" 1/2	2" 1/2	250	535
RTS 255 3S	1524	820	1296	750	1660	2" 1/2	2" 1/2	250	715
RTS 349 3S	1490	820	1596	750	1960	DN80	DN80	250	840
RTS 448 3S	1685	890	1692	790	2085	DN80	DN80	300	1160
RTS 511 3S	1685	890	1692	790	2085	DN80	DN80	300	1160
RTS 639 3S	1820	1000	1965	900	2375	DN100	DN100	350	1500
RTS 850 3S	1920	1047	2236	980	2657	DN125	DN125	350	2075
RTS 1160 3S	2080	1147	2533	1070	2954	DN125	DN125	400	2575
RTS 1450 3S	2222	1237	2754	1160	3173	DN150	DN150	450	3390

Its vertical design and reduced width (narrow range) allows an easy installation even in tiny plant rooms. The flue pipes are equipped with removable stainless steel turbulators, which allow to optimize the efficiency of the heat exchange without increasing head losses. The door features an ambidextrous opening and is provided with a peephole with pressure intake. Casing is made of stove-enamelled sheet. Shell and flue gas zone are easy to reach for maintenance. The control panel should be ordered separately.

- High efficiency both punctual and seasonal
- Operation at modulating temperature (minimum allowed return temperature 50 °C)
- Several solutions thanks to the combination with RIELLOtech control panels
- Maximum operating pressure: 6 bar.

### **TECHNICAL DATA**

Description	Powe	er – kW	Efficie	ncy <b>-</b> %	Notes	Code
	Output useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)		
RTS 90 3S	85.1	90	94.5	98.5	(1)(2)	20042418
RTS 115 3S	108.3	115	94.2	98.5	(1)(2)	20031973
RTS 166 3S	157.4	166	94.8	98.5	(1)(2)	20031974
RTS 217 3S	207.5	217	95.6	98.5	(1)(2)	20031976
RTS 255 3S	244.0	255	95.7	98.5	(1)(2)	20031977
RTS 349 3S	334.7	349	95.9	98.5	(1)(2)	20031978
RTS 448 3S	427.8	448	95.5	98.5	(3)	20031979
RTS 511 3S	488.0	511	95.5	98.5	(3)	20031980
RTS 639 3S	610.2	639	95.5	98.5	(3)	20042417
RTS 850 3S	811.8	850	95.5	98.5	(3)	20044152
RTS 1160 3S	1107.8	1160	95.5	98.5	(3)	20047381
RTS 1450 3S	1384.8	1450	95.5	98.5	(3)	20047391

- Maximum operating pressure 5 bar for 90 model.

  Maximum operating pressure 6 bar for the other models.

  Minimum temperature of water return (to the boiler): 50 °C.

  (1) Gas products only for replacement, till 1st January 2018, in conformity of point 2 (G) Article 1 of Regulation EU N. 813/2013.

  (2) Oil product are in conformity with ErP Directive (EU Regulation Nr. 813/2013)

  For orders please contact Sales Department.

### **ACCESSORIES**

Description	Code
MECHANICAL ACCESSORIES	
Burner flange	20199147
Burner flange	4031188
Burner flange	4031196
Burner flange	4031197
Burner flange	4031198
Burner flange	20043900
Burner flange	20047680

### **CONTROL PANELS**

Description	Installation	Code	Boiler model
RIELLOtech CLIMA COMFORT	Vertical	4031069	All models
RIELLOtech PRIME	Vertical	20010820	All models
RIELLOtech PRIME ACS	Vertical	20010437	All models

Climate management with RIELLOtech Clima Comfort.
Thermostatic management with RIELLOtech PRIME.
NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

### **RECOMMENDED COMBINATIONS WITH BURNERS - EU COUNTRIES**

Description	Back-pressure in combustion								_			Ga	s b	urn											Bur flar			Cor	ntro	l pane
	chamber		Ye	llov	v fla	me	e (S	tan	dar	d)								me (	Lov	v N	Ox)				IIdi	ige				
	(mbar)		Two	_	age	_				_	_	_			1od	ula	ing													
		_		<u>-</u>		4			Med	cha	nic -	al c	am		_	-		Ele	ectr	oni 0	с са		ntrol	-						
																							erter							
																						u	U						omfort	
		TC	TC	0 TC	o TC	0 TC	RS 50/M MZ TC	RS 70/M TC	RS 100/M TC	RS 130/M TC	RS 150/M TC	RS 55/M BLU TC	RS 68/M BLU TC	RS 120/M BLU TC	RS 160/M BLU TC	RS 55/E BLU	RS 68/E BLU	RS 120/E BLU	RS 160/E BLU	RS 120/E 02 BLU TC	RS 160/E 02 BLU TL	RS 120/EV 02 BLU TC	RS 160/EV 02 BLU TC	Burner flange	Burner flange	Burner flange	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit
		RS 50 TC	RS 70 TC	RS 100 TC		-	RS 50	RS 70	RS 10	Н	_	_	-	RS 120	RS 16	RS 55	RS 68	RS 12(	RS 16	RS 12(	RS 16	RS 120	RS 16			_	Burn	_	Riello	Two s
		3784702	3785102	3785302	3785502	20044636	3781622	3789610	3789710	3789810	20044638	20038484	3897406	3897606	3788006	20038491	3897432	3897632	3788032	20165996	20164535	20154943	20158956	4031197	20043900	20047680	4031196	20010820	4031069	4031067
	2.9	•			Ц		_		$\Box$									_	4	_				L	Ш			•		•
RTS 448 3S	2.9				Ц		•	Ц	Ш	Ш							Ц	4	4					L	Ш				•	
	2.9				Ц	4	_			Ш		•						_	4	_				L	Ш		•		•	
	2.9				Ц	4	_		Ш	Ш						•		4	4	_					Ш		•		•	
	5.4	•			Ц														4									•		•
RTS 511 3S	5.4				Ц	4	•		Ш	Ш								_	4	_					Ш				•	
	5.4				Ц	4	_		Ш	Ш		•						_	4	_					Ш		•		•	
	5.4				Ц	4	_			Ш						•		_	4	_					Ш		•		•	
	5.2		•		Ц	4	_			Ш								_	4	_					Ш			•		•
RTS 639 3S	5.2				Ц	_	_	•		Ш								_	4	_					Ш				•	
	5.2					4	_						•					_	4	_							•		•	
	5.2				Ц	_	_			Ш							•	_	4	_				•	Ш				•	
	6.7			•	Ц		_		Ш																Ш			•		•
	6.7				Ц				•										4										•	
RTS 850 3S	6.7				Ц									•					4										•	
	6.7					_												•											•	
	6.7				Ц														4	•									•	
	6.7				Ц														4			•							•	
	3.9				•														4						•			•		•
	3.9				Ц					•									4						•				•	
RTS 1160 3S	3.9				Ц	4			Ш					•				_	4						Ц				•	
	3.9				Ц													•	4										•	
	3.9				Ц														4	•									•	
	3.9				Ц	_													4			•							•	
	4.6			Ш	Ш	•		Щ	Ш	Ш					Ш		Ш		_						Ш			•		•
	4.6				Ц	_		Щ	Ш	Ш	•				Ш		Ш	_	4						Ш				•	
RTS 1450 3S	4.6			Ш	Ц	_		Щ	Ш	Ш					•		Ш								Ш				•	
	4.6			Ш	Ц	_		Щ	Ш	Ш					Ш		Ш		•						Ш				•	
	4.6			Ш	Ц	_		Щ		Ш				L	Ш	L	Ш	_	4		•				Ш				•	
	4.6		L								L												•						•	

Description	Back-pressure in combustion						Li	ght	oil l	burn	ner							al fi urn			rner ssory	В	urn	er fl	ang	e	Cor	ntro	l par	ıels
	chamber (mbar)	,	/ello	ow f	lam	e (S1	tano	dard	)			Blu	e fl	ame	(Lo	w N	0x)													
	(5a.)	Т	wo	stag	ge	М	odu	ılatiı	ng		Tw	o sta	age			Mod	lula	ting												
				-	,	М		anio am	al			-			Мє	cha	nica	al ca	am											
		RL 50 TC	RL 70 TC	RL 100 TC	RL 130 TC	RL 50/M TC	RL 70/M TC	RL 100/M TC	RL 130/M TC	BG6.1D	BG7.1D	RL 22 BLU	RL 32 BLU	RL 42 BLU	RL 55/M BLU	RL 85/M BLU	RLS 68/M MX TC	RLS 120/M MX TC	RLS 160/M MX TC	Kit modulation RWF 50.2	Kit modulation RWF 50.2	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit				
		3474632	3475032	3475232	3475432	20166502	20166463	20166481	20166486	20015693	20015696	20027479	20027481	20027567	20169338	20169330	20147784	20147786	20147789	20082208	20099869	20043900	4031188	20199147	4031196	4031198	20010820	4031069	4031067	20013035
RTS 90 3S	1.0									•																	•		•	
RTS 115 3S	1.4										•												П	П	П		•	П	•	
RTS 166 3S	1.8											•											П	П	П	•	•	П	•	
RTS 217 3S	2.7											•														•	•		•	
RTS 255 3S	2.9												•										П		П	П	•	П	•	П
RTS 349 3S	3.6													•									П	•	П	П	•	П	•	П
	2.9	•																					П		П	П	•	П	•	П
	2.9					•																	П		П	Г		•		•
RTS 448 3S	2.9													•									•				•	П	•	
	2.9														•										•			•		•
	2.9																•			•							•	П	•	
	5.4	•																					Г		П		•	П	•	
	5.4					•																						•		•
RTS 511 3S	5.4														•								Г		•	Г	П	•		•
	5.4																•			•			Г		П	Г	•	П	•	П
	5.2		•																П				Г		П	Г	•	П	•	П
	5.2						•												П				Г		П	Г		•		•
RTS 639 3S	5.2														•				П				Г		•	Г		•		•
	5.2																•			•			П			П	•	П	•	
	6.7			•															П				Г		П	Г	•	П	•	Т
	6.7							•															Г		П	П		•		•
RTS 850 3S	6.7															•							Г		•	П		•		•
	6.7																	•		•			Г		П	Г	•	П	•	Т
	3.9				•														П			•	Г			Г	•	П	•	Т
RTS 1160 3S	3.9							•											П				Г			Г	П	•		•
	3.9																		•		•		Г		П	Г	•	П	•	Т
	4.6				•														П			•	Г		П	Г	•	П	•	Т
RTS 1450 3S	4.6								•										П			•	Г		П	Г	П	•		•
	4.6															П			•		•	П	Г	П		Г	•	П	•	П

### **RECOMMENDED COMBINATIONS WITH BURNERS - EXTRA EU COUNTRIES**

Description	Back-pressure in combustion							as b									ner nge	Con	ıtrol	l pan	els
	chamber						w f	lam	e (S1		dard	_					80				
	(mbar)			Tw	o sta	age			_		Mod		_	_							
					-					Ме	echa		al ca	am							
					-							-					$\vdash$				
									C)	u	u					d)	d)	me	ma Comfort	rner t kit	lation kit
		RS 34 MZ TC	RS 44 MZ TC	RS 50 TC	RS 70 TC	RS 100 TC	RS 130 TC	RS 150 TC	RS 34/M MZ TC	RS 44/M MZ TC	RS 50/M MZ TC	RS 70/M TC	RS 100/M TC	RS 130/M TC	RS 150/M TC	Burner flange	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit
		3789010	3789110	3784702	3785102	3785302	3785502	20044636	3788710	3788810	3781622	3789610	3789710	3789810	20044638	20043900	4031197	20010820	4031069	4031067	20013035
DTC 466 DC	1.8	•																•		•	
RTS 166 3S	1.8								•										•		•
DTC 24T 25	2.7	•																•		•	
RTS 217 3S	2.7								•										•		•
	2.9	•																•		•	
RTS 255 3S	2.9								•										•		•
	3.6		•															•		•	
RTS 349 3S	3.6									•								П	•		•
PTC 4 4 0 0C	2.9			•														•		•	
RTS 448 3S	2.9										•						П	П	•		•
	5.4			•													П	•		•	
RTS 511 3S	5.4										•						П		•		•
	5.2				•												П	•		•	
RTS 639 3S	5.2											•					П		•		•
PTC 050 05	6.7					•											•	•		•	
RTS 850 3S	6.7												•				П		•		•
PTC 4450 25	3.9						•									•		•		•	
RTS 1160 3S	3.9													•		•			•		•
PTC 44 F0 PC	4.6							•										•		•	
RTS 1450 3S	4.6														•				•		•

Description	Back-pressure in combustion								Gas													Вι	urn	er fl	an	ge	Coi	ntro	l pane	els
	chamber						ВІ	lue	flan	ne	(Lov																			
	(mbar)	Monostadio		-		_	_	_				Мс	du	latii		_	_													
		-	-		ме	cna	nic		am		_				Ele	ctro	onic	car	m 1 <sub>2</sub>	0, 00	ontrol									
						1		1	_				1								erter									
		BS3	BS3D	BS3/M	RS 25/M BLU TC	RS 35/M BLU TC	RS 55/M BLU TC	RS 68/M BLU TC	RS 120/M BLU TC	RS 160/M BLU TC	RS 25/E BLU	RS 35/E BLU	RS 45/E BLU	RS 55/E BLU	RS 68/E BLU	RS 120/E BLU	RS 160/E BLU	RS 120/E 02 BLU TC	RS 160/E 02 BLU TL	RS 120/EV 02 BLU TC	RS 160/EV 02 BLU TC	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit				
		3761316	3761716	3762350	3910510	3910610	20038484	3897406	3897606	3788006	3910710	3910810	3897332	20038491	3897432	3897632	3788032	20165996	20164535	20154943	20158956	20043900	20047680	4031196	4031198	4031197	20010820	4031069	4031067	20013035
	1.0	•																									•			
RTS 90 3S	1.0		•																								•		•	
	1.0			•																								•		•
	1.4	•																									•			
RTS 115 3S	1.4		•																								•		•	
	1.4			•																								•		•
	1.8	•																									•			
RTS 166 3S	1.8		•																								•		•	
	1.8			•					L																			•		•
RTS 217 3S	2.7				•				L																•			•		•
	2.7										•														•			•		•
RTS 255 3S	2.9				•																							•		•
	2.9								L			•																•		•
RTS 349 3S	3.6					•			L																			•		•
	3.6			-				_	L			•																•		•
RTS 448 3S	2.9			_			•		L		L	_	ļ.									_	_	•				•		•
	2.9			-			_	-	H			-	•															•		•
RTS 511 3S	5.4			-			•	-	L		-	-	-	L									_	•		_		•		•
PTC 620.25	5.4			-				-	$\vdash$			-		•								H		•				•		•
RTS 639 3S	5.2							•	_		H													•				•		_
	6.7								•		H		$\vdash$			•								H				•		•
RTS 850 3S	6.7			-			H	-	H		H	-	-			_		•				$\vdash$	-			_		•		•
	6.7			-			-		H		H	$\vdash$				_	Н	_		•		Н		H		_		•		•
	3.9			-			-		•		H	$\vdash$				_				_		Н				_		•		•
	3.9			-		-		-	Ť	$\vdash$	H	-	$\vdash$			•						H		H				•		•
RTS 1160 3S	3.9															Ť		•										•	$\vdash$	•
	3.9			-				-	H		H	-	H							•		H				_		•		•
	4.6								H	•												Н	•					•		•
	4.6								$\vdash$								•					Н						•		•
RTS 1450 3S	4.6				H		H		$\vdash$	H	H		t	H					•				H					•		•
	4.6								$\vdash$							Н	Н				•	Н						•		•

HOI AIR GENERATORS

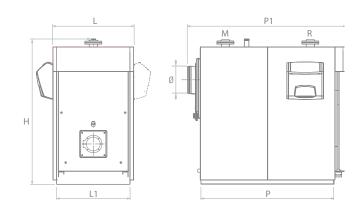
Description	Back-pressure in combustion	_				Volla	10/ F	lam	) (C4		Ligh lard		il bu	ırne	r		DI.	uo f	lam	. (1.	w NO	<u></u>		ner ssory	Bu	rner	flar	nge	Coı	ntro	l pane
	chamber (mbar)	-						lam	e (St	anc	_		latii	na		H				e (LC											
	(iiibui)	-			wo	- -	e		_	_		odu han		can		-	100	o sta	age	_		lating anical									
		_													_					_		m									
																							WF 50.2	WF 50.2						Comfort	<u>.</u>
		RG3D	RG4D	RL 50 TC	RL 70 TC	RL 100 TC	RL 130 TC	RL 34 MZ TC	RL 44 MZ TC	RL 50/M TC	RL 70/M TC	RL 100/M TC	RL 130/M TC	RL 28/M TC	RL 38/M TC	BG6.1D	BG7.1D	RL 22 BLU	RL 32 BLU	RL 42 BLU	RL 55/M BLU	RL 85/M BLU	Kit modulation RWF 50.2	Kit modulation RWF 50.2	Burner flange	Burner flange	Burner flange	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit
		3739450	3739750		3475032	3475232	3475432	3470210	3470310	20166502	20166463	20166481	20166486		20166497	20015693		20027479	20027481	20027567	20169338	20169330	20082208	20099869	20043900	4031188	4031196	4031198	20010820	4031069	4031067
	1.0	•																											•		•
RTS 90 3S	1.0															•													•		•
DTC 44F DC	1.4	•															П												•		•
RTS 115 3S	1.4																•												•		•
RTS 166 3S	1.8		•																										•		•
113 100 33	1.8																	•										•	•		•
	2.7							•																				•	•		•
RTS 217 3S	2.7													•														•		•	
	2.7																	•										•	•		•
	2.9							•																					•		•
RTS 255 3S	2.9													•																•	
	2.9																		•										•		•
	3.6								•																				•		•
RTS 349 3S	3.6														•															•	
	3.6																			•						•			•		•
	2.9		-	•						_							-												•		•
	2.9									•							-			_										•	
RTS 448 3S	2.9																			•						•			•	_	•
	2.9		-																		•						•		_	•	
	2.9		-	-																			•						•		•
	5.4			•						_																			•		•
RTS 511 3S	5.4									•																	_			•	
	5.4																				•		•				•			•	•
	5.4				•																		•						•		•
	5.2				Ť						•																		-	•	
RTS 639 3S	5.2										•										•						•			•	
	5.2																				_		•		-				•	Ť	•
	6.7					•											$\vdash$						_						•		•
	6.7					Ť						•																	Ť	•	
RTS 850 3S	6.7											Ė										•					•			•	
	6.7																						•						•		•
	3.9						•																		•				•		•
RTS 1160 3S	3.9											•																		•	
	3.9		H														$\vdash$		П					•					•		•
	4.6						•																		•				•		•
RTS 1450 3S	4.6		+							_			•	-	_	-	+								•					•	

Description	Back-pressure			D	ual f	uel b	urne	er			Bui	ner		Burr	ner fl	ange		Со	ntrol	pane	els
	in combustion chamber			ow fl	ame			e fla		Low		ssory				0-					
	(mbar)			anda			<u> </u>		)x)												
		_	Tw	o sta	age		_	Modu													
		_		_			ме	chan	icai	cam											
		28	38	50	70	00	RLS 68/M MX TC	RLS 120/M MX TC	RLS 160/M MX TC	RLS 190/M MZ	Kit modulation RWF 50.2	Kit modulation RWF 50.2	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit				
		RLS 2	RLS 3	RLS 5	RLS 7	RLS 100	RLS 6	RLS 13	RLS 1	RLS 1	Kit m	Kit m	Burn	Burn	Burn	Burn	Burn	Riello	Riello	Two	3-poi
		20147897	20147803	20147805	20147798	20147799	20147784	20147786	20147789	20159361	20082208	20099869	20043900	20047680	4031188	4031196	4031198	20010820	4031069	4031067	20013035
RTS 166 3S	1.8	•															•	•		•	
RTS 217 3S	2.7	•															•	•		•	
RTS 255 3S	2.9	•																•		•	
RTS 349 3S	3.6		•															•		•	
	2.9			•														•		•	
RTS 448 3S	2.9						•				•							•		•	
	5.4				•													•		•	
RTS 511 3S	5.4						•				•							•		•	
	5.2				•													•		•	
RTS 639 3S	5.2						•				•							•		•	
	6.7					•												•		•	
RTS 850 3S	6.7							•			•							•		•	
	3.9									•	•			•				•		•	
RTS 1160 3S	3.9								•			•						•		•	
	4.6									•	•			•				•		•	
RTS 1450 3S	4.6								•			•						•		•	

Three flue gas passes steel jet burner boilers

## RTS 2S

Products up to 400 kW only for replacement, till 1st January 2018, in conformity of point 2 (G) Article 1 of Regulation EU N. 813/2013.





- Single-piece steel boilers with three flue gas passes, that can be matched with jet burners
- The particular geometry of the heat exchange allows to reduce the permanence time of flue gases in the high temperature zones while decreasing in this way the formation of NOx for low polluting emissions

Description	Н	L	P	L1	P1	М	R	Ø	Net weight
	mm	mm	mm	mm	mm	DN	DN	DN	kg
RTS 115 2S	1205	660	860	580	1155	2"	2"	180	335
RTS 150 2S	1285	710	1010	640	1330	2"	2"	200	450
RTS 200 2S	1390	760	1180	690	1500	2" 1/2	2"1/2	250	515
RTS 247 2S	1390	760	1180	690	1500	2" 1/2	2"1/2	250	535
RTS 319 2S	1524	820	1296	750	1660	2" 1/2	2"1/2	250	715
RTS 410 2S	1490	820	1596	750	1960	DN80	DN80	250	840
RTS 526 2S	1685	890	1692	790	2085	DN80	DN80	300	1160
RTS 736 2S	1830	1000	1965	900	2375	DN100	DN100	350	1500
RTS 850 2S	1830	1000	1965	900	2375	DN100	DN100	350	1500
RTS 1012 2S	1920	1047	2236	980	2657	DN125	DN125	350	2075
RTS 1200 2S	1920	1047	2236	980	2657	DN125	DN125	350	2075
RTS 1355 2S	2080	1147	2533	1070	2954	DN125	DN125	400	2575
RTS 1500 2S	2080	1147	2533	1070	2954	DN125	DN125	400	2575
RTS 1850 2S	2222	1237	2754	1160	3173	DN150	DN150	450	3390

Pressurized steel boilers, that can be matched with any fuel jet burners. Provided with completely wet combustion chamber with free dilation and three passes flue path. The flue pipes are equipped with removable stainless steel turbulators, which allow to optimize the efficiency of the heat exchange without increasing head losses.

The door features an ambidextrous opening and is provided with a peephole with pressure intake. Casing is made of stove-enamelled sheet. Shell and flue gas zone are easy to reach for maintenance.

The control panel should be ordered separately.

- High efficiency both punctual and seasonal
- Operation at modulating temperature (minimum allowed return temperature 50 °C)
- Several solutions thanks to the combination with RIELLOtech control panels
- Maximum operating pressure: 6 bar.

### **TECHNICAL DATA**

Description	Powe	r - kW	Efficie	ncy - %	Notes	Code
	Output useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30°C)		
RTS 115 2S	115	125	92.2	97.2		20150418
RTS 150 2S	150	163	92.2	97.2		20150304
RTS 200 2S	200	216	92.7	97.2		20150305
RTS 247 2S	247	264	93.5	97.2		20150410
RTS 319 2S	319	341	93.5	97.2		20150412
RTS 410 2S	410	439	93.5	97.2		20150416
RTS 526 2S	526	563	93.5	97.2		20150417
RTS 736 2S	736	787	93.5	97.2		20150419
RTS 850 2S	850	909	93.5	97.2	(1)	20150434
RTS 1012 2S	1012	1082	93.5	97.2	(1)	20150420
RTS 1200 2S	1200	1283	93.5	97.2	(1)	20150435
RTS 1355 2S	1355	1449	93.5	97.2	(1)	20150432
RTS 1500 2S	1500	1609	93.2	97.2	(1)	20150437
RTS 1850 2S	1850	1980	93.5	97.2	(1)	20150433

### **ACCESSORIES**

Description	Code
MECHANICAL ACCESSORIES	
Burner flange	4031188
Burner flange	4031196
Burner flange	4031395
Burner flange	20043900
Burner flange	20047680
Burner flange	20065920
Burner flange	4031186
Burner flange	4031192
Burner flange	4031198
Burner flange	20043899
Burner flange	20184817

### **CONTROL PANELS**

Description	Installation	Code	Boiler model
RIELLOtech CLIMA COMFORT	Vertical	4031069	All models
RIELLOtech PRIME	Vertical	20010820	All models
RIELLOtech PRIME ACS	Vertical	20010437	All models

Climate management with RIELLOtech Clima Comfort. Thermostatic management with RIELLOtech Prime.

Maximum operating pressure: 6 bar. (1) For orders please contact Sales Department.

### **RECOMMENDED COMBINATIONS WITH BURNERS - EU COUNTRIES**

Description	Back-pressure in combustion			Vell	016: 4	ila ==	0 /5	+	darc		ias t	urn	er		DI	10 5		(Lo	A1	Ox/				Bu	rneı	fla	nge		Co	ntro	l pan
	chamber (mbar)	0ne			ow i		ie (5	tan	aarc	1)				Moc		ting		(LO	W N	UX)											
	(54.7)	stage																													
		-			-						Mec	han	ical	cam	1			EI	ectr	onio	ca	m									
		10				.,		,,		.,	; TC	; TC	LU TC	LU TC	LU TC	U TC	U TC	n	n.	n.	_		ge	ge	ge	ge	ge	ge	rime	Riellotech Clima Comfort	ourner nt kit
		RS 44/1 MZ	RS 100 TC	RS 130 TC	RS 190 TC	RS 44 MZ TC	RS 50 TC	RS 100/M TC	RS 130/M TC	RS 190/M TC	RS 44/M MZ TC	RS 50/M MZ TC	RS 120/M BLU TC	RS 160/M BLU TC	RS 200/M BLU TC	RS 45/M BLU TC	RS 68/M BLU	RS 120/E BLU	RS 160/E BLU	RS 200/E BLU	RS 45/E BLU	RS 68/E BLU	Burner flange	Riellotech Prime	Riellotech (	Two stage burner management kit					
		3788610	3785302	3785502	3785813	3789110	3784702	3789710	3789810	3787623	3788810	3781622	3897606	3788006	3899710	3897306	3897406	3897632	3788032	3899810	3897332	3897432	20043900	20047680	20065920	4031188	4031196	4031395	20010820	4031069	4031067
	3.70	•		L												Ĺ		Ц						Ĺ			L	•	•		
	3.70					•																						•	•		•
RTS 410 2S	3.70										•																	•		•	
	3.70															•		Ц										•		•	
	3.70																				•							•		•	
	2.20						•																					•	•		•
RTS 526 2S	2.20											•																•		•	
	2.20																•										•			•	
	2.20																					•					•			•	
	4.80		•																							•			•		•
RTS 739 2S	4.80		_	_	_		_	•	_									Ш		Ш					_	•	_		_	•	
	4.80		_	_	_								•														•		_	•	
	4.80		L.	_	_		_		-									•		Ш					-	ļ.,	•		L.	•	
	6.80		•		_				-																	•			•		•
RTS 850 2S	6.80							•					_													•	_			•	
	6.80												•												-		•			•	
	6.80		_															•									•		_	•	
	6.10		•		_				ļ.,														•						•		•
RTS 1012 2S	6.10		_	_	_				•				_										•						_	•	
	6.10		_	_	_								•										•						_	•	
	6.10			ļ.,														•					•						ļ.,	•	
	9.80			•	_				L.														•						•		•
RTS 1200 2S	9.80								•					_									•		-					•	
	9.80													•					_						•					•	
	9.80				_														•						•				_	•	
	5.10				•				-																•				•		•
RTS 1355 2S	5.10									•				_											•					•	
	5.10													•					_						•					•	
	5.10																	H	•						•					•	
	7.00				•				-	_															•				•	_	•
RTS 1500 2S	7.00			_	H				-	•				•				H		H				H	•		_	H	-	•	
	7.00			H	H				-					•				H	•	H				H	•			H	-	•	
	7.00				_													H	•						•				_	•	
	7.20				•			_		_								H						•					•		•
RTS 1850 2S	7.20									•					_			H						•						•	
	7.20														•									•						•	

NOTE: the gas burners must be completed with the gas train.

HOT AIR GENERATORS

Description	Back-pressure						Lig	ht d	oil b	ourr						[	ual	Fue	el bu	ırne			Burner		Bu	ner	flaı	nge		Cor	ntro	pan	els
	in combustion chamber	Γ,	Yell	ow	flaı	me	(Sta	nd	ard)	)	Blue	flame N0x)	(Low	,	Yello (Sta	w fl		е			e flan w N0:		accessory										
	(mbar)	Tv	NO.	stag	σe		Mod	lula	ating	σ	Two		ılating	Tvv			iiu)		Mod		ting	<b>'</b>	-										
		-		-		-			al c	_	stage -	Mech	anical		-						al can	n	-										
												C	am										JF 50.2								omfort		kit
		RL 50 TC	RL 100 TC	RL 130 TC	RL 190 TC	RL 38/M TC	RL 50/M TC	RL 100/M TC	RL 130/M TC	RL 190/M TC	RL 42 BLU	RL 55/M BLU	RL 85/M BLU	RLS 50	RLS 70	RLS 100	RLS 190/M MZ	RLS 250/M MZ	RLS 68/M MX TC	RLS 120/M MX TC	RLS 160/M MX TC	RLS 310/M MX	Kit modulation RWF 50.2	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit					
		3474632	3475232	3475432	3475613	20166497	20166502	20166481	20166486	20166490	20027567	20169338	20169330	20147805	20147798	20147799	20159361	20145372	20147784	20147786	20147789	20147806	20082208	20043900	20047680	20065920	4031188	4031196	4031395	20010820	4031069	4031067	20013035
	3.70	•																											•	•		•	
	3.70					•																							•		•		•
RTS 410 2S	3.70										•																•			•		•	
	3.70													•															•	•		•	
	3.70																		•				•							•		•	
	2.20	•																											•	•		•	
	2.20						•																						•		•		•
RTS 526 2S	2.20											•																•			•		•
	2.20														•												•			•		•	
	2.20																		•				•							•		•	
	4.80		•																								•			•		•	
	4.80							•																			•				•		•
RTS 739 2S	4.80												•															•			•		•
	4.80														•												•			•		•	
	4.80																		•				•							•		•	
	6.80		•																								•			•		•	
DTC OFO OC	6.80							•																			•				•		•
RTS 850 2S	6.80															•												•		•		•	
	6.80																			•			•							•		•	
	6.10		•																					•						•		•	
DTC	6.10							•																•							•		•
RTS 1012 2S	6.10															•								•						•		•	
	6.10																			•			•							•		•	
	9.80			•																				•						•		•	
RTS 1200 2S	9.80								•															•							•		•
113 1200 23	9.80																•						•			•				•		•	L
	9.80																				•		•							•		•	
	5.10			•				L											L					•						•		•	L
RTS 1355 2S	5.10							L	•										L					•							•		•
1333 23	5.10							L									•		L				•			•				•		•	L
	5.10							L								L			L		•		•							•		•	L
	7.00				•			L																		•				•		•	
RTS 1500 2S	7.00									•																•					•		•
	7.00																•						•			•				•		•	
	7.00																				•		•							•		•	
	7.20				•																				•					•		•	
RTS 1850 2S	7.20									•															•						•		•
5 10,00 23	7.20																	•					•		•					•		•	
	7.20																					•	•							•		•	

### **RECOMMENDED COMBINATIONS WITH BURNERS - EXTRA EU COUNTRIES**

Description	Back-pressure						G	as t	urn	er								Bui	rner	fla	nge	_	_	Co	ntro	l pan	els
	in combustion chamber				,	Yello	w f	lam	e (St	tano	lard	)															
	(mbar)		ne age		Т	wo :	stag	ge			М	odu	latir	ng													
		_	-			_	_				Mec	han	ical	can	,												
																							П		E.		
		TC	TC										TC	TC	TC	ge	ge	ge	ge	ge	ge	96	ge	rime	lima Comfo	urner nt kit	ulation kit
		RS 34/1 MZ 1	RS 44/1 MZ 1	RS 100 TC	RS 130 TC	RS 190 TC	RS 44 MZ TC	RS 50 TC	RS5D	RS 100/M TC	RS 130/M TC	RS 190/M TC	RS 34/M MZ	RS 44/M MZ TC	RS 50/M MZ TC	Burner flange	Riellotech Prime	Riellotech C	Two stage burner management kit	3-point modulation kit							
		3788510	3788610	3785302	3785502	3785813	3789110	3784702	3762016	3789710	3789810	3787623	3788710	3788810	3781622	20043900	20047680	20065920	4031186	4031188	4031192	4031198	4031395	20010820	4031069	4031067	20013035
	3.00	•																				•		•			
RTS 247 2S	3.00								•										•					•		•	
	3.00												•									•	$\perp$	$\perp$	•		•
	2.40	•																			•			•			
RTS 319 2S	2.40						•														•			•		•	
	2.40												•									•			•		•
	3.70		•																				•	•			
RTS 410 2S	3.70						•																•	•		•	
	3.70													•									•		•		•
RTS 526 2S	2.20							•															•	•		•	
	2.20														•								•	$\perp$	•		•
RTS 739 2S	4.80			•																•				•		•	
	4.80									•										•					•		•
RTS 850 2S	6.80			•																•			$\perp$	•		•	$\perp$
	6.80									•										•			$\perp$	$\perp$	•		•
RTS 1012 2S	6.10			•												•							╙	•		•	_
	6.10										•					•							L	L	•		•
RTS 1200 2S	9.80				•											•							$\perp$	•		•	$\perp$
	9.80										•					•							$\perp$	$\perp$	•		•
RTS 1355 2S	5.10					•												•					$\perp$	•	$\perp$	•	
	5.10											•						•					L	$\perp$	•		•
RTS 1500 2S	7.00					•												•					L	•	$\perp$	•	
	7.00											•						•					$\perp$	$\perp$	•		•
RTS 1850 2S	7.20					•											•						$\perp$	•	_	•	_
	7.20											•					•								•		•

Description	Back-pressure									G	as b	urn	er										Burner flange										Control panels				
	in combustion chamber								BΙι	ie fl	ame	(Lo	w N	10x)																							
	(mbar)		ne age		vo age							М	odı	ılatiı	ng																						
		310	-	310	-			Me	echa	nic	al c	am				El	lectr	oni	с са	m																	
																																	Comfort		n kit		
		BS3	BS4	BS3D	BS4D	BS3/M	BS4/M	RS 120/M BLU TC	RS 160/M BLU TC	RS 200/M BLU TC	RS 25/M BLU TC	RS 35/M BLU TC	RS 45/M BLU TC	RS 68/M BLU TC	RS 120/E BLU	RS 160/E BLU	RS 200/E BLU	RS 25/E BLU	RS 35/E BLU	RS 45/E BLU	RS 68/E BLU	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit											
		3761316	3761416	3761716	3761816	3762350	3762450	3897606	3788006	3899710	3910510	3910610	3897306	3897406	3897632	3788032	3899810	3910710	3910810	3897332	3897432	20043899	20043900	20047680	20065920	4031186	4031192	4031196	4031198	4031395	20184817	20010820	4031069	4031067	20013035		
	1.20	•																				•										•					
RTS 115 2S	1.20			•																		•										•		•			
	1.20					•																•											•		•		
	1.60	•																													•	•					
RTS 150 2S	1.60			•																											•	•		•			
	1.60						•																			•							•		•		
	1.80		•																							•						•					
RTS 200 2S	1.80				•																					•						•		•			
113 200 23	1.80										•																		•				•		•		
	1.80																	•											•				•		•		
RTS 247 2S	3.00										•																		•				•		•		
K13 247 23	3.00																	•											•				•		•		
RTS 319 2S	2.40											•															•						•		•		
K13 319 23	2.40																		•								•						•		•		
PTC 440 2C	3.70												•																	•			•		•		
RTS 410 2S	3.70																			•										•			•		•		
PTC FOC OC	2.20													•														•					•		•		
RTS 526 2S	2.20																				•							•					•		•		
PTC TOO OC	4.80							•																				•					•		•		
RTS 739 2S	4.80														•													•					•		•		
PTC OFO 35	6.80							•																				•					•		•		
RTS 850 2S	6.80														•													•					•		•		
PTC 4042 25	6.10							•															•										•		•		
RTS 1012 2S	6.10														•								•										•		•		
PTC 4200 SS	9.80								•																•								•		•		
RTS 1200 2S	9.80															•									•								•		•		
	5.10								•																•								•		•		
RTS 1355 2S	5.10															•									•								•		•		
	7.00								•																•								•		•		
RTS 1500 2S	7.00															•									•								•		•		
	7.20									•														•									•		•		
RTS 1850 2S	7.20																•							•									•		•		

HOI AIR GENERATORS

Description	Back-pressure in combustion	_							11			. /-		_	_	bu	rne	r				_	Lee	-FI		/1 -: •	10:-)				Вι	ırne	er fl	lang	ξе					ont	
	chamber (mbar)	_	no	cta	<b>~</b>			Ye	llov	_		_	tar	ıda	rd)		Ma	- dul	atir	n a	_	_	_	tla stag	_	(Low N															
(III)	(IIIbai)		ne :	- -	ge				IV		stag -	ge_				М	_	ani	_	_	m	IV		- -	ge_	Modul Mecha ca	nical														
	1.60																									Cul													ne	ner	Kit
		RG3	RG4S	RG5S	RL 34/1 MZ TC	RG3D	RG4D	RG5D	RL 100 TC	RL 130 TC	RL 190 TC	RL 34 MZ TC	RL 44 MZ TC	RL 50 TC	RL 64 MZ TC	RL 100/M TC	RL 130/M TC	RL 190/M TC	RL 28/M TC	RL 38/M TC	RL 50/M TC	BG7.1D	RL 22 BLU	RL 32 BLU	RL 42 BLU	RL 55/M BLU	RL 85/M BLU	Burner flange	Riellotech Prime	Two stage burner	management kit										
		3739300	3739650	3739950	3470110	3739450	3739750	3739850	3475232	3475432	3475613	3470210	3470310	3474632	3470410	20166481	20166486	20166490	20166492	20166497	20166502	20015696	20027479	20027481	20027567	20169338	20169330	20043899	20043900	20047680	20065920	4031186	4031188	4031192	4031196	4031198	4031395	20184817	20010820	4031069	4031067
	1.20	•														П									П			•										١.	•		$\top$
RTS 115 2S	1.20					•																						•										-	•		•
	1.20																					•						•										-	•		•
	1.60		•																																	$\Box$		•	•		
RTS 150 2S	1.60						•																															•	•		•
	1.60																						•													•			•		•
RTS 200 2S -	1.80			•																												•							•		
	1.80							•																								•				$\perp$		'	•		•
	1.80																		•															$\Box$	$\perp$	•			•	•	_
	1.80															Ш			_				•		Ш			Ш							_	•		'	•		•
	3.00				•											Ш			_						Ш			Ш							$\rightarrow$	•		-	•		_
RTS 247 2S	3.00				L							•				Ш			_			_			Ш										-	•			•	+	•
	3.00			H	H										L	Н		Н	•			_			Н			Н						$\perp$	-	•		+	+	•	
	3.00			L	H								_		L	Н		Н	_					•	Н			Н							$\dashv$	•		+	•	+	•
	2.40			H	H			Н					•			Н		Н							H			H				Н		•	+	+		Η'	•	•	•
RTS 319 2S	2.40															Н			•			_		•	Н			Н				Н	_	•	+	+	+	١.	• '	+	•
	2.40														•	Н			_			_		_	Н			Н				Н	•	•	+	+	+	-	•	+	•
RTS 410 2S	3.70				H			Н							_	Н		H	+	•		_		H	H			H		Н	_		_		+	+	•	+	+	•	
N13 410 23	3.70			H	H		Н	Н								Н		H	+	_		_		H	•			H	Н			Н	•	$\vdash$	+	+	+	۲,	• '	+	•
	2.20													•		Н		$\vdash$	+			_			_			Н		Н			_		+	+	•	+	•	+	•
RTS 526 2S	2.20															Н			+		•	_			Н			Н							+	-	•	+	+	•	+
	2.20															Н		$\vdash$	$\dashv$			_			Н	•		Н							•	+	+	+	-	•	
	4.80							Н	•							Н		$\vdash$	+			_			Н			Н				Н	•		+	+	1	١,	•		•
RTS 739 2S	4.80															•									Н			Н					•		$\top$	+	1		-	•	
	4.80															П									П		•	П							•	$\top$		$\top$	•	•	
	6.80								•							П									П			П					•		$\top$	$\top$		١,	•		•
RTS 850 2S	6.80															•									П			П				П	•		$\top$	$\top$			•	•	
	6.10								•																П			П	•							$\top$		١,	•		•
RTS 1012 2S	6.10															•													•						T	Т			•	•	
RTS 1200 2S	9.80									•																			•							T		1	•		•
K13 1200 23	9.80																•												•										•	•	
RTS 1355 2S	5.10									•																			•									-	•		•
1555 23	5.10										Ĺ				Ĺ		•												•										•	•	
RTS 1500 2S	7.00										•				Ĺ																•								•		•
1,000 23	7.00												L					•							Ш			Ш			•								•	•	
RTS 1850 2S	7.20						Ш				•														Ш			Ш		•						$\perp$		-	•		•
1050 23	7.20																	•												•										•	- (

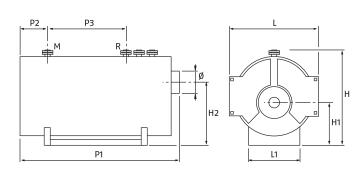
Description	Back-pressure					D	ual fuel	burn	er				Burner			Bui	rner	flar	nge				ntrol
	in combustion chamber (mbar)				llov						e flan		accessory									pai	nels
	(IIIbai)		Tw	o st	age		Modula	ating		Мо	dulati	ng											
				-			Mechai can		М	echa	anical	cam											
		RLS 28	RLS 38	RLS 50	RLS 70	RLS 100	RLS 190/M MZ	RLS 250/M MZ	RLS 68/M MX TC	RLS 120/M MX TC	RLS 160/M MX TC	RLS 310/M MX	Kit modulation RWF 50.2	Burner flange	Riellotech Prime	Two stage burner management kit							
		20147897	20147803	20147805	20147798	20147799	20159361	20145372	20147784	20147786	20147789	20147806	20082208	20043900	20047680	20065920	4031188	4031192	4031196	4031198	4031395	20010820	4031067
RTS 150 2S	1.60	•																		•		•	•
R13 150 23	1.60	•																		•		•	•
RTS 200 2S	1.80	•																		•		•	•
K15 200 25	1.80		•															•				•	•
RTS 247 2S	3.00			•																	•	•	•
MI3 241 23	3.00								•				•									•	•
RTS 319 2S	2.40				•												•					•	•
	2.40								•				•									•	•
RTS 410 2S	3.70	L			•												•			L		•	•
	3.70								•				•							L		•	•
RTS 526 2S	2.20	L				•													•	L		•	•
	2.20	L								•			•							L		•	•
RTS 739 2S	4.80	L				•								•				Ш		L	Ш	•	•
	4.80	L								•			•					Ш		L	Ш	•	•
RTS 850 2S	6.80	_					•						•			•				L		•	•
	6.80	_									•		•							L		•	•
RTS 1012 2S	6.10	L					•						•			•				L		•	•
	6.10										•		•							L		•	•
RTS 1200 2S	9.80	_					•						•			•				_	Ш	•	•
	9.80										•		•							L		•	•
RTS 1355 2S	5.10							•					•		•					_	Ш	•	•
	5.10	_										•	•						L	_		•	•
RTS 1500 2S	7.00																			_		•	•
	7.00																			L		•	•
RTS 1850 2S	7.20	L																		L		•	•
	7.20																					•	•

NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

Three flue gas passes steel jet burner boilers

### **RTG**





- Single-piece steel boilers with three flue gas passes
- The particular geometry of the heat exchanger allows to reduce the permanence time of flue gases in the high temperature zones while decreasing in this way the formation of NOx for low polluting emissions

Description	L	Н	P1	L1	H1	H2	P2	P3	Ø	Net we	eight kg
	mm	mm	5 bar	8bar							
RTG 1000	1580	1930	3240	1100	790	1250	640	1300	400	3320	3720
RTG 1200	1580	1930	3490	1100	790	1250	640	1550	400	3550	3990
RTG 1500	1800	2200	3650	1250	915	1450	720	1400	450	4700	5220
RTG 1800	1800	2200	3900	1250	915	1450	720	1650	450	4950	5500
RTG 2100	1930	2330	4510	1250	960	1530	830	1970	500	5700	6450
RTG 2600	2050	2450	4510	1310	995	1650	830	1970	500	7110	8120
RTG 3000	2050	2460	4960	1310	995	1650	830	2420	500	7650	8750
RTG 3500	2260	2660	5100	1500	1070	1780	860	2450	600	9250	10400
RTG 4000	2260	2660	5550	1500	1070	1780	860	2800	600	10050	11350
RTG 4300	2260	2660	5550	1500	1070	1780	860	2800	600	10200	11500
RTG 5000	2500	2950	6070	1620	1225	1955	922	3000	700	13300	14950
RTG 6000	2500	2950	6570	1620	1225	1955	922	3450	700	14200	5950
RTG 7500	2750	3200	7020	1800	1305	2110	1022	3600	800	19200	19950
RTG 9000	2910	3360	7320	1900	1355	2210	1022	3900	900	23000	23500

Monobloc steel boilers with possibility of using gas or oil burners. They are equipped with pressurized furnace with three actual fume paths, passing flame and horizontal development mounted on steel base. The exterior of the body is equipped with hydraulic connections, rings for lifting rods, handrails and manhole (models from 5000 to 9000).

The particular geometry of the heat exchanger allows reducing the presence of fumes in the high temperature zones, thus reducing the formation of NOx. Front access is ensured by two doors insulated with refractory materials and a containment braid. The fume box is equipped with condensate drain and doors for easy cleaning and maintenance.

The body is thermally insulated with high density stone wool and protected by an aluminium sheet.

These boilers are available in 14 models with useful output from 1,165 to 10,560 kW.

The optional control panel must be ordered separately.

- High point yields and intermediate seasons
- Reduced polluting emissions
- Robust construction
- Can be combined with Riello monobloc burners
- Easy to transport (lifting rings)
- Easy maintenance: front access to the combustion chamber, fume tubes, fume chamber and inside the body
- Easy to assemble: easy coupling and standardised connections
- Installation flexibility: a number of installation solutions is possible by combining Riello burners.

#### **TECHNICAL DATA**

Description	Powe	r – kW	Efficier	ncy - %	Code
	Output useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)	
RTG 1000	1165	1260	92.5	93.0	4031883
RTG 1200	1410	1522	92.7	93.2	4031885
RTG 1500	1760	1902	92.6	93.1	4031401
RTG 1800	2040	2210	92.3	92.9	4031887
RTG 2100	2510	2710	92.6	93.4	4031403
RTG 2600	3020	3260	92.7	93.1	4031405
RTG 3000	3520	3810	92.4	92.8	4031407
RTG 3500	4090	4420	92.5	93.2	4031409
RTG 4000	4680	5050	92.7	93.3	4031411
RTG 4300	5030	5450	92.3	92.8	4031889
RTG 5000	5830	6310	92.4	93.0	4031413
RTG 6000	7020	7590	92.5	93.1	4031415
RTG 7500	8760	9460	92.6	93.2	4031417
RTG 9000	10560	11400	92.6	93.2	4031419

The product codes above refer to 5-bar models. Maximum operating pressure 5 bar (8 bar on request).

#### **CONTROL PANELS**

Description	Installation	Code	Boiler model
RIELLOtech CLIMA COMFORT	Vertical	4031069	All models
RIELLOtech PRIME	Vertical	20010820	All models
RIELLOtech PRIME ACS	Vertical	20010437	All models

Climate management with RIELLOtech Clima Comfort.

Thermostatic management with RIELLOtech PRIME.

NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

#### **RECOMMENDED COMBINATIONS WITH BURNERS**

Description	Back-pressure in combustion	_		Yella	ow f	lam	e (S	tanı	dard	)				Gas	bu	rner		lue	flan	ne (I	ow	NOx	()			_			Coi	ntro	l panel
	chamber (mbar)		vo age		,,,,,		c (3	carre							Мос	dula															
		_	-							М	echa	anic	al ca	am									Elec	ctro	nic	cam					
																														nfort	
		L)	u	1 TC	4 MZ TC	1 MZ FS1	1 MZ FS1	1 MZ FS1	1 MZ FS1	'M C01	M C01	1 BLU TC	RS 200/M BLU TC	RS 310/M BLU FS1	RS 410/M BLU FS1	RS 510/M BLU FS1	RS 610/M BLU FS1	RS 810/M BLU FS1	'M BLU	M BLU	BLU	E BLU	RS 310/E BLU FS1	RS 410/E BLU FS1	RS 510/E BLU FS1	RS 610/E BLU FS1	RS 810/E BLU FS1	/E BLU	Riellotech Prime	Riellotech Clima Comfort	Two stage burner management kit
		RS 130 TC	RS 190 TC	RS 190/M TC	RS 250/M MZ TC	RS 310/M MZ FS1	RS 410/M MZ FS1	RS 510/M MZ FS1	RS 610/M MZ FS1	RS 1000/M C01	RS 1200/M C01	RS 160/M BLU TC	RS 200/I	RS 310/IN	RS 410/N	RS 510/N	RS 610/N	RS 810/N	RS 1000/M BLU	RS 1200/M BLU	RS 160/E BLU	RS 200/E BLU	RS 310/E	RS 410/E	RS 510/E	RS 610/E	RS 810/F	RS 1000/E BLU	Riellote	Riellote	Two stagemanage
		3785502	3785813	3787623	3788410	20068351	20068361	20068027	20066706	20145938	20145936	3788006	3899710	20067964	20069841	20069845	20069847	20155846	20145840	20145867	3788032	3899810	20065783	20056927	20056930	20056932	20160126	20057514	20010820	4031069	4031067
	4.5	•																											•		•
RTG 1000	4.5											•																		•	•
	4.5																				•					L				•	•
	6.6		•															Ш		Щ		Ш				L			•	L	•
RTG 1200	6.6			•																						L				•	•
	6.6			_		_	_				_	•						Ш	Ш	Щ		Ш			_	L				•	•
	6.6	_	_					_	_				_		_	_			_		•	_	_	_		_	_	_		•	•
	5.3	_	•	_	_	L	-	-	-	_	-	-	-	_	_			Ш	_		_	_	_		_	<u> </u>			•	_	•
RTG 1500	5.3			•				-					-						_		_	_	_	_		-				•	9
	5.3	_	_		-		-		-	_	-	-	•	_		_			_	$\square$		_	_			⊢	_	_	_	•	9
	5.3	H	_	-	-	H	-	-	-		-	-	-		-	-	-	-	_		_	•	_	_	-	⊢	-	-	•	•	•
	5.6		•		-		-	-	-		-	-	-		-	-	-	-	_		—	_	_	-		⊢	-	-	•		•
RTG 1800	5.6	H		•				-							-		-		_		_	_	_			⊢				•	9
	5.6													•					_		_	_	_			$\vdash$				-	
	5.6	-	H		•								-		H	-	-		_		_	_	•	H		$\vdash$	-	-		•	
PTC 2400	5.6	-	-	-	Ť	H	-	-	-	-	-	-	-	•	-	-		Н	_	$\vdash$	_	_	_		-	⊢	-	-	-	•	
RTG 2100	5.6			H	-		-			-	-	-	-	-		-		Н	_	$\vdash$	_	_	•			⊢				•	
	5.6	-	-	_	-	•	-	-	-		-	-	-		_	-			_		_	_	Ť		_	⊢	-	-		•	
PTG 2600	5.5	H	H			•			-						•		H		_		-	-	_	-		$\vdash$	H			•	
RTG 2600	5.5	H	-		-		-	-	-		-	-	-		-		H	-	_		—	_	_	•		⊢	-			•	
	5.5 7.7	-	-	-	-		•	-	-		-	-	-		-	-		$\vdash$	_		_	_	_	_		⊢	-			•	
RTG 3000	7.7	-		-			Ť	-		-	-	-	-	-	•	-		$\vdash$	—	Н	_	_	_			-				•	
K10 3000	7.7	-	-	-	-	-	-	-	-		-	-	-		-	-		$\vdash$	_	$\vdash$	_	_	_	•	-	-	-	-		•	
	5.4							•										Н	$\vdash$	$\vdash$	_	$\vdash$		۲		$\vdash$				•	
RTG 3500	5.4				-		-	Ė	-		-	-				•		Н	-	$\vdash$	_	$\vdash$	_							•	
. ==	5.4																	$\vdash$	Н	$\vdash$		$\vdash$			•	$\vdash$				•	
	7.0								•										_		_	_	_							•	-
RTG 4000	7.0						_				_						•	Н	_		_	_	_			$\vdash$				•	-
	7.0																		-			$\overline{}$				•				•	
	8.2								•										_				_							•	
RTG 4300	8.2																	•												•	•
	8.2																										•			•	•
	5.6									•																				•	•
RTG 5000	5.6																	•												•	•
	5.6																	П		П							•			•	•
	8.4									•			Т					П												•	•
RTG 6000	8.4																	П	•											•	•
	8.4																											•		•	•
PTC 7500	8.1										•																			•	•
RTG 7500	8.1																			•										•	•

Description	Back-pressure		Ligl	ht oil	burne	r				Dι	ıal fu	el bi	ırneı	r				Со	ntrol	l pane	els
	in combustion chamber						Yellov	n fla	me (s	Stand	lard)										
	(mbar)	Tν	o sta	age	Modu	lating					١	1odu	latin	g							
		-	_		Mach	anical	stage -				Mar	han	ical c	am				-			
						m						- III	icai c	aiii							
																		mfort			kit
		RL 130 TC	RL 190 TC	RL 250 MZ TC	RL 130/M TC	RL 190/M TC	RLS 130	RLS 190/M MZ	RLS 250/M MZ	RLS 160/M MX TC	RLS 310/M MX	RLS 410/M MX	RLS 510/M MX	RLS 610/M MX	RLS 800/M MX	RLS 1000/M C13	RLS 1200/M C13	Riellotech Clima Comfort	Riellotech Prime	Two stage burner management kit	3-point modulation kit
		3475432	3475613	3470010	20166486	20166490	20147800	20159361	20145372	20147789	20147806	20147809	20147812	20147813	20147802	20147815	20147814	4031069	20010820	4031067	20013035
	4.5	•																•		•	
RTG 1000	4.5				•														•		•
	4.5						•											•		•	
	4.5									•								•		•	
	6.6	•																•		•	
RTG 1200	6.6				•														•		•
110 1200	6.6							•										•		•	
	6.6									•								•		•	
	5.3		•															•		•	
RTG 1500	5.3					•													•		•
	5.3							•										•		•	
	5.3										•							•		•	
	5.6		•															•		•	
RTG 1800	5.6					•													•		•
NIG 1000	5.6								•									•		•	
	5.6										•							•		•	
RTG 2100	5.6			•														•		•	
	5.6										•							•		•	
RTG 2600	5.5											•						•		•	
RTG 3000	7.7												•					•		•	
RTG 3500	5.4												•					•		•	
RTG 4000	7.0													•				•		•	
RTG 4300	8.2													•				•		•	
RTG 5000	5.6														•			•		•	
RTG 6000	8.4															•		•		•	
RTG 7500	8.1																•	•		•	
RTG 9000	8.7																	•		•	

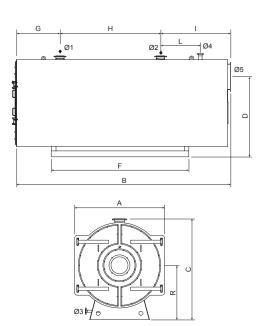
### **RTQ T**







- Single-piece steel boilers with three flue gas passes, that can be matched with jet burners
- The particular geometry of the heat exchange allows to reduce the permanence time of flue gases in the high temperature zones while decreasing in this way the formation of NOx for low polluting emissions



Three flue gas passes steel jet burner boilers

Description		3000	3500	4000	5000	6000	7000	8000	9000	10000	11000	12000	14000	16000	18000
A	mm	2010	2050	2100	2350	2400	2480	2580	2800	2800	2900	3000	3080	3280	3370
В	mm	5164	5310	5425	6115	6332	6415	6432	6452	6732	6732	7332	8102	8492	8902
С	mm	2370	2400	2450	2700	2750	2830	3000	3300	3300	3400	3500	3700	3900	4000
D	mm	1790	1820	1795	2050	2095	2115	2300	2400	2400	2500	2600	2800	3000	3100
F	mm	2800	3000	3000	3800	3500	4000	3700	4000	4000	4250	4400	4500	5000	5200
G	mm	801	801	881	851	791	851	800	800	800	800	800	800	800	800
	mm	2900	3080	2800	3600	3600	3900	3700	3700	4000	4000	4600	5200	5800	6200
I	mm	1463	1429	1741	1658	1941	1663	1932	1952	1932	1932	1932	2102	1892	1902
L	mm	800	800	1050	1000	1050	1000	1050	1050	1050	1050	1050	1050	1050	1050
R	mm	1240	1250	1275	1400	1425	1465	1515	1625	1625	1675	1725	1765	1865	1910
Ø1 – straight pipeline (*)		DN 200	DN 200	DN 200	DN 250	DN 300	DN 300	DN 350	DN 400	DN 450	DN 450				
Ø2 – return pipeline (*)		DN 200	DN 200	DN 200	DN 250	DN 300	DN 300	DN 350	DN 400	DN 450	DN 450				
Ø3 – drain from the boiler (**)		DN 40													
Ø4 - joining a security group (*)		DN 80	DN 80	DN 80	DN 100	DN 125									
Ø5 - flue gas outlet	mm	600	600	700	700	700	800	800	900	900	900	1000	1100	1100	1200

(\*) PN16 (\*\*) PN40

Monobloc steel boilers with possibility of using gas or oil burners. They are equipped with pressurized furnace with three actual fume paths, passing flame and horizontal development mounted on steel base. The exterior of the body is equipped with hydraulic connections, rings for lifting rods, handrails and manhole. The particular geometry of the heat exchanger allows reducing the presence of fumes in the high temperature zones, thus reducing

e formation of NOx. Front access is ensured by two doors insulated with refractory materials and a containment braid. The fume box is equipped with condensate drain and doors for easy cleaning and maintenance.

The body is thermally insulated with high density stone wool and protected by an aluminium sheet.

These boilers are available in 14 models with useful output from 3,000 to 18,000 kW.

- High point yields and intermediate seasons
- Reduced polluting emissions
- Robust construction
- Can be combined with Riello burners
- Easy to transport (lifting rings)
- Easy maintenance: front access to the combustion chamber, fume tubes, fume chamber and inside the body
- Easy to assemble: easy coupling and standardised connections
- Installation flexibility: a number of installation solutions is possible by combining Riello burners.

RTQ T models can be equipped with control panels of the RIELLO 5000 series with various functional contents:

TMR2 – thermostatic panel for controlling a single-circuit boiler with one or two-stage burners; ÜL-M is an electronic climate control panel for controlling a modulating, one- or two-stage burner, built-in or free-standing storage ank or a DHW flow-through heat exchanger. Cascade control of a group of up to four boilers. Possibility to control 6 separate heating circuits (when ordering additional control units). Üontrol panels can be installed both on the top and on the side of the boiler.

To install the control panel on the side panel of the boiler, a special bracket is required (article no. 4031059).

The control panel is not included in the boiler delivery set and must be ordered separately!

#### **TECHNICAL DATA**

Description	Powe	r - kW	Efficier	ncy <b>-</b> %	Code
	0utput useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30°C)	
RTQ 3000 T	3000	3226	93.0	94.0	20069409
RTQ 3500 T	3500	3763	93.0	94.0	20069418
RTQ 4000 T	4000	4301	93.0	94.0	20069419
RTQ 5000 T	5000	5376	93.0	94.0	20069420
RTQ 6000 T	6000	6452	93.0	94.0	20069424
RTQ 7000 T	7000	7527	93.0	94.0	20149276
RTQ 8000 T	8000	8602	93.0	94.0	20069429
RTQ 9000 T	9000	9677	93.0	94.0	20069433
RTQ 10000 T	10000	10753	93.0	94.0	20069439
RTQ 11000 T	11000	11828	93.0	94.0	20069441
RTQ 12000 T	12000	12903	93.0	94.0	20069443
RTQ 14000 T	14000	15054	93.0	94.0	20069444
RTQ 16000 T	16000	17204	93.0	94.0	20069445
RTQ 18000 T	18000	19355	93.0	94.0	20069446

#### **CONTROL PANELS**

Description	Code	Boiler model
Riello 5000 TMR2	07200123	All models
Riello 5000 CL-M	20020036	All models

MAY 2022 FDITION

#### **RECOMMENDED COMBINATIONS WITH BURNERS**

Description	Back-pressure in combustion						ias b												rner				ntrol nels
	chamber (mbar)				BI	ue f				JX)					BI				w NC	X)	_	,	-
	(IIIDal)	_	Mod	han	ical		1odu	latir		ctro	nic c	- m		-				latir			_		
			мес	han	icai	Calli			EIE	CLIO	nic c	aiii				мес	IIIaII	icai	cam		$\blacksquare$		
		FS1	FS1	FS1	FS1	RS 810/M BLU FS1		FS1	FS1	FS1	FS1	FS1						~	5	<u>m</u>		Riello 5000 CL-M	Riello 5000 TMR2
		RS 310/M BLU FS1	RS 410/M BLU	RS 510/M BLU	RS 610/M BLU FS1	BLU		RS 310/E BLU FS1	RS 410/E BLU FS1	RS 510/E BLU FS1	RS 610/E BLU FS1	RS 810/E BLU FS1		RLS 310/M MX	RLS 410/M MX	RLS 510/M MX	RLS 610/M MX	RLS 800/M MX	RLS 1000/M C13	RLS 1200/M C13		00	00 T
		0/W	M/0	0/M	M/0	M/OI		0/E	0/E	0/E	0/E	10/E		10/1	10/	10/1	10/1	000	000	200/		2 50	2 50
		S 31	SS 41	S 51	S 61	35 87	(1)	S 31	SS 41	S 51	19 51	35 83	(1)	RIS 3	STS 4	SLS 5	SLS 6	STS 8	3LS 1	?LS 1	(1)	Siello	Siello
		_			-	-	_	-				-	$\overset{\smile}{-}$					-	-	_	Ŭ		
		242	1284	845	248	946		192	294	930	932	126		307	310	312	313	302	315	314		036	123
		20068245	20068284	20069845	20069847	20155846		20068261	20068294	20056930	20056932	20160126		20147807	20147810	20147812	20147813	20147802	20147815	20147814		20020036	07200123
		92	20	2	2	20	Ξ	2	20	2	7	2	3	50	2	2	2	2	2	2	Ξ	50	0
RTQ 3000 T	6	•						•												_	Н	•	
	6													•						_	Н		•
	8		•																		Н	•	
RTQ 3500 T	8								•											_	Н	•	
	8														•						П		•
	8			•																		•	
RTQ 4000 T	8									•												•	
	8															•							•
	8				•																	•	
RTQ 5000 T	8										•											•	
	8																•				Ш		•
	9					•								_			_					•	
RTQ 6000 T	9											•		_	_	_	_	_			Ш	•	
	9													_	_	_	_	•	_	_		_	•
PT0 7000 T	9						•						•		_	_	_	-	-	_	Н	•	_
RTQ 7000 T	9												•	_					•			Ť	•
	8						•							-	-	-	-		<u> </u>			•	<u> </u>
RTQ 8000 T	8												•							_		•	
•	8																		•	_	Н		•
	8						•															•	
RTQ 9000 T	8												•									•	
	8																			•			•
	9						•															•	
RTQ 10000 T	9												•									•	
	9																				•		•
	9						•															•	
RTQ 11000 T	9									_			•									•	
	9						_														•		•
RTQ 12000 T	11						•						•									•	
KIQ 12000 I	11												•							_	•	Ť	•
	11						•														-	•	
RTQ 14000 T	11						Ė						•								Н	•	
•	11																				•		•
	12						•														П	•	
RTQ 16000 T	12												•								П	•	
	12																				•		•
	13						•															•	
RTQ 18000 T	13												•									•	
	13																				•		•

<sup>(1)</sup> For combination with large burners, please contact the pre-sales service. Note: the gas burners must be completed with the gas train. Note: light oil burners are equipped with light oil injectors.

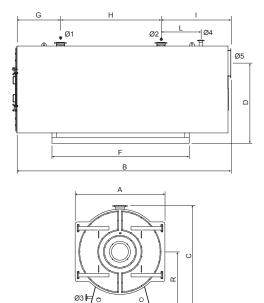
NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

MILL

Three flue gas passes steel jet burner boilers

## **RTQ TK**







 Single-piece steel boilers with three flue gas passes, that can be matched with jet burners

Description		4000	4500	5000	6000	7000	8000	9000	10000	11000	12000	14000	16000	18000	20000
A	mm	2010	2050	2100	2350	2400	2480	2580	2750	2800	2900	3000	3080	3280	3370
В	mm	5164	5310	5425	6115	6332	6415	6432	6466	6732	6732	7332	8102	8492	8902
С	mm	2370	2400	2450	2700	2750	2830	3000	3150	3300	3400	3500	3700	3900	4000
D	mm	1790	1820	1795	2050	2095	2115	2300	2400	2400	2500	2600	2800	3000	3100
F	mm	2800	3000	3000	3800	3500	4000	3700	4020	4000	4250	4400	4500	5000	5200
G	mm	801	801	881	851	791	851	800	755	800	800	800	800	800	800
Н	mm	2900	3080	2800	3600	3600	3900	3700	3920	4000	4000	4600	5200	5800	6200
I	mm	1463	1429	1741	1658	1941	1663	1932	1658	1932	1932	1932	2102	1892	1902
L	mm	800	800	1050	1000	1050	1000	1050	1000	1050	1050	1050	1050	1050	1050
R	mm	1240	1250	1275	1400	1425	1465	1515	1625	1625	1675	1725	1765	1865	1910
Ø1 – straight pipeline (*)		DN 200	DN 200	DN 200	DN 250	DN 300	DN 300	DN 350	DN 400	DN 450	DN 450				
Ø2 – return pipeline (*)		DN 200	DN 200	DN 200	DN 250	DN 300	DN 300	DN 350	DN 400	DN 450	DN 450				
Ø3 – drain from the boiler (**)		DN 40													
Ø4 - joining a security group (*)		DN 80	DN 80	DN 80	DN 100	DN 125									
Ø5 - flue gas outlet	mm	600	600	700	700	700	800	800	900	900	900	1000	1100	1100	1200

(\*) PN16 (\*\*) PN40

Monobloc steel boilers with possibility of using gas or oil burners. They are equipped with pressurized furnace with three actual fume paths, passing flame and horizontal development mounted on steel base. The exterior of the body is equipped with hydraulic connections, rings for lifting rods, handrails and manhole.

Front access is ensured by two doors insulated with refractory materials and a containment braid. The fume box is equipped with condensate drain and doors for easy cleaning and maintenance.

The body is thermally insulated with high density stone wool and protected by an aluminium sheet.

These boilers are available in 14 models with useful output from 4000 to 20,000 kW.

- High point yields and intermediate seasons
- Reduced polluting emissions
- Robust construction
- Can be combined with Riello burners
- Easy to transport (lifting rings)
- Easy maintenance: front access to the combustion chamber, fume tubes, fume chamber and inside the body
- Easy to assemble: easy coupling and standardised connections
- Installation flexibility: a number of installation solutions is possible by combining Riello burners.

**TERMINAL UNITS** 

RIELLO

RTQ TK models can be equipped with control panels of the RIELLO 5000 series with various functional contents:

MR2 – thermostatic panel for controlling a single-circuit boiler with one or two-stage burners; ÜL-M is an electronic climate control panel for controlling a modulating, one- or two-stage burner, built-in or free-standing storage ank or a DHW flow-through heat exchanger. Cascade control of a group of up to four boilers. Possibility to control 6 separate heating circuits (when ordering additional control units).

Control panels can be installed both on the top and on the side of the boiler.

To install the control panel on the side panel of the boiler, a special bracket is required (article no. 4031059).

The control panel is not included in the boiler delivery set and must be ordered separately!

#### **TECHNICAL DATA**

Description	Powe	r – kW	Efficie	ency - %	Code
	Output useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)	
RTQ 4000 TK	4000	4348	92.0	93.0	20149272
RTQ 4500 TK	4500	4891	92.0	93.0	20149273
RTQ 5000 TK	5000	5435	92.0	93.0	20149274
RTQ 6000 TK	6000	6522	92.0	93.0	20149275
RTQ 7000 TK	7000	7609	92.0	93.0	20065060
RTQ 8000 TK	8000	8696	92.0	93.0	20065062
RTQ 9000 TK	9000	9783	92.0	93.0	20065063
RTQ 10000 TK	10000	10870	92.0	93.0	20065064
RTQ 11000 TK	11000	11957	92.0	93.0	20065065
RTQ 12000 TK	12000	13043	92.0	93.0	20065066
RTQ 14000 TK	14000	15217	92.0	93.0	20065067
RTQ 16000 TK	16000	17391	92.0	93.0	20065068
RTQ 18000 TK	18000	19565	92.0	93.0	20065069
RTQ 20000 TK	20000	21739	92.0	93.0	20065070

#### **CONTROL PANELS**

Description	Code	Boiler model
Riello 5000 TMR2	07200123	All models
Riello 5000 CL-M	20020036	All models

NOTE: for specific accessories and more details on control panels, please refer to page 393.

#### **RECOMMENDED COMBINATIONS WITH BURNERS**

Description	Back-pressure		Gas	bur	ner		Dual fu	el burner		trol
	in combustion chamber			Ye	llow	Flar	ne (Standar	rd)	par	nels
	(mbar)		Мос	dulat	ing		Two-stage	Modulating		
		М	echa	nica	ıl ca	m	-			
		RS 510/M MZ FS1	RS 610/M MZ FS1	RS 1000/M C01	RS 1200/M C01	(1)	(1)	(1)	Riello 5000 CL-M	Riello 5000 TMR2
		20068027	20066706	20145938	20145936	(1)	(1)	(1)	20020036	07200123
DTO LODO TV	8	•							•	
RTQ 4000 TK	8						•	•		•
	10		•						•	
RTQ 4500 TK	10						•	•		•
	10			•					•	
RTQ 5000 TK	10						•	•		•
PTO (200 TV)	10			•					•	
RTQ 6000 TK	10						•	•		•
PTO TOO TIV	12			•					•	
RTQ 7000 TK	12						•	•		•
PTO COCC TV	12				•				•	
RTQ 8000 TK	12						•	•		•
DTO ODGO TV	11				•				•	
RTQ 9000 TK	11						•	•		•
DTO 40000 TV	11					•			•	
RTQ 10000 TK	11						•	•		•
PTO 11000 TV	12					•			•	
RTQ 11000 TK	12						•	•		•
PTO 12000 TV	12					•			•	
RTQ 12000 TK	12						•	•		•
RTQ 14000 TK	14					•			•	
אוע ויייסט ווע	14						•	•		•
RTQ 16000 TK	14					•			•	
	14						•	•		•
RTQ 18000 TK	16					•			•	
און טטטט ווא	16						•	•		•
RTQ 20000 TK	17					•			•	
πι <b>ψ 20000 I</b> π	17						•	•		•

<sup>(1)</sup> For combination with large burners, please contact the pre-sales service.

Note: the gas burners must be completed with the gas train.

Note: light oil burners are equipped with light oil injectors.

NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

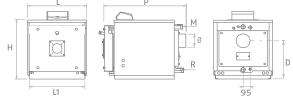
Two flue gas passes steel jet burner boilers

# RTQ 3S

RTQ 3S 35-166

Products up to 400 kW only for replacement, till  $1^{st}$  January 2018, in conformity of point 2 (G) Article 1 of Regulation EU N. 813/2013.

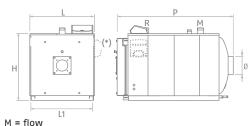


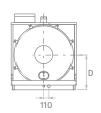


RTQ 3S 217-4000

R = return

(\*) From RTQ 1100 3S to RTQ 4000 3S model





- Single-piece steel boilers
- Provided with completely wet combustion chamber with free dilation and flame-inversion (square range)

Description	H mm	L mm	P mm	L1 mm	D mm	M	R Ø	ø mm	Net weight kg
RTQ 35 3S	605	605	880	560	310	1" 1/4	1" 1/4	139	137
RTQ 55 3S	605	605	1030	560	310	1" 1/4	1" 1/4	139	160
RTQ 70 3S	740	705	970	660	384	1" 1/2	1" 1/2	179	199
RTQ 91 3S	740	705	1120	660	384	1" 1/2	1" 1/2	179	225
RTQ 115 3S	905	805	1230	753	500	G2"	G2"	180	283
RTQ 166 3S	955	853	1405	803	525	G2"	G2"	180	355
RTQ 217 3S	1060	925	1580	875	525	G2" <sup>1</sup> / <sub>2</sub>	G2"½	200	455
RTQ 255 3S	1060	925	1580	875	525	G2"1/2	G2"½	200	473
RTQ 318 3S	1110	975	1810	925	550	G2"1/2	G2"½	250	610
RTQ 349 3S	1110	975	1810	925	550	G2"1/2	G2"½	250	610
RTQ 448 3S	1275	1150	2140	1100	655	DN80	DN80	300	970
RTQ 511 3S	1275	1150	2140	1100	655	DN80	DN80	300	970
RTQ 575 3S	1385	1220	2410	1170	690	DN100	DN100	300	1189
RTQ 639 3S	1385	1220	2410	1170	690	DN100	DN100	300	1189
RTQ 766 3S	1440	1285	2550	1235	715	DN100	DN100	350	1406
RTQ 896 3S	1530	1360	2865	1310	755	DN125	DN125	400	1817
RTQ 1100 3S	1630	1450	3130	1400	820	DN125	DN125	400	2280
RTQ 1300 3S	1725	1535	3155	1485	865	DN125	DN125	450	2780
RTQ 1600 3S	1822	1610	3235	1555	900	DN150	DN150	500	3160
RTQ 2100 3S	1972	1715	3515	1660	1000	DN175	DN175	500	4170
RTQ 2400 3S	1972	1715	3515	1660	1000	DN175	DN175	500	4180
RTQ 2700 3S	2090	1865	3560	1895	1050	DN175	DN175	500	4826
RTQ 3000 3S	2162	1935	3670	1885	1080	DN175	DN175	500	5346
RTQ 3500 3S	2240	2040	4010	1990	1155	DN200	DN200	550	6195
RTQ 4000 3S	2270	2070	4260	2020	1170	DN200	DN200	600	6790



Provided with high-performance stainless steel turbulators ensuring wide exchange surface, in order to optimize the heat exchange and allow a homogeneous thermal load. The front door features an ambidextrous opening and is provided with a highly-insulating mineral-wool double seal. Casing is made of stove-enamelled sheet. The control panel should be ordered separately.

- High efficiency both punctual and seasonal
- Operation at modulating temperature (minimum allowed return temperature 55 °C)
- Several solutions thanks to the combination with RIELLOtech control panels.

#### **TECHNICAL DATA**

Description	Powe	r - kW	Efficie	ncy - %	Notes	Code
	0utput useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)		
RTQ 35 3S	33.8	34.8	94.2	95.9	(1)	20025617
RTQ 55 3S	53.2	55.0	93.8	95.5	(1)	20025618
RTQ 70 3S	67.8	69.0	94.2	95.9	(1)	20025619
RTQ 91 3S	87.1	90.0	94.2	95.9	(1)(2)	20024200
RTQ 115 3S	109.7	115.0	95.8	95.1	(1)(2)	4032606.0
RTQ 166 3S	158.7	166.0	95.6	95.6	(1)(2)	4032607.0
RTQ 217 3S	206.8	217.0	95.3	96.3	(1)(2)	4032608.0
RTQ 255 3S	243.3	255.0	95.8	96.5	(1)(2)	4032609.0
RTQ 318 3S	303.4	318.0	95.6	96.5	(1)(2)	4032610.0
RTQ 349 3S	332.0	348.0	95.4	96.7	(1)(2)	4032611.0
RTQ 448 3S	427.4	448.0	95.4	96.7		4032613.0
RTQ 511 3S	487.5	511.0	95.4	96.7		4032614.0
RTQ 575 3S	548.6	575.0	95.4	96.7		4032615.0
RTQ 639 3S	609.6	639.0	95.4	96.7		4032616.0
RTQ 766 3S	730.8	766.0	95.4	96.7		4032617.0
RTQ 896 3S	854.8	896.0	95.4	96.7		20008436
RTQ 1100 3S	1049.4	1100.0	95.4	96.7		20012427
RTQ 1300 3S	1240.2	1300.0	95.4	96.7		20008435
RTQ 1600 3S	1526.4	1600.0	95.4	96.7		20016656
RTQ 2100 3S	2003.4	2100.0	95.4	96.7		20016657
RTQ 2400 3S	2289.6	2400.0	95.4	96.7		20018817
RTQ 2700 3S	2576.0	2700.0	95.4	96.7		20106515
RTQ 3000 3S	2860.0	3000.0	95.4	96.7		20106514
RTQ 3500 3S	3339.0	3500.0	95.4	96.7		20107462
RTQ 4000 3S	3816.0	4000.0	95.4	96.7		20107467

Maximum operating pressure 5 bar for RTQ 35 3S - RTQ 766 3S models. Maximum operating pressure 6 bar for RTQ 896 3S - RTQ 4000 3S models.

#### **ACCESSORIES**

Description	Code
MECHANICAL ACCESSORIES	
Burner flange	4031395
Burner flange	20076596
Burner flange	20076618
Burner flange	4031198
Burner flange	4031391

#### **CONTROL PANELS**

Description	Installation	Boiler models	Code
RIELLOtech CLIMA COMFORT	Horizontal	RTQ 3S 90-2400	4031064
RIELLOtech CLIMA COMFORT	Vertical	RTQ 3S 448-4000	4031069
RIELLOtech PRIME	Horizontal / Vertical	All models	20010820
RIELLOtech PRIME ACS	Horizontal / Vertical	All models	20010437

NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

Gas products and oil products (models 35, 55 and 70) are only for replacement, till 1st January 2018, in conformity of point 2 (G) Article 1 of Regulation EU N. 813/2013.

Oil products are in conformity with ErP Directive (EU Regulation Nr. 813/2013).

#### **RECOMMENDED COMBINATIONS WITH BURNERS - EU COUNTRIES**

Description	Back-pressure in combustion							as b								Burner		ont	rol p	oanel	S
	chamber	_					w f	lam	e (St												
	(mbar)	_	T	wo :	stag	e		_				lati	_								
		_						_		Mec	han	ical	can	n			_			_	
		RS 44 MZ TL	RS 50 TL	RS 70 TL	RS 100 TL	RS 130 TL	RS 190 TC	RS 50/M MZ TL	RS 70/M TL	RS 100/M TL	RS 130/M TL	RS 190/M TC	RS 250/M MZ TL	RS 310/M MZ FS1	RS 410/M MZ FS1	Extended head	Riellotech Prime	Riellotech Clima Comfort	Riellotech Clima Comfort	Two stage burner management kit	3-point modulation kit
		3789111	3784703	3785103	3785303	3785503	3785813	3781623	3789611	3789711	3789811	3787623	3788411	20068343	20068356	3010443	20010820	4031069	4031064	4031067	20013035
RTQ 448 3S	3.5	•															•			•	
WIÓ 440 22	3.5							•											•		•
RTQ 511 3S	4.2		•														•			•	
	4.2							•											•		•
RTQ 575 3S	3.4			•													•			•	
	3.4								•										•		•
RTQ 639 3S	4.5			•													•			•	
	4.5								•										•		•
RTQ 766 3S	5.3				•												•			•	
	5.3									•									•	_	•
RTQ 896 3S	6.0				•					_							•		_	•	
	6.0				L	_				•									•		•
RTQ 1100 3S	3.3	_				•		_	_	_	_		-	-	-		•	_	_	•	_
	3.3	-				_		_	-	-	•		-	-	-		-		•	_	•
RTQ 1300 3S	5.3	_				•		_	_	_	_		-	-	-		•	_	_	•	_
	5.3				H	H					•			H		•	•		•	_	•
RTQ 1600 3S	4.7						•					•				•	•		•	•	•
PTO 2400 25	4.7 5.1	-										•	•						•	_	•
RTQ 2100 3S													•	•					•		•
RTQ 2400 3S	7.6													•				•	•	$\vdash$	•
RTQ 2700 3S	8.0	-			-	-		_	-	-		_	-	•			-	•		_	•
RTQ 3000 3S	6.5 7.1			-										Ť	•			•			•
RTQ 3500 3S RTQ 4000 3S	8.0	H		_	H	-		_	H	H		H		$\vdash$	•			•		$\vdash$	•
CC 000# VIA	8.0														_			_			_

Description	Back-pressure in combustion		_	_	Li	ght	oil b			_	·-	_		_	Dι	ıal f	uel	burr		e fla	me	Burner accessory		urn lang		(	ont	rol p	ane	ls
	chamber (mbar)						Ye	llow	flai	me (	(Sta	nda	rd)							w N				-						
	(mour)		T	wo	stag	e			Мос	lula	ting	5	Т	wo	stag	ge		Мос	dula	ting										
		_			-			Ме	cha	nica	al ca	am	_		-		Ме	echa	nic	al ca	m					_				
																											fort	fort		١.
																											Riellotech Clima Comfort	Riellotech Clima Comfort		n kit
																						p	d)	d)	d)	ime	ma	ma (	Two stage burner management kit	latio
							Z TC	_	ی	≓	卢	≓					RLS 190/M MZ	RLS 250/M MZ	RLS 310/M MX	RLS 410/M MX	RLS 510/M MX	Extended head	Burner flange	Burner flange	Burner flange	Riellotech Prime	h Cli	h Cli	Two stage burner	npou
		卢	≓	0 T	RL 130 TL	RL 190 TC	RL 250 MZ	RL 50/M TL	RL 70/M TL	RL 100/M TL	RL 130/M TL	RL 190/M	0		00	90	90/N	50//	10/N	10/N	10/№	эфс	er fl	er fl	er fl	otecl	otecl	otecl	stag	3-point modulation kit
		RL 50 TL	RL 70 TL	RL 100 TL	1L 13	l 19	IL 25	IL 50	IL 70	1 10	1L 13	l 19	RLS 50	RLS 70	RLS 100	RLS 130	LS 1	LS 2	LS 3	LS 4	LS 5	xter	urn	urn	urn	iello	iello	iello	wo	-poi
			Œ	LE.	-	-	Œ	-	-		-	LE.	-	-	-	-		-	-	-	-		ш	ш	ш	-	LE.		F -	m
		33	33	33	33	2	10	504	924	484	487	231	305	86,	66,	300	361	372	306	309	312	869	95	596	618	820	69	49	29	035
		3474633	3475033	3475233	3475433	3475613	3470010	20166504	20166476	20166484	20166487	20169231	20147805	20147798	20147799	20147800	20159361	20145372	20147806	20147809	20147812	20097869	4031395	20076596	20076618	20010820	4031069	4031064	4031067	20013035
	3.5	•	m	m	m	m	m	7	7	7	7	2	7	7	7	7	2	7	7	7	7	7	4	7	7	•	4	4	•	7
RTQ 448 3S	3.5							•															•					•		•
	3.5												•									•				•			•	
	4.2	•																								•			•	
RTQ 511 3S	4.2							•															•					•	_	•
	4.2	_												•												•			•	L
RTQ 575 3S	3.4	•			-	-			•					-	-	-	-			H			•			•		•	•	•
KIQ 5/5 53	3.4								Ť					•		-										•		_	•	Ť
	4.5		•											Ť												•			•	
RTQ 639 3S	4.5								•																			•		•
•	4.5													•												•			•	
	5.3			•																						•			•	
RTQ 766 3S	5.3									•																		•		•
	5.3													•												•			•	
	6.0			•																						•			•	
RTQ 896 3S	6.0									•					L											_		•		•
	6.0				•										•	-										•			•	H
RTQ 1100 3S	3.3				Ť						•															Ť		•	-	•
1100 33	3.3														•											•			•	Ė
	5.3				•																					•			•	
RTQ 1300 3S	5.3										•																	•		•
	5.3															•										•			•	
	4.7					•																				•			•	
RTQ 1600 3S	4.7											•																•		•
	4.7																•									•			•	
DTO 2400 2C	5.1				-		•					•		-		-	-								-	•		•	•	•
RTQ 2100 3S	5.1 5.1											•						•								•		•	•	Ť
	7.6	_																Ť								•			•	
RTQ 2400 3S	7.6																											•		•
	7.6																		•					•		•			•	Т
	8.0																									•			•	
RTQ 2700 3S	8.0																										•			•
	8.0																		•					•		•			•	
	6.5																									•			•	L
RTQ 3000 3S	6.5																							_		_	•		<u>_</u>	•
	6.5																		•					•		•			•	
DTO SEGO SC	7.1															-										•	•		•	•
RTQ 3500 3S	7.1 7.1																			•					•	•	-		•	<u> </u>
	8.0																			Ė					Ť	•			•	
RTQ 4000 3S	8.0																										•			•
•	8.0																				•				•	•			•	$\vdash$

### **RECOMMENDED COMBINATIONS WITH BURNERS - EXTRA EU COUNTRIES**

Description	Back-pressure in combustion						Ye	llov	, fla	me	(Sta	Gas nda		rner		•			Bli	ıe fl	ame	(Lo	w No	)x)	Burner accessory		rner ssory	0	.ont	rol p	oane	IS
	chamber (mbar)	_		Tvv	o st	age					(500			lati	ng				-			_	o sta	_								
	(				_										can				0	_			_	- B								
												Mec	IIaII	Icai	Can	_				_		_	_							Π.		т
																													Comfort	Comfort		ri;
		7	<b>=</b>						MZ TL	MZ TL	MZ TL	_			1	MZ TL	MZ FS1	MZ FS1							d head	d head	d head	h Prime	h Clima	h Clima	e burne	nodulatio
		RS 34 MZ TL	RS 44 MZ TL	RS 50 TL	RS 70 TL	RS 100 TL	RS 130 TL	RS 190 TC	RS 34/M MZ TL	RS 44/M MZ TL	RS 50/M MZ	RS 70/M TL	RS 100/M TL	RS 130/M TL	RS 190/M TC	RS 250/M MZ TL	RS 310/M MZ FS1	RS 410/M MZ FS1	BS1	BS2	BS3	BS1D	BS2D	BS3D	Extended head	Extended head	Extended head	Riellotech Prime	Riellotech Clima Comfort	Riellotech Clima Comfort	Two stage burner	3-point modulation kit
		3789011	3789111	3784703	3785103	3785303	3785503	3785813	3788711	3788811	3781623	3789611	3789711	3789811	3787623	3788411	20068343	20068356	3761158	3761258	3761316	3761558	3761658	3761716	3010443	3001007	3001009	20010820	4031069	4031064	4031067	20013035
RTQ 35 3S	0.4																		•									•				L
	0.4																					•				_		•			•	⊢
RTQ 55 3S	0.9	H		-					$\vdash$				$\vdash$			H		H		•			•			•		•	H		•	$\vdash$
	0.9																			•						•		•			<u> </u>	$\vdash$
RTQ 70 3S	0.6																			Ť			•			•		•			•	$\vdash$
	2.0																				•						•	•				Н
RTQ 91 3S	2.0																							•			•	•			•	$\vdash$
	1.5																				•						•	•				Т
RTQ 115 3S	1.5																							•			•	•			•	Г
DTO 166 25	1.3																				•						•	•				Т
RTQ 166 3S	1.3																							•			•	•			•	
RTQ 217 3S	2.2	•																										•			•	
MIQ 211 33	2.2								•																					•		•
RTQ 255 3S	2.8	•																										•			•	L
4 233 30	2.8								•																					•		•
RTQ 318 3S	3.2	•																										•			•	L
	3.2				-	-			_	•			_	-						_										•		•
RTQ 349 3S	3.9		•		_	_		_	_	_		_	_	_				_		_		_						•	_	•	•	•
	3.9		•							•												_						•		•	•	-
RTQ 448 3S	3.5		•								•																	•		•	_	•
	4.2			•	-						_		-									_						•		Ť	•	Ť
RTQ 511 3S	4.2			Ť							•																	+		•	Ť	•
	3.4				•																							•			•	$\vdash$
RTQ 575 3S	3.4											•																		•		•
	4.5				•																							•			•	Т
RTQ 639 3S	4.5											•																		•		•
DTO 766 35	5.3					•																						•			•	
RTQ 766 3S	5.3												•																	•		•
RTQ 896 3S	6.0					•																						•			•	
WIÁ 020 22	6.0												•																	•		•
RTQ 1100 3S	3.3						•																					•			•	$\perp$
	3.3													•																•		•
RTQ 1300 3S	5.3						•																					•			•	$\perp$
	5.3													•														-		•	_	•
RTQ 1600 3S	4.7							•							-										•			•		-	•	-
	4.7				-	-			H	-			H	-	•			-	-	H			Н		•				H	•		•
RTQ 2100 3S	5.1															•	_						$\vdash$							•		•
RTQ 2400 3S	7.6	_															•						$\vdash$						•	_		•
RTQ 2700 3S	8.0 6.5																•						$\vdash$					-	•			•
RTQ 3000 3S RTQ 3500 3S	7.1																Ť	•					$\vdash$						•			•
RTQ 4000 3S	8.0																	•											•			•
	ers must be comp																															

Description	Back-pressure in combustion										_	ht c										_				E	Burr	ier	acc	ess	ory			urne ang		Co	onti	rol r	pane	ls
	chamber	_	0 :=			_								_	nd	lard	1)	_		_	400		#im.		-								1110	giig	.6					
	(mbar)	_	Un	e st	tage	-					IW	sta -	age	!				-			_	lula —— nica	_		-															
		_									T					Т		7							+										$\neg$		+	+		Г
																																					Riellotech Clima Comfort	Riellotech Clima Comfort		ŧ
																										_	_	_	_	_	_	_				e .	а Со	a Co	ner	tion
						=												읻							_	heac	nge	nge	nge	Prin	Clim	Clim	burr	100						
						1 MZ				F	= 7 M	- 7E E	ء ا ا	<u>.</u>   ₽	<b>≓</b>   i	<b>≓</b>   i	2	ZW 0	Σ	Σ	MI	Z Z	¥.	Ψ	Ψ	ded	r fla	r fla	r fla	tech	tech	tech	tage	u t						
		RG1NR	RG2	RG3	RG5S	RL 34/1	RG2KD	RG3D	RG4D	RG5D	. 24	RL 44 M2 IL	200	RL /U IL	001.1	RL 130 TL	RL 190 TC	RL 250 MZ	RL 28/M TL	RL 38/M TL	RL 50/M TL	RL 70/M TL	RL 100/M TL	RL 130/M TL	RL 190/M TL	Extended head	Burner flange	Burner flange	Burner flange	Riellotech Prime	iello	iello	Two stage burner management kit	3-noint modulation kit						
		~	~	~	~	~	~	~	~	~ (	Σ (	2 0	٥ ٥	2 0	Σ (	X (	~	~	~	~	~	~	~	~	~	ш	ш	ш	ш	ш	ш	ш	B		B	~	~	~		ď
		-05	20	00	20	=	00	50	20	20	=   ;	= 8	0 6	2	27	69	13	9	495	664	504	924	484	487	231	496	965	963	696	89	981	56	86	95	6	820	69	49	291	035
		3736405	3737750	3739300	3739950	3470111	3738100	3739450	3739750	3739850	3470211	34,71,633	04140	3475033	3475233	3475433	3475613	3470010	20166495	20166499	20166504	20166476	20166484	20166487	20169231	3000964	3000065	3000963	3000969	3001068	3000981	3010426	4031198	4031395	4031391	20010820	4031069	4031064	4031067	20013035
RTQ 35 3S	0.4	•														I												•								•				
RTQ 55 3S	0.9		•													$\perp$										•										•		Ш		L
	0.9						•		4	_	_	_		_		$\perp$									_		4							Ш		•	Ш		•	L
RTQ 70 3S	0.6			L			•		4	_	_	1	_	4	_	4	_								_		4	_					$\perp$	Ш	$\perp$	•	Ш	Ш	•	L
RTQ 91 3S	2			•		_			4	_	+	+	+	+	4	$\perp$	4	_		_		Ш		_	_	_	•	4	_				$\vdash$	$\perp$	$\vdash$	•	Ш	Ш	_	L
DT0 445 0C	2				-			•	+	+	+	+	+	+	+	+	+	_	_			Н	H	-	_	_	•	4	_				$\vdash$	$\vdash$	$\vdash$	•	Н	Н	•	H
RTQ 115 3S	1.5			H	•			•	+	+	+	+	+	+	+	+	+	-	-					-	+	+	$\dashv$	+	-	_			$\vdash$	$\vdash$	$\vdash$	•	Н	Н	•	H
DTO 166 35	1.3	_	H	H	Ť	H		+	•	+	+	+	+	+	+	+	+	-				Н	H	-	+	+	+	+	•	_			$\vdash$	$\vdash$	$\vdash$	•	Н	Н	•	H
RTQ 166 3S	1.3	_		H		-			+	+	+	+	+	+	+	+	+	+	•			Н	Н	-	+	+	+	+					•	$\vdash$	$\vdash$	Ĭ	Н	•	Ť	•
	2.2	_			•			+	+	+	+	+	+	+	+	+	+	+	_			Н			+	+	+	1	$\dashv$	•			_		•	•	Н	H		F
RTQ 217 3S	2.2	_						$\dashv$	+	•	+	+	t	+	1	+	+	_							+	1	+	1			•				•	•	Н	Н	•	H
	2.2								$\top$	$^{\dagger}$	t	$^{+}$	t	$^{\dagger}$	1	$^{+}$	1		•						$\top$	1	$\top$						$\neg$		$\neg$	_	П	•		•
	2.8				•				$\top$	T	T	$\top$	t	$\top$		$\top$											$\exists$			•			П		•	•	П	П		Г
RTQ 255 3S	2.8								T	1	•	T	T	T	T	$\top$							П									•	П		П	•	П	П	•	Г
	2.8															T			•														П		П			•		•
	3.2					•																														•				
RTQ 318 3S	3.2									•	•																					•				•			•	
	3.2															$\perp$				•																		•		•
RTQ 349 3S	3.9								_	_	,			4		$\perp$									_								Ш	Ш	Ш	•			•	L
	3.9								4	_		+		+		$\perp$				•					_		4						$\perp$	$\perp$	$\perp$			•		•
RTQ 448 3S	3.5										+	•	•	_	_	$\perp$	4	_								_		4					$\perp$	$\perp$	$\perp$	•	Ш	Ш	•	L
	3.5			H				_	+	+	+	+	+	+	+	+	4	_			•				+	_	4	_	_				$\vdash$	•	$\vdash$	_	Ш	•	_	•
RTQ 511 3S	4.2								+	+	+	•	•	+	+	+	+	_			_				-	-	-	4					$\vdash$		$\vdash$	•	Ш		•	L
	4.2			-					+	+	+	-	+	+	-	+	-	-			•			-	+	-	-	-	-	_			$\vdash$	•	$\vdash$	•	Н	•	•	•
RTQ 575 3S	3.4						H	$\dashv$	+	+	+	+	+	+	+	+	+	-	-			•		$\dashv$	+	+	+	$\dashv$					$\dashv$	-	$\dashv$	_	H	•	_	•
	4.5			-		-	H		+	+	+	+	-	•	+	+	+	+	-			H	H		+	+	+	$\dashv$					$\dashv$	$\dashv$	$\dashv$	•			•	f
RTQ 639 3S	4.5							+	+	+	+	+	+	+	+	+	+	+				•		$\dashv$	+	+		$\dashv$					$\dashv$		$\vdash$		Н	•		•
	5.3							+	+	+	$^{+}$	+	+	+	•	+	+	$\dashv$					П	$\forall$	+	$\forall$	$\dashv$	$\dashv$					$\exists$		$\exists$	•		П	•	H
RTQ 766 3S	5.3			T					$\top$	$\dagger$	$\dagger$	+	$\dagger$	$\dagger$	$\dagger$	+	+	$\dashv$					•		1	$\exists$	$\dashv$	7					$\neg$		$\neg$			•		•
DTO 006 30	6													(	•	$\top$																	П		П	•			•	
RTQ 896 3S	6																						•															•		•
RTQ 1100 3S	3.3															•																				•			•	
1100 23	3.3					L										$\prod$								•														•		•
RTQ 1300 3S	5.3							Ц	4	1	1	1		1	1	•								Ц									Ш	$\Box$	Ш	•	Ш	Ш	•	L
	5.3			L		L			4	1	1	_	1	1	1	$\perp$		4				Ш	Щ	•	4	4	4	4					Щ	Ш	Щ		Ш	•		•
RTQ 1600 3S	4.7			-		L			_	+	+	+	+	+	+	4	•	4	_						_	4	4	4					$\vdash$	$\perp$	$\vdash$	•	Ш		•	L
	4.7			L		L	H	-	+	+	+	+	+	+	+	+	4		4			Н	H		•	4	4	4		_			$\vdash$	$\vdash$	$\dashv$	_	Н	•	_	•
RTQ 2100 3S	5.1				-			4	+	+	+	+	+	+	+	+	+	•	_			Ш		$\Box$	_	4	4	4	_				$\dashv$	$\dashv$	$\dashv$	•	Н		•	-
NOTE: the light oil I	5.1															$\perp$									•											_	Ш	•		•

Description	Back-pressure				Du	al f	uel l	burr	ner					urne					ntrol
	in combustion chamber (mbar)					flai dar						ame I0x)	ac	cess	ory	flar	ıge	pai	nels
	(		T	wo s	stag	e		_		dula									
				_	-			Ме	echa	nic	al c	am							
		RLS 28	RLS 38	RLS 50	RLS 70	RLS 100	RLS 130	RLS 190/M MZ	RLS 250/M MZ	RLS 310/M MX	RLS 410/M MX	RLS 510/M MX	Extended head	Extended head	Extended head	Burner flange	Burner flange	Riellotech Prime	Two stage burner management kit
		20147897	20147803	20147805	20147798	20147799	20147800	20159361	20145372	20147806	20147809	20147812	20097868	20097869	20097840	20076596	20076618	20010820	4031067
RTQ 217 3S	2.2	•													•			•	•
RTQ 255 3S	2.8	•													•			•	•
RTQ 318 3S	3.2		•										•					•	•
RTQ 349 3S	3.9		•										•					•	•
RTQ 448 3S	3.5			•										•				•	•
RTQ 511 3S	4.2				•												Ш	•	•
RTQ 575 3S	3.4				•												Ш	•	•
RTQ 639 3S	4.5				•												Ш	•	•
RTQ 766 3S	5.3				•												Ш	•	•
RTQ 896 3S	6.0					•											Ш	•	•
RTQ 1100 3S	3.3					•											Ш	•	•
RTQ 1300 3S	5.3						•										Ш	•	•
RTQ 1600 3S	4.7							•									Ш	•	•
RTQ 2100 3S	5.1								•								Ш	•	•
RTQ 2400 3S	7.6									•						•	Ш	•	•
RTQ 2700 3S	8.0									•						•		•	•
RTQ 3000 3S	6.5									•						•		•	•
RTQ 3500 3S	7.1										•						•	•	•
RTQ 4000 3S	8.0											•					•	•	•

110

Two flue gas passes steel jet burner boilers

# RTQ 2S

L1

M = flow

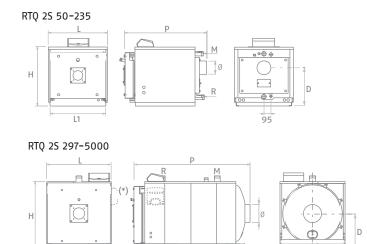
R = return

Products up to 400 kW only for replacement, till  $1^{st}$  January 2018, in conformity of point 2 (G) Article 1 of Regulation EU N. 813/2013.





- Single-piece steel boilers, that can be matched with any fuel jet burners
- Provided with completely wet combustion chamber with free dilation and flame-inversion (square range).



Description	Н	L	L1	Р	D	Ø	Net weight
Description	mm	mm	mm	mm	mm	mm	kg
RTQ 50 2S	605	605	560	885	325	139	127
RTQ 64 2S	605	605	560	1035	325	139	160
RTQ 82 2S	740	705	660	970	384	179	199
RTQ 105 2S	740	705	660	1120	384	179	225
RTQ 154 2S	790	805	753	1220	500	180	288
RTQ 203 2S	840	853	803	1400	525	180	382
RTQ 235 2S	840	853	803	1400	525	180	382
RTQ 297 2S	980	925	875	1550	525	200	458
RTQ 323 2S	980	925	875	1550	525	200	458
RTQ 357 2S	980	925	875	1550	525	200	478
RTQ 418 2S	1030	975	925	1770	550	250	630
RTQ 467 2S	1030	975	925	1770	550	250	630
RTQ 537 2S	1030	975	925	1945	550	250	731
RTQ 597 2S	1030	975	925	1945	550	250	726
RTQ 715 2S	1210	1150	1100	2115	655	300	953
RTQ 837 2S	1210	1150	1100	2210	655	300	1037
RTQ 920 2S	1280	1220	1170	2380	690	300	1237
RTQ 1020 2S	1335	1285	1235	2515	715	450	1530
RTQ 1250 2S	1430	1360	1310	2835	755	400	2257
RTQ 1500 2S	1530	1450	1400	2965	820	400	2570
RTQ 1700 2S	1610	1535	1485	3125	865	450	2841
RTQ 2020 2S	1680	1605	1555	3115	900	450	3340
RTQ 2320 2S	1750	1655	1605	3210	925	450	3725
RTQ 2620 2S	1925	1800	1750	3455	1015	450	4667
RTQ 2920 2S	1995	1865	1815	3560	1050	500	4826
RTQ 3200 2S	1996	1865	1815	3611	1050	500	4905
RTQ 3500 2S	2055	1935	1885	3670	1080	500	5346
RTQ 4000 2S	2140	2040	1990	4004	1155	550	6195
RTQ 4500 2S	2170	2070	2020	4254	1170	600	6790
RTQ 5000 2S	2355	2230	2180	4521	1250	650	7965

**TERMINAL UNITS** 

Pressurized steel boilers, that can be matched with any fuel jet burners. Provided with completely wet combustion chamber with free dilation and flame-inversion. Equipped with removable high-efficiency stainless steel turbulators ensuring an optimized heat exchange and a homogeneous thermal load.

The front door features an ambidextrous opening and is provided with a mineral-wool double seal. Casing is made of stoveenamelled sheet.

The control panel should be ordered separately.

- Operation at modulating temperature (minimum allowed return temperature 55 °C)
- Several solutions thanks to the combination with RIELLOtech control boards.

#### **TECHNICAL DATA**

Description	Powe	r – kW	Efficie	ency - %	Code
	Output useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)	
RTQ 50 2S	50	54.2	92.2	95.1	20136573
RTQ 64 2S	64	69.3	92.3	95.3	20136574
RTQ 82 2S	82	88.8	92.3	95.4	20136575
RTQ 105 2S	105	113.6	92.4	95.7	20136577
RTQ 154 2S	154	166	92.9	91.4	20136578
RTQ 203 2S	203	217	93.4	-	20136579
RTQ 235 2S	235	255	92.3	92.8	20136580
RTQ 297 2S	297	318	93.4	-	20136581
RTQ 323 2S	323	348	92.8	93.3	20136582
RTQ 357 2S	357	384	92.9	93.3	20136583
RTQ 418 2S	418	448	93.3	-	20136584
RTQ 467 2S	467	500	93.4	93.3	20136585
RTQ 537 2S	537	575	93.4	-	20136587
RTQ 597 2S	597	639	93.4	93.3	20136588
RTQ 715 2S	715	766	93.4	-	20136589
RTQ 837 2S	837	896	93.4	93.3	20136590
RTQ 920 2S	920	990	92.9	93	20136592
RTQ 1020 2S	1020	1100	92.7	92.9	20136594
RTQ 1250 2S	1250	1338	93.4	93.3	20136595
RTQ 1500 2S	1500	1606	93.4	93.3	20136598
RTQ 1700 2S	1700	1820	93.4	93.3	20136599
RTQ 2020 2S	2020	2162	93.4	93.3	20136600
RTQ 2320 2S	2320	2485	93.4	93.3	20136601
RTQ 2620 2S	2620	2830	92.5	92.8	20136602
RTQ 2920 2S	2920	3150	92.7	92.9	20136603
RTQ 3200 2S	3200	3450	92.7	92.9	20136605
RTQ 3500 2S	3500	3780	92.7	92.9	20136606
RTQ 4000 2S	4000	4315	92.7	92.9	20136607
RTQ 4500 2S	4500	4854	92.7	92.9	20136608
RTQ 5000 2S	5000	5394	92.7	92.9	20136609

Maximum operating pressure 6 bar for RTQ 2S 50 - 5000 models.

#### **ACCESSORIES**

Description	Code
MECHANICAL ACCESSORIES	
Burner flange	20043900
Burner flange	20047680
Burner flange	4031188
Burner flange	4031395
Burner flange	20076596
Burner flange	20076618
Burner flange	20067631
Burner flange	4031196
Burner flange	20043899
Burner flange	4031186
Burner flange	4031192
Burner flange	4031198

#### **CONTROL PANELS**

Description	Installation	Boiler models	Code
RIELLOtech CLIMA COMFORT	Horizontal	RTQ 2S 50-2620	4031064
RIELLOtech CLIMA COMFORT	Vertical	RTQ 2S 715-5000	4031069
RIELLOtech PRIME	Horizontal / Vertical	All models	20010820
RIELLOtech PRIME ACS	Horizontal / Vertical	All models	20010437

NOTE: for specific accessories, connection MODBUS and more details on control panels, please refer to page 393.

#### **RECOMMENDED COMBINATIONS WITH BURNERS - EU COUNTRIES**

Description	Back-pressure								G	ias t	ourn	ner										В	urn	er fl	lang	ge		C	ont	rol į	anels
	in combustion chamber				_			Yell	ow f	lam	e (S	tan		_																	
	(mbar)	One stage			Tw	o st	age							Мос	lula	ting															
						-							Мє	cha	nic	al ca	m		ĺ					1							1 1
																	5	1	5	5								ne	ia Comfort	ia Comfort	ner kit
		RS 44/1 MZ TL	RS 44 MZ TL	RS 50 TL	RS 70 TL	RS 100 TL	RS 130 TL	RS 150 TL	RS 190 TL	RS 44/M MZ TL	RS 50/M MZ TL	RS 70/M TL	RS 100/M TL	RS 150/M TL	RS 190/M TL	RS 250/M MZ TL	RS 310/M MZ FS1	RS 410/M MZ FS1	RS 510/M MZ FS1	RS 610/M MZ FS1	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Riellotech Clima Comfort	Two stage burner management kit						
		3788611	3789111	3784703	3785103	3785303	3785503	20044637	20030087	3788811	3781623	3789611	3789711	20044639	20052616	3788411	20068343	20068356	20068027	20066706	20043900	20047680	4031188	4031395	20076596	20076618	20067631	20010820	4031069	4031064	4031067
	2.9	•																						•				•			
RTQ 418 2S	2.9		•																					•				•			•
	2.9									•														•						•	
RTQ 467 2S	3.3			•																				•				•			•
MIQ 401 23	3.3										•													•						•	
RTQ 537 2S	3.0				•																		•					•			•
NIQ 551 25	3.0											•											•							•	
RTQ 597 2S	5.1				•																		•					•			•
NIQ 591 25	5.1											•											•							•	(
RTQ 715 2S	4.7				•																		•					•			•
KIŲ 115 25	4.7												•										•							•	(
DTO 027 20	8.1					•																	•					•			•
RTQ 837 2S	8.1												•										•							•	
DTO 020 25	4.6					•																	•					•			•
RTQ 920 2S	4.6												•										•							•	
DT0 4000 00	4.6					•															•							•			•
RTQ 1020 2S	4.6												•								•									•	
DT0 40-0 00	5.8						•														•							•			•
RTQ 1250 2S	5.8													•							•									•	
DT0 4-44 40	5.4							•													•							•			•
RTQ 1500 2S	5.4													•							•									•	
	7.2								•													•						•			•
RTQ 1700 2S	7.2														•							•								•	
	4.8								•																		•	•			•
RTQ 2020 2S	4.8														•												•			•	
RTQ 2320 2S	4.2															•											•			•	
RTQ 2620 2S	6.0																•								•					•	
RTQ 2920 2S	6.3																•								•				•		
RTQ 3200 2S	7.9																	•							•				•		
RTQ 3500 2S	7.9																	•							•				•		
RTQ 4000 2S	7.7																		•							•			•		
RTQ 4500 2S	8.0																			•						•			•		
RTQ 5000 2S	7.9																			•						•			•		١,

Description	Back-pressure in combustion	L.	_		Li	ght	oil l	burn	er Yello	212. 4	lam	0 /5	tan	12-		ual f	uel	bur	ner			ırne ess			В	urn	er fl	ang	ge		(	ontr	ol p	anel	s
	chamber (mbar)	<u> </u>	т	wo	star	76					lam latir	<u> </u>	Land	uaro		o sta	age		Modu	lating			-												
	(inibal)	_				,-		Η.				_	_							anical															
					_			Ľ	Mec	han	ıcal	can	1			-				ım															
																																fort	fort		
																																Com	Com	_	n ķi
																				2	ad	ad	ad	a	a	e	e e	يە	e e	e e	ime	ima	ima	rne t kit	latic
				١.			IZ TC			=	ᆮ	ᆮ	ᆮ						RLS 190/M MZ	RLS 250/M MZ	Extended head	Extended head	Extended head	Burner flange	Riellotech Prime	Riellotech Clima Comfort	Riellotech Clima Comfort	Two stage burner management kit	nod						
		RL 50 TL	RL 70 TL	RL 100 TL	RL 130 TL	RL 190 TC	RL 250 MZ TC	RL 38/M TL	RL 50/M TL	RL 70/M TL	RL 100/M TL	RL 130/M TL	RL 190/M	38	20	02	100	RLS 130	190/	250/	nde	nde	nde	ner f	lote	lote	lote	stag nage	3-point modulation kit						
		R 5	RL 7	RL 1	RL 1	RL 1	RL 2	RL 3	RL 5	RL 7	RL 1	RL 1	RL 1	RLS 38	RLS 50	RLS 70	RLS 100	RLS	RLS	RLS	Exte	Exte	Exte	Bur	Riel	Riel	Riel	Two	3-p						
						m		6	4	0	4	2		m	2			0	_	0.	8	6		0	0				9	_	0				2
		3474633	3475033	3475233	3475433	20011008	3470010	20166499	20166504	20166476	20166484	20166487	20169231	20147803	20147805	20147798	20147799	20147800	20159361	20145372	20097868	20097869	3010422	20043900	20047680	4031188	4031196	4031395	20076596	20067631	20010820	4031069	4031064	4031067	20013035
		347	347	347	347	200	347	201	201	201	201	201	201	201	201	201	201	201	201	201	200	200	301	200	200	403	403	403	200	200	200	403	403	403	200
	2.9	•																										•			•			•	
RTQ 418 2S	2.9							•																				•					•		•
	2.9													•							•							•			•			•	
	3.3	•																										•			•			•	
RTQ 467 2S	3.3								•																			•			<u>.</u>		•		•
	3.3	_													•							•						•			•			•	
DT0 537 35	3	•						-																				•			•			•	
RTQ 537 2S	3								•							•										•		•			•		•	•	•
	5.1		•					-								•										•					•			•	
RTQ 597 2S	5.1		-							•																•					•		•	_	•
NIQ 591 25	5.1									_						•										•					•			•	Ť
	4.7		•													H										•					•			•	
RTQ 715 2S	4.7									•																•							•		•
	4.7															•										•					•			•	
	8.1			•																						•					•			•	
RTQ 837 2S	8.1										•															•							•		•
	8.1																•										•				•			•	
	4.6			•																						•					•			•	
RTQ 920 2S	4.6										•															•							•		•
	4.6																•										•				•			•	
	4.6			•																				•							•			•	
RTQ 1020 2S	4.6										•													•									•		•
	4.6																•							•							•			•	
	5.8				•																			•							•			•	
RTQ 1250 2S	5.8											•												•									•		•
	5.8			-	L	L		-										•						•	_				-		•		_	•	
	5.4					•																			•						•			•	
RTQ 1500 2S	5.4							-				•							•					•					-				•	•	•
	5.4					•																			•	_					•			•	
RTQ 1700 2S	7.2					ľ							•												•						Ť		•	_	•
KIŲ 1700 25	7.2												Ť						•						•	_					•			•	Ť
	4.8					•													-		Н			Н	_					•	•	Н	$\dashv$	•	
RTQ 2020 2S	4.8					ŕ							•								Н			Н						•	Ĺ	Н	•	-	•
4 -320 23	4.8																			•				Н						•	•		$\dashv$	•	
	4.2						•																•							•	•			•	
RTQ 2320 2S	4.2																							Н									•		•
RTQ 2620 2S	6.0						•																						•		•	Н		•	

#### **RECOMMENDED COMBINATIONS WITH BURNERS - EXTRA EU COUNTRIES**

Description	Back-pressure in combustion	-												s bu										RI	e fl	am				E	Buri	nei	fla	ang	зe				Co	ntro	ol p	pan	els
	chamber (mbar)								Yell	ow	fla	me	(S1	tan	daı	rd)							4	(Lo	w N	10x	)																
	(1115417)		ne age			T۱	NO :	sta	ge							Мо	dul	ati	ng						e . ge s																		
			_					-							Ме	cha	ani	cal	ca	m				-		-	1				_	_		_	_					_	_	_	
																																								fort	fort		
																																								Riellotech Clima Comfort	Riellotech Clima Comfort	<u>.</u> .	3-point modulation kit
		ے	_									ᆮ	닏	닏					그	FS1	FS1	FS1	FS1					9 8	98	ge e	ט מ	שמ	99	ge	ge	ge	ge	ge	rime	lima	lima	urne	ılatic
		RS 34/1 MZ TL	44/1 MZ TL	1Z TL	1Z TL	L	١.	2	_	_		RS 34/M MZ	RS 44/M MZ TL	RS 50/M MZ TL	르	Z Σ	Z Σ	μ Π	RS 250/M MZ	RS 310/M MZ FS1	RS 410/M MZ	RS 510/M MZ FS1	RS 610/M MZ FS1					Burner flange	Burner Hange	Burner flange	Durner Hange	Ē .	Burner flange	Riellotech Prime	ch	ch C	Two stage burner	mod					
		34/1	1441	RS 34 MZ TL	RS 444 MZ TL	RS 50 TL	RS 70 TL	RS 100 TL	RS 130 TL	RS 150 TL	RS 190 TL	34/1	44/	20/N	RS 70/M TL	RS 100/M TL	RS 150/M TL	RS 190/M TL	250/	310/	410/	510/	610/	2	m 2	BSZD	BS3D	rner	rner	rner	2 6	ם ב	rner	rner	rner	rner	rner	rner	llote	llote	llote	o sta	anias Toint
		RS	RS	RS	RS	RS	RS	RS	SS	RS	RS	RS	RS	SS	RS	SS.	RS	RS	RS	RS	RS	RS	RS I	BS2	BS3	B S	BS	Bu :	n R	Bu	0 0	0 0	n R	n B	Bu	Bu	Bu	Bu	Ŗ	Ŗ	Rie	≥ Έ	3 -
		_	_	_	_	m	m	6	<u>m</u>	537	780		_	m	_		539	919	_	343	356	027	902	ω,		ω,		399	000	80	0 0	ا م	7	ω	2	969	818	331	320	69	7,5	25	3.5
		3788511	3788611	3789011	3789111	3784703	3785103	3785303	3785503	20044637	20030087	3788711	3788811	3781623	3789611	3789711	20044639	20052616	3788411	20068343	20068356	20068027	20066706	3761258	3761316	3/61658	3761716	20043899	20043900	20047680	4051180	20110	4031192	4031198	4031395	20076596	20076618	20067631	20010820	4031069	4031064	4031067	20013035
	0.3	37	37	37	37	37	37	37	37	5	50	37	37	37	37	37	5	50	37	50	50	50	_	37	37	2 2	37	2 2	7	2 3	1 3	į į	¥ .	<u>∓</u>	<u>+</u>	<u>~</u>	5	50	9 20	Ŧ	<u>+</u>	4	1
RTQ 50 2S	0.3			H	H	H			Н	+	+	+	+	+	+		+				+		+	+	-	•	+		+	+	+	+	+	+	+	+	+	$\dashv$	•		-	•	+
DT0 61 06	0.8					T	H		П	$\forall$				1		1	+						1	•	1	+	+		+		$^{+}$	$^{\dagger}$	T	1	$\forall$	$\top$	$\forall$	$\forall$	•	П			T
RTQ 64 2S	0.8																								1	•													•			•	
RTQ 82 2S	0.8																								•		_	•							$\Box$				•				
	0.8					L			Ц	_			_	4			4				_		_	_	_	-	-	•	4	4	+	+	4	4	4	_	4	_	•	$\perp$		•	+
RTQ 105 2S	1.4			H	H	-	-			-	_	-	_	-	-	-	+	_		_	-	_	+	-	•	٠.	-	•	+	+	+	+	+	+	$\dashv$	$\dashv$	$\dashv$	-	•	$\vdash$	_	•	+
	1.4 1.6	H			H	H	$\vdash$		Н	$\dashv$	+	+	+	+	+	+	+				+		+	+	•	+		-	+	١,	•	+	+	+	$\dashv$	+	+	$\dashv$	•	$\vdash$		-	+
RTQ 154 2S	1.6			H	H	H			Н	+	+	+	+	+	+		+				+		+	+	+	-	•		$^{+}$		-	$^{+}$	$\dagger$	+	+	+	+	$\dashv$	•	$\exists$		•	+
	1.8	•				T			П		$\forall$	$\forall$	$\forall$		7		1						$\top$	$\top$	+	Ť	$\top$		T	1	$^{+}$	Ť	1	•	$\forall$	$\top$	$\top$	$\exists$	•				+
RTQ 203 2S	1.8			•																													ŀ	•					•			•	
	1.8											•																					ŀ	•	$\Box$	$\Box$	$\Box$			$\square$	•		•
	2.7	•			L	L			Ш	_				4			_						4	4	4	_		4	_	4		1	-	•	_	4	4		•				L
RTQ 235 2S	2.7			•			-			_	4	4	_	_	4		4				_		_	_	_	+	_		4	4	+	+	-	•	$\dashv$	$\dashv$	_	_	•	$\vdash$		•	Ļ
	2.7	•		H	H	H	-		Н	$\dashv$	+	+	•	+	+	-	+	-		-	-	-	+	+	+	+	+	+	+	+	+	+	•	•	$\dashv$	$\dashv$	+	$\dashv$	•	$\vdash$	•	$\vdash$	•
RTQ 297 2S	3.5			•	Н	H			Н	$\dashv$	+	+		+	+	+	+				$\dashv$		+	+	+	+	+	+	+	+	+	+	•	+	+	+	+	$\dashv$	•			•	+
4 _ 5 5	3.5			Н	Н	H	H		Н	$\forall$	$\forall$	+	$\forall$	•	+	1	1				+	_	$\forall$	+	+	+	+	+	+	+	$^{+}$	+	•	+	$\forall$	+	+	$\exists$	Н	$\exists$	•		•
	3.9		•			Г											1						$\top$			T	1		T	T	T	١,	•		$\top$	$\top$	$\top$	$\exists$	•				T
RTQ 323 2S	3.9				•																											1	•						•			•	
	3.9								Ш				•																			1	•		Ц	$\perp$			Ш	Ш	•		•
	4.1		•		L		_				_	_		_	4	_							_	4	4		4		4	_	_	_	4		•	_	_	_	•	$\perp$			$\perp$
RTQ 357 2S	4.1				•	H	-		Н	-	_	4	•	-	4	_	+				_		+	+	+	+	+	+	+	+	+	+	+	4	•	$\dashv$	+	_	•	$\vdash$	•	•	•
	4.1 2.9		•		H		-		Н	$\dashv$	_	_	•	-	-	-	-	_		_	-		+	+	+	+	+	-	+	+	+	+	+	+	•	$\dashv$	+	-	•	$\vdash$	•	$\vdash$	ľ
RTQ 418 2S	2.9	Н	Ť	$\vdash$	•	H	$\vdash$		Н	$\dashv$	+	+	$\dashv$	$\dashv$	+	+	+	-		-	$\dashv$		+	+	+	+	+	+	+	+	+	+	+	+	•	+	+	$\dashv$	•	$\vdash$	-	•	+
	2.9	T											•			1								1	+		$\top$		1	T	$^{\dagger}$	+	1		•	$\forall$	T	$\exists$			•		•
DTO 1.67 25	3.3					•	Т		П														T	T	T	T		T		T		T	T		•	T	T	$\exists$	•	П	П	•	T
RTQ 467 2S	3.3													•																					•						•		•
RTQ 537 2S	3.0						•							_									_	4			_			4	•	+			_	_	_	_	•			•	Ļ
	3.0				_	L	_		Ш	_	4	4	4	_	•		4				_	_	4	4	4	+	4	4	4	4	•	+	4	4	$\dashv$	$\dashv$	4	_		$\vdash$	•		•
RTQ 597 2S	5.1			H	H	H	•		Н	$\dashv$	+	-	-	+	•	+	+	-		_	-	-	+	+	+	+	+	+	+	+	•	+	+	+	$\dashv$	$\dashv$	+	-	•	$\vdash$	•	•	•
	5.1 4.7	H		H	H	H	•		Н	$\dashv$	+	+	+	+	-	+	+				+	-	+	+	+	+	+	+	+	+	-	+	+	+	$\dashv$	+	+	$\dashv$	•		•	•	+
RTQ 715 2S	4.7	H				H	Ť	H	Н	+	+	+	+	+	+	•	+				$\dashv$		+	+	+	+	+	+	+	+	,	+	+	+	+	+	+	$\dashv$		$\dashv$	•	Ť	•
	8.1	H			H	H		•	H							$\forall$	+				+		$\forall$	+	+	+	+	$\dagger$	+	$\dagger$	•	-	+	+	$\forall$	$\dashv$	+	+	•	$\exists$		•	Ť
RTQ 837 2S	8.1	П				Г		Г	П	1	1	1	1	1	1	•	1				7		$\top$	$\top$	1	$\dagger$	$\dagger$	$\top$	1	$\top$	•		1		$\forall$	$\top$	$\top$	$\forall$			•		•
RTQ 920 2S	4.6							•																							•								•			•	
W16 A50 52	4.6								П							•							$\Box$			Ţ	I	Ţ		Ţ	•			_	$\Box$	$\Box$	$\Box$			$\Box$	•		•
RTQ 1020 2S	4.6				L	L		•	Ц	_			_				_				_			_	1	1	1	_	•	4	1	1	4		$\perp$	$\perp$	$\perp$	_	•	Ц		•	$\downarrow$
,	4.6	H			L	L	_							_		•	4				_		_	_	_	4	4	-	•	+	+	+	4	4	$\dashv$	$\dashv$	$\dashv$	_		$\dashv$	•	_	•
RTQ 1250 2S	5.8	H							•	4	4	4	4	4	4	4	-				4		+	+	+	+	+	_	•	+	+	+	4	4	$\dashv$	$\dashv$	$\dashv$	4	•	$\dashv$	_	•	•
RTQ 1250 2S	5.8	lete															•											•	•												•		_

Description	Back-pressure												Gas	s bı	urn	er														Bu	rne	r fla	ng	е			Со	ntr	ol pa	nels	
	in combustion chamber							,	Yell	ow	fla	me	e (S1	tan	dar	d)									flar NO																
	(mbar)		ne			Tv	/O S	tag	ge							Мо	dula	atin	ıg					One		vo															
		sta	age -	-			_				+				Me	cha	anio	al	can				S	tage	sta	ige -															
		RS 34/1 MZ TL	RS 44/1 MZ TL	RS 34 MZ TL	RS 44 MZ TL	RS 50 TL	RS 70 TL	RS 100 TL		$\exists$		RS 34/M MZ TL	RS 44/M MZ TL	RS 50/M MZ TL		RS 100/M TL	RS 150/M TL		KS 250/M MZ IL	KS 310/M MZ FS1	7	$\top$	KS 610/M MZ FSI	B52	BS2D	Н		Н	Н	Burner flange	Burner flange	Burner flange	Burner Tlange	+		Burner flange		Riellotech Clima Comfort	Riellotech Clima Comfort		_
		3788511	3788611	3789011	3789111	3784703	3785103	3785303	3785503	20044637	20030087	3788711	3788811	3781623	3789611	3789711	20044639	20052616	3788411	20068343	20008350	20068027	20066706	3761316	3761658	3761716	20043899	20043900	20047680	4031186	4031188	4031192	4031198	70076596	20076618	20067631	20010820	4031069	4031064	4031067	
DT0 4500 25	5.4									•																		•									•			•	
RTQ 1500 2S	5.4																•											•											•	•	
DTO 1700 25	7.2										•																		•								•			•	
RTQ 1700 2S	7.2																	•											•										•	•	
RTQ 2020 2S	4.8										•																									•	•			•	
KIŲ 2020 23	4.8																	•																		•			•	•	
RTQ 2320 2S	4.2																	1	•																	•			•	•	
RTQ 2620 2S	6.0																		1	•														•					•	•	
RTQ 2920 2S	6.3																		1	•														•				•		•	
RTQ 3200 2S	7.9																			•	•													•				•		•	
RTQ 3500 2S	7.9																			•	•					П								•				•		•	
RTQ 4000 2S	7.7																			$\top$		•		T		П							T	T	•			•		•	
RTQ 4500 2S	8.0																				1	1	•	T		П								T	•			•		•	
RTQ 5000 2S	7.9									$\Box$	$\exists$				T		1	T	$\top$	T		1	•	T		П	П	П			$\exists$		T	T	•			•		•	

Description	Back-pressure in combustion	F				_				<u> </u>			urn	er ndai	rd)									rner				Bui	ner	fla	nge				Co	ontr	ol p	anel	s
	chamber (mbar)	0	ne	stag	76	_					tag		Star	ıaaı	ra)		М	odı	ılat	ing	,	$\dashv$																	
	(IIIbai)	_				_					rus				+			han		_		-																	
		H			П	Н							Т		+	Ť	100	- I	-			+			+							П		Н					-
																																				Riellotech Clima Comfort	Riellotech Clima Comfort		±
																																			41	Con	Con	بر ب <u>ت</u>	N NO
					١.																		ad	ad	g g	9 0	р <u>а</u>	, a	e e	e e	e e	e e	e e	e e	rime	ima	ima	urne it ki	ilati
					MZ TL			1	7 7					اً اِي	12 IC	≓ i	=	ᄅ	=	르	릳	Ę	d P	ָם ק	5 ,	lang	2 6	flang	ch P	ch C	ch C	ge b	hou						
				S	4/1	۵		RL 34 MZ TL	RL 44 MZ TL	0 1	길	RL 100 TL	RL 130 TL	RL 190 TC	RL 250 MZ	RL 28/M TL	RL 38/M TL	RL 50/M TL	RL 70/M TL	RL 100/M TL	RL 130/M TL	RL 190/M TL	Extended head	Extended head	ם ו	Burner flange	Riellotech Prime	lote	lote	Two stage burner management kit	intı								
		RG2	RG3	RG4S	RL 34/1	RG3D	RG4D	RL 3	RL 4	RL 50 TL	RL 70 TL	RL 1	RL 1	RL 1	RL 2	RL 2	R 3	R 5	RL 7	RL 1	RL 1	RL 1	Exte	EXT EXT	ב ב	Bur	B 8	Bur	Buri	Bur	Bur	Buri	Bur	Buri	Riel	Riel	Riel	Two	3-point modulation kit
		Г		П	П			П	П	П													$\neg$		٦,			Т		П	Т	П		П	_	П			_
		20	300	650	Ξ	450	750	211	311	533	033	233	£33	008	6	2649	9649	9204	9449	9484	2481	9231	196	965	77	3900	2 8	88	92	96	86	395	5596	7631	0820	690	490	290	3035
		3737750	3739300	3739650	3470111	3739450	3739750	3470211	3470311	3474633	3475033	3475233	3475433	20011008	3470010	20166495	20166499	20166504	20166476	20166484	20166487	20169231	3000964	3000965	2010	20043900	4031186	4031188	4031192	4031196	4031198	4031395	20076596	20067631	20010820	4031069	4031064	4031067	20013035
RTQ 50 2S	0.3	•																				_	•		1				Ť		_	Ò	П	П	•	Ť			_
RTQ 64 2S	0.8	•																					•												•				
RTQ 82 2S	0.8		•																					•											•				
RTQ 82 2S	0.8					•										$\perp$		_						•			$\perp$					Ш	Ш	Ш	•			•	_
RTQ 105 2S	1.4		•						Ш			_	_	_	_	_	_	4	4	4		4	_		1	_	+	_				Ш	Ш	Ш	•	Ш	_		_
	1.4		-	L		•			Ш			_	_	_	_	_	4	_	_		_	_	_	•	+	_	+	_				Н	Ш	Н	•	Ш		•	_
RTQ 154 2S	1.6			•					Н			_	_	+	+	+	4	+	_	-	4	-	_	+	+	+	•	+				Н	Н	Н	•	Н	_		_
	1.6				•		•					-	+	+	+	+	+	+	+	-	-	+	+	-	+	+	•	+	H		•	$\vdash$	Н	Н	•	Н		•	_
RTQ 203 2S	1.8				-	Н		•	Н			$\dashv$	+	+	+	+	+	+	+	+	$\dashv$	+	+	+	+	+	•	-		H	_	Н	Н	Н	•	Н	-	•	_
MQ 203 23	1.8							Ť				+	+	+	+	•	+	+	+	+	+	+	+		$^{+}$	+	Ť	+	H		•	Н	Н	Н	Ť	Н	•	_	•
	2.7				•								1	+	+	+		+	1	1			+		+		+				•	Н	Н	Н	•	Н			-
RTQ 235 2S	2.7							•				$\neg$		$\top$	+	$\top$		1			$\neg$		1		$^{\dagger}$						•	П	П	П	•	П		•	_
•	2.7												T		1	•		$\top$							Ť		T				•	П	П	П			•		•
	3.5				•								T		T	$\top$									T		Τ		•			П	П	П	•				
RTQ 297 2S	3.5							•																					•						•			•	
	3.5															-	•												•								•		•
RTQ 323 2S	3.9								•																_				•			Ш	Ш	Ш	•			•	_
4 2-2 -2	3.9												4	_	4	'	•	4				_			1		$\perp$	_	•			Ш	Ш	Ш			•		•
RTQ 357 2S	4.1									•		_	4	_	4	4	_	4	4	4	_	4	_		4	_	$\perp$	-				•	Ш	Н	•		_	•	_
	4.1											_	+	+	+	+	•	+	4	_	_	_	_	-	+	+	+	+				•	Н	Н			•	_	•
RTQ 418 2S	2.9	-								•		-	+	+	+	۲,	•	+	-	-	-	-	+	-	+	+	+	-	-			•	Н	Н	•		•	•	•
	3.3	H							Н	•		+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	H		_	•	Н	Н	•	Н		•	Ť
RTQ 467 2S	3.3									_		+	+	+	+	+	+	•	+	+	$\dashv$	+	+		+	+	+					•	Н	Н	_	Н	•	_	•
	3.0								Н	•		$\dashv$	+	+	+	+	1	+	1	1		1	+		+	+	+					•	Н	Н	•	Н		•	-
RTQ 537 2S	3.0											$\exists$	1	$\top$	$\top$	$\top$		•			$\neg$		1		$^{\dagger}$		$^{\dagger}$					•	П	П			•		•
PT0 507 30	5.1										•		T	T	T	T		T							T	T	T	•				П	П	П	•	П		•	_
RTQ 597 2S	5.1																		•									•									•		•
RTQ 715 2S	4.7										•																	•							•			•	
4 1 1 2 2 3	4.7					Ш			Ш			_							•									•				Ш	Ш	Ш		Ш	•	_	•
RTQ 837 2S	8.1								Щ			•	_	_	_	_	_	_					_		1	_	1	•				Ш	Ш	Ш	•	Ш		•	_
	8.1		H						Н				+	+	+	+	4	+	4	•	4	4	+	+	+	+	+	•	H			Н		$\vdash$	_	Н	•	_	•
RTQ 920 2S	4.6				H				Н			•	+	+	+	+	+	+	+		4	+	+	+	+	+	+	•	$\vdash$			Н	Н	$\vdash$	•	Н	•	•	_
	4.6 4.6				H	$\vdash$			Н			•	+	+	+	+	+	+	+	•	$\dashv$	+	+	+	+	•	+	•	$\vdash$			Н	Н	Н	•	Н	-	•	•
RTQ 1020 2S	4.6								Н			-	+	+	+	+	+	+	+	•	$\dashv$	$\dashv$	+	+	+	•	+	+				Н	Н	Н	Ť	Н	•	-	•
	5.8		H		Н	Н			Н			$\dashv$	•	+	+	+	+	+	+	$\dashv$	$\dashv$	$\dashv$	+	+	-	•	+	+				Н	Н	Н	•	Н	H	•	_
RTQ 1250 2S	5.8				Н	Н			Н		$\vdash$	$\dashv$	+	+	+	+	+	+	+	+	•	$\dashv$	+		+	•	+	+		Н		П	Н	П		Н	•	-	•
DT0 4=00.00	5.4		T		П	П		П	П	П		$\dashv$	$\top$	•	$\top$	$\top$	+	$\top$	$\forall$	1	$\exists$	$\top$	$\top$	$\top$	+	•	1	T		П		П	П	П	•	П	1	•	_
RTQ 1500 2S	5.4																				•				1	•						П	П	П		П	•		•
DTO 1700 35	7.2													•												•									•			•	_
RTQ 1700 2S	7.2																					•		T	I	•	·							П			•		•
RTQ 2020 2S	4.8											J	Ţ	•				I		I		Ţ	_[				Ľ	L				Ш	Ш	•	•			•	
	4.8					Ц			Ш			_	_	$\perp$		4		_		4		•	_	_	1	1	1	_				Ш	Ш	•		Ш	•		•
RTQ 2320 2S	4.2					Ш			Ш				_	-	•		_	_			_			•			1					Ш	Ш	•		Ш		•	_
RTQ 2620 2S	6.0													,	•																		•		•			•	

Description	Back-pressure			Dι	ıal f	uel	bur	ner		Bur				Bui	rner	flar	nge				ntrol
	in combustion chamber		Ye	llov	ı fla	me	(Sta	ndard	)	acces	sory									pai	nels
	(mbar)		T	wo:	stag	e		Modu	lating												
									anical ım												
																					<u>.</u>
		RLS 28	RLS 38	RLS 50	RLS 70	RLS 100	RLS 130	RLS 190/M MZ	RLS 250/M MZ	Extended head	Extended head	Burner flange	Riellotech Prime	Two stage burner management kit							
		20147897	20147803	20147805	20147798	20147799	20147800	20159361	20145372	20097868	20097869	20043900	20047680	4031188	4031192	4031196	4031198	4031395	20067631	20010820	4031067
RTQ 203 2S	1.8	•															•			•	•
RTQ 235 2S	2.7	•															•			•	•
RTQ 297 2S	3.5		•												•					•	•
RTQ 323 2S	3.9		•												•					•	•
RTQ 357 2S	4.1		•															•		•	•
RTQ 418 2S	2.9		•							•								•		•	•
RTQ 467 2S	3.3			•							•							•		•	•
RTQ 537 2S	3.0				•									•						•	•
RTQ 597 2S	5.1				•									•						•	•
RTQ 715 2S	4.7				•									•						•	•
RTQ 837 2S	8.1					•										•				•	•
RTQ 920 2S	4.6					•										•				•	•
RTQ 1020 2S	4.6					•						•								•	•
RTQ 1250 2S	5.8						•					•								•	•
RTQ 1500 2S	5.4							•					•							•	•
RTQ 1700 2S	7.2							•					•			Г				•	•
RTQ 2020 2S	4.8								•										•	•	•

### **CAST IRON JET BURNER BOILERS GAS/OIL**



#### THREE FLUE GAS PASSES

THREE FLUE GAS PASSES





TREGÌ 3N (23,9 KW)
TREGÌ 4N (31,5 KW)
TREGÌ 5N (40,2 KW)
TREGÌ 6N (48,2 KW)
TREGÌ 7N (56,2 KW)
TREGÌ 8N (63,8 KW)
TREGÌ 9N (72,5 KW)
TREGÌ 10N (83,5 KW)

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#### TREGÌ NK

TREGÌ 3/60 NK (23,9 KW) TREGÌ 4/60 NK (31,5 KW) TREGÌ 3/100 NK (23,9 KW) TREGÌ 4/100 NK (31,5 KW) TREGÌ 5/100 NK (40,2 KW)

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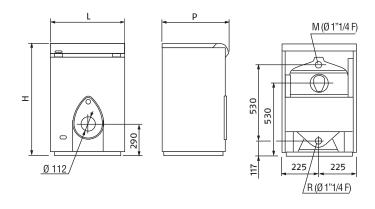
**TERMINAL UNITS** 

RIELLO

Three flue gas passes cast iron jet burner boilers

## Tregì N





- Cast-iron boilers with three flue gas passes, removable turbulators, wet combustion chamber and winged pipes
- They can be matched with oil or gas jet burner

Description	H mm	L mm	P mm	ø mm	Net weight kg
TDEC) a N					
TREGÌ 3 N	850	450	490	130	109
TREGÌ 4 N	850	450	590	130	135
TREGÌ 5 N	850	450	690	130	161
TREGÌ 6 N	850	450	790	130	187
TREGÌ 7 N	850	450	890	130	213
TREGÌ 8 N	850	450	990	130	239
TREGÌ 9 N	965	450	995	180	267
TREGÌ 10 N	965	450	1095	180	297

The front door, with ambidextrous opening, is provided with a glass wool insulation, while the boiler body is insulated through a high-density glass wool layer. The built-in control panel is equipped with safety devices and can manage an one-stage burner. Casing is made of stove-enamelled steel sheet.

- Possible combination with a separated DHW tank
- Allowed return temperature up to 35 °C for all fuels
- Easy handling: this product is supplied in one only pre-assembled item inside a wooden box on a pallet.

#### **TECHNICAL DATA**

Description	Powe	er – kW	Efficie	ency - %	Code
	0utput useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)	
TREGÌ 3 N	23.9	26.5	90.2	90.9	4040719
TREGÌ 4 N	31.5	34.8	90.5	91.3	4040720
TREGÌ 5 N	40.2	44.3	90.7	91.6	4040721
TREGÌ 6 N	48.2	53.1	90.8	92.0	4040722
TREGÌ 7 N	56.2	62.0	90.6	91.8	4040723
TREGÌ 8 N	63.8	70.0	91.1	92.0	4040724
TREGÌ 9 N	72.5	80.0	90.63	90.3	4040725
TREGÌ 10 N	83.5	92.0	90.76	90.5	4040726

#### **ACCESSORIES**

Description	Code
Global shut-off kit	4047318

RECOMMENDED	COMBINATIONS	WITH BURNERS

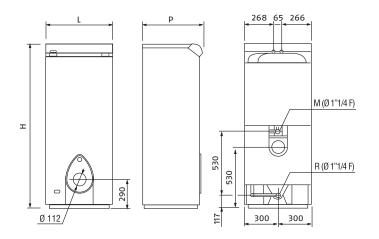
Description	Back-pressure	Gas burner Blue flame (Low NOx)		Light oil burner Yellow flame (Standard)			er		
	in combustion chamber (mbar)						ndard)		
	(mour)	(iiibai)			One stage				
				BS2	BS1	RG2	RGO.R	RG1NR	RG2KD
		3761258	3761158	3737750	3736550	3736405	3738100		
TDEC) 2 N	0.1		•						
TREGÌ 3 N	0.1				•				
TREGÌ 4 N	0.17		•						
IREGI 4 N	0.17					•			
TREGÌ 5 N	0.26		•						
IREGI 5 N	0.26					•			
TREGÌ 6 N	0.36	•							
IREGI 6 N	0.36			•					
TREGÌ 7 N	0.42	•							
IKEUI / N	0.42			•					
TREGÌ 8 N	0.6	•							
IKEUI 8 N	0.6						•		

NOTE: the gas burners must be completed with the gas train.
NOTE: the light oil burners must be completed with the light oil nozzles.

Three flue gas passes cast iron jet burner boilers

# Tregi NK





- Cast-iron boilers with three flue gas passes with storage cylinder, removable turbulators, wet combustion chamber and winged pipes
- They can be matched with oil or gas jet burner

Description	H mm	L mm	P mm	ø mm	Net weight kg
TREGÌ 3/60 NK	1470	450	580	130	157
TREGÌ 4/60 NK	1470	450	580	130	182
TREGÌ 3/100 NK	1470	600	580	130	157
TREGÌ 4/100 NK	1470	600	580	130	182
TREGÌ 5/100 NK	1510	600	690	130	223

Enamelled storage tank, of 60 lt or 100 lt capacity, perfectly insulated with a styrofoam cover, complete with hydraulic circuit and high efficiency circulator. The front door, with ambidextrous opening, is provided with a glass wool insulation, while the boiler body is insulated through a high-density glass wool layer.

The built-in control panel is equipped with safety devices and can manage an one-stage burner. Casing is made of stove-enamelled steel sheet.

- Allowed return temperature up to 35 °C for all fuels
- Easy handling: this product is supplied in one only pre-assembled item inside a wooden box on a pallet (models 3NK and 4NK) or in separated parcels (boiler and casing) on a pallet

#### **TECHNICAL DATA**

Description	Powe	Power – kW		Efficiency - %		Code
	0utput useful 80°/60° max	Furnace input min-max	Useful Pn (80°/60°)	Useful 30% Pn (30 °C)	liters	
TREGÌ 3/60 NK	23.9	26.5	90.2	90.9	60	20101199
TREGÌ 4/60 NK	31.5	34.8	90.5	91.3	60	20101200
TREGÌ 3/100 NK	23.9	26.5	90.2	90.9	100	20101201
TREGÌ 4/100 NK	31.5	34.8	90.5	91.3	100	20101202
TREGÌ 5/100 NK	40.2	44.3	90.7	91.6	100	20101203

#### **ACCESSORIES**

	Description	Code
Global shut-off kit		4047318

#### **RECOMMENDED COMBINATIONS WITH BURNERS**

	Description	Back-pressure		Light oi	I burner
		in combustior chamber (mbar)	Blue flame (Low NOx)		/ flame idard)
		(	0r	ne stage	
			BS1	RGO.R	RG1NR
			3761158	3736550	3736405
TREGÌ 3/60 NK		0.10	•		
		0.10		•	
TDEC)co NV		0.17	•		
TREGÌ 4/60 NK		0.17			•
TREGÌ 3/100 NK		0.10	•		
IREGI 3/100 NK		0.10		•	
TREGÌ 4/100 NK		0.17	•		
		0.17			•
TREGÌ 5/100 NK		0.26	•		
אא טטו /כ וטאו		0.26			•

NOTE: the gas burners must be completed with the gas train.

NOTE: the light oil burners must be completed with the light oil nozzles.

### **CONTROL PANELS AND THERMOREGULATIONS**

6

#### APPLICATION

ELECTRONIC

THERMOSTATIC



RIELLOTECH CLIMA COMFORT RIELLOTECH CLIMA MIX

VILLEGIECH CLIMA MIX

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RIELLO 5000 CL-M

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RIELLOTECH PRIME RIELLOTECH PRIME ACS

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RIELLO 5000 TMR2

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**TERMINAL UNITS** 

APPLICATION		ELECTRONIC	THERMOSTATIC				
	CLIMA COMFORT	CLIMA MIX	RIELLO 5000 CL-M	PRIME	PRIME ACS	RIELLO 5000 TMR	
HORIZONTAL	•		•	•	•	•	
VERTICAL	•	•					
FOR ELECTRICAL CABINET	•	•					
BURNER	Modulating*		Modulating	One stage/two stage (with kit code 4031067)	One stage/two stage (with kit code 4031067)	One stage/two stage	
CASCADE APPLICATION	Immersion or clip probe		•				
SOLAR SYSTEM	Probes 2 x 20010103 1 x 4031913						
DHW TANK	o Probe 1 x 20010103		•		• Probe included	•	
DIRECT ZONE	•		•	•	•	•	
1st MIXED ZONE	Immersion or clip probe	Immersion or clip probe	With kit 20022775				
		probe or remote					
2 <sup>nd</sup> MIXED ZONE	immersion or clip probe	With kit 20011194, immersion or clip probe	With kit 20022775				
		probe or remote ol RC3					
ALTERNATIVE SOURCE GENERATOR	For biomass: immersion probe						

For modulating burner matched with cabinet installation control panel, add kit code 20013035.

#### **USE OF RIELLOTECH REGULATION SYSTEMS**

RIELLOTECH regulation systems are specifically designed for the following ranges: TAU N, RTS 3S, RTQ and RTQ 3S. Besides they allow the addition of more functions concerning the thermoregulations integrated in the model TAU UNIT OIL.

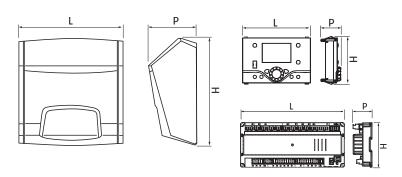
The complete compositions and the communication kits are to be checked on the specific accessories tables in the sections concerning

boilers and thermal groups.

Control panels and thermoregulations

# RIELLOtech Clima Comfort RIELLOtech Clima Mix





 RIELLOtech is Riello range of control systems designed to control any kind of installations

Description	H mm	L mm	P mm	Net weight kg
RIELLOtech CLIMA COMFORT/MIX	360	350	165	3
CLIMA COMFORT	360	350	165	3
CLIMA MIX	120	180	50	1
CLIMA DISPLAY	95	140	50	1

RIELLOtech is an electronic control panel for the climatic management of a furnace with single-stage, two-stage or modulating burner. Ideal for complex systems as well as for the management of simpler installations. The range includes:

**RIELLOtech Climate Comfort:** it is the climatic regulation of even complex systems in single- or multi-family installations. It manages modulating burners, cascades of boilers, solar systems and the integration of several types of heat generators. The system side manages a mixed area (expandable to 2 with a special dedicated kit), one direct and the production of domestic hot water. Clima Comfort also offers the possibility to control modulating circulators (0-10V and PWM) with the specific expansion.

**RIELLOtech Clima Mix:** this is the system regulation that can manage 1 mixed area expandable to 2 with a special kit. The RIELLOtech Clima Comfort versions include a boiler probe and an external probe. All RIELLOtech Clima regulations can be integrated via BUS.

RIELLOtech features IP X4D protection level.

- It is possible to personalise the control panel through programmable inputs and outputs (e.g. 0/10V input, generator anticondensation pump)
- Frost protection, anti-blocking pump function and anti-legionnaires' disease protection
- Energy saving thanks to the system thermoregulation according to the external weather conditions
- Easy to program thanks to a user-friendly menu and a large display
- Quick to install: terminals and connectors, identifiable through silk-screen prints, are included in the supply
- Great flexibility of installation: they can be horizontally or vertically installed on the boilers or wall-mounted by means of a specific kit
- A specific version as main control panel for boiler-room is also available (in combination with Clima Display).

### **TECHNICAL DATA**

**RIELLO** 

Description	Functional description	Installation type	Notes	Code
RIELLOtech CLIMA COMFORT	Control panel with climatic regulation	Horizontal	(1)	4031064
RIELLOtech CLIMA COMFORT	Control panel with climatic regulation	Vertical	(1)	4031069
RIELLOtech CLIMA MIX	Electrical panel with zone regulator	Vertical		20010428
CLIMA DISPLAY	User interface for adjustments CLIMA COMFORT			20010906
CLIMA MIX	Zone regulator			20010904
CLIMA COMFORT	Climatic regulation			20010903

<sup>(1)</sup> Supplied as standard 1 immersion probe and 1 external sensor.

Deductible products only within a system refurbishment and building energy redevelopment. Therefore, please always check the specific procedures for accessing the incentive.

#### **ACCESSORIES**

Description	Code
Programmable expansion kit (CLIMA COMFORT)	20102310
Programmable expansion kit (CLIMA MIX)	20011194
Relay kit for modulating burner (CLIMA COMFORT)	20013035
RIELLOtech wall-hung installation kit (to be used only for vertical installation)	20010056
RC3 remote control kit	20155028
MODBUS connection kit	20185704
Indoor probe	20012456
NTC immersion probe (10kΩ) – 5 metres	20010068
NTC DHW-tank probe (10kΩ) - 5 metres	20010103
Solar collector probe NTC (10 k ohm)	4031913
NTC 0-ring probe (10k $\Omega$ )	20168680
NTC external probe (10 k ohm)	20164232

#### **APPLICATION CHART**

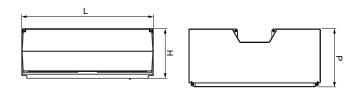
Description	Burner	Boiler in cascade	Biomass boiler	Solar system	DHW storage cylinder	Direct zone	1st mixed zone	2 <sup>nd</sup> mixed zone
RIELLOtech CLIMA COMFORT *						-	-	With specific additional mixed zone control kit
RIELLOtech CLIMA MIX								With additional mixed zone control kit
Compulsory accessories		1 NTC clip probe		2 NTC DHW-tank probes and 1 NTC immersion probe solar collector	1 NTC DHW- tank probe		1 NTC clip probe or 1 NTC immersion probe	1 NTC clip probe or 1 NTC immersion probe
Optional accessories			1 NTC immersion probe (only for biomass boiler)				1 indoor probe or RC3 remote control	1 indoor probe or RC3 remote control

For modulating burner adjustment, order the relay kit accessory.

Control panels and thermoregulations

### RIELLO 5000 CL-M





• RIELLO 5000 CL-M range of control systems designed to control any kind of installations

Description	H	L	P	Net weight
	mm	mm	mm	kg
RIELLO 5000 CL-M	165	451	207	3

The RIELLO 5000 CL-M control panel is designed for climatic management of a one or two-circuit boiler equipped with a modulating, single or two-stage ventilated burner, built-in or free-standing boiler and pump heating system circulation.

Two to four boilers with CL-M control panels can be connected to the cascade control system.

At the same time, up to 6 additional control modules can be connected to each control panel for a separate heating circuit or a continuous flow heat exchanger of the DHW system (modules are supplied as accessories, see section "Accessories". Installation on the side of the boiler is allowed, using the support bracket available as an accessory.

#### **TECHNICAL DATA**

Description	Functional description	Installation type	Notes	Code
RIELLO 5000 CL-M	Control panel with climatic regulation	Horizontal	(1)	20020036

(1) Supplied as standard 1 immersion probe and 1 external sensor.

#### **ACCESSORIES**

Drawing	Description	Code
<u>Q</u>	CDHW accessory module	20022775
	Lateral adapter kit	4031059

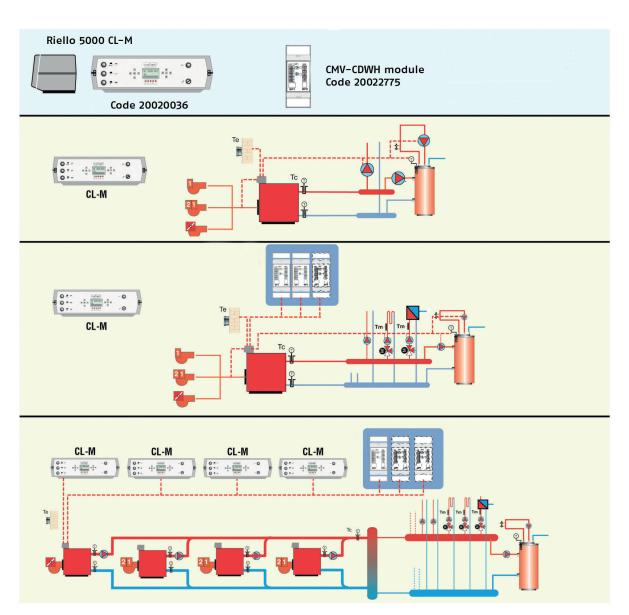
**TERMINAL UNITS** 

### **APPLICATION CHART**

**RIELLO** 

Description	Burner	Boiler in cascade	Solar system	DHW storage cylinder	Direct zone	1 <sup>st</sup> mixed zone	2 <sup>nd</sup> mixed zone
RIELLO 5000 CL-M				Or	-		With specific additional mixed zone control kit
Compulsory accessories		1 NTC clip probe	2 NTC DHW- tank probes and 1 NTC immersion probe solar collector	1 NTC DHW- tank probe		1 CDHW	1 CDHW

For modulating burner adjustment, order the relay kit accessory.  $% \label{eq:condition}%$ 



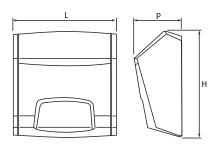
### RECOMMENDATIONS FOR THE USE OF CONTROL PANELS WITH RIELLO BOILERS

Description	RIELLO 3500 SAT	RTQ	RTS	RTQ T (K)	TAU N
RIELLO 5000 CL-M	•	•	•	•	•

Control panels and thermoregulations

# RIELLOtech Prime ACS





• RIELLOtech is Riello range of control systems designed to control any kind of installations

Description	H mm	L mm	P mm	Net weight kg
RIELLOtech Prime	360	350	165	3
RIELLOtech Prime ACS	360	350	165	3

RIELLOtech Prime is the thermostatic product line for the control of 1-stage and 2-stage burners (by means of a specific kit) and one direct zone. RIELLOtech Prime ACS is the thermostatic product line for the control of 1-stage and 2-stage burners (by means of a specific kit), the production of DHW and one direct zone. IPX4D electrical protection.

- Easy to use and install
- Safety thermostat with manual-reset
- Over-temperature disposal function
- Adjustable anti-condensation function on heating and DHW production
- These control panels feature a wide internal space and allow maximum ease of connections
- These control panels are available as horizontal version; for the vertical installation you just have to rotate the front panel by 180°.

#### **TECHNICAL DATA**

Description	Туре	Code
RIELLOtech Prime	Thermostatic control panel heating-only single stage (1) - horizontal installation (2)	20010820
RIELLOtech Prime ACS	Thermostatic control panel heating and DHW production single stage (1) - horizontal installation (2)	20010437

- (1) Two stage burner controlled by kit code 4031067.
- (2) For vertical installation turn the frontal panel by 180°.

#### **ACCESSORIES**

Description	Code
Two stage burner management kit (to install in Riellotech Prime and Riellotech Prime ACS)	4031067
RIELLOtech wall-hung installation kit (to be used only for vertical installation models)	20010056

TERMINAL UNITS

### **APPLICATION CHART**

**RIELLO** 

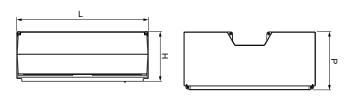
Description	Burner	Boiler in cascade	Biomass boiler	Solar system	DHW storage cylinder	Direct zone	1 <sup>st</sup> mixed zone	2 <sup>nd</sup> mixed zone
RIELLOtech PRIME	Two-stage with special					-		
RIELLOtech PRIME ACS	kit  Two-stage with special kit							
Compulsory accessories					1 storage tank probe NTC			

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Control panels and thermoregulations

## **RIELLO 5000 TMR2**





• RIELLO 5000 TMR2 range of control systems designed to control any kind of installations

Description	H	L	P	Net weight
	mm	mm	mm	kg
RIELLO 5000 TMR2	165	451	207	3

RIELLO 5000 TMR2 is the thermostatic product line for the control of 1-stage and 2-stage burners, the production of DHW and one direct zone. IPX4D electrical protection.

- Easy to use and install
- Safety thermostat with manual-reset
- Over-temperature disposal function
- Adjustable anti-condensation function on heating and DHW production
- These control panels feature a wide internal space and allow maximum ease of connections
- These control panels are available as horizontal installation.

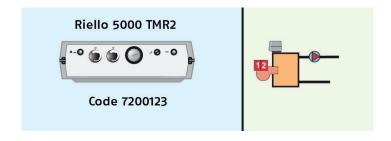
### TECHNICAL DATA

Description	Functional description	Installation type	Code
RIELLO 5000 TMR2	Control panel with climatic regulation	Horizontal	07200123

### **APPLICATION CHART**

**RIELLO** 

Description	Burner	Boiler in cascade	Biomass boiler	Solar system	DHW storage cylinder	Direct zone	1 <sup>st</sup> mixed zone	2 <sup>nd</sup> mixed zone
RIELLO 5000 TMR2	Two-stage with special kit					-		
Compulsory accessories					1 storage tank probe NTC			



### RECOMMENDATIONS FOR THE USE OF CONTROL PANELS WITH RIELLO BOILERS

Description	RIELLO 3500 SAT	RTQ	RTS	RTQ T (K)
RIELLO 5000 TMR2	•	•	•	•

HYBRID SYSTEMS

## **FLUE OPTIONS SYSTEM**



### SINGLE FLUE GAS EXHAUST SYSTEM OR DOUBLE SUCTION/DISCHARGE Ø80 mm

Drawing	Description	Material (*)	Д		Notes	Code
			o 57-70P	-20		
			Condexa Pro	TAU UNIT 35-70		
			Cond	TAU U		
	45° bend Ø80 mm	PP	•	•	(2)	20137503
	90° bend Ø80 mm	PP	•	•	(2)	20137506
	Extension Ø80 mm, L=500	PP	•	•	(2)	20137508
	Extension Ø80 mm L=1000	PP	•	•	(2)	20137509
	Extension Ø80 mm L=2000	PP	•	•	(2)	20137511
	Flexible extension 12.5 m with 8 spacers Ø80 mm	PP	•	•	(2)	20132509
	Horizontal terminal Ø80 mm	PP	•	•	(2)	20137517
	Air suction terminal Ø80 mm	PP	•	•	(2)	20137515
	T-junction kit Ø80 mm with support bracket	PP	•	•	(2)	20132504
	Pipe spacers in the flue gases pipe	PP	•	•		20132505
	Straight inspection manifold Ø80 mm	PP	•	•	(2)	20132506
	Flue cover Ø80 mm	PP	•	•	(2)	20132508
	Flue cover Ø80 for rigid/flexible system	PP	•	•	(2)	20131271
	Flue support shelf kit	Met	•	•		20145888
	Rigid-flexible fitting Ø80 mm	PP	•	•	(2)	20132510
	Flexible-flexible fitting Ø80 mm	PP	•	•	(2)	20132511
	Flexible-rigid-fitting Ø80 mm	PP	•	•	(2)	20132512
	Drain pipe kit	PP	•	•		20132518
ā.	Ø80 mm T-junction kit	PP	•	•	(2)	20132513
	Ø80 mm T-junction closure kit for condensate drain	Met	•	•	(2)	20132514
CI III	Plume kit Ø80 mm	PP	•	•	(2)	20197690

Deductible products only in the context of the refurbishment of the system or the energy-efficient retrofitting of the building. Therefore please always check the specific ways of accessing the incentive.

 <sup>(\*)</sup> PP material: colour may change over time because of sun's rays exposure.
 (2) H1 pressure level according to EN 1443.
 NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).
NOTE: please, refer to boiler installation manual for maximum flue line length.

### Ø60/100 mm CONCENTRIC FLUE GAS EXHAUST SUCTION/DISCHARGE SYSTEM (TYPE C GAS-TIGHT COMBUSTION KIT REQUIRED)

Drawing	Description	Material (*)	Condexa Pro 57-70P	Notes	Code
	Double adaptor Ø80/80 mm - concentric Ø60/100 mm	PP/Met	•	(2)(3)	20137535
	Wall collector Ø60/100 mm	PP/PPu	•	(2)(3)	20132018

PP material: colour may change over time because of sun's rays exposure

Deductible products only in the context of the refurbishment of the system or the energy-efficient retrofitting of the building. Therefore please always check the specific ways of accessing the incentive.

### Ø80/125 mm CONCENTRIC FLUE GAS EXHAUST SUCTION/DISCHARGE SYSTEM (TYPE C GAS-TIGHT COMBUSTION KIT REQUIRED)

Drawing	Description	Material (*)	Condexa Pro 57-70P	TAU UNIT 35-70	Notes	Code
	Universal tile for sloping roofs	Nylon	•	•		20132050
	Element kit Ø80/125 mm connection to flue	PP	•	•	(2)	20132520
	45° bend Ø80/125 mm	PP/ABS	•	•	(2)	20131054
	90° bend Ø80/125 mm	PP/ABS	•	•	(2)	20131083
	90° bend with inspection Ø80/125 mm	PP/ABS	•	•	(2)	20131095
	Double adaptor Ø80/80 mm - concentric Ø80/125 mm	PP/ABS	•	•	(2)	20131055
	Extension Ø80/125 mm, L=500 mm	PP/ABS	•	•	(2)	20131084
	Extension Ø80/125 mm, L=1000 mm	PP/ABS	•	•	(2)	20131085
	Vertical terminal Ø80/125 mm	PP/ABS	•	•	(2)	20131113
	Wall discharge terminal Ø80/125 mm	PP/ABS	•	•	(2)	20131098
CIII	Plume kit Ø80 mm	PP	•	•	(2)	20197690

PP material: colour may change over time because of sun's rays exposure.

Deductible products only in the context of the refurbishment of the system or the energy-efficient retrofitting of the building. Therefore please always check the specific ways of accessing the incentive.

 <sup>(2)</sup> H1 pressure level according to EN 1443
 (3) Check the maximum equivalent lengths by consulting the technical data sheet and / or by contacting the pre-sales service.
 NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443)
NOTE: please, refer to boiler installation manual for maximum flue line length

<sup>(2)</sup> H1 pressure level according to EN 1443. NOTE: please, refer to boiler installation manual for maximum flue line length.

### SINGLE FLUE GAS EXHAUST SYSTEM OR DOUBLE SUCTION/DISCHARGE Ø110 mm

Drawing	Description	Material (*)	Condexa Pro 90-135	TAU UNIT 100-140	Notes	Code
	45° bend Ø110 mm	PP	•	•	(2)	20131205
	90° bend Ø110 mm with inspection	PP	•	•	(2)	20131202
	90° bend Ø110 mm	PP	•	•	(2)	20131208
	Extension Ø110 mm, L=1000 mm	PP	•	•	(2)	20131210
	Ø110 T-junction kit with condensate drain	PP	•	•	(2)	20131218
	Ø110 mm T-junction kit with stack support condensate drain	PP	•	•	(2)	20131221
	Ø110 mm T-junction kit	PP	•	•	(2)	20131222
	Flue cover Ø110 mm with terminal	PP	•	•	(2)	20131225
	Horizontal terminal Ø110 mm	PP	•	•	(2)	20197688
	Air suction terminal Ø110 mm	PP	•	•	(2)	20197689

PP material: colour may change over time because of sun's rays exposure. H1 pressure level according to EN 1443.

NOTE: find the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.

Deductible products only in the context of the refurbishment of the system or the energy-efficient retrofitting of the building. Therefore please always check the specific ways of accessing the incentive.

### Ø110/160 mm CONCENTRIC FLUE GAS EXHAUST SUCTION/DISCHARGE SYSTEM (TYPE C GAS-TIGHT COMBUSTION KIT REQUIRED)

Drawing	Description	Material (*)	Condexa Pro 90-135	TAU UNIT 100-140	Notes	Code
	Tile Ø160 mm 25-45% slope	_	•	•		20131145
	Adaptor Ø80/Ø110 mm	PP		•	(2)	20131238
	Extension Ø110 mm, L=145 mm	PP		•	(2)	20144853
	Extension Ø110/160 mm, L=500 mm	PP/Met	•	•	(2)	20131046
	Extension Ø110/160 mm, L=1000 mm	PP/Met	•	•	(2)	20131050
	45° bend Ø110/160 mm	PP/Met	•	•	(2)	20131036
	90° bend Ø110/160 mm	PP/Met	•	•	(2)	20131040
	90° bend with inspection Ø110/160 mm	PP/Met	•	•	(2)	20131147
	Double adaptor Ø110/110 mm – concentric Ø110/160 mm	PP/Met	•	•	(2)	20131059
	Ø110/160 concentric horizontal flue terminal	PP/Met	•	•	(2)	20131149
	Outlet on roof Ø110/160 mm	PP/PE	•	•	(2)	20147403

PP material: colour may change over time because of sun's rays exposure. H1 pressure level according to EN 1443.

Deductible products only in the context of the refurbishment of the system or the energy-efficient retrofitting of the building. Therefore please always check the specific ways of accessing the incentive.

NOTE: if in the flue line there is a component with P1 pressure level (according to EN 1443), all the line has P1 pressure level even if all the other components are in H1 pressure level (according to EN 1443).

NOTE: please, refer to boiler installation manual for maximum flue line length.

### PLASTIC FLUE SYSTEM Ø160 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	30° bend Ø160 mm	PP	20062445
	45° bend Ø160 mm	PP	20032646
	90° bend Ø160 mm	PP	20032644
<b>©</b> 0	Inspection bend Ø160 mm	PP	20062446
	Extention Ø160 mm, L=500 mm	PP	20060940
	Extention Ø160 mm, L =1000 mm	PP	20060941
	Extention Ø160 mm, L=2000 mm	PP	20060942
90	Inspection extention Ø160 mm	PP	20060945
	Chimney support Ø160 mm	PP	20062703
	Chimney cover Ø160 mm (stainless steel)	PP	20060953
	Condensate drain pipe Ø160 mm	PP	20062447
	T connection Ø160 mm with condensate drain and chimney support	PP	20063419
	T connection Ø160 mm with condensate drain	PP	20062448

### PLASTIC FLUE SYSTEM Ø200 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	Concentric adapter Ø200-160 mm	PP	20062567
	30° bend Ø200 mm	PP	20062539
	45° bend Ø200 mm	PP	20062542
	90° bend Ø200 mm	PP	20062543
	Inspection bend Ø200 mm	PP	20062545
	Extention Ø200 mm L =500 mm	PP	20062527
	Extention Ø200 mm L =1000 mm	PP	20062530
	Extention Ø200 mm L =2000 mm	PP	20062532
	Inspection extention Ø200 mm	PP	20062534
	Chimney support Ø200 mm	PP	20062548
	Chimney cover Ø200 mm (stainless steel)	PP	20062547
	Condensate drain pipe Ø200 mm	PP	20062537
	T connection Ø200 mm with condensate drain and chimney support	PP	20063420
	T connection Ø200 mm with condensate drain	PP	20062550

### PLASTIC FLUE SYSTEM Ø250 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	Eccentric adapter Ø250–160 mm	PP	20062606
	Concentric adapter Ø250-200 mm	PP	20062607
	Eccentric adapter Ø250-200 mm	PP	20132393
	30° bend Ø250 mm	PP	20062593
	45° bend Ø250 mm	PP	20062594
	90° bend Ø250 mm	PP	20062595
<b>©</b> 0	Inspection bend Ø250 mm	PP	20062598
	Extention Ø250 mm, L=500 mm	PP	20062576
	Extention Ø250 mm, L=1000 mm	PP	20062577
	Extention Ø250 mm, L=2000 mm	PP	20062578
	Inspection extention Ø250 mm	PP	20062591
	Chimney support Ø250 mm	PP	20062600
	Chimney cover Ø250 mm (stainless steel)	PP	20062599
	Condensate drain pipe Ø250 mm	PP	20062592
	T connection Ø250 mm with condensate drain and chimney support	PP	20063421
	T connection Ø250 mm with condensate drain	PP	20062601

### PLASTIC FLUE SYSTEM Ø300 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	Eccentric adapter Ø300-160 mm	PP	20158581
	Eccentric adapter Ø300-250 mm	PP	20158580
	45° bend Ø300 mm	PP	20145293
	90° bend Ø300 mm	PP	20145294
<b>©</b> 0	Inspection bend Ø300 mm	PP	20158567
	Extention Ø300 mm, L=500 mm	PP	20145292
	Extention Ø300 mm, L=1000 mm	PP	20145295
	Extention Ø300 mm, L=2000 mm	PP	20145296
90	Inspection extention Ø300 mm	PP	20145290
< <u>000 b</u>	Chimney support Ø300 mm	PP	20158569
	Condensate drain pipe Ø300 mm	PP	20158566
	T connection Ø300 mm with condensate drain and chimney support	PP	20158572
	T connection Ø300 mm with condensate drain	PP	20158571

DOUBLE WALL PLASTIC/INOX FLUE SYSTEM Ø160-225 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	30° bend Ø160-225 mm	PP/Met	20062658
	45° bend Ø160-225 mm	PP/Met	20062659
	90° bend Ø160-225 mm	PP/Met	20062660
	Extention Ø160-225 mm, L=500 mm	PP/Met	20062655
	Extention Ø160-225 mm, L=1000 mm	PP/Met	20062656
	Inspection extention Ø160-225 mm, L=1000 mm	PP/Met	20062657
	Pipe for terminal Ø160-225 mm	PP/Met	20062662
	Terminal Ø160-225 mm	PP/Met	20062663
	Chimney support Ø160-225 mm	PP/Met	20062661

### DOUBLE WALL PLASTIC/INOX FLUE SYSTEM Ø200-300 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	30° bend Ø200-300 mm	PP/Met	20062669
	45° bend Ø200-300 mm	PP/Met	20062670
	90° bend Ø200-300 mm	PP/Met	20062671
	Extention Ø200-300 mm, L=500 mm	PP/Met	20062666
	Extention Ø200-300 mm, L=1000 mm	PP/Met	20062667
	Inspection extention Ø200-300 mm	PP/Met	20062668
	Pipe for terminal Ø200-300 mm	PP/Met	20062673
	Terminal Ø200-300 mm	PP/Met	20062674
	Chimney support Ø200-300 mm	PP/Met	20062672

### DOUBLE WALL PLASTIC/INOX FLUE SYSTEM Ø250-350 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	45° bend Ø250-350 mm	PP/Met	20062689
	Extention Ø250-350 mm, L=500 mm	PP/Met	20062676
	Extention Ø250-350 mm, L=1000 mm	PP/Met	20062677
	Inspection extention Ø250-350 mm	PP/Met	20062688
	Pipe for terminal Ø250-350 mm	PP/Met	20062691
	Terminal Ø250-350 mm	PP/Met	20062692
	Chimney support Ø250-350 mm	PP/Met	20062690

### DOUBLE WALL PLASTIC/INOX FLUE SYSTEM Ø300-350 mm FOR CONDENSING BOILERS

Drawing	Description	Material	Code
	Eccentric adapter Ø300/350 mm - 250/350 mm	PP/Met	20158598
	45° bend Ø300-350 mm	PP/Met	20158600
	Extention Ø300-350 mm, L=500 mm	PP/Met	20158601
	Extention Ø300-350 mm, L=1000 mm	PP/Met	20158602
	Inspection extention Ø300-350 mm	PP/Met	20158603
	Pipe for terminal Ø300-350 mm	PP/Met	20158604
(1)	Terminal Ø300-350 mm	PP/Met	20158605
	Chimney support Ø300-350 mm		20158606
	Boiler cnnection Ø300-350 mm (STEEL PRO POWER)	PP/Met	20158607
	Condensate drain pipe Ø300-350 mm	PP/Met	20158594

### **FLUE SYSTEM ACCESSORIES**

Drawing	Description	Code
	Siphon Long John	20062443
	Tool Ø160 mm	20062510
	Tool Ø200 mm	20062563
	Tool Ø250 mm	20062604
obo	Spacers Ø300-500 mm	20158577
	Spacers Ø160 mm	20062444
	Spacers Ø160 mm (5pz)	20060948
	Spacers Ø200 mm	20062564
	Spacers Ø225 mm	20062664
	Spacers Ø250 mm	20062605
	Grid Ø160 mm	20062513
	Grid Ø200 mm	20062575
	Grid Ø250 mm	20062636
	Grid Ø300 mm	20158576
	Wall cover Ø160 mm	20062512
	Wall cover Ø200 mm	20062574
	Wall cover Ø225 mm	20062665

Drawing	Description	Code
	Wall cover Ø250 mm	20062635
	Wall cover Ø300 mm	20062675
Q	Wall cover Ø350 mm	20062693
<b>(D</b> )	Wall feeder Ø160-225 mm	20062449
	Wall feeder Ø200-300 mm	20062556
	Wall feeder Ø250-350 mm	20062602



AIR CONDITIONING	攀	
AIR CONDITIONERS	417	
PROFESSIONAL AIR CONDITIONERS	433	

### **AIR CONDITIONERS**



### AIR CONDITIONERS FOR SMALL- AND MEDIUM-SIZED ROOMS

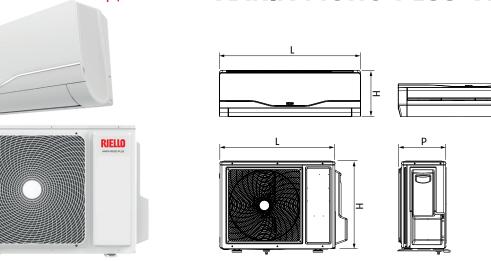
	WALL-MOU	INTED	CEILING/F	LOOR	CASSETTE		DUCTED	
		AARIA MONO PLUS AMW AARIA AMW 25 PLUS SET AARIA AMW 35 PLUS SET AARIA AMW 50 PLUS SET		AARIA MONO PLUS AMS AARIA AMS 35 P SET AARIA AMS 50 P SET		AARIA MONO PLUS AMK AARIA AMK 35 P SET AARIA AMK 50 P SET		AARIA MONO PLUS AMD AARIA AMD 35 P SET AARIA AMD 50 P SET
		page 418		page 420		page 423		page 425
MONO INVERTER				AARIA MONO PLUS AMC AARIA AMC 25 P SET AARIA AMC 35 P SET AARIA AMC 42 P SET				
MO				page 421				
		AARIA START  AARIA START 25  AARIA START 35  AARIA START 50  AARIA START 70						
		page 426						
		AARIA MULTI WALL-MOUNTED AMW 20 P AMW 25 P AMW 35 P AMW 50 P AMW 70 P		AARIA MULTI CEILING/FLOOR AMS 35 P AMS 50 P AMS 70 P		AARIA MULTI CASSETTE AMK 25 P AMK 35 P AMK 50 P AMK 70 P		AARIA MULTI DUCTED AMD 25 PA AMD 35 PA AMD 50 PA AMD 70 PA AMD 70 PB
/ERTER		page 428		page 428		page 428		page 428
MULTI INVERTER				AARIA MULTI CONSOLE AMC 25 P AMC 35 P AMC 42 P				
				page 428				
MONOBLOC				AARIA ONE INVERTER AARIA ONE INVERTER				
W				page 431				

**TERMINAL UNITS** 

RIELLO

Wall-mounted mono inverter air conditioners

### **AARIA MONO PLUS-AMW**





- Monosplit wall-mounted inverter
- R32 heat pump, low environmental impact
- High energy efficiency class A+++/A++, for limited consumption

Description	Unit	Н	L	Р	Net weight
	type	mm	mm	mm	kg
AMW 25 P	Indoor	280	855	200	10,0
AARIA MONO 25 PLUS	Outdoor	550	800	280	29,0
AMW 35 P	Indoor	280	855	200	10,0
AARIA MONO 35 PLUS	Outdoor	550	800	280	31,5
AMW 50 P	Indoor	322	997	230	13,0
AARIA MONO 50 PLUS	Outdoor	614	820	338	37,8

AARIA MONO PLUS air conditioners, for installation on a wall, the ideal Riello solutions for small and medium sized homes, to allow proposals with high energy efficiency and modern design. The unit with R32 refrigerant with low environmental impact reaches classes of energy efficiency A +++ / A ++.

Outdoor is unit equipped with ROTARY inverter compressor, to ensure maximum comfort during operation.

AARIA MONO PLUS range has three models from 2.5 kW to 5.0 kW.

Using the infra-red remote control that is supplied it is possible to manage all the unit's function.

The AAARIA MONO PLUS air conditioners can be equipped with an optional Wi-Fi kit, for complete remote management via Dedicated APP RiCLOUD AC.

- Indoor unit equipped with a hidden LED DISPLAY
- SMART mode for automatic operation
- SLEEP function for maximum night comfort
- QUIET function for ultra silent operation
- ANTIFREEZE function to start the unit when the internal temperature falls below 10 °C
- AUTORESTART function in case of power failure
- Outdoor unit complete with attachment covers.

### **TECHNICAL DATA**

Description	Output in cooling (T=+35 °C)	Annual consump- tion	Output in heating (Pdesign T=-10	Annual consump- tion	Unit type	Liquid attach- ments	Gas attach- ments	L/H max m		ergy icy class SCOP	Code
	kW	kWh/year	°C) kW	kWh/year		mm	mm		%≋	%≋	
AMW 25 P	2.6	107	2.4	731	Indoor				A+++	A++	20127839
AARIA MONO 25 PLUS					Outdoor						20151556
AARIA AMW 25 PLUS SET						6.35	9.52	15/10			20127854
AMW 35 P	3.5	144	2.8	854	Indoor				A+++	A++	20127841
AARIA MONO 35 PLUS					Outdoor						20151557
AARIA AMW 35 PLUS SET						6.35	9.52	15/10			20127858
AMW 50 P	5.2	253	4.6	1401	Indoor				A++	A++	20127842
AARIA MONO 50 PLUS					Outdoor						20151558
AARIA AMW 50 PLUS SET						6.35	12.7	25/15			20127859

The data and the efficiency classes are declared in conformity with EN 14825 for a temperate climate zone. The performances refer to the following conditions:

Cooling: indoor unit input air temperature 27 °C Tb.s., 19 °C Tb.u.

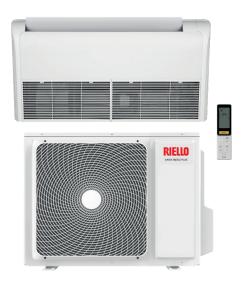
Heating: indoor unit input air temperature 20 °C Tb.s.

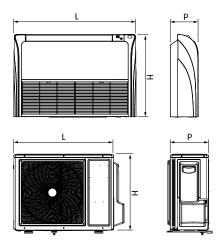
### **ACCESSORIES**

Drawing	Description	Code
	Air conditioner Wi-Fi interface kit for model AMW P	20194065

Ceiling/floor-standing mono inverter air conditioners

### **AARIA MONO PLUS-AMS**







- Ceiling/floor-standing Inverter Monosplit
- R32 heat pump, low environmental impact
- High A+++/A+ energy class, for low consumption
- With infrared control

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMS 35 P	Indoor	680	1000	230	26,0
AARIA MONO 35 PLUS	Outdoor	550	800	280	31,5
AMS 50 P	Indoor	680	1000	230	26,0
AARIA MONO 50 PLUS	Outdoor	614	820	338	37,8

AARIA MONO PLUS-AMS air conditioners, with ceiling/floor-standing installation, are designed for medium and small spaces, to allow proposals with high energy yields and a functional design. The unit with low environmental impact R32 refrigerant achieves A+++/A+ energy efficiency classes.

The unit consists of an outdoor unit equipped with ROTARY inverter compressor, to ensure maximum comfort during operation, and an indoor unit, with 4 fan speeds. The AARIA MONO PLUS unit that can be paired is available in two output ratings from 3.5 kW to 5.0 kW. The offer is completed by an infrared remote control supplied as a standard, through which it is possible to manage all the unit functions.

- Indoor unit with on-board DISPLAY
- SMART mode for automatic operation
- QUIET function for ultra quiet operation
- AUTORESTART function in case of blackout
- Outdoor unit complete with connection covers
- Wired control on request.

### **TECHNICAL DATA**

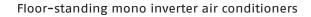
Description	Output in cooling	Annual consumption		Annual consumption	Unit type		tachments	L/H max		ergy cy class	Code
	(T=+35 °C) kW	kWh/year	(Pdesign T=-10 °C) kW	kWh/year		mm	mm	m	SEER &≈≋	SCOP Se≋	
AMS 35 P	3.50	146	3.00	945	Indoor				A+++	A+	20151552
AARIA MONO 35 PLUS					Outdoor						20151557
AARIA AMS 35 P SET						6.35	9.52	15/10			20161590
AMS 50 P	5.00	240	4.40	1491	Indoor				A+++	A+	20151553
AARIA MONO 50 PLUS					Outdoor						20151558
AARIA AMS 50 P SET						6.35	12.7	25/15			20161592

Data and efficiency classes are declared in compliance with standard EN 14825 for temperate climate zone.

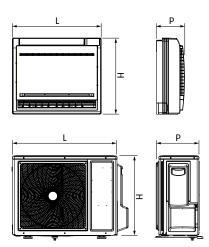
- Performance refers to the following conditions:

   cooling: indoor unit air inlet temperature 27°C Tb.s., 19°C Tb.u.
- heating: indoor unit air inlet temperature 20°C Tb.s.





## **AARIA MONO PLUS-AMC**







- Ceiling/floor-standing Inverter Monosplit
- R32 heat pump, low environmental impact
- High A++/A++ energy class, for low consumption
- · With infrared control

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMC 25 P	Indoor	600	700	210	16,5
AARIA MONO 25 PLUS	Outdoor	550	800	280	29,0
AMC 35 P	Indoor	600	700	210	16,5
AARIA MONO 35 PLUS	Outdoor	550	800	280	31,5
AMC 42 P	Indoor	600	700	210	16,5
AARIA MONO 50 PLUS	Outdoor	614	820	338	37,8

The AARIA MONO PLUS-AMC air conditioners, for floor-standing installation, are suitable for medium and small environments, to allow proposals with high energy efficiency and functional design. The unit with low environmental impact R32 refrigerant achieves A++/A + energy efficiency classes. The unit consists of an outdoor unit equipped with ROTARY inverter compressor, to ensure maximum comfort during operation, and an indoor unit, with 4 fan speeds. The AARIA MONO PLUS unit that can be paired is available in three output ratings from 2.5 kW to 5.0 kW. The offer is completed by an infrared remote control supplied as a standard, through which it is possible to manage all the unit functions.

- Dual airflow management
- SMART mode for automatic operation
- DRY operation for dehumidification
- QUIET function for ultra quiet operation
- AUTORESTART function in case of blackout
- Outdoor unit complete with connection covers
- Infrared remote control.

### **TECHNICAL DATA**

**RIELLO** 

Description	Output in cooling	Annual consump-	Output in heating	Annual consump-	Unit type	Liquid attach-	Gas attach-	L/H max		ergy ncy class	Code
	(T=+35 °C) kW	tion kWh/year	(Pdesign T=-10 °C) kW	tion kWh/year		ments mm	ments mm	m	SEER &	SCOP &S≋	
AMC 25 P	2.50	107	2.40	798	Indoor				A++	A+	20151549
AARIA MONO 25 PLUS					Outdoor						20151556
AARIA AMC P MONO 25 PLUS						6.35	9.52	15/10			20161593
AMC 35 P	3.50	157	2.90	962	Indoor				A++	A+	20151550
AARIA MONO 35 PLUS					Outdoor						20151557
AARIA AMC P MONO 35 PLUS						6.35	9.52	15/10			20161594
AMC 42 P	4.20	208	3.20	1115	Indoor				A++	A+	20151551
AARIA MONO 50 PLUS					Outdoor						20151558
AARIA AMC P MONO 50 PLUS						6.35	12.7	25/15			20161595

Data and efficiency classes are declared in compliance with standard EN 14825 for temperate climate zone. Performance refers to the following conditions:

- cooling: indoor unit air inlet temperature 27°C Tb.s., 19°C Tb.u.

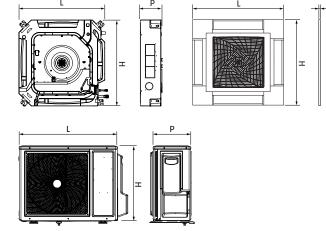
- heating: indoor unit air inlet temperature 20°C Tb.s.

Cassette mono inverter air conditioners

### **AARIA MONO PLUS-AMK**

PANNELLO 4 VIE







- Monosplit Inverter with cassettes
- R32 heat pump, low environmental impact
- With remote control
- Condensate drain pump on the unit

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMK 35 P	Indoor	570	570	260	19
AARIA MONO 35 PLUS	Outdoor	550	800	280	31,5
4 WAY PANEL AMK 25-35-50 P	Panel	700	700	60	2
AMK 50 P	Indoor	570	570	260	19
AARIA MONO 50 PLUS	Outdoor	614	820	338	37,8
4 WAY PANEL AMK 25-35-50 P	Panel	700	700	60	2

AARIA MONO PLUS air conditioners, Cassette installation, are designed as a medium and small size residential environment, to allow proposals with high energy efficiency and modern design. The unit with R32 refrigerant with low environmental impact reaches classes of energy efficiency A +++ / A ++.

AMK P

The centrifugal fan of the indoor unit has three speeds that allow to reach low level of noise at super-low speed. The unit is ultra compact with a depth of 260 mm with a 700x700 mm cover panel. The outdoor unit has a high efficiency rotary compressor which reduces vibrations to a minimum and is characterized by perfect sound-proofing insulation..

- QUIET function for ultra silent operation
- **DEHUMIDIFICATION** operation
- AUTORESTART function in case of power failure
- POWER mode for fast temperature reaching
- Outdoor unit complete with attachment covers
- Infrared remote control as standard

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### **TECHNICAL DATA**

**RIELLO** 

Description	Output in cooling	Annual consumption		Annual consump-	Unit type	Liquid attach-	Gas attach-	L/H max		ergy icy class	Code
	(T=+35 °C) kW	kWh/year	(Pdesign T=-10 °C) kW	tion kWh/year		ments mm	ments mm	m	SEER %≋	SCOP Ses≋	
AMK 35 P	3.5	187	3	1025	Indoor				A++	A	20151429
AARIA MONO 35 PLUS					Outdoor						20151557
4 WAY PANEL AMK 25-35-50 P						6.35	9.52	15/10			20151431
AARIA AMK 35 P SET											20161587
AMK 50 P	5	264	4.5	1425	Indoor				A++	A	20151430
AARIA MONO 50 PLUS					Outdoor						20151558
4 WAY PANEL AMK 25-35-50 P						6.35	12.7	25/15			20151431
AARIA AMK 50 P SET											20161589

The data and the efficiency classes are declared in conformity with EN 14825 for a temperate climate zone.

The performances refer to the following conditions:

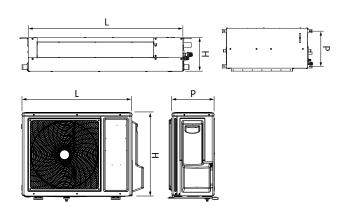
Cooling: indoor unit input air temperature 27 °C Tb.s., 19 °C Tb.u.

Heating: indoor unit input air temperature 20 °C Tb.s.

### AARIA MONO PLUS-AMD

Duct-connected mono inverter air conditioners







- Monosplit Ducted inverter
- R32 heat pump, low environmental impact
- With wired remote control
- The indoor unit with 185 mm in height

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMD 35 PA	Indoor	185	850	420	15,5
AARIA MONO 35 PLUS	Outdoor	550	800	280	31,5
AMD 50 PA	Indoor	185	1170	420	21,5
AARIA MONO 50 PLUS	Outdoor	614	820	338	37,8

AARIA MONO PLUS air conditioners, with Duct installation, are designed as a medium and small size residential environment, to allow proposals with high energy efficiency and modern design. The unit with R32 refrigerant with low environmental impact reaches classes of energy efficiency A +++ / A ++.

AARIA MONO PLUS - AMD range has two models from 3.5 kW and 5.0 kW.

The fan of the indoor unit is ductable, with three speeds allowing to reach high levels of silence. With a height of 185 mm the unit is one of the most compact in its category. The outdoor unit has a high efficiency rotary compressor to minimize vibrations and is characterized by a perfect sound insulation.

- QUIET function for ultra silent operation
- **DEHUMIDIFICATION** operation
- AUTORESTART function in case of power failure
- POWER mode for fast temperature reaching
- Outdoor unit complete with attachment covers
- Standard wired control.

#### **TECHNICAL DATA**

Description	Output in cooling (T=+35 °C) kW	Annual consumption kWh/year	Output in heating (Pdesign T=-10 °C) kW	Annual consumption kWh/year	Unit type	Liquid attach- ments mm	Gas attach- ments mm	L/H max m		ergy ncy class SCOP	Code
AMD 35 PA	3.5	187	3	1025	Indoor				A++	A	20151424
AARIA MONO 35 PLUS					Outdoor						20151557
AARIA AMD 35 PA SET						6.35	9.52	15/10			20161585
AMD 50 PA	5	264	4.5	1425	Indoor				A++	A	20151425
AARIA MONO 50 PLUS					Outdoor						20151558
AARIA AMD 50 PA SET						6.35	12.7	25/15			20161586

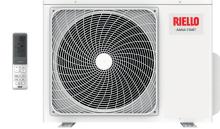
The data and the efficiency classes are declared in conformity with EN 14825 for a temperate climate zone.

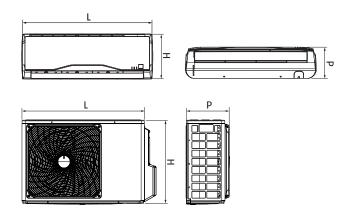
- The performances refer to the following conditions: Cooling: indoor unit input air temperature 27 °C Tb.s., 19 °C Tb.u.
- Heating: indoor unit input air temperature 20 °C Tb.s.

Wall-mounted mono inverter air conditioners

### **AARIA START**









- Monosplit wall-mounted inverter
- R32 heat pump, low environmental impact
- Energy efficiency class A++/A+

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMW 25 ST	Indoor	280	820	195	8,8
AARIA START 25	Outdoor	540	780	245	27,0
AMW 35 ST	Indoor	280	820	195	8,8
AARIA START 35	Outdoor	540	780	245	28,0
AMW 50 ST	Indoor	318	1008	225	11,6
AARIA START 50	Outdoor	614	820	338	37,8
AMW 70 ST	Indoor	335	1125	240	14,0
AARIA START 70	Outdoor	697	890	353	51,0

The AARIA START air conditioners, for installation on a wall, the ideal Riello solutions for small and medium sized homes. The unit with the low environmental impact R32 refrigerant attains energy efficiency values equivalent to class A++/A+, thanks to the Inverter technology.

The AARIA START range has four models, from 2.6 kW up to 7.0 kW when cooling.

The fan of the 4-speed indoor wall unit allows you to reach high levels of silence, up to 20 dB(A), at an extremely ow speed. The outdoor unit has a high efficiency rotary compressor with sound-absorbing insulation.

Using the infra-red remote control that is supplied it is possible to manage all the unit's function.

The AARIA START air conditioners are equipped with an optional Wi-Fi kit, for complete management using a specific RiCLOUD AC APP.

- SMART mode for automatic operation
- SLEEP function for maximum night-time comfort
- QUIET function for ultra-silent operation
- AUTORESTART function if the power supply is interrupted
- Outdoor unit complete with connection covers
- Infra-red remote control supplied

### **TECHNICAL DATA**

Description	Output in cooling	Annual con- sumption	Output in heating	Annual con- sumption	Unit type	Liquid attach-	Gas attach-	L/H max m		ergy icy class	Code
	(T=+35 °C) kW		(Pdesign T=-10 °C) kW	kWh/year		ments mm	ments mm		SEER ‰≋	SCOP &S≋	
AMW 25 ST	2.6	147	2.4	839	Indoor				A++	A+	20139544
AARIA START 25					Outdoor						20139542
AARIA AMW 25 START SET						6.35	9.52	15/10			20140092
AMW 35 ST	3.6	186	3.2	1123	Indoor				A++	A+	20139545
AARIA START 35					Outdoor						20139546
AARIA AMW 35 START SET						6.35	9.52	15/10			20140095
AMW 50 ST	5.2	268	5.2	1819	Indoor				A++	A+	20139547
AARIA START 50					Outdoor						20139548
AARIA AMW 50 START SET						6.35	12.7	25/15			20140096
AMW 70 ST	7.0	350	5.6	1963	Indoor				A++	A+	20139549
AARIA START 70					Outdoor						20139550
AARIA AMW 70 START SET						6.35	12.7	25/15			20140106

The data and the efficiency classes are declared in conformity with EN 14825 for a temperate climate zone. The performances refer to the following conditions:

Cooling: indoor unit input air temperature 27 °C Tb.s., 19 °C Tb.u.

Heating: indoor unit input air temperature 20 °C Tb.s.

### **ACCESSORIES**

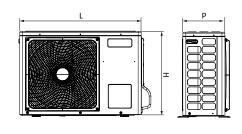
Drawing	Description	Code
	Air conditioner Wi-Fi interface kit	20194065

**TERMINAL UNITS** 

Multi inverter air conditioners

### **AARIA MULTI PLUS**







- Multisplit DC inverter air conditioner
- Multi range of up to 4 indoor units
- R32 heat pump with low environmental impact

Description	Unit type	H mm	L mm	P mm	Net weight kg
AARIA MULTI 250 P	Outdoor	553	800	275	36
AARIA MULTI 355 P	Outdoor	700	890	340	51
AARIA MULTI 370 P	Outdoor	700	890	340	54
AARIA MULTI 475 P	Outdoor	700	890	340	61
AARIA MULTI 485 P	Outdoor	700	890	340	61
AARIA MULTI 590 P	Outdoor	760	920	372	66

The AARIA MULTI PLUS range has been designed to serve several rooms with the use of just a single outdoor unit. The main feature is the flexibility of the choices of the indoor units with a wide selection of wall-mounted, duct-connected and cassettes. AARIA MULTI PLUS is available in 5 models from 5 kW to 8.5 kW of delivered cooling capacity, providing state-of-the-art energy performances. The unit with the low environmental impact R32 refrigerant attains energy efficiency values equivalent to class A++/A+, thanks to the Inverter technology. The metal outdoor unit that is pre-coated to withstand the elements has attachment covers and a plastic front grille.

The high efficiency TWIN ROTARY compressor can reduce vibrations to a minimum.

- Condensing unit with up to 4 attachments for the indoor units
- Wide range of indoor units: wall, cassettes and duct-connected
- DC Inverter technology
- High SCOP and SEER
- Up to 100 m long pipes
- Operating limit of the outdoor unit: AARIA MULTI 250 P down to -15°C in heating mode and up to +43°C in cooling mode; AARIA MULTI 355 590 P down to -25°C in heating mode and up to +43°C in cooling mode
- Compact dimensions
- High energy efficiency class for low consumption.

### **TECHNICAL DATA**

Description	Unit type	Indoor unit combination	Output in cooling (T=+35°C) kW	Output in heating (Pdesign T=-10°C) kW	Liquid attachments mm	Gas attachments mm		ergy ncy class SCOP %≋	Code
AARIA MULTI 250 P	DUAL (1:2)	2x3,5	5.0	5.2	2x6.35	2x9.52	A++	A+	20171566
AARIA MULTI 355 P	TRIAL (1:3)	3x2,5	5.5	4.7	3x6.35	3x9.52	A++	A+	20175226
AARIA MULTI 370 P	TRIAL (1:3)	3x2,5	7.0	6.0	3x6.35	3x9.52	A++	A+	20175227
AARIA MULTI 475 P	QUADRI (1:4)	4x2,5	7.5	6.3	4x6.35	3x9.52+1x12.7	A++	A+	20175228
AARIA MULTI 485 P	QUADRI (1:4)	4x2,5	8.5	7.0	4x6.35	3x9.52+1x12.7	A++	A+	20175229
AARIA MULTI 590 P	PENTA (1:5)	5x2,5	9.0	7.2	5x6.35	3x9.52+2x12.7	A++	A+	20175230

The data and the efficiency classes are declared in conformity with EN 14825 for a temperate climate zone. The performances refer to the following conditions:

Cooling: indoor unit input air temperature 27 °C Tb.s., 19 °C Tb.u.

Heating: indoor unit input air temperature 20 °C Tb.s.

### TECHNICAL DATA OF WALL-MOUNT INDOOR UNITS



Description	Output in cooling kW	Output in heating kW	Absorbed power W	Power supply V/Ph/Hz	Maximum treated air volume m³/h	Dimensions (H/L/P) mm	Liquid piping Ømm	Gas piping Ømm	Code
AMW 20 P	2	2.3	25	230/1/50	600	280/855/200	6.35	9.52	20148316
AMW 25 P	2.5	2.8	25	230/1/50	600	280/855/200	6.35	9.52	20127839
AMW 35 P	3.5	3.8	25	230/1/50	650	280/855/200	6.35	9.52	20127841
AMW 50 P	5.2	6.0	40	230/1/50	900	332/997/230	6.35	12.70	20127842
AMW 70 P	7.0	8.1	45	230/1/50	1100	336/1115/243	9.52	15.88	20148318

#### TECHNICAL DATA OF CEILING/FLOOR INDOOR UNITS



Description	Output in cooling kW	Output in heating kW	Absorbed power W	Power supply V/Ph/Hz	Maximum treated air volume m³/h	Dimensions (H/L/P) mm	Liquid piping Ømm	Gas piping Ømm	Code
AMS 35 P	3.5	4.0	30	230/1/50	750	680/1000/230	6.35	9.52	20151552
AMS 50 P	5.0	5.8	30	230/1/50	880	680/1000/230	6.35	12.70	20151553
AMS 70 P	7.0	7.5	120	230/1/50	1250	680/1325/230	9.52	15.88	20151554

#### **TECHNICAL DATA OF FLOOR INDOOR UNITS**



Description	Output in cooling kW	Output in heating kW	Absorbed power W	Power supply V/Ph/Hz	Maximum treated air volume m³/h	Dimensions (H/L/P) mm	Liquid piping Ømm	Gas piping Ømm	Code
AMC 25 P	2.5	2.8	40	230/1/50	400	600/700/210	6.35	9.52	20151549
AMC 35 P	3.4	3.5	40	230/1/50	450	600/700/210	6.35	9.52	20151550
AMC 42 P	4.2	4.7	40	230/1/50	530	600/700/210	6.35	9.52	20151551

### TECHNICAL DATA OF INDOOR CASSETTE UNITS



Description	Output in cooling kW	Output in heating (Pdesign) kW	Absorbed power W	Power supply V/Ph/Hz	Maximum treated air volume m³/h	Dimensions (H/L/P) mm	Liquid piping Ømm	Gas piping Ømm	Code
AMK 25 P	2.6	3.2	33	230/1/50	510	260/570/570	6.35	9.52	20151428
4 WAY PANEL AMK 25-35-50 P						60/700/700			20151431
SET AMK 25 P									20154918
AMK 35 P	3.5	4.0	35	230/1/50	620	260/570/570	6.35	9.52	20151429
4 WAY PANEL AMK 25-35-50 P						60/700/700			20151431
SET AMK 35 P									20154921
AMK 50 P	5.0	5.5	38	230/1/50	700	260/570/570	6.35	12.70	20151430
4 WAY PANEL AMK 25-35-50 P						60/700/700			20151431
SET AMK 50 P									20154920
AMK 70 P	7.1	8.0	50	230/1/50	1260	204/840/840	9.52	15.88	20151432
4 WAY PANEL AMK 70 P						50/950/950			20151433
SET AMK 70 P									20155179

#### **TECHNICAL DATA OF DUCTED INDOOR UNITS**



Description	Output in cooling kW	Output in heating (Pdesign) kW	Absorbed power W	Power supply V/Ph/Hz	Maximum treated air volume m³/h	Dimensions (H/L/P) mm	Liquid piping Ømm	Gas piping Ømm	Code
AMD 25 PA	2.5	3.0	17	230/1/50	530	185/850/420	6.35	9.52	20151422
AMD 35 PA	3.5	4.0	28	230/1/50	600	185/850/420	6.35	9.52	20151424
AMD 50 PA	5.0	5.5	55	230/1/50	900	185/1170/420	6.35	12.70	20151425
MD 70 PA	7.1	7.5	65	230/1/50	1000	185/1170/420	9.52	15.88	20151426
MD 70 PB	7.1	8.0	200	230/1/50	1440	248/1100/700	9.52	15.88	20151427

#### **ACCESSORIES**

Drawing	Description	Code
	Air conditioner Wi-Fi interface kit for model AMW P	20194065
	IR remote control	20192803
	IR remote control receiver panel	20160625
© 0 6 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Wired remote control for AMK P models	20187243
23 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Centralised touch screen control N (compatible with models from AARIA MULTI 355 P)	20133642

- The data and the efficiency classes are declared in conformity with EN 14825:

  Cooling: Input air temperature 27 °C Tb.s., 19 °C Tb.u.; Outdoor air temperature 35 °C Tb.s.

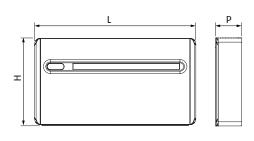
  Heating: Input air temperature 20 °C Tb.s., outdoor air temperature 7 °C Tb.s./6 °C Tb.u.

  For system configurations, see the technical data sheet.

Monobloc air conditioners

# AARIA ONE INVERTER





- Without outdoor unit
- Inverter monobloc with remote control
- Refrigerant R410A
- Heat pump operation

Description	H	L	P	Net weight
	mm	mm	mm	kg
AARIA ONE INVERTER 25	555	1030	170	46,5

AARIA ONE INVERTER is the Riello proposal for air conditioners without outdoor unit, which eliminates any disturbance from the decorative point of view outside the house. In fact, it allows you to considerably reduce the aesthetic impact of the outdoor units, especially in all the cases in which it is necessary to preserve the artistic heritage, such as historic buildings, museums, villas, where you do not want to give up the summer air conditioning and winter heating, or for all applications in which you want to eliminate the presence of the outdoor unit.

The AARIA ONE INVERTER unit can be installed on any perimeter wall in floor-standing or hanging version, making 162 millimetres holes in the wall.

The aesthetic impact is reduced significantly also inside the house thanks to a depth of only 170 mm, smaller than conventional indoor climate control units. The cooling power delivered in comfort conditions is 2.04 kW and in heat pump mode is 2.1 kW. If necessary, the Power mode can be selected, which allows the desired temperature to be reached in the shortest time possible; once reached, AARIA ONE INVERTER will return to comfort mode operation.

The infrared remote control is supplied as standard, and there is also a control panel on board the machine that allows you to set any function, including the "lock" function that prevents any inappropriate use of the appliance.

- Inverter compressor
- Power operation
- Easy installation: only two holes
- Floor-standing or hanging installation
- Reduced depth
- Condensate tray constantly heated.

#### **TECHNICAL DATA**

Description	Cooling power kW	Thermal power kW	Cooling absorbed power W	Heating absorbed power W	(Max/min) sound pressure level dB(A) (1)		ergy ncy class SCOP	Code
AARIA ONE INVERTER 25	2.04	2.1	630	638	40/31	A+	Α	20131342

Performance refers to the following conditions:

- cooling: room air temperature 27°C, outdoor air temperature 35°C. heating: room air temperature 20°C, outdoor air temperature 7°C.
- Values referred to 2 m distance from the machine on the inside.

# **PROFESSIONAL AIR CONDITIONERS**



#### AIR CONDITIONERS FOR COMMERCIAL ENVIRONMENTS

	WALL		CEILING/FLOOR	CASSETTE		DUCTED		
NVERTER CHING		AARIA PRO AMW 70 P	AARIA PRO AMS 70–170 P	14	AARIA PRO AMK 70-170 P		AARIA PRO AMD 70-170 P	
MONO I MATO		page 434	page 435		page 437		page 439	

**TERMINAL UNITS** 

RIELLO

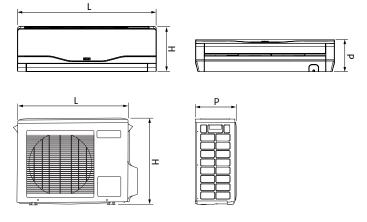
Wall-hung mono inverter air conditioners

## **AARIA PRO P-AMW**











- Wall-hung Inverter monosplit
- Heat pump in R32 with low environmental impact
- Energy class up to A+++/A++ for low consumption

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMW 70 P	Indoor	336	1115	243	16,0
AARIA PRO P 1070 M	Outdoor	730	860	308	46

The AARIA PRO P-AMW series is the ideal ceiling solution for air conditioning of medium/large commercial premises such as shops, offices and public buildings. AARIA PRO offers cooling power ratings from 7.3 to 12.9 kW, with single-phase power supply for rating from 1070 to 1125 and three-phase power supply for rating from 1125 to 1140.

The high operating limits (down to -15 °C) ensure effective use for both summer cooling and winter heating, with high seasonal efficiency. The ceiling indoor units have a high control of the air flow, both in horizontal and vertical direction, thanks to the motorized fins with five steps.

All the machines allow a connection for the introduction of fresh air into the indoor space.

The ranges are supplied complete with infrared remote control.

- AUTORESTART function in case of blackout
- Indoor unit with fan suitable for quiet operation
- Easy filter maintenance and accessibility
- Possible intake of outdoor fresh air
- Infrared control included.

#### **TECHNICAL DATA**

Description	Unit type	Power supply	Liquid connections	Connections gas	L/H max	cooling	ut in g mode	heating	ut in g mode		ergy icy class	Code
		V/Ph/Hz	mm	mm	m	(T=+	(T=+35 °C)		(T=+7 °C)		SCOP	
						kW	SEER	kW	SCOP	%≣	%≣	
AARIA PRO P 1070 M	Outdoor	230/1/50								A++	A+	20153499
AMW 70 P	Indoor	230/1/50								_	-	20148318
AARIA PRO P 70 M SET			9.52	15.88	25/15	7.0	7.1	8.0	4.0	-	_	20166998

Data and efficiency classes are declared in compliance with standard EN 14825 for temperate climate zone. Seasonal energy rating (SEER and SCOP) is only available for units below 12 kW.

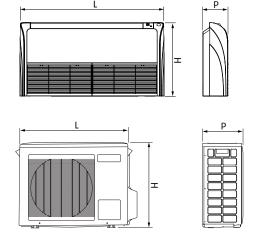
Performance refers to the following conditions:

- cooling: indoor unit air inlet temperature 27°C Tb.s., 19°C Tb.u.
- heating: indoor unit air inlet temperature 20°C Tb.s.

Ceiling/floor-standing mono inverter air conditioners

## **AARIA PRO P-AMS**







- Ceiling/floor-standing Inverter Monosplit
- Heat pump in R32 with low environmental impact
- Energy class up to A++/A

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMS 70 P	Indoor	680	1000	230	26,0
AARIA PRO P 1070 M	Outdoor	730	860	308	46
AMS 100 P	Indoor	680	1325	230	33,5
AARIA PRO P 1100 M	Outdoor	760	920	372	60
AMS 125 P	Indoor	680	1650	230	43,0
AARIA PRO P 1125 M	Outdoor	965	950	370	83
AMS 125 P	Indoor	680	1650	230	43,0
AARIA PRO P 1125 T	Outdoor	965	950	370	85
AMS 140 P	Indoor	680	1650	230	43
AARIA PRO P 1140 T	Outdoor	1350	950	370	105

The AARIA PRO P-AMS series is the ideal ceiling solution for air conditioning of medium/large commercial premises such as shops, offices and public buildings. AARIA PRO offers cooling power ratings from 7.3 to 12.9 kW, with single-phase power supply for rating from 1070 to 1125 and three-phase power supply for rating from 1125 to 1140.

The high operating limits (down to -15 °C) ensure effective use for both summer cooling and winter heating, with high seasonal

The ceiling indoor units have a high control of the air flow, both in horizontal and vertical direction, thanks to the motorized fins with five steps. All the machines allow a connection for the introduction of fresh air into the indoor space. The ranges are supplied complete with infrared remote control.

- AUTORESTART function in case of blackout
- Indoor unit with fan suitable for quiet operation
- Easy filter maintenance and accessibility
- Possible intake of outdoor fresh air
- Infrared control included.

**RIELLO** 

Description	Unit type	Power supply V/Ph/Hz	Liquid connections mm	Connections gas mm	L/H max m	coolin	Output in cooling mode (T=+35 °C)		Energy efficiency class SEER SCOP - 20 ≈ 20 ≈		Code	
						kW	SEER	kW	SCOP	ॐ≋	%≣	
AARIA PRO P 1070 M	Outdoor	230/1/50								A++	Α	20153499
AMS 70 P	Indoor	230/1/50								_	-	20151554
AARIA PRO AMS P 70M SET			9.52	15.88	25/15	6.9	6.1	7.5	3.8	-	_	20166939
AARIA PRO P 1100 M	Outdoor	230/1/50								A+	А	20159411
AMS 100 P	Indoor	230/1/50								_	-	20159404
AARIA PRO AMS P 100M SET			9.52	15.88	50/30	9.5	6.03	10.2	3.8	-	_	20167018
AARIA PRO P 1125 M	Outdoor	230/1/50										20159412
AMS 125 P	Indoor	230/1/50								_	_	20159405
AARIA PRO AMS P 125M SET			9.52	15.88	50/30	12	5.86	12.5	3.81			20167019
AARIA PRO P 1125 T	Outdoor	400/3/50										20159413
AMS 125 P	Indoor	230/1/50								_	_	20159405
AARIA PRO AMS P 125T SET			9.52	15.88	50/30	12	5.86	12.5	3.81			20167020
AARIA PRO P 1140 T	Outdoor	400/3/50										20159414
AMS 140 P	Indoor	230/1/50								_	_	20159406
AARIA PRO AMS P 140T SET			9.52	15.88	75/30	12.9	6.1	14.1	4.0			20167021

Data and efficiency classes are declared in compliance with standard EN 14825 for temperate climate zone. Seasonal energy rating (SEER and SCOP) is only available for units below 12 kW.

Performance refers to the following conditions:

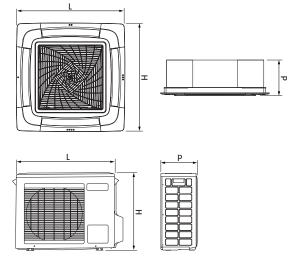
- cooling: indoor unit air inlet temperature 27°C Tb.s., 19°C Tb.u. heating: indoor unit air inlet temperature 20°C Tb.s.

Drawing	Description	Code
© 5 0 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Wired control	20187243

Mono inverter-case air conditioners

## **AARIA PRO P-AMK**







- Monosplit Inverter cassette
- Heat pump in R32 with low environmental impact
- Energy class up to A++/A

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMK 70 P	Interna	840	840	204	27
AARIA PRO P 1070 M	Esterna	730	860	308	46
Cover panel		950	950	50	6,5
AMK 100 P	Interna	840	840	246	31
AARIA PRO P 1100 M	Esterna	760	920	372	60
Cover panel		950	950	50	6,5
AMK 125 P	Interna	840	840	288	32,0
AARIA PRO P 1125 M	Esterna	965	950	370	83
Cover panel		950	950	50	6,5
AMK 125 P	Interna	840	840	288	32,0
AARIA PRO P 1125 T	Esterna	965	950	370	85
Cover panel		950	950	50	6,5
AMK 140 P	Interna	840	840	288	32,0
AARIA PRO P 1140 T	Esterna	1350	950	370	105
Cover panel		950	950	50	6,5

The AARIA PRO P-AMK series is the ideal cassette solution for air conditioning of medium/large commercial premises such as shops, offices and public buildings.

AARIA PRO P offers cooling power ratings from 7.1 kW to 12.2 kW, with single-phase power supply for rating from 1070 to 1125 and three-phase power supply for rating from 1025 to 1140. The high operating limits (down to -15 °C) ensure effective use for both summer cooling and winter heating, with high seasonal efficiency. The AMK-P indoor cassette units are designed for recessed ceiling installation and their dimensions are 840x840 mm.

The design features a plastic cover panel with central air intake and 4-way delivery, with individually orientable ventilation. The unit is complete with infrared control.

- AUTORESTART function in case of blackout
- Indoor unit with fan suitable for quiet operation
- Condensate pump on board of the unit
- Easy filter maintenance and accessibility
- Possible intake of additional air
- Infrared control.

**RIELLO** 

										_		
Description	Unit type	Electrical power supply	Liquid connections	Connections gas	L/H max		ut in g mode		ut in g mode		ergy icy class	Code
	377	V/Ph/Hz	mm	mm	m		35 °C)		7 °C)	SEER	SCOP	
							CEED		SCOP	%≋	%≋	
	0.11	222/4/=2				kW	SEER	kW	SCOP			
AARIA PRO P 1070 M	Outdoor	230/1/50								A++	Α	20153499
AMK 70 P	Indoor	230/1/50								_	-	20151432
Cover panel										-	-	20151433
AARIA PRO AMK P 70M SET			9.52	15.88	25/15	7.1	6.1	8.0	3.8	-	-	20167000
AARIA PRO P 1100 M	Outdoor	230/1/50								A+	А	20159411
AMK 100 P	Indoor	230/1/50								-	-	20158940
Cover panel										-	-	20151433
AARIA PRO AMK P 100M SET			9.52	15.88	50/30	9.0	5.7	10.1	3.8	-	-	20167001
AARIA PRO P 1125 M	Outdoor	230/1/50								-	-	20159412
AMK 125 P	Indoor	230/1/50								-	-	20158941
Cover panel										-	_	20151433
AARIA PRO AMK P 125M SET			9.52	15.88	50/30	12	5.9	12.3	3.7	-	_	20167003
AARIA PRO P 1125 T	Outdoor	400/3/50								-	-	20159413
AMK 125 P	Indoor	230/1/50								-	_	20158941
Cover panel										-	_	20151433
AARIA PRO AMK P 125T SET			9.52	15.88	50/30	12	5.9	12.3	3.7	-	_	20167004
AARIA PRO P 1140 T	Outdoor	400/3/50								-	-	20159414
AMK 140 P	Indoor	230/1/50								-	-	20158942
Cover panel										-	-	20151433
AARIA PRO AMK P 140T SET			9.52	15.88	75/30	12.2	5.1	14.3	3.7	-	_	20167005

Data and efficiency classes are declared in compliance with standard EN 14825 for temperate climate zone. Seasonal energy rating (SEER and SCOP) is only available for units below 12 kW.

Performance refers to the following conditions:

cooling: indoor unit air inlet temperature 27°C Tb.s., 19°C Tb.u.
heating: indoor unit air inlet temperature 20°C Tb.s.

#### **ACCESSORIES**

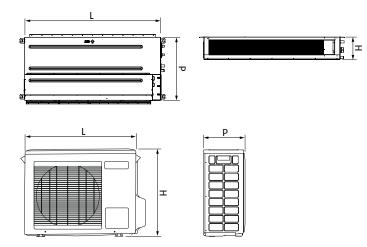
Drawing	Description	Notes	Code
0 (6 )	IR remote control	(1)	20192803
	IR remote control receiver panel	(1)	20160625
0 6 0 V	Wired control		20187243

(1) Already included as standard in AMK models.

Mono inverter air conditioners-ductable

# **AARIA PRO P-AMD**







- Ducted Inverter Monosplit
- Heat pump in R32 with low environmental impact
- Energy class up to A+/A

Description	Unit type	H mm	L mm	P mm	Net weight kg
AMD 70 PA	Indoor	185	1170	420	21,5
AARIA PRO P 1070 M	Outdoor	730	860	308	46
AMD 70 PB	Indoor	248	1100	700	36
AARIA PRO P 1070 M	Outdoor	730	860	308	46
AMD 100 PB	Indoor	248	1500	700	35
AARIA PRO P 1100 M	Outdoor	760	920	372	60
AMD 125 PB	Indoor	248	1500	700	52
AARIA PRO P 1125 M	Outdoor	965	950	370	83
AMD 125 PC	Indoor	425	1350	490	61
AARIA PRO P 1125 M	Outdoor	965	950	370	83
AMD 125 PB	Indoor	248	1500	700	52
AARIA PRO P 1125 T	Outdoor	965	950	370	85
AMD 125 PC	Indoor	425	1350	490	61
AARIA PRO P 1125 T	Outdoor	965	950	370	85
AMD 140 PB	Indoor	248	1500	700	52,0
AARIA PRO P 1140 T	Outdoor	1350	950	370	105
AMD 140 PC	Indoor	425	1350	490	61,0
AARIA PRO P 1140 T	Outdoor	1350	950	370	105

The AARIA PRO P-AMD series is the ideal ductable solution for air conditioning of medium/large commercial premises such as shops, offices and public buildings.

AARIA PRO P-AMD offers cooling power ratings from 7.1 kW to 13.5 kW, with single-phase power supply for rating from 1070 to 1125 and three-phase power supply for rating from 1125 to 1140. The high operating limits (down to -15 °C) ensure effective use for both summer cooling and winter heating, with seasonal efficiency among the highest on the market. AMD indoor units are preset for installations requiring air ducting.

The compact size and the versatility of the range, with heads up to 250 Pa, allow a high variety of installations. The offer is complete with the wired control.

- AUTORESTART function in case of blackout
- Easy filter maintenance and accessibility
- Wired control included

**RIELLO** 

Description	Unit type	Power supply	Liquid connections	Connections gas	max	Head Pa	cooling	ut in g mode	heatin	ut in g mode		ergy cy class	Code
		V/Ph/Hz	mm	mm	m		(T=+)	35 °C)	(T=+	7 °C)	SEER	SCOP	
							kW	SEER	kW	SCOP	&≋	&≋	
AARIA PRO P 1070 M	Outdoor	230/1/50									A++	Α	20153499
AMD 70 PA	Indoor	230/1/50									-	-	20151426
AARIA PRO AMD P 70M SET A			9.52	15.88	25/15	0/40	7.1	6.1	7.5	3.8	-	-	20167006
AARIA PRO P 1070 M	Outdoor	230/1/50									A++	A+	20153499
AMD 70 PB	Indoor	230/1/50									-	-	20151427
AARIA PRO AMD P 70M SET B			9.52	15.88	25/15	25/150	7.1	6.1	8.0	4.0	-	-	20167008
AARIA PRO P 1100 M	Outdoor	230/1/50									A+	Α	20159411
AMD 100 PB	Indoor	230/1/50									-	-	20158936
AARIA PRO AMD P 100M SET B			9.52	15.88	50/30	25/150	9.5	5.6	10.2	3.8	-	-	20167009
AARIA PRO P 1125 M	Outdoor	230/1/50									-	-	20159412
AMD 125 PB	Indoor	230/1/50									-	-	20158937
AARIA PRO AMD P 125M SET B			9.52	15.88	50/30	25/150	11.9	5.6	12.2	3.8	-	-	20167010
AARIA PRO P 1125 M	Outdoor	230/1/50									-	-	20159412
AMD 125 PC	Indoor	230/1/50									-	-	20159407
AARIA PRO AMD P 125M SET C			9.52	15.88	50/30	40/250	12	5.8	12.2	3.7	_	-	20167014
AARIA PRO P 1125 T	Outdoor	400/3/50									-	-	20159413
AMD 125 PB	Indoor	230/1/50									-	-	20158937
AARIA PRO AMD P 125T SET B			9.52	15.88	50/30	25/150	11.9	5.6	12.2	3.6	-	-	20167012
AARIA PRO P 1125 T	Outdoor	400/3/50									-	-	20159413
AMD 125 PC	Indoor	230/1/50									-	-	20159407
AARIA PRO AMD P 125T SET C			9.52	15.88	50/30	40/250	12	5.8	12.2	3.7	_	-	20167015
AARIA PRO P 1140 T	0utdoor	400/3/50									-	-	20159414
AMD 140 PB	Indoor	230/1/50									-	-	20158938
AARIA PRO AMD P 140T SET B			9.52	15.88	75/30	25/150	12.5	6.1	14.5	3.8	_	-	20167016
AARIA PRO P 1140 T	Outdoor	400/3/50									-	-	20159414
AMD 140 PC	Indoor	230/1/50									-	-	20159408
AARIA PRO AMD P 140T SET C			9.52	15.88	75/30	40/250	13.5	6.1	15	4	_	-	20167017

Data and efficiency classes are declared in compliance with standard EN 14825 for temperate climate zone. Seasonal energy rating (SEER and SCOP) is only available for units below 12 kW.

Performance refers to the following conditions:

cooling: indoor unit air inlet temperature 27°C Tb.s., 19°C Tb.u.

heating: indoor unit air inlet temperature 20°C Tb.s.

Drawing	Description	Code
(200)	IR remote control	20192803
	IR remote control receiver panel	20160625



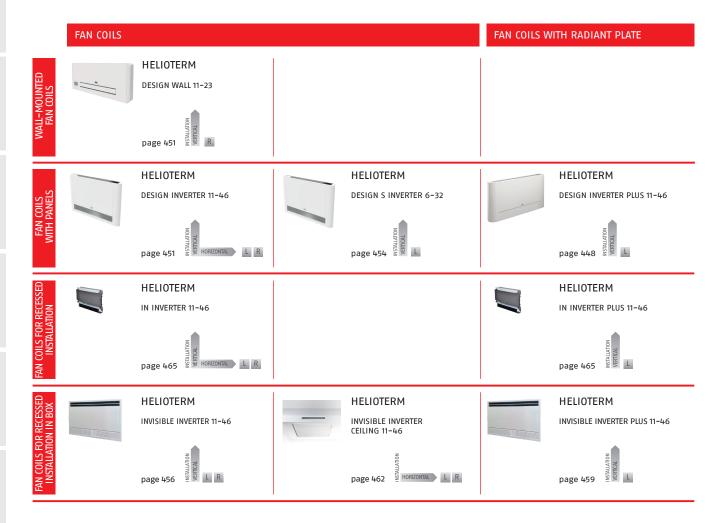
TERMINAL UNITS	<u> </u>
FAN COILS	ццц
DUCTABLE FAN COILS	470
WATER AIR HEATERS	473

**TERMINAL UNITS** 

## **FAN COILS**

**RIELLO** 





# FAN COILS



#### COMMERCIAL

WALL-MOUNTED FAN COILS



NUOVO ACU NUOVO ACU F

ACU 12-93

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FAN COILS FOR RECESSED INSTALLATION/DUCTED



FCU N

FCU 09-43

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"CASSETTE" FAN COILS



RK N HYDROLINE

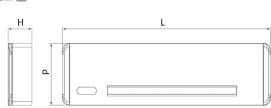
RK 24N-96N

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RIELLO

Wall-mounted Fan coils







• Wall-mounted fan coils with Brushless Inverter motor

Description	H mm	L mm	P mm
DESIGN WALL 11	335	902	128
DESIGN WALL 17	335	1102	128
DESIGN WALL 23	335	1302	128

DESIGN WALL is the new Riello wall-mounted fan coils range suitable for residential and small commercial applications.

Thanks to the DC-Brushless motor, the DESIGN WALL fan coils are able to operate with an high modulation of air flow rate, from 0 up to 100%, in order to keep a comfortable temperature inside the room and to ensure the minimum-noise operation.

The range is characterized by an ultra slim aesthetic, with a depth of only 128 mm, to guarantee a perfect integration within the

Motorized flaps distribute air uniformly throughout the room.

The DESIGN WALL is available in two versions: equipped with remote control and on board touch display or in combination with control panel wall mounted TOP (Design Wall 11-23P).

Three models are available, with power from 1140 W up to 2340 W in cooling mode from 1610 W to 3250 W in heating mode.

All three are available in the two versions with remote control or control panel wall mounted TOP.

- Ultra slim design
- 128 mm of depth, also with 2-3 way valve on board
- Motorized flaps for a comfortable air distribution
- Touch display control

#### **TECHNICAL DATA**

Description	Power cooling 7 °C-12 °C (1) Watt	Power heating 50 °C (2) Watt	Power heating 70 °C-60 °C (3) Watt	Maximum air flow rate (4) m³/h	Sound pressure irradiation max-min (5) dB(A)	Notes	Code
WITH REMOTE CONTROL							
DESIGN WALL 11	1140	1610	2780	320	39.7-24.9		20186360
DESIGN WALL 17	1620	2350	4120	430	42.4-25.2		20186361
DESIGN WALL 23	2340	3250	5720	540	42.6-25.8		20186362
IN COMBINATION WITH CONTROL PAN	EL WALL MOUNTE	TOP					
DESIGN WALL 11 P	1140	1610	2780	320	39.7-24.9	(A)	20186363
DESIGN WALL 17 P	1620	2350	4120	430	42.4-25.2	(A)	20186364
DESIGN WALL 23 P	2340	3250	5720	540	42.6-25.8	(A)	20186365

- Performance refer to the following conditions:
  (1) Room air temperature 27 °C Tb.s. and 19 °C Tb.u.
  (2) Air temperature 20 °C Tb.s. and the same water flow rate achieved in cooling mode.
  (3) Air temperature 20 °C Tb.s.
- Air flow rate measured with cleaned filters.
- According to UNI EN ISO 7779:2001.
- Mandatory accessory.

Drawing	Decription	Notes	Code
23	Control panel wall mounted TOP (MASTER).  TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
al.	Motorized 3 – ways valve kit.		20099251
	Motorized 2 – ways valve kit.		20099250
49	2 - ways taps kit.		20117090

<sup>(1)</sup> Mandatory accessory for Design Wall 11P-23P.

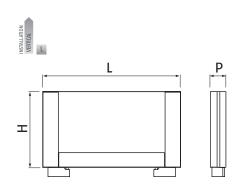
RIELLO

**TERMINAL UNITS** 

Fan coil

# **Design Inverter Plus**





 Tangential fan coils with radiant plate and Brushless inverter motor

Description	Н	L	Р
	mm	mm	mm
DESIGN INVERTER PLUS 11	580	760	130
DESIGN INVERTER PLUS 21	580	960	130
DESIGN INVERTER PLUS 33	580	1160	130
DESIGN INVERTER PLUS 40	580	1360	130
DESIGN INVERTER PLUS 46	580	1560	130

DESIGN INVERTER PLUS is the TOP of what Riello has to offer for fan coils. It is ideal for providing superior comfort in heating mode. DESIGN INVERTER PLUS unites, thanks to its exclusive operating principle, the convective and ventilating effect with the radiant effect of the front panel, thereby increasing the wellness of the room.

In addition to the radiating effect, the entire range is equipped with the DC Brushless Inverter motors. This technological solution provides a continuous variation from 0 to 100% of the air flow rate and as a result the heating and cooling capacity.

The DESIGN INVERTER PLUS very quickly heat and cool any area, with the possibility of selecting between two dedicated functions: PERFORMANCE for commercial needs, when high efficiency and high effectiveness are required, and COMFORT for residential needs, to ensure always maximum low-noise operation.

Thanks to the use of the DC Brushless motors, the DESIGN INVERTER PLUS save up to 50% on electricity compared to the fan coils with traditional motors (type ON/OFF). Just like the entire HELIOTERM range, the DESIGN INVERTER PLUS range has an ULTRA FLAT appearance, with a depth of just 13 cm and an automatic suction system.

The range is available in 5 models with outputs in cooling mode from 830 W up to 4560 W and in heating mode from 1150 W up to 4860 W.

The vast range of accessories and controls with touch DISPLAY support a wide range of applications. The versions that can be installed vertically with connections on the left.

The structure is made of galvanised sheet metal with sides made of ABS; the front delivery grille is made of aluminium.

- FULL FLAT with an automatic suction system
- Depth of 13 cm
- Terminal with radiating effect
- Easy to remove and clean the filters
- **Touch Display commands**

Description	7°C−1	Power cooling 7°C-12°C (1) W		Power heating 50°C (2) W		Maximum air flow rate (4) m³/h		Sound pressure irradiation max-min (5) dB(A)	
	Performance	Comfort	Performance	Comfort	Performance	Comfort	Performance	Comfort	
WHITE FAN COIL WITH RADIANT HEAT PLA	TE AND AUT	OMATIC AIF	VENTILATI	ON					
DESIGN INVERTER PLUS 11B	1095	830	1515	1150	197	162	42.2-24.2	39.4-24.2	20116258
DESIGN INVERTER PLUS 21B	2120	1760	2885	2460	389	320	43.1-25.3	40.2-25.3	20116260
DESIGN INVERTER PLUS 33B	3310	2650	4140	3410	560	461	45.5-25.6	42.2-25.6	20116261
DESIGN INVERTER PLUS 40B	3875	3340	5015	4400	699	576	45.9-26.3	42.5-26.3	20116263
DESIGN INVERTER PLUS 46B	4560	3800	5910	5200	787	648	47.2-27.6	43.9-27.6	20116264
Performance refer to the following condit (1) Room air temperature 27 °C d.b. and 1 (2) Air temperature 20 °C and the same w (3) Air temperature 20 °C (4) Air temperature 20 °C; main fan in "of (5) Air flow rate measured with cleaned 1 (6) According to UNI EN ISO 7779:2001 NOTE: the performance setting is recommen	9°C w.b. ater flow ra f". ilters.				setting is re	ecommende	d for residentia	al spaces.	

Drawing	Decription	Notes	Code
- + * •	Control panel on board BASIC. TOUCH LCD onboard panel, of amber colour, that works as: ON/OFF, room thermostat with temperature range from 5 to 40 °C, summer-winter selector, fan control with water temperature probe. Fan speed can be regulated according to four operation modes: AUTO, NIGHT, MIN e MAX. Provided with 230 V output to control of an electronic valve.		20116484
23.6 (- + * 0)	Control panel on board TOP. TOUCH LCD electronic on board control panel with continuous modulation and ModBus RTU communication protocol. It makes the room temperature regulation fully automatic, through the programs AUTO, SILENT, NIGHT and MAX by means of a probe located in the lower part of the appliance. Communication protocol ModBus RTU.		20181365
23	Control panel wall mounted TOP (MASTER). TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
• •	Electronic board for wall mounted control panel TOP (SLAVE). Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
== ;	Control panel for recessed installation.	(1)	20147241
100	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
100	Remote control interface 0-10V. Electronic remoting board with input 0-10V.		20116413
44	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20101063
4 2	2-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management; the second one allows to balance the head losses of the system. This kit is compulsory in the versions Plus, except for the case when we mount the 3-ways valve or when we have a collector with thermo-electric heads.		4013453
<b>&amp; S</b>	2-ways taps kit.		4013450

Drawing	Decription	Notes	Code
₩.b	White-feet kit. The kit is composed by two supporting feet that allow to place the panel fan coil on the floor.		4013458
	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		2006942
FIC	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452
	White mounting bracket kit.  This kit is used to fix the panel fan coil to the floor, in case of installation in front of shop windows or wherever there is no possibility to fix it to the wall.		2006942

- (1) Both codes are necessary for the first fan coil.(2) It must be installed 1 piece for every remoted fan coil.

#### **MATCHING ACCESSORIES**

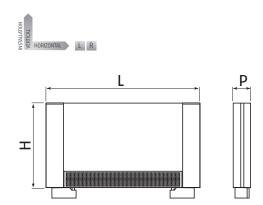
Drawing	Description		Size			Notes	Code	
		11	21	33	40	46		
							(D)	20116460
	Back-cover panel kit for the models Design Inverter and Design Inverter Plus		•				(D)	20116461
				•			(D)	20116462
					•		(D)	20116463
						•	(D)	20116464

(D) Availability of the material at our warehouse: 25 working days from the order validation date.

Fan coil

# **Design Inverter**





- · Tangential fan coils
- Vertical or horizontal installation (with accessory)

Description	Н	L	P
	mm	mm	mm
DESIGN INVERTER 11	580	760	130
DESIGN INVERTER 21	580	960	130
DESIGN INVERTER 33	580	1160	130
DESIGN INVERTER 40	580	1360	130
DESIGN INVERTER 46	580	1560	130

The DESIGN INVERTER are the Riello fan coils with DC Brushless Inverter motors, for a continuous variation from 0 to 100% of the air flow and consequently the heating and cooling capacity. The DESIGN INVERTER quickly heat and cool any area, and it is possible to choose between two dedicated functions: PERFORMANCE for commercial needs, when high efficiency and high effectiveness are required, and COMFORT for residential needs, to ensure always maximum low-noise operation. Thanks to the DC Brushless motors, the DESIGN INVERTER save up to 50% in electricity compared to the fan coils with traditional motors (ON/OFF). Just like the whole HELIOTERM family, the DESIGN INVERTER range is extremely thin, with a depth of just 13 cm.

The range comes in 5 models with a cooling capacity from 830 W up to 4560 W and a heating capacity from 1090 W up to 4860 W. The wide range of accessories and e controls with a touch DISPLAY support a wide application range.

All versions can be installed vertically or horizontally (using a specific accessory), with connections on the left. The structure is made of zinc-coated sheet with ABS side parts; the front delivery grille is made of aluminium.

- Extremely thin
- Depth of 13 cm
- Units can be installed both vertically and horizontally
- Ease of installation with left connections
- Easy to remove and clean the filters
- Touch Display commands

#### **TECHNICAL DATA**

Description	7°C−1	cooling 2°C (1) N	50°	heating C (2) N	Maximum air flow rate (4) m³/h		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		rate (4)		max-r	re irradiation nin (5) (A)	Code
	Performance	Comfort	Performance	Comfort	Performance	Comfort	Performance	Comfort																									
WHITE FAN COIL																																	
DESIGN INVERTER 11B	1095	830	1415	1090	197	162	42.2-24.2	39.4-24.2	20116254																								
DESIGN INVERTER 21B	2120	1760	2775	2350	389	320	43.1-25.3	40.2-25.3	20116244																								
DESIGN INVERTER 33B	3310	2650	3905	3190	560	461	45.5-25.6	42.2-25.6	20116246																								
DESIGN INVERTER 40B	3875	3340	4665	4100	699	576	45.9-26.3	42.5-26.3	20116250																								
DESIGN INVERTER 46B	4560	3800	5705	4860	787	648	47.2-27.6	43.9-27.6	20116252																								

Performance refer to the following conditions:

- Room air temperature 27 °C d.b. and 19 °C w.b. Air temperature 20 °C and the same water flow rate achieved in cooling mode Air temperature 20 °C Air flow rate measured with cleaned filters

- According to UNI EN ISO 7779:2001

NOTE: the performance setting is recommended for commercial spaces, while the comfort setting is recommended for residential spaces.

#### **ACCESSORIES**

**RIELLO** 

Drawing	Decription	Notes	Code
[-+ * 0]	Control panel on board BASIC. TOUCH LCD onboard panel, of amber colour, that works as: ON/OFF, room thermostat with temperature range from 5 to 40 °C, summer-winter selector, fan control with water temperature probe. Fan speed can be regulated according to four operation modes: AUTO, NIGHT, MIN e MAX. Provided with 230 V output to control of an electronic valve.		20116484
730  - +   * 0	Control panel on board TOP. TOUCH LCD electronic on board control panel with continuous modulation and ModBus RTU communication protocol. It makes the room temperature regulation fully automatic, through the programs AUTO, SILENT, NIGHT and MAX by means of a probe located in the lower part of the appliance. Communication protocol ModBus RTU.		20181365
rin wern	Control panel wall mounted TOP (MASTER).  TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
• •	Electronic board for wall mounted control panel TOP (SLAVE). Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
	Control panel for recessed installation.	(1)	20147241
	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
	Remote control interface 0-10V. Electronic remoting board with input 0-10V.		20116413
44	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20101063
4 1	2-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management; the second one allows to balance the head losses of the system. This kit is compulsory in the versions Plus, except for the case when we mount the 3-ways valve or when we have a collector with thermo-electric heads.		4013453
4	2-ways taps kit.		4013450
<b>L</b>	White-feet kit. The kit is composed by two supporting feet that allow to place the panel fan coil on the floor.		4013458
	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		2006942
FIC	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452
	White mounting bracket kit. This kit is used to fix the panel fan coil to the floor, in case of installation in front of shop windows or wherever there is no possibility to fix it to the wall.		20069422
	Condensate drain 11 for horizontal installation.	(3)	20025185
777	Condensate drain 21 for horizontal installation.	(3)	20025186
• • [	Condensate drain 33 for horizontal installation.	(3)	20025187
	Condensate drain 40 for horizontal installation.	(3)	20025188
	Condensate drain 46 for horizontal installation.	(3)	20025189

Drawing	Decription	Notes	Code
	Cables kit for right-side connections. It is compulsory for the connections reversal.		20069415

- Both codes are necessary for the first fan coil. It must be installed 1 piece for every remoted fan coil. The accessory is necessary for the horizontal installation of fan coil.

#### **MATCHING ACCESSORIES**

Drawing	Description	Size		Notes	Code			
		11	21	33	40	46		
		•					(D)	20116460
			•				(D)	20116461
	Back-cover panel kit for the models Design Inverter and Design Inverter Plus			•			(D)	20116462
					•		(D)	20116463
						•	(D)	20116464

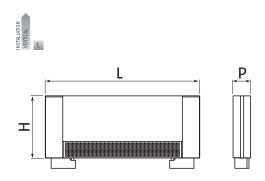
(D) Availability of the material at our warehouse: 25 working days from the order validation date.

## RIELLO

Fan coil

# **Design S Inverter**





· Tangential fan coils with Brushless inverter motor

Description	Н	L	P
	mm	mm	mm
DESIGN INVERTER 6BS	379	760	130
DESIGN INVERTER 11BS	379	960	130
DESIGN INVERTER 17BS	379	1160	130
DESIGN INVERTER 23BS	379	1360	130
DESIGN INVERTER 32BS	379	1560	130

The DESIGN S INVERTER have a height of 379 mm and are lower than traditional fan coils. This feature allow their installation in limited spaces.

The whole range is provided with DC Brushless Inverter motors, allowing a continuous modulation from 0 to 100% of the air flow and consequently of the heating and cooling capacity, heating and cooling any room very rapidly.

Thanks to the DC Brushless motors, the DESIGN S INVERTER have an electrical consumption that is 50% lower than the fan coils with traditional motors. The DESIGN S INVERTER range features an ultra flat design, thanks to a depth of just 13 cm.

The structure is made of zinc-coated sheet with the frontal grille made of aluminium. The range comes in 5 models with a cooling capacity from 560 W to 3140 W and a heating capacity from 780 W till 3910 W.

The wide range of accessories and controls with a touch DISPLAY support a wide application range.

- Extremely thin
- Height 379 mm
- Easy to remove and clean the filters
- Touch Display commands

#### **TECHNICAL DATA**

Description	Power cooling 7 °C-12 °C (1) Watt	Power heating 50 °C (2) Watt	Power heating 70 °C-60 °C (3) Watt	Maximum air flow rate (4) m³/h	Sound pressure irradiation max-min (5) dB(A)	Code
WHITE FAN COIL						
DESIGN INVERTER 6BS	560	780	1390	140	38.8-23.8	20116265
DESIGN INVERTER 11BS	1040	1570	2730	250	39.5-24.9	20116267
DESIGN INVERTER 17BS	1640	2380	4140	390	41.4-25.1	20116271
DESIGN INVERTER 23BS	2310	3250	5650	540	41.6-25.7	20116272
DESIGN INVERTER 32BS	3140	3910	6620	600	42.6-26.8	20116273

Performance refer to the following conditions: (1) Room air temperature 27 °C d.b. and 19 °C w.b.

- Air temperature 20 °C and the same water flow rate achieved in cooling mode Air temperature 20 °C
- Air flow rate measured with cleaned filters
- According to UNI EN ISO 7779:2001

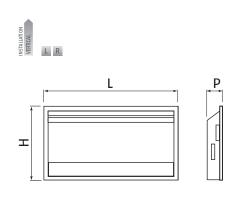
Drawing	Decription	Notes	Code
- +   * 0	Control panel on board BASIC. TOUCH LCD onboard panel, of amber colour, that works as: ON/OFF, room thermostat with temperature range from 5 to 40 °C, summer-winter selector, fan control with water temperature probe. Fan speed can be regulated according to four operation modes: AUTO, NIGHT, MIN e MAX. Provided with 230 V output to control of an electronic valve.		20116484
23.0 \- +   * 0	Control panel on board TOP. TOUCH LCD electronic on board control panel with continuous modulation and ModBus RTU communication protocol. It makes the room temperature regulation fully automatic, through the programs AUTO, SILENT, NIGHT and MAX by means of a probe located in the lower part of the appliance. Communication protocol ModBus RTU.		20181365
23	Control panel wall mounted TOP (MASTER). TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
• •	Electronic board for wall mounted control panel TOP (SLAVE) Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
= ,(D)	Control panel for recessed installation.	(1)	20147241
a Di	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
in a	Remote control interface 0-10V. Electronic remoting board with input 0-10V.		20116413
41	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20076544
	2-ways valve kit.  The kit is composed by a valve with thermo-electric head, it allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management.		20076590
4	2-ways taps kit.		4013450
الما الما	White-feet kit. The kit is composed by two supporting feet that allow to place the panel fan coil on the floor.		4013458
	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		20069423
90	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452
	White mounting bracket kit. This kit is used to fix the panel fan coil to the floor, in case of installation in front of shop windows or wherever there is no possibility to fix it to the wall.		20069422

Both codes are necessary for the first fan coil It must be installed 1 piece for every remoted fan coil

Fan coil

# Invisible Inverter





 Tangential fan coils with Brushless inverter motor for recessed installation in the wall (with template)

Description	Н	L	P
	mm	mm	mm
INVISIBLE INVERTER 11	750	770	152
INVISIBLE INVERTER 21	750	970	152
INVISIBLE INVERTER 33	750	1170	152
INVISIBLE INVERTER 40	750	1370	152
INVISIBLE INVERTER 46	750	1570	152

INVISIBLE INVERTER is the Riello proposal for fan coils for recessed installation, allowing you to rationalise the space according to the criteria of modern interior architecture. The unit can be recessed in walls with limited thickness, thanks to the just 14.2 cm deep box. The white front panel with a grey intake grille in the same aesthetic line as the DESIGN INVERTER fan coil. The orientation of the air expulsion wing can be adjusted manually by 160° from bottom to top to ensure optimum comfort both in heating and cooling mode. The entire range comes with DC Brushless Inverter motors. This technological solution provides a continuous variation from 0 to 100% of the air flow rate and as a result the heating and cooling capacity.

INVISIBLE INVERTER quickly heats and cools any room; with the possibility of choosing between two dedicated functions: PERFORMANCE for commercial needs, when high efficiency and high effectiveness are required, and COMFORT for residential needs, to ensure always maximum low-noise operation.

Thanks to the DC Brushless motors, the INVISIBLE INVERTER range has an electrical consumption that is 50% lower than fan coils with traditional motors (ON/OFF type).

The range comes in 5 models with a cooling capacity from 830 W to 4560 W and a heating capacity from 1090 W till 4860 W with a wide range of accessories.

- Ultra flat design
- Wings can be completely orientated
- Ultra low-noise operation
- Ease of installation thanks to the box for recessed installation
- Just 14,2 cm deep
- Wide range of accessories
- Filters easy to dismount and clean

Description	7°C-1	cooling 2°C (1) V	50°	heating C (2) N	rate	n air flow e (4) ³/h	max-r	re irradiation min (5) i(A)	Code
	Performance	Comfort	Performance	Comfort	Performance	Comfort	Performance	Comfort	
WHITE FAN COIL WITH TEMPLATE FOR RECESSED	INSTALLAT	TON IN TH	E WALL						
INVISIBLE INVERTER 11	1095	830	1415	1090	197	162	42.2-24.2	39.4-24.2	20069349
BOX (for recessed installation)									20025164
FRONTAL PANEL AND GRID									20116418
INVISIBLE INVERTER 21	2120	1760	2775	2350	389	320	43.1-25.3	40.2-25.3	20069370
BOX (for recessed installation)									20025166
FRONTAL PANEL AND GRID									20116419
INVISIBLE INVERTER 33	3310	2650	3905	3190	560	461	45.5-25.6	42.2-25.6	20069371
BOX (for recessed installation)									20025167
FRONTAL PANEL AND GRID									20116420
INVISIBLE INVERTER 40	3875	3340	4665	4100	699	576	45.9-26.3	42.5-26.3	20069372
BOX (for recessed installation)									20025169
FRONTAL PANEL AND GRID									20116421
INVISIBLE INVERTER 46	4560	3800	5705	4860	787	648	47.2-27.6	43.9-27.6	20069373
BOX (for recessed installation)									20025171
FRONTAL PANEL AND GRID									20116423

- Performance refer to the following conditions:
  (1) Room air temperature 27 °C d.b. and 19 °C w.b.
  (2) Air temperature 20 °C and the same water flow rate achieved in cooling mode
  (3) Air temperature 20 °C
  (4) Air flow rate measured with cleaned filters
  (5) According to UNI EN ISO 7779:2001
  NOTE: the performance setting is recommended for commercial spaces, while the comfort setting is recommended for residential spaces.

Drawing	Decription	Notes	Code
53	Control panel wall mounted TOP (MASTER).  TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
••	Electronic board for wall mounted control panel TOP (SLAVE). Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
	Control panel for recessed installation.	(1)	20147241
	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
77	Remote control interface 0-10V. Electronic remoting board with input 0-10V.		20116413
44	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20101063
4 1	2-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management; the second one allows to balance the head losses of the system. This kit is compulsory in the versions Plus, except for the case when we mount the 3-ways valve or when we have a collector with thermo-electric heads.		4013453

**RIELLO** 

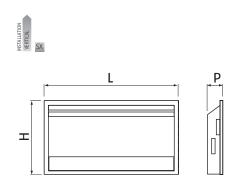
Drawing	Decription	Notes	Code
4	2-ways taps kit.		4013450
	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		20069423
FIC	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452
Ŏ	Cables kit for right-side connections. It is compulsory for the connections reversal.		20069415

- Both codes are necessary for the first fan coil It must be installed 1 piece for every remoted fan coil

Fan coil

# Invisible Inverter Plus





· Tangential fan coils with Brushless inverter motor, radiant heat plate effect of frontal panel for recessed installation in the wall (with template)

Description	Н	L	P
	mm	mm	mm
INVISIBLE INVERTER PLUS 11	750	770	152
INVISIBLE INVERTER PLUS 21	750	970	152
INVISIBLE INVERTER PLUS 33	750	1170	152
INVISIBLE INVERTER PLUS 40	750	1370	152
INVISIBLE INVERTER PLUS 46	750	1570	152

INVISIBLE INVERTER PLUS is the Riello TOP of the range proposal for fan coils for recessed installation, allowing you to rationalise the space according to the criteria of modern interior architecture. The unit can be recessed in walls with limited thickness, thanks to the just 14.2 cm deep box.

The INVISIBLE INVERTER PLUS front panel unites, thanks to its exclusive operating principle, the convective and ventilating effect with the radiant effect of the front panel, thereby increasing the wellness of the room. The orientation of the air expulsion wing can be adjusted manually by 160° from bottom to top to ensure optimum comfort both in heating and cooling mode.

The entire range comes with DC Brushless Inverter motors. This technological solution provides a continuous variation from 0 to 100% of the air flow rate and as a result the heating and cooling capacity.

INVISIBLE INVERTER PLUS quickly heats and cools any room; with the possibility of choosing between two dedicated functions: PERFORMANCE for commercial needs, when high efficiency and high effectiveness are required, and COMFORT for residential needs, to ensure always maximum low-noise operation. Thanks to the DC Brushless motors, the INVISIBLE INVERTER PLUS range has an electrical consumption that is 50% lower than fan coils with traditional motors (ON/OFF type).

The range comes in 5 models with a cooling capacity from 830 W to 4560 W and a heating capacity from 1090 W till 1090 4860 W.

- Ultra flat design
- Radiant effect in heating mode
- Wings can be completely orientated
- Ultra low-noise operation
- Ease of installation thanks to the box for recessed installation
- Just 14,2 cm deep
- Wide range of accessories
- Filters easy to dismount and clean

**RIELLO** 

Description	7°C-1	Power cooling 7°C-12°C (1) W		Power heating 50°C (2) W		Maximum air flow rate (4) m³/h		Sound pressure irradiation max-min (5) dB(A)		Code
	Performance	Comfort	Performance	Comfort	Performance	Comfort	Performance	Comfort		
WHITE FAN COIL WITH TEMPLATE FOR F	RECESSED I	NSTALLATI	ON IN THI	E WALL				'		
INVISIBLE INVERTER PLUS 11	1095	830	1515	1090	197	162	42.2-24.2	39.4-24.2	(D)	20069374
BOX (for recessed installation)										20025164
FRONTAL PANEL AND GRID										20116418
INVISIBLE INVERTER PLUS 21	2120	1760	2885	2350	389	320	43.1-25.3	40.2-25.3	(D)	20069375
BOX (for recessed installation)										20025166
FRONTAL PANEL AND GRID										20116419
INVISIBLE INVERTER PLUS 33	3310	2650	4140	3190	560	461	45.5-25.6	42.2-25.6	(D)	20069376
BOX (for recessed installation)										20025167
FRONTAL PANEL AND GRID										20116420
INVISIBLE INVERTER PLUS 40	3875	3340	5015	4100	699	576	45.9-26.3	42.5-26.3	(D)	20069377
BOX (for recessed installation)										20025169
FRONTAL PANEL AND GRID										20116421
INVISIBLE INVERTER PLUS 46	4560	3800	5910	4860	787	648	47.2-27.6	43.9-27.6	(D)	20069378
BOX (for recessed installation)										20025171
FRONTAL PANEL AND GRID									ĺ	20116423

Performance refer to the following conditions:
(1) Room air temperature 27 °C d.b. and 19 °C w.b.
(2) Air temperature 20 °C and the same water flow rate achieved in cooling mode
(3) Air temperature 20 °C
(4) Air temperature 20 °C, Main fan in "off"
(5) Air flow rate measured with cleaned filters
(6) According to UNI EN ISO 7779:2001
(D) Availability of the material at our warehouse: 25 working days from the order validation date.
NOTE: the performance setting is recommended for commercial spaces, while the comfort setting is recommended for residential spaces.

Describe a	Decription	Notes	Code
Drawing	Control panel wall mounted TOP (MASTER).  TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.		20181383
• •	Electronic board for wall mounted control panel TOP (SLAVE). Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
<u></u>	Control panel for recessed installation.	(1)	20147241
100	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
18 6	Remote control interface 0-10V. Electronic remoting board with input 0-10V.		20116413
44	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20101063

Drawing	Decription	Notes	Code
4 1	2-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management; the second one allows to balance the head losses of the system. This kit is compulsory in the versions Plus, except for the case when we mount the 3-ways valve or when we have a collector with thermo-electric heads.		4013453
4	2-ways taps kit.		4013450
	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		20069423
FIG	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452

Both codes are necessary for the first fan coil. It must be installed 1 piece for every remoted fan coil.

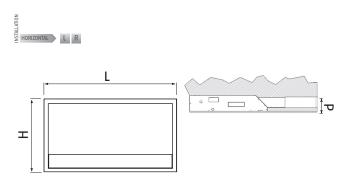
**TERMINAL UNITS** 



Ceiling-mounted fan coil units with formwork

# **Invisible Inverter Ceiling**





 Fan coil unit with a builtin Brushless Inverter motor complete with template for ceiling installation.

Description	H mm	L mm	P mm
INVISIBLE INVERTER 11	750	770	152
INVISIBLE INVERTER 21	750	970	152
INVISIBLE INVERTER 33	750	1170	152
INVISIBLE INVERTER 40	750	1370	152
INVISIBLE INVERTER 46	750	1570	152

The INVISIBLE INVERTER ceiling-mounted unit is ideally designed for installation in false ceilings, such as in hotel rooms, where direct air intake, via a grille (not included), and air supply, via a distribution duct, are required. This unit can be fitted in false ceilings with limited thickness thanks to the unit's depth of only 14.2 cm.

The cover panel is white and equipped with an intake grille. The telescopic duct allows combination with any type of air outlet grille available on the market. INVISIBLE INVERTER is equipped with DC Brushless Inverter motors.

The DC Brushless motor allows a continuous variation from 0 to 100% of the air flow rate and therefore of the heating and cooling capacity. The INVISIBLE INVERTER heats and cools any room very quickly, with a choice of two dedicated mappings: PERFORMANCE for commercial environments, which require high performance and efficiency, and COMFORT for quiet residential environments. Thanks to the use of DC Brushless motors the INVISIBLE INVERTERS save up to 50% electricity compared to fan coil units with traditional motors (ON/OFF type).

The range is available in 5 models, with cooling capacities from 830 W up to 4560 W and heating capacities from 1090 W up to 4860 W with a wide range of accessories.

- Installation in false ceilings
- Particularly low noise level
- Reduced depth of 14.2 cm
- Wide range of accessories

Description	7°C-	g power -12°C (1)	50	Thermal output 50°C W (2)		Maximum air flow m³/h (4)		oressure -min A) (5)	Notes	Code		
	Performance	Comfort	Performance	Comfort	Performance	Comfort	Performance	Comfort				
WHITE FAN COIL UNIT COMPLETE WITH CEILING INSTALLATION TEMPLATE												
INVISIBLE INVERTER 11	1095	830	1415	1090	197	162	42.2-24.2	39.4-24.2		20069349		
Built-in unit										20025164		
Ceiling panel and suction grille									(D)	20116425		
Telescopic air outlet duct									(D)	4013486		
INVISIBLE INVERTER 21	2120	1760	2775	2350	389	320	43.1-25.3	40.2-25.3		20069370		
Built-in unit										20025166		
Ceiling panel and suction grille									(D)	20116426		
Telescopic air outlet duct									(D)	4013487		
INVISIBLE INVERTER 33	3310	2650	3905	3190	560	461	45.5-25.6	42.2-25.6		20069371		
Built-in unit										20025167		
Ceiling panel and suction grille									(D)	20116427		
Telescopic air outlet duct									(D)	4013488		
INVISIBLE INVERTER 40	3875	3340	4665	4100	699	576	45.9-26.3	42.5-26.3		20069372		
Built-in unit										20025169		
Ceiling panel and suction grille									(D)	20116428		
Telescopic air outlet duct									(D)	4013489		
INVISIBLE INVERTER 46	4560	3800	5705	4860	787	648	47.2-27.6	43.9-27.6		20069373		
Built-in unit										20025171		
Ceiling panel and suction grille									(D)	20116429		
Telescopic air outlet duct									(D)	4013490		

- Performance refers to the following services:
  (1) Ambient air temperature 27°C Tb.s. and 19°C Tb.u.
  (2) Air temperature 20°C and same water flow rate as in cooling mode.
  (3) Air temperature 20°C.
  (4) Air flow rate measured with clean filters.
  (5) According to UNI EN ISO 7779:2001.
  (D) Availability of the material at our warehouse: 25 working days from the order validation date.
  NOTA: the performance setting is recommended for commercial spaces, while the comfort setting is recommended for residential spaces.

#### **ACCESSORIES**

**RIELLO** 

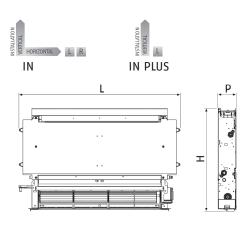
Drawing	Decription	Notes	Code
23	Control panel wall mounted TOP (MASTER).  TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
• •	Electronic board for wall mounted control panel TOP (SLAVE). Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
	Control panel for recessed installation.	(1)	20147241
	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
i a	Remote control interface 0-10V. Electronic remoting board with input 0-10V.		20116413
al.	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20101063
	2-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management; the second one allows to balance the head losses of the system. This kit is compulsory in the versions Plus, except for the case when we mount the 3-ways valve or when we have a collector with thermo-electric heads.		4013453
4	2-ways taps kit.		4013450
	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		20069423
FIG	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452

- (1) Both codes are necessary for the first fan coil (2) It must be installed 1 piece for every remoted fan coil

Fan coil for recessed installation

# In Inverter In Inverter Plus





• Fan coils with Brushless inverter motor for recessed installation in the wall

Description	Н	L	Р
	mm	mm	mm
IN INVERTER 11	576	525	126
IN INVERTER 21	576	725	126
IN INVERTER 33	576	925	126
IN INVERTER 40	576	1125	126
IN INVERTER 46	576	1325	126
IN INVERTER PLUS 11	576	525	126
IN INVERTER PLUS 21	576	725	126
IN INVERTER PLUS 33	576	925	126
IN INVERTER PLUS 40	576	1125	126
IN INVERTER PLUS 46	576	1325	126

IN INVERTER is the Riello proposal for fan coils for recessed installation, allowing you to rationalise the space according to the criteria of modern interior architecture. The unit can be recessed in walls that are relatively thin, thanks to the just 12.6 cm deep box.

The entire range comes with DC Brushless Inverter motors. This technological solution provides a continuous variation from 0 to 100% of the air flow rate and as a result the heating and cooling capacity.

IN INVERTER quickly heats and cools any room; with the possibility of choosing between two dedicated functions: PERFORMANCE for commercial needs, when high efficiency and high effectiveness are required, and COMFORT for residential needs, to ensure always maximum low-noise operation.

Thanks to the DC Brushless motors, the IN INVERTER range has an electrical consumption that is 50% lower than fan coils with traditional motors (ON/OFF type). The range comes in 5 models with (PLUS model) and without radiant effect, with a cooling capacity from 830 W up to 4560 W and a heating capacity from 1090 W up to 4860 W.

The vast range of accessories and controls with DISPLAY support a wide range of applications.

All IN INVERTER versions can be installed vertically or horizontally (using a specific accessory), with standard connections on the left (on the right with the relative accessory).

The IN INVERTER PLUS versions can be installed vertically with connections on the left. The structure is made of zinc-coated sheet metal.

- Ultra low-noise operation
- Just 12,6 cm deep
- Wide range of accessories
- Filters easy to dismount and clean

MAY 2022 FDITION

**RIELLO** 

Description	Power cooling 7°C-12°C (1) W		Power heating 50°C (2) W		Maximum air flow rate (4) m³/h		Sound pressure irradiation max-min (5) dB(A)		Notes	Code
	Performance	Comfort	Performance	Comfort	Performance	Comfort	Performance	Comfort		
FAN COIL FOR RECESSED INSTALLATION										
IN INVERTER 11	1095	830	1515	1090	197	162	42.2-24.2	39.4-24.2		20069349
IN INVERTER 21	2120	1760	2885	2350	389	320	43.1-25.3	40.2-25.3		20069370
IN INVERTER 33	3310	2650	4140	3190	560	461	45.5-25.6	42.2-25.6		20069371
IN INVERTER 40	3875	3340	5015	4100	699	576	45.9-26.3	42.5-26.3		20069372
IN INVERTER 46	4560	3800	5910	4860	787	648	47.2-27.6	43.9-27.6		20069373
FAN COIL WITH RADIANT HEAT PLATE FO	R RECESSI	ED INSTAL	LATION							
IN INVERTER PLUS 11	1095	830	1515	1090	197	162	42.2-24.2	39.4-24.2	(D)	20069374
IN INVERTER PLUS 21	2120	1760	2885	2350	389	320	43.1-25.3	40.2-25.3	(D)	20069375
IN INVERTER PLUS 33	3310	2650	4140	3190	560	461	45.5-25.6	42.2-25.6	(D)	20069376
IN INVERTER PLUS 40	3875	3340	5015	4100	699	576	45.9-26.3	42.5-26.3	(D)	20069377
IN INVERTER PLUS 46	4560	3800	5910	4860	787	648	47.2-27.6	43.9-27.6	(D)	20069378

Performance refer to the following conditions:
(1) Room air temperature 27 °C d.b. and 19 °C w.b.
(2) Air temperature 20 °C and the same water flow rate achieved in cooling mode
(3) Air temperature 20 °C
(4) Air temperature 20 °C; main fan in "off"
(5) Air flow rate measured with cleaned filters
(6) According to UNI EN ISO 7779:2001
(D) Availability of the material at our warehouse: 25 working days from the order validation date.
NOTE: the performance setting is recommended for commercial spaces, while the comfort setting is recommended for residential spaces.

#### ACCECCODIEC

Drawing	Decription	Notes	Code
*53	Control panel wall mounted TOP (MASTER).  TOUCH LCD wall-hung electronic control panel with room probe and ModBus RTU communication protocol. The control panel allows to manage the room temperature through its temperature probe or though the on board probe of the fan coil. The panel allows to control one or more (up to max 30) fan-coils thanks to the on board electronic for control panel wall mounted TOP.	(1)	20181383
0 +	Electronic board for wall mounted control panel TOP (SLAVE). Electronic remoting board with continuous modulation for remote connection with the wall mounted control panel TOP. It is possible to connect max 30 electronic board with one wall mounted control panel TOP.	(1)(2)	20181395
	Control panel for recessed installation.	(1)	20147241
	Remote control interface. Electronic remoting board for 3-speed thermostat.	(1)(2)	20116481
	Remote control interface 0–10V. Electronic remoting board with input 0–10V.		20116413
4	3-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fancoil from the system if combined with a control panel allowing the management. The holder valve allows to balance the head losses of the system. This kit is an alternative to the two-ways valve.		20101063
4	2-ways valve kit. The kit is composed by a valve with thermo-electric head and a holder valve. The first one allows to exclude automatically the panel fan coil from the system if combined with a control panel allowing the management; the second one allows to balance the head losses of the system. This kit is compulsory in the versions Plus, except for the case when we mount the 3-ways valve or when we have a collector with thermo-electric heads.		4013453
	2-ways taps kit.		4013450

Drawing	Decription	Notes	Code
===1	Spacer fitting kit for 2-way valve unit for connecting the pipes to the valves with outlet on the floor and for 3-way valves unit for connecting the pipes to the valves with outlet on the wall.		20069423
FIC	90°-connection kit, to allow an easy connection of the pipes to the valves for the exit from wall.		4013452
Õ	Cables kit for right-side connections for IN model (not for PLUS model). It is compulsory for the connections reversal.		20069415

#### **MATCHING ACCESSORIES**

Drawing	Description	Size		Size			Notes	Code
		11	21	33	40	46		
							(D)	4013481
	90° air-inlet kit for recessed models IN Inverter (not for Plus models)		•				(D)	4013482
				•			(D)	4013483
					•		(D)	4013484
						•	(D)	4013485
		•					(D)	4013486
			•				(D)	4013487
	Upper inlet kit for recessed models IN Inverter			•			(D)	4013488
					•		(D)	4013489
						•	(D)	4013490
		•					(D)	4013491
			•				(D)	4013492
	Suction kit for recessed models IN Inverter (not for Plus model)			•			(D)	4013493
	thot for rius modely				•		(D)	4013494
						•	(D)	4013495

<sup>(</sup>D) Availability of the material at our warehouse: 25 working days from the order validation date.

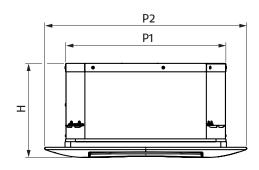
Both codes are necessary for the first fan coil It must be installed 1 piece for every remoted fan coil.

**TERMINAL UNITS** 

Fan coils - Cassette

# **RK N Hydroline**





• "Cassette" fan coils

Description	H mm	L1 mm	L2 mm
RK 24 N SET	298	720	569
RK 40 N SET	298	720	569
RK 47 N SET	298	720	569
RK 63 N SET	298	960	825
RK 72 N SET	298	960	825
RK 96 N SET	298	960	825

The RK N cassette fan coil range is designed for heating and/or cooling solutions both for residential or commercial applications wherever a ceiling installation is required in order to meet specific architectural needs.

Thanks to the pleasant aesthetic, the accurate design and the 4-ways adjustable air outlet, the RK N cassette fan coils are Riello's ideal solution for any setting. For a user-friendly interface, the whole range of RK N fan coils can be matched with the wall-hung control panels of Hydrocontrol line:

- TermoComfortPlus and TermoComfort.
- Extremely low noise level
- Washable air filter
- Condensate drain pump supplied as standard
- Ease of installation
- Excellent air distribution through 4 manual wings
- Filters easy to disassemble and clean.

#### **TECHNICAL DATA**

	Description	Power cooling kW	Power heating kW	Air flow rate m³/h	Notes	Code
RK 24 N SET	RK 24 N	2.400	3.200	660	(1)(2)	20051794
	Grid panel				(2)	4012190
	Summer/Winter automatic switch kit				(2)	4012226
RK 40 N SET	RK 40 N	4.000	5.000	735	(1)(2)	20051795
	Grid panel				(2)	4012190
	Summer/Winter automatic switch kit				(2)	4012226
RK 47 N SET	RK 47 N	4.700	6.200	900	(1)(2)	20051796
	Grid panel				(2)	4012190
	Summer/Winter automatic switch kit				(2)	4012226
RK 63 N SET	RK 63 N	6.300	8.110	980	(1)(2)	20051797
	Grid panel				(2)	20051800
	Summer/Winter automatic switch kit				(2)	4012226
RK 72 N SET	RK 72 N	7.200	10.000	1160	(1)(2)	20051798
	Grid panel				(2)	20051800
	Summer/Winter automatic switch kit				(2)	4012226
RK 96 N SET	RK 96 N	9.600	13.000	1.600	(1)(2)	20051799
	Grid panel				(2)	20051800
	Summer/Winter automatic switch kit				(2)	4012226

- TO PURCHASE THE COMPLETE PRODUCT, PLEASE REMEMBER TO ORDER ALL THE CODES (RK N, GRID PANEL AND SUMMER/WINTER AUTOMATIC SWITCH KIT).
- (\*) TO PURCHASE THE COMPLETE PRODUCT, PLEASE REMEMBER TO ORDER ALL THE CODES (RK N, GRID PANEL AND SUMMER/WINTE (1) The fan coil must be matched with an electrovalve that manages the functioning.

  (2) Accessories "Grid panel" and "Summer/Winter automatic switch kit" must be ordered together with the base unit. Performance refer to the following conditions:

- fan speed: maximum; cooling: flow water 7°C; inlet air temperature 27°C Td.b./ 19°C Tw.b.; (Δt 5°C); heating: flow water 50°C; inlet air temperature 20°C Td.b; same water flow rate reached in cooling mode; maximum flow water 80°C.

#### **ACCESSORIES**

Description	Code
2-pipes valve kit (24-47 models)	20035945
2-pipes valve kit (63-96 models)	20086595
Primary air kit	4012192
Air lock kit	4012225

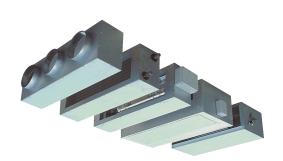
#### **CONTROLS**

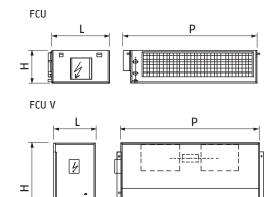
Description	Notes	Code
2 pipes "Plus" control (wall-mounted)	(1)	20081464
Air probe kit	(2)	20083816
Water probe kit		20083809
Multiple kit	(3)	20081499

- Not included the water probe kit code 20083809.
- Sensor for remote reading. One control for each fan coil.

### Ductable fan coils

### FCU N





• Fan coils for horizontal and vertical installation

Description	H mm	L mm	P mm
FCU 09 N	296	520	645
FCU 15 N-17 N	296	520	1000
FCU 21 N	325	600	1100
FCU 24 N	325	600	1345
FCU 36 N-43 N	375	600	1345

FCU duct-connected fan coils are designed to provide a preliminary air treatment both for small-sized centralized installations and for installations with fun-coils unists. They are available in 7 models with an air flow rate ranging from 930 to 4.300 m3/h. The possibility to combine FCU units with a series of accessories, both on the outlet and on the intake side, makes them suitable for different uses, starting from the simple functions of cooling and/or heating up to treatments such as filtering, mixing, external air suction, re-heating both through water and electrical.

It is available in two basic versions: one for horizontal installation, having a reduced length, and one for vertical installation. These units consist of an aluzinc casing, provided with a thermal insulation layer made of polyethylene and polyester. All units are equipped with: a synthetic eff. EU3 filter, removable on guide rails, a heat-exchange coil with copper pipes and aluminium wings, a stainless steel AISI 304 condensate trap and double-suction fans with direct coupled motor. All units (except for 09 size because of its reduced electrical absorption) are also equipped with an electrical connection box with connectors protected by a relay.

- Compact dimensions
- Stainless steel AISI 304 condensate trap
- Motorized fan group, that can be inspected from the bottom
- Wide range of accessories enabling the units to be more flexible and suit different application needs.

#### **TECHNICAL DATA**

Description	Power cooling kW	Power heating kW	Maximum air loss m³/h	External static pressure Pa	Maximum power input W	Code
MODELS FOR HORIZONTAL INSTALLATION	ON					
FCU 09 N	4.6	9.8	930	90	195	20095872
FCU 15 N	7.5	15.5	1.500	100	299	20095873
FCU 17 N	9.1	19.7	1.600	85	302	20095874
FCU 21 N	10.5	21.6	2.050	115	430	20095876
FCU 24 N	13.1	25.9	2.400	105	430	20095877
FCU 36 N	15.7	35.5	3.600	120	750	20095878
FCU 43 N	20.7	46.3	4.200	115	950	20095879

- (1) Availability of the material in our warehouse: 20 working days of receipt of the order.
- Performance refer to the following conditions: Cooling: inlet air temperature 26 °C with 50% r.h.; flow water 7 °C ( $\Delta$ t 5 °C at the nominal air flow)
- Heating: inlet air temperature 26 °C with 50% r.n.; flow water 7 °C ( $\Delta$ t 5 °C at the nominal air flow)

  Heating: inlet air temperature 20 °C with 50% r.h.; flow water 70 °C ( $\Delta$ t 10 °C at the nominal air flow)

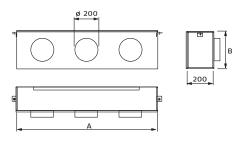
#### **ACCESSORIES**

Description	Notes	Code
CP-Basic: speed selector with 0FF/cooling/heating button and 3-positions speed switch	(A)	20083633
CP-Comfort/R: Wall-hung electronic control panel for winter/summer room temperature control, activation or exclusion of the electrical resistance and fan speed selection (minimum, medium, maximum), for models with electrical resistance	(A)	20083635
CP-Comfort/V: Wall-hung electronic control panel for winter/summer room temperature control, activation or exclusion of water coil (0-10 V control) and fan speed selection (minimum, medium, maximum), for models with water coil	(A)	20083637

<sup>(</sup>A) The accessory cannot be ordered separately but only togheter with the unit. Anyway it will have be mounted because it is not pre-intalled on the product.

#### **OUTLET PLENUM FOR ROUND DUCTS**

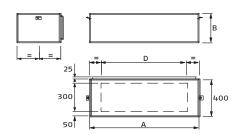
Destination	Description	Code
Model 09	Outlet plenum for round ducts for FCU 09	4015962
Models 15-17	Outlet plenum for round ducts for FCU 15-17	4015963
Model 21	Outlet plenum for round ducts for FCU 21	4015964
Model 24	Outlet plenum for round ducts for FCU 24	4015965
Models 36-43	Outlet plenum for round ducts for FCU 36-43	4015966



Model	Round ducts			nsions m
	Number	Diameter mm	А	В
Model 09	2	200	614	295
Models 15-17	3	200	974	295
Model 21	3	200	1074	322
Model 24	4	200	1314	322
Models 36-43	4	200	1314	372

### **INTAKE PLENUM 90°**

Destination	Description	Code
Model 09	Intake plenum 90° for FCU 09	4015967
Models 15–17	Intake plenum 90° for FCU 15-17	4015968
Model 21	Intake plenum 90° for FCU 21	4015969
Model 24	Intake plenum 90° for FCU 24	4015970
Models 36-43	Intake plenum 90° for FCU 36-43	4015971

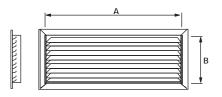


Model	Dimensions mm					
	А	A B D				
Model 09	550	278	500			
Models 15-17	910	278	800			
Model 21	1010	302	800			
Model 24	1250	302	1200			
Models 36-43	1250	328	1200			

TERMINAL UNITS

#### INTAKE GRID WITH FIXED WINGS (FOR INTAKE PLENUM)

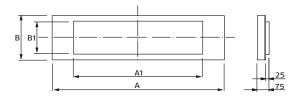
Destination	Description	Code
Model 09	Intake grid for FCU 09	4015972
Models 15-17-21	Intake grid for FCU 15-17-21	4015973
Models 24-36-43	Intake grid for FCU 24-36-43	4015974



Model	Dimensions mm				
	A B				
Model 09	500	300			
Models 15-17-21	800	300			
Models 24-36-43	1200	300			

### ADAPTER FRAME FOR RECTANGULAR DUCTS

Destination	Description	Code
Model 09	Adapter frame for FCU 09	4015978
Models 15-17	Adapter frame for FCU 15-17	4015979
Model 21	Adapter frame for FCU 21	4015980
Model 24	Adapter frame for FCU 24	4015981
Models 36-43	Adapter frame for FCU 36-43	4015982

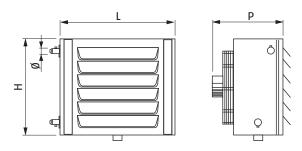


Model			nsions im	
	А	В	B1	
Model 09	614	440	295	235
Models 15-17	974	800	295	235
Model 21	1074	800	322	235
Model 24	1314	1070	322	280
Models 36-43	1314	1070	372	280

Water hot air generators

# Nuovo Acu-Nuovo Acu F





- Heating and cooling versions
- Helicoidal fan

Description	H mm	L mm	P mm	Ø mm	Net weight kg
NUOVO ACU 13 M	390	555	370	1"	15
NUOVO ACU 23 M	440	605	396	1"	18
NUOVO ACU 33 M	490	655	402	1"	21
NUOVO ACU 43 M	540	705	402	1"	24
NUOVO ACU 53 M	590	755	402	1"	28
NUOVO ACU 63 M	640	805	402	1"1/4	32
NUOVO ACU 73 T	690	855	460	1"1/4	43
NUOVO ACU 23 F	440	605	396	1"	18
NUOVO ACU 33 F	490	655	402	1"	21
NUOVO ACU 43 F	540	705	402	1"	24
NUOVO ACU 63 F	640	805	402	1" 1/4	32

NUOVO ACU and NUOVO ACU F are water air-heaters designed for the heating and cooling of small and medium-sized areas, such as warehouses, storehouses, laboratories, sports centres.

The NUOVO ACU consists of 3-ranks coils for applications with low temperature warm water. The NUOVO ACU F is specifically designed for cooling and consists of 3-ranks copper coils with condensate trap.

- Low noise level
- Reduced dimensions
- Coil with coupling provided with vent
- Reversible hydraulic connections
- Possibility of ceiling installation with specific accessory kit (only heating version, not for F versions)
- Available as single-phase (16 models) and three-phase (1 model)
- 10 models
- Wide range of accessories
- The range consists of 4 models for cooling with 3 row coils with output from 19,6 to 42,2 kW.
- Range consists of:
  - 7 models with 3 row coils with output from 17,3 to 63 kW
  - 4 models for cooling with 3 row coils with output from 19,6 to 42,2 kWa.

TERMINAL UNITS

## **TECHNICAL DATA (HEATING VERSION)**

Description	Power heating (*) kW	Air flow rate (**) m³/h	Motor	Nr. revs/min (***)	Code		
WATER HOT AIR GENERATOR WITH COPPER 3 ROW COILS							
NUOVO ACU 13M	17.3	1.550	Single-phase	1400-900-700	4152422		
NUOVO ACU 23M	23.7	2.300	Single-phase	1400-900-700	4152424		
NUOVO ACU 33M	28.5	2.550	Single-phase	1400-900-700	4152426		
NUOVO ACU 43M	37.5	3.400	Single-phase	1400-900-700	4152428		
NUOVO ACU 53M	44.0	3.850	Single-phase	1400-900-700	4152430		
NUOVO ACU 63M	54.1	4.900	Single-phase	1400-900-700	4152432		
NUOVO ACU 73T	61.2	6.150	Three-phase	900-700	4152414		

<sup>(\*)</sup> Performance refer to the following conditions:  $\Delta T$  water 85-70 °C, inlet air temparature +15 °C, 50% r.h., 1013 mbar, fan at the maximum speed. (\*\*) Performance refer to fan at the maximum speed. (\*\*\*) The variation of revolutions number can be obtained by applying specific accessories.

#### **TECHNICAL DATA (COOLING VERSION)**

Description	Power heating (*) kW	Power cooling (**) kW	Air flow rate m³/h	Motor	Nr. revs/min	Notes	Code
WATER HOT AIR GENERATOR WITH CO	OPPER 3 ROW COILS	FOR COOLING					
NUOVO ACU 23F	19,6	10,2	1.520	Single-phase	900	(D)	4152501
NUOVO ACU 33F	24,5	12,9	1.900	Single-phase	900	(D)	4152502
NUOVO ACU 43F	27,9	15,1	2.000	Single-phase	900	(D)	4152503
NUOVO ACU 63F	42,2	21,5	3.150	Single-phase	900	(D)	4152504

Performance refer to the following conditions: ΔT water 85-70 °C, inlet air temparature +15 °C, 50% r.h., 1013 mbar.

#### **ACCESSORIES**

Description	Destination	Code
Single-phase 4-position speed regulator kit	NUOVO ACU 13–63 M NUOVO ACU 23–63 F	20092637
Three-phase control panel kit	NUOVO ACU 73 T	4155602
Three-phase speed manual selector kit	NUOVO ACU 73 T	4155604
Support brackets	All models	4155606
Ceiling installation kit	NUOVO ACU 13 M	4155609
Ceiling installation kit	NUOVO ACU 23 M	4155611
Ceiling installation kit	NUOVO ACU 33 M	4155613
Ceiling installation kit	NUOVO ACU 43 M	4155615
Ceiling installation kit	NUOVO ACU 53 M	4155617
Ceiling installation kit	NUOVO ACU 63 M	4155619
Ceiling installation kit	NUOVO ACU 73 T	4155620
Vertical dampers kit	NUOVO ACU 13 M	4155626
Vertical dampers kit	NUOVO ACU 23 M - 23 F	4155628
Vertical dampers kit	NUOVO ACU 33 M - 33 F	4155630
Vertical dampers kit	NUOVO ACU 43 M - 43 F	4155632
Vertical dampers kit	NUOVO ACU 53 M	4155634
Vertical dampers kit	NUOVO ACU 63 M - 63 F	4155636
Vertical dampers kit	NUOVO ACU 73 T	4155638

Performance refer to the following conditions: ΔT water 7-12 °C, inlet air termperature +30 °C, 60% r.h., 1013 mbar. Availability of the material at our warehouse: 30 working days from the date of the order's validation.



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HYBRID SYSTEMS

## THERMOSTAT AND CHRONOTERMOSTAT



MAY 2022 EDITION

Smart remote control

# Hi, Comfort T100 Wi-Fi

NEW









- · Modulating room controls
- Remote interface for boiler
- Remore management through APP

Description	H	L	P
	mm	mm	mm
Hi, Comfort T100 Wi-Fi	89	135	28

Hi, Comfort is the smart and easy solution by Riello to manage your domestic comfort both through the traditional wall control and the new app Hi, Comfort, freely downloadable for iOS and Android systems, that permits to easy control the boiler and the temperature inside the house, making a fantastic user experience for end user a real thing. Hi, Comfort app, in fact, meets and respect all the standards that current market requires in terms of simplicity of usage, wide compatibility and highest security.

Hi, Comfort is available for OT connection to better exploit modulation capability of the boiler (reaching A+ standard, according to EU Delegated Regulation No. 811/2013) or with On/Off to reach maximum simplicity.

It is possible to control up to 8 heating zones, each one controlled by its own Hi, Comfort to independently set temperature and time windows

Installing Hi, Comfort is easy and in case of replacement of an old thermostat no renovation of the electric wiring is required. Hi, Comfort is powered by batteries, thus allowing a truly wireless installation: Hi, Comfort can be installed anywhere in the house and connected to the boiler through Hi, Comfort G100–W or radio base station Hi, Comfort G100–R. All procedures that with a traditional thermostat might look complicated, such as daily/weekly programming, are now easily within everyone's means thanks to touch screen technology.

### TECHNICAL DATA

Description	Notes	Code
Hi, Comfort T100 Wi-Fi		20193354
Hi, Comfort T100		20193352
Hi, Comfort G100-W		20193355
Hi, Comfort G100-R		20193356
ITRF11 interface board	(1)	20164477

(1) Only for "old model" Family Condens.

#### **RANGE DESCRIPTION**

Drawing	Description	Code
A COURT OF THE COU	Hi, Comfort T100 Wi-Fi Complete KIT for wi-fi installation, containing a room control Hi, Comfort T100 and gateway Hi, Comfort G100-W. Package includes batteries, wires, transformer, screws, anchors, double-sided tape, magnetic tape and technical instructions.  Class-ErP grant: VI-4% (*); I-1% (**).	20193354
20.8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Hi, Comfort T100 Room thermostat Hi, Comfort T100 ideal for replacement and new buildings, both for single zone and for multi-zones application. Hi, Comfort T100 can be connected to the internet coupled with Hi, Comfort G100-W (optional). Package includes batteries, screws, anchors, double-sided tape and technical instructions.  Class-ErP grant: V-3% (*); I-1% (**).	20193352
N. Combri	Hi, Comfort G100-W Hi, Comfort G100-W is the device permitting internet connection through domestic Wi-Fi net. It allows as well OT connection with the boiler for remote advanced control. Package includes wires, transformer, double-sided tape.	20193355
N. Conduct	Hi, Comfort G100-R Radio-frequency based device allowing wireless connection of control Hi, Comfort T100 to the boiler (both ON/OFF and through OTBus). It can be used as well when weakness of Wi-Fi signal preclude to install Hi, Comfort G100-W close to the boiler.	20193356
	ITRF11 interface board (Only for Family Condens "former version"). To be used according to the kind of boiler (consult dedicated section) in OTBus operation. For operation in ON/OFF mode it is not required.	20164477

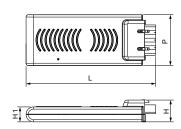
<sup>(\*)</sup> With connection via OTBus. (\*\*) In on/off connection.

Smart key

# Hi, Comfort K100







- Remote control
- Updated App
- Easy to install

Description	H	H1	L	P
	mm	mm	mm	mm
Hi, Comfort K100	14.6	10	86.8	34

Smart Key Hi, Comfort K100 permits to make boilers smart without necessarily changing your thermostat, for the highest installation easiness: its plug&play installation and guided commissioning permit to be operative quickly.

With Hi, Comfort K100 it is possible to control remotely the boiler, set parameters and reduce consumptions avoiding useless heating hours. New Hi, Comfort App is enriched with newly developed functions to grant a great online experience for end-users, like baby function that set a maximum of DHW temperature supplied by shower. Hi, comfort K100 requires a ModBus connection in the boiler.

#### **TECHNICAL DATA**

	Description	Code
Hi, Comfort K100		20168501

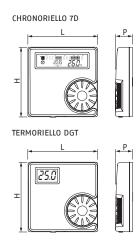
NOTE: available from the second quarter of 2022.



#### Thermostats and chronostats

## ChronoRiello





• The ChronoRiello are digital programmable thermostats for programming both daily and weekly temperature, in heating mode and allow optimal management of the system

Description	H mm	L mm	P mm
TERMORIELLO DGT	86	86	20
TERMORIELLO DGT WIRELESS	86	86	20
CHRONORIELLO 7D	86	86	20
CHRONORIELLO 7D WIRELESS	86	86	20

#### **TERMORIELLO DGT**

Room thermostat with digital display.

### TERMORIELLO DGT WIRELESS

Room thermostat with digital display.

Digital weekly programmable thermostat. Three selectable temperature levels (Comfort-Economy-Antifreeze).

Personalized weekly programming. Cooling function (it is necessary for this function to install an external separation relay). Party function (always warm up request and programmed time slots ignored). Daily band with time division in 60 minute

#### **CHRONORIELLO 7D WIRELESS**

Digital weekly chronothermostat digital display in radio frequency.

Digital weekly programmable thermostat. Three selectable temperature levels (Comfort-Economy-Antifreeze).

Personalized weekly programming. Party function (heating request always active at programmed time slots ignored). Daily band with time division in 60 minute segments.

- Simplicity of installation
- Ease of use
- Temperature selection knob on thermostat front
- Calibration probe on all models
- Series batteries on all models
- The wireless models work in radio frequency allowing the connection to the boiler without the use of electric cables
- On / off hysteresis can be calibrated on all models.

#### **TECHNICAL DATA**

	·	
Description	Туре	Code
TERMORIELLO DGT	Thermostat	20059640
TERMORIELLO DGT WIRELESS	Radio frequency thermostat	20063871
CHRONORIELLO 7D	Weekly programmable thermostat	20063873
CHRONORIELLO 7D WIRELESS	Digital weekly chronothermostat digital display in radio frequency	20101747

# **HEAT-EXCHANGERS**



Plate heat-exchanger

# Riello HEATgate



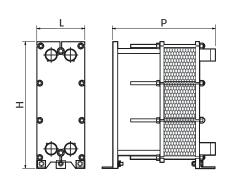


 Plate heat-exchangers for heat generators, heat pumps and solar applications

Description	Plates Nr.	Н	L	P
	from - to	mm	mm	mm
SP 20	11 - 29	470	200	252
	41 - 49	470	200	352
	17 - 27	755	200	251
SP 30	37	755	200	351
	53 - 69	755	200	552
CD OF	25 - 39	950	400	408
	45 - 65	950	400	548
SP 35	75 - 93	950	400	688
	105 - 121	950	400	918
	19 - 35	819	310	418
CD / O	47 - 67	819	310	558
SP 40	75 - 99	819	310	718
	111 - 145	819	310	948
CD 60	43 - 101	1124	530	775
SP 60	117 - 167	1124	530	1275

RIELLO HEATgate is a range of inspectable plates heat-exchangers created by RIELLO to suit as many applications as possible. Its technical features make it a high-quality, long-lasting product, while ensuring the highest efficiency and reliability during the

. The RIELLO HEATgate range consists of heat-exchangers with plates made of stainless steel AISI316, NBR or EPDM peroxide gaskets (according to the application), and is equipped with threaded couplings made of AISI316.

The heat-exchanger structure ensure tightness up to 10 bars. The different sizes perfectly meet the thermal programmes and applications shown in the table, thus ensuring high efficiency and reduced pressure drops. Ease of maintenance thanks to the quality of materials.

#### **TECHNICAL DATA**

Description	Plates	DN	MIX (*)	Weight	Kit ty	ype (**)	Code
	Nr.		%	kg	Insulation	Feet	
HEAT-EXCHANGER AISI 316 L, WITH EP	DM PEROXIDE GASK	ETS FOR SOLAR	APPLICATION				
P 20 - DN32 29 (29A) E	29	DN32	100	33	KIT C1	KIT P1	20016729
SP 20 - DN32 41 (41A) E	41	DN32	100	37	KIT C2	KIT P1	20016730
SP 30 - DN32 17 (17A) E	17	DN32	100	46	KIT C3	KIT P1	20016734
SP 30 - DN32 27 (27A) E	27	DN32	100	51	KIT C3	KIT P1	2001673
SP 30 - DN32 37 (37A) E	37	DN32	100	57	KIT C4	KIT P1	20016736
SP 30 - DN32 53 (53A) E	53	DN32	100	66	KIT C5	KIT P1	20016738
SP 30 - DN32 69 (69A) E	69	DN32	100	73	KIT C5	KIT P1	20016739
SP 40 - DN65 23 (10A) E	23	DN65	45	108	KIT C6	KIT P2	20016731
SP 40 - DN65 29 (13A) E	29	DN65	45	112	KIT C6	KIT P2	20016732
SP 40 - DN65 33 (15A) E	33	DN65	45	114	KIT C6	KIT P2	20016733
PLATE HEAT-EXCHANGER AISI 316 L, W	ITH NBR GASKETS						
SP 20 - DN32 11 (11A) N	11	DN32	100	28	KIT C1	KIT P1	20016741
SP 20 - DN32 21 (21A) N	21	DN32	100	30	KIT C1	KIT P1	20016742
SP 20 - DN32 29 (29A) N	29	DN32	100	33	KIT C1	KIT P1	20014216
SP 20 - DN32 41 (41A) N	41	DN32	100	37	KIT C2	KIT P1	20014217
SP 20 - DN32 49 (49A) N	49	DN32	100	39	KIT C2	KIT P1	20014240
SP 35 - DN50 25 (25A) N	25	DN50	100	89	KIT C17	KIT P2	20140410
SP 35 - DN50 31 (31A) N	31	DN50	100	92	KIT C17	KIT P2	20140411
SP 35 - DN50 35 (35A) N	35	DN50	100	94	KIT C17	KIT P2	20140412
SP 35 - DN50 39 (39A) N	39	DN50	100	96	KIT C17	KIT P2	20140413
SP 35 - DN50 45 (45A) N	45	DN50	100	103	KIT C18	KIT P2	20140414
SP 35 - DN50 49 (49A) N	49	DN50	100	105	KIT C18	KIT P2	20140415
SP 35 - DN50 57 (57A) N	57	DN50	100	109	KIT C18	KIT P2	20140416
SP 35 - DN50 65 (65A) N	65	DN50	100	113	KIT C18	KIT P2	20140418
SP 35 - DN50 75 (75A) N	75	DN50	100	122	KIT C19	KIT P2	20140419
SP 35 - DN50 81 (81A) N	81	DN50	100	125	KIT C19	KIT P2	20140420
SP 35 - DN50 93 (93A) N SP 35 - DN50 105 (105A) N	93	DN50	100	131	KIT C19	KIT P2	2014042
· , ,	105	DN50	100	143	KIT C20	KIT P2	20140423
SP 35 - DN50 121 (121A) N	121	DN50	100	151	KIT C20	KIT P2	20140424
SP 40 - DN65 19 (19A) N	19	DN65	100	105	KIT C6	KIT P2	20014230
SP 40 - DN65 23 (23A) N	23	DN65	100	108	KIT C6	KIT P2	20014218
SP 40 - DN65 27 (27A) N	27	DN65	100	111	KIT C6	KIT P2	20014219
SP 40 - DN65 35 (35A) N	35	DN65	100	116	KIT C6	KIT P2	20014235
SP 40 - DN65 47 (47A) N	47	DN65	100	128	KIT C7	KIT P2	20014232
SP 40 - DN65 59 (59A) N	59	DN65	100	136	KIT C7	KIT P2	20014231
SP 40 - DN65 67 (67A) N	67	DN65	100	144	KIT C7	KIT P2	20140425
SP 40 - DN65 75 (75A) N	75	DN65	100	154	KIT C8	KIT P2	20140426
SP 40 - DN65 93 (93A) N	93	DN65	100	166	KIT C8	KIT P2	20140427
SP 40 - DN65 99 (99A) N	99	DN65	100	171	KIT C8	KIT P2	20140428
SP 40 - DN65 111 (111A) N	111	DN65	100	185	KIT C21	KIT P2	20140429
SP 40 - DN65 121 (121A) N	121	DN65	100	192	KIT C21	KIT P2	20140432
SP 40 - DN65 145 (145A) N	145	DN65	100	209	KIT C21	KIT P2	2014043
SP 60 - DN100 51 (51A) N	51	DN100	100	415	KIT C15	KIT P3	2014043
SP 60 - DN100 59 (59A) N	59	DN100	100	427	KIT C15	KIT P3	2014043
SP 60 - DN100 65 (65A) N	65	DN100	100	435	KIT C15	KIT P3	20140438
P 60 - DN100 73 (73A) N	73	DN100	100	447	KIT C15	KIT P3	20140439
SP 60 - DN100 77 (77A) N	77	DN100	100	442	KIT C15	KIT P3	2008324
SP 60 - DN100 85 (85A) N	85	DN100	100	464	KIT C15	KIT P3	2014044
SP 60 - DN100 97 (97A) N	97	DN100	100	471	KIT C15	KIT P3	2008324
SP 60 - DN100 107 (107A) N	107	DN100	100	517	KIT C16	KIT P3	2014044
SP 60 - DN100 117 (117A) N	117	DN100	100	521	KIT C16	KIT P3	20083250
SP 60 - DN100 121 (79A) N	121	DN100	65	527	KIT C16	KIT P3	2003982
SP 60 - DN100 143 (100A) N	143	DN100	70	558	KIT C16	KIT P3	2003982
SP 60 - DN100 167 (109A) N	167	DN100	65	592	KIT C16	KIT P3	20039827

<sup>(\*) %</sup> of high efficiency plates on the total (\*\*) See matching table with insulation kit page 488

#### INSULATION KITS MATCHING TABLE

Thermoformed insulation kits to combine with the heatgate plate heat exchangers for high and low temperature applications.

		0	•	
Description	Insulation kit type	Exchanger type	Maximum plate nr.	Code
Insulation kit SP 20 29	KIT C1	20	29	20096860
Insulation kit SP20 49	KIT C2	20	49	20096862
Insulation kit SP30 29	KIT C3	30	29	20096863
Insulation kit SP30 49	KIT C4	30	49	20096864
Insulation kit SP30 75	KIT C5	30	75	20096865
Insulation kit SP 35 41	KIT C17	35	41	20140442
Insulation kit SP 35 71	KIT C18	35	71	20140443
Insulation kit SP 35 101	KIT C19	35	101	20140444
Insulation kit SP 35 151	KIT C20	35	151	20140445
Insulation kit SP40 41	KIT C6	40	41	20090501
Insulation kit SP40 71	KIT C7	40	71	20096867
Insulation kit SP40 101	KIT C8	40	101	20096868
Insulation kit SP40 151	KIT C21	40	151	20140446
Insulation kit SP60 101	KIT C15	60	101	20096918
Insulation kit SP60 201	KIT C16	60	201	20116198

#### **FEET MATCHING TABLE**

Description	Feet kit	Exchanger type	Code
Ground fixing kit SP 20-30	Kit P1	20-30	20120281
Ground fixing kit SP 35-40	Kit P2	40-45	20120282
Ground fixing kit SP 60	Kit P3	60	20120284

THE MATCHING WITH THE BOILERS LISTED BELOW ARE VALID FOR THE HIGH WATER CONTENT MODELS AND FOR THE ALU PRO POWER BOILERS. CONTACT THE PRE SALES DEPARTMENT FOR THE MATCHING WITH CONDEXA PRO (OLD MODELS), CONDEXA PRO 2 EVO AND CONDEXA PRO 3.

#### **SELECTION TABLE**

#### BOILER ON HIGH TEMPERATURE INSTALLATION

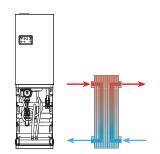
Instal	lation	power
motar	iutioii	POVVCI

kW	Code	Model
115	20014230	SP 40 - DN65 19 (19A) N
150	20014218	SP 40 - DN65 23 (23A) N
225	20014219	SP 40 - DN65 27 (27A) N
300	20014235	SP 40 - DN65 35 (35A) N
350	20014232	SP 40 - DN65 47 (47A) N
450	20014231	SP 40 - DN65 59 (59A) N
525	20014231	SP 40 - DN65 59 (59A) N
600	20140425	SP 40 - DN65 67 (67A) N
700	20140426	SP 40 - DN65 75 (75A) N
750	20140426	SP 40 - DN65 75 (75A) N
800	20140435	SP 60 - DN100 51 (51A) N
900	20140437	SP 60 - DN100 59 (59A) N
1000	20140438	SP 60 - DN100 65 (65A) N
1150	20140439	SP 60 - DN100 73 (73A) N
1250	20083248	SP 60 - DN100 77 (77A) N
1450	20140440	SP 60 - DN100 85 (85A) N

NOTE: check ever the pressure drop

#### Thermal program

	Fluid	IN °C	OUT °C	Head loss (KPa)
Primary	H₂O	80	60	≤ 33
Secondary	H₂O	50	70	≤ 33



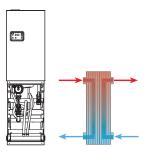
CONDENSING BOILER ON LOW TEMPERATURE INSTALLATION

#### Installation power

kW	Code	Model
35	20016742	SP 20 - DN32 21 (21A) N
75	20014217	SP 20 - DN32 41 (41A) N
100	20014240	SP 20 - DN32 49 (49A) N
115	20140411	SP 35 - DN50 31 (31A) N
150	20140413	SP 35 - DN50 39 (39A) N
180	20140415	SP 35 - DN50 49 (49A) N
225	20140416	SP 35 - DN50 57 (57A) N
300	20014231	SP 40 - DN65 59 (59A) N
350	20140425	SP 40 - DN65 67 (67A) N
375	20140426	SP 40 - DN65 75 (75A) N
450	20140427	SP 40 - DN65 93 (93A) N
525	20140429	SP 40 - DN65 111 (111A) N
600	20140433	SP 40 - DN65 145 (145A) N

#### Thermal program

	Fluid	IN °C	OUT °C	Head loss (KPa)
Primary	H₂0	60	40	≤10
Secondary	H₂0	30	40	≤ 31



NOTE: check ever the pressure drop

#### SOLAR THERMAL WITH SWIMMING POOL

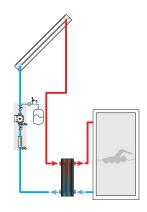
#### Installation power

kW	Code	Model
20	20016729	SP 20 - DN32 29 (29A) E
35	20016730	SP 20 - DN32 41 (41A) E
50	20016731	SP 40 - DN65 23 (10A) E
75	20016732	SP 40 - DN65 29 (13A) E
100	20016733	SP 40 - DN65 33 (15A) E

NOTE: check ever the pressure drop

#### Thermal program

	Fluid	IN °C	OUT °C	Head loss (KPa)
Primary	Glyc. 30%	55	35	≤ 2
Secondary	H <sub>2</sub> O	29	33	≤ 20



#### SOLAR THERMAL WITH PUFFER

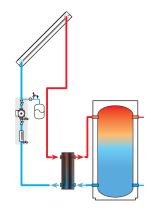
#### Installation power

kW	Code	Model
20	20016734	SP 30 - DN32 17 (17A) E
35	20016735	SP 30 - DN32 27 (27A) E
50	20016736	SP 30 - DN32 37 (37A) E
75	20016738	SP 30 - DN32 53 (53A) E
100	20016739	SP 30 - DN32 69 (69A) E

NOTE: check ever the pressure drop

#### Thermal program

	Fluid	IN °C	OUT °C	Head loss (KPa)
Primary	Glyc. 30%	60	40	≤ 5
Secondary	H₂O	35	55	≤ 5



#### INSTANTANEOUS DHW PRODUCTION

#### Installation power

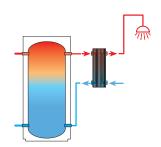
**RIELLO** 

kW	Code	Model
50	20016734	SP 30 - DN32 17 (17A) E
75	20016735	SP 30 - DN32 27 (27A) E
115	20016736	SP 30 - DN32 37 (37A) E
130	20014230	SP 40 - DN65 19 (19A) N
150	20014218	SP 40 - DN65 23 (23A) N
180	20014219	SP 40 - DN65 27 (27A) N
240	20014235	SP 40 - DN65 35 (35A) N
350	20014232	SP 40 - DN65 47 (47A) N
450	20140425	SP 40 - DN65 67 (67A) N
525	20140427	SP 40 - DN65 93 (93A) N
600	20140429	SP 40 - DN65 111 (111A) N

NOTE: check ever the pressure drop

#### Thermal program

	Fluid	IN °C	OUT °C	Head loss (KPa)
Primary	H <sub>2</sub> O	50	30	≤20
Secondary	H₂0	10	43	≤ 20



## WATER CIRCULATORS

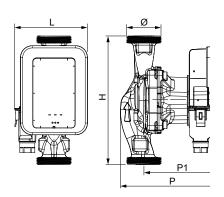


		SINGLE PUM	P	DOUBLE PUM	Р
ED		RELID	VEGA RMXA-RMYA 4,1-7,6 H <sub>MAX</sub> (mca)		
SPE	ONIC	_	page 492		
VARIABLE SPEED	ELECTRONIC		VEGA RSHE	7	VEGA RTHE
VAR	ш		7,4–13,5 H <sub>MAX</sub> (mca)		7,6–13,0 H <sub>MAX</sub> (mca)
			page 495		page 505

**TERMINAL UNITS** 







Water circulators



- Domestic electronic single pump
- ErP ready

Description	H mm	H1 mm	L mm	P mm	P1 mm	ø mm	Net weight kg
VEGA RMXA 25-40	180	76.3	101.9	128.6	94.6	Rp 1"	2,0
VEGA RMXA 25-60	180	76.3	101.9	128.6	94.6	Rp 1"	2,0
VEGA RMXA 32-40	180	76.3	101.9	140.3	106.3	Rp 1" 1/4	2,3
VegA RMXA 32-60	180	76.3	101.9	140.3	106.3	Rp 1" 1/4	2,3
VegA RMXA 32-80	180	76.3	101.9	140.3	106.3	Rp 1" 1/4	2,5
VegA RMYA 25-40	130	76.3	101.9	128.6	94.6	Rp 1"	2,0
VegA RMYA 25-60	130	76.3	101.9	128.6	94.6	Rp 1"	2,0
VegA RMYA 25-80	130	76.3	101.9	128.6	94.6	Rp 1"	2,2

High efficiency single glandless circulators, ideal for domestic systems, capable of ensuring high performances and energetic saving thanks both to the self-protected motor with ECM technology and the integrated electronic control able to adapt the operation in funcion of the system requirements.

Able to operate at different speeds (min,med,max) with three different operating modes: constant differential pressure, variable differential pressure, constant speed.

#### Features:

- Low energetic consumptions
- Silent operation
- Three different operating modes: n=cost,  $\Delta p$ -c,  $\Delta p$ -v
- Extremely compact dimensions thanks to the electrical connector positioned laterally
- Ease of regulation: with a single regulation button performance is determined according to the needs of the installation
- Thread connections

#### Operating limits

- Max operating pressure: 6 bar
- Operating temperature: from -10°C up to 95°C
- Protection degree: IP X2D

#### **TECHNICAL DATA**

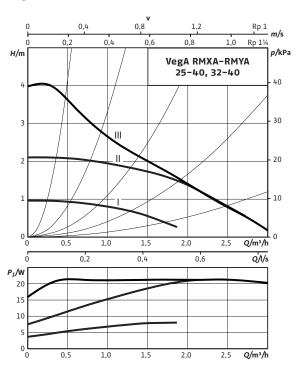
Description	Volume flow rate Q <sub>max</sub> m³/h	Nominal pressure bar	Hydraulic head H <sub>max</sub> mca	Code
VegA RMXA 25-40	3.0	6.0	4.1	20188521
VegA RMXA 25-60	3.0	6.0	6.0	20188522
VegA RMXA 32-40	3.0	6.0	4.1	20188523
VegA RMXA 32-60	3.0	6.0	6.0	20188524
VegA RMXA 32-80	4.3	6.0	7.6	20188525
VegA RMYA 25-40	3.0	6.0	4.1	20188507
VegA RMYA 25-60	3.0	6.0	6.0	20188517
VegA RMYA 25-80	4.3	6.0	7.6	20188520

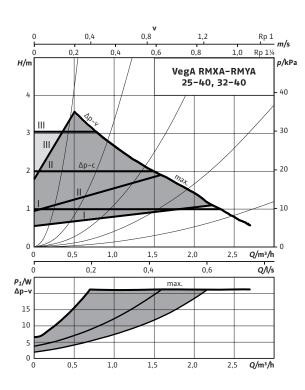
#### **ACCESSORIES**

Description	Code
BCT 25 pipe connection (DN25)	4322904
BCT 32 pipe connection (DN32)	4322906

### **HYDRAULIC PERFORMANCES**

VegA RMXA- RMYA 25-40 VegA RMXA 32-40

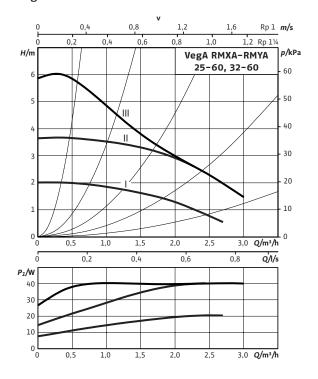




**TERMINAL UNITS** 

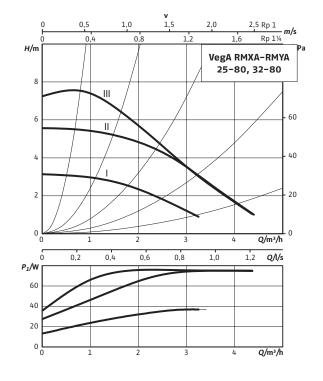
#### VegA RMXA-RMYA 25-60 VegA RMXA 32-60

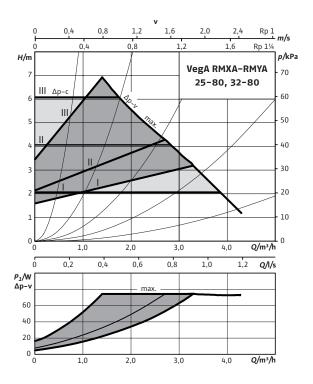
**RIELLO** 



#### 0,6 1,2 Rp 11/4 H/m p/kPa VegA RMXA-RMYA 25-60, 32-60 50 40 30 20 10 - 0 0,5 1,0 1,5 2,0 2,5 3,0 **Q/m³/h** 0 0,2 0,4 0,8 Q/I/s 0,6 may 30 20 1,0 1,5 2,0 2,5 3,0 **Q/m³/h**

#### VegA RMXA-RMYA 32-80





Water circulators

# **VegA RSHE**





<ul><li>Electronic single pumps</li><li>ErP ready</li></ul>								
Description	H mm	H1 mm	H2 mm	L mm	P mm	P1 mm	Ø mm	Net weight kg
VegA RSHE 25-60 PN10	180	90	203	102	224	180	Rp 1" ½ (*)	4,5
VegA RSHE 25-70 PN10	180	90	203	102	224	180	Rp 1" ½ (*)	4,5
VegA RSHE 25-90 PN10	180	98	233	128	245	198	Rp 1" ½ (*)	5,3
VegA RSHE 30-60 PN10	180	90	203	102	224	180	Rp 2" (*)	4,6
VegA RSHE 30-70 PN10	180	90	203	102	224	180	Rp 2" (*)	4,6
VegA RSHE 30-90 PN10	180	98	233	128	245	198	Rp 2" (*)	5,4
VegA RSHE 32-70 PN6/10	220	98	233	128	255	207	DN32-PN6/10	11
VegA RSHE 40-30 PN6/10	220	90	223	102	232	175	DN40-PN6/10	8,6
VegA RSHE 40-60 PN6/10	220	98	245	128	249	201	DN40-PN6/10	9,2
VegA RSHE 40-80 PN6/10	250	109	277	142	379	315	DN40-PN6/10	13
VegA RSHE 50-70 PN6/10	280	109	292	142	371	318	DN50-PN6/10	14,2

(\*) NOTE: By means of the thread pipe connections the diameter is reduced from Rp 1" ½ to Rp 1" and from Rp 2" to Rp 1" 1/4.

280

280

340

340

360

109

109

169

169

169

Wet rotor electronic circulators with high-performance motor that ensure high performance and energy savings related to the electronic management system that allows to vary the operating speed of the rotor, ensuring the correct input required by the system. Possibility to select the differential pressure regulation in constant or variable mode or to have the manual selection of the three speeds.

292

292

340

340

360

142

142

174

174

174

318

327

334

329

330

371

384

404

395

414

DN50-PN6/10

DN65-PN6/10

DN65-PN6/10

DN65-PN6/10

DN80-PN10

14,2

16,1

25,8

27,5

30,4

Circulators suitable for all heating, air conditioning and closed refrigeration circuits.

#### Features:

- Low energy consumptions

VegA RSHE 50-80 PN6/10

VegA RSHE 65-80 PN6/10

VegA RSHE 65-90 PN6/10

VegA RSHE 65-110 PN6/10

VegA RSHE 80-90 PN10

- Silent operation
- Easy wiring thanks to the front accessibility to the terminal block
- Pump body material suitable to avoid the corrosion due to the condensate
- LED indicator to set up either the hydraulic head or to display the error codes
- Power supply: 230V, 50/60 Hz

#### Operating limits:

- Max operating pressure: 10 bar
- Temperature range: from 20 °C up to 110 °C
   Protection degree: IP X4D

**TERMINAL UNITS** 

#### **TECHNICAL DATA**

**RIELLO** 

Description	Volume flow rate $Q_{max}$ $m^3/h$	Nominal pressure bar	Maximum hydraulic head H <sub>max</sub> mca	Notes	Code
VegA RSHE 25-60 PN10	8.2	10	7.4		20182746
VegA RSHE 25-70 PN10	9.6	10	10.8		20182765
VegA RSHE 25-90 PN10	11.7	10	12.1	(D)	20182766
VegA RSHE 30-60 PN10	8.2	10	7.4		20182767
VegA RSHE 30-70 PN10	9.6	10	10.8		20182768
VegA RSHE 30-90 PN10	11.7	10	12.1		20182771
VegA RSHE 32-70 PN6/10	13.0	6/10	9.0		20182772
VegA RSHE 40-30 PN6/10	12.7	6/10	5.4		20182773
VegA RSHE 40-60 PN6/10	18.2	6/10	8.5		20182774
VegA RSHE 40-80 PN6/10	24.8	6/10	13.0		20182775
VegA RSHE 50-70 PN6/10	29.0	6/10	10.2		20182776
VegA RSHE 50-80 PN6/10	31.2	6/10	12.8		20182777
VegA RSHE 65-80 PN6/10	32.0	6/10	10.1		20182778
VegA RSHE 65-90 PN6/10	46.2	6/10	11.6		20182779
VegA RSHE 65-110 PN6/10	55.5	6/10	17.1		20182781
VegA RSHE 80-90 PN10	64.0	10	13.5	(D)	20182782

<sup>(</sup>D) Availability of the material at our warehouse: 20 working days after the order validation date.

#### **ACCESSORIES**

Description	Notes	Code				
COUNTER FLANGE KIT						
DN32 PN 6 counter flange	(D)	20158976				
DN40 PN 6 counter flange	(D)	20158977				
DN50 PN 6 counter flange	(D)	20158979				
DN65 PN 6 counter flange	(D)	20158980				
DN80 PN 10/16 counter flange	(D)	20158983				
INTERMEDIATE FLANGE FOR LENGTH COMPENSATION						
DN40 intermediate flange		20158985				
DN50 intermediate flange		20158986				
DN65 intermediate flange		20158987				
PIPE CONNECTIONS						
BCT 25 pipe connection (DN25)		4322904				
BCT 32 pipe connection (DN32)		4322906				
CONNECT MODULE						
Connect module	(1)	20182901				

 $<sup>\</sup>label{lem:condition} A vailability of the \ material \ at our \ warehouse: 7 \ working \ days \ after the \ order \ validation \ date. \\ Order \ one \ for \ each \ circulator.$ 

## ACCESSORIES MATCHING TABLE

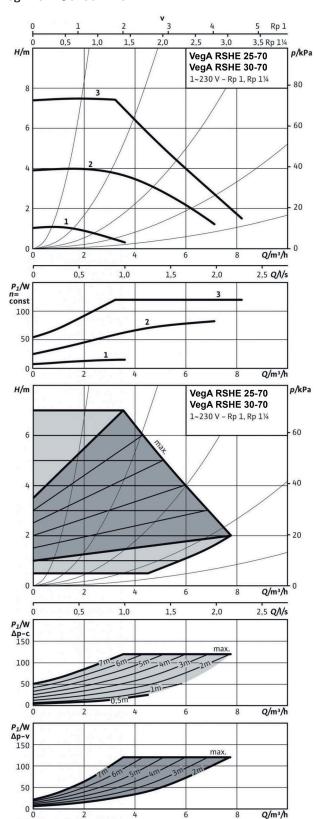
Description	Code	4322904	4322906	20158977	20158979	20158980	20158983
		BCT 25 pipe connection (DN25)	BCT 32 pipe connection (DN32)	DN40 PN6 counter flange	DN50 PN6 counter flange	DN65 PN6 counter flange	DN80 PN10/16 counter flange
VegA RSHE 25-60 PN10	20182746	•					
VegA RSHE 25-70 PN10	20182765	•					
VegA RSHE 25-90 PN10	20182766	•					
VegA RSHE 30-60 PN10	20182767		•				
VegA RSHE 30-70 PN10	20182768		•				
VegA RSHE 30-90 PN10	20182771		•				
VegA RSHE 40-30 PN6/10	20182773			•			
VegA RSHE 40-60 PN6/10	20182774			•			
VegA RSHE 40-80 PN6/10	20182775			•			
VegA RSHE 50-70 PN6/10	20182776				•		
VegA RSHE 50-80 PN6/10	20182777				•		
VegA RSHE 65-80 PN6/10	20182778					•	
VegA RSHE 65-90 PN6/10	20182779					•	
VegA RSHE 65-110 PN6/10	20182781					•	
VegA RSHE 80-90 PN10	20182782						•

**TERMINAL UNITS** 

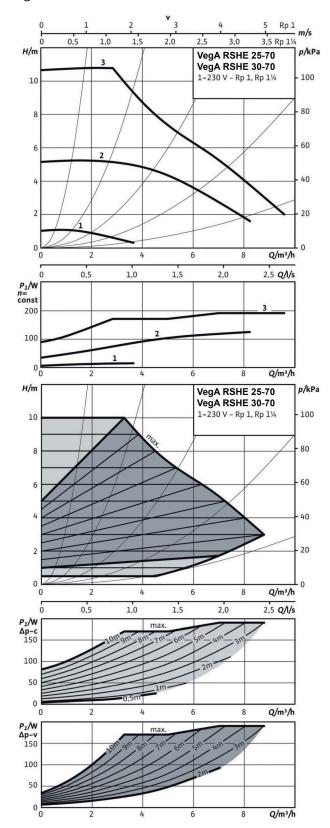
#### **HYDRAULIC PERFORMANCES**

VegA RSHE 25-60 PN10 VegA RSHE 30-60 PN10

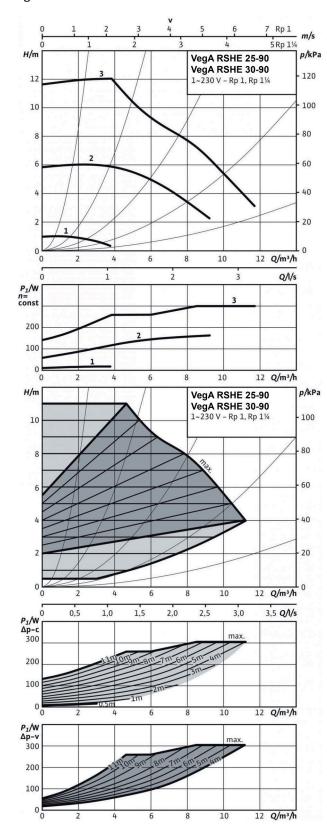
**RIELLO** 



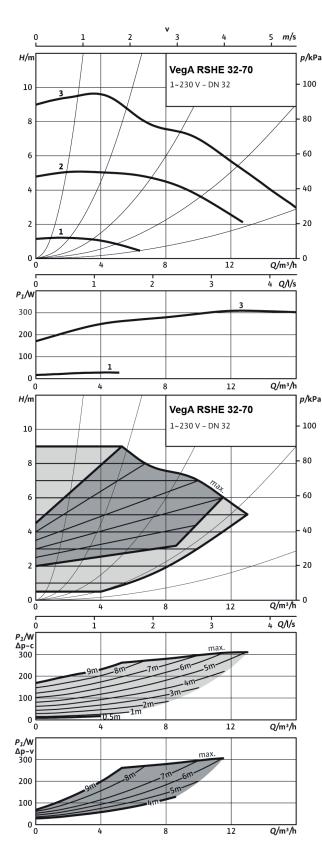
VegA RSHE 25-70 PN10 VegA RSHE 30-70 PN10



#### VegA RSHE 25-90 PN10 VegA RSHE 30-90 PN10



#### VegA RSHE 32-70 PN6/10

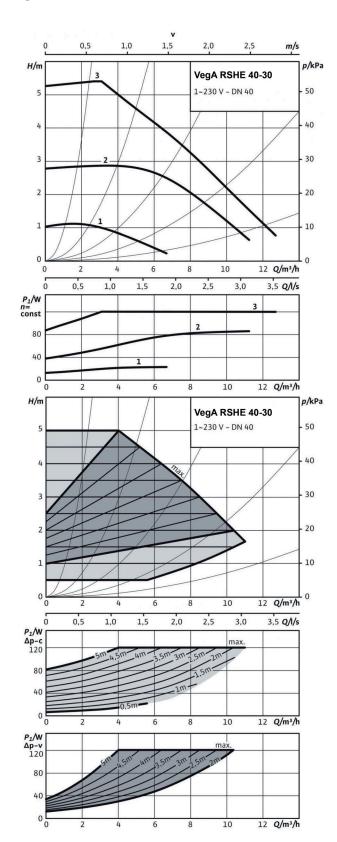


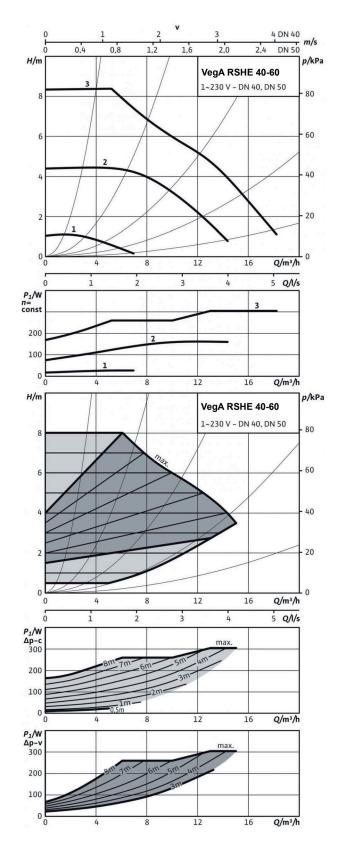
**TERMINAL UNITS** 

#### VegA RSHE 40-30 PN6/10

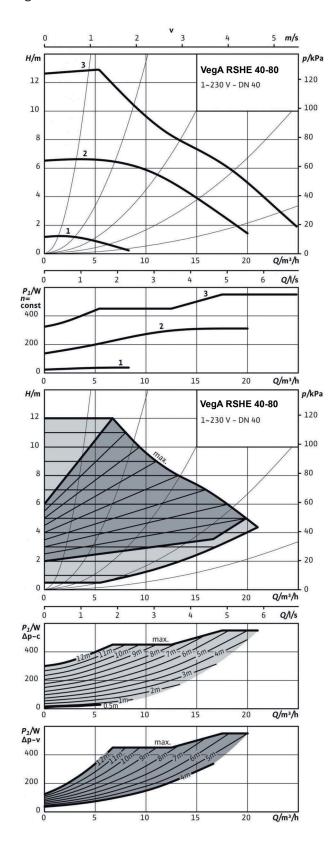
**RIELLO** 

#### VegA RSHE 40-60 PN6/10

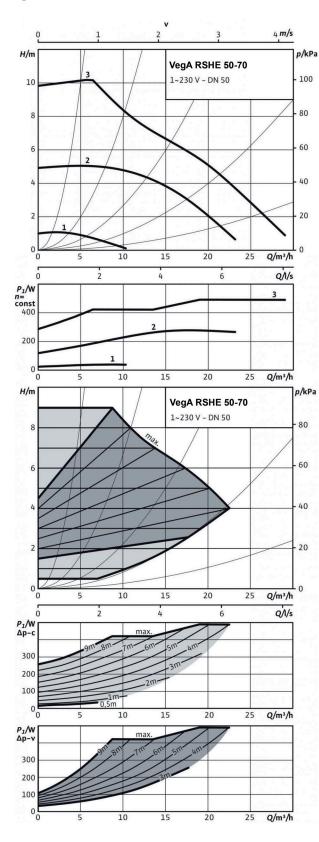




#### VegA RSHE 40-80 PN6/10



#### VegA RSHE 50-70 PN6/10

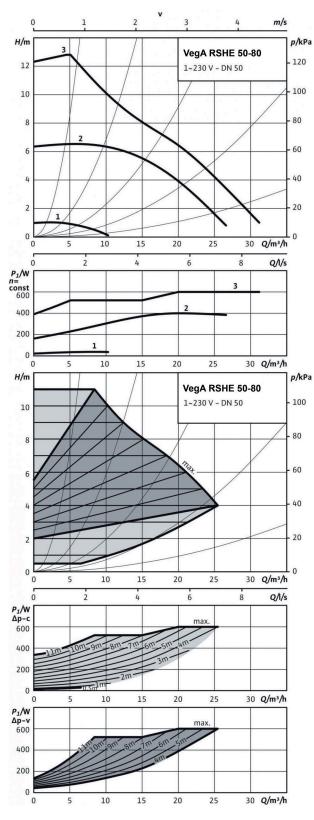


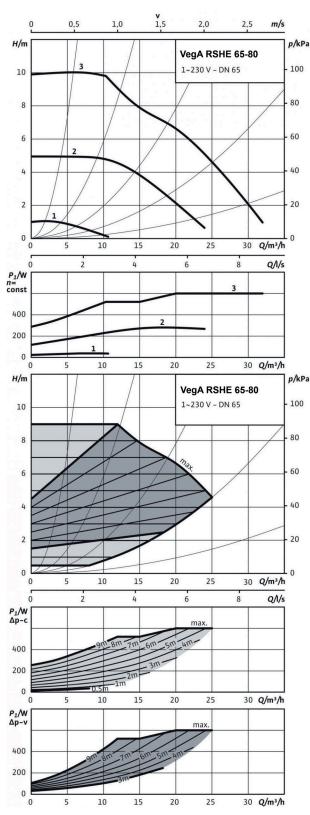
**TERMINAL UNITS** 

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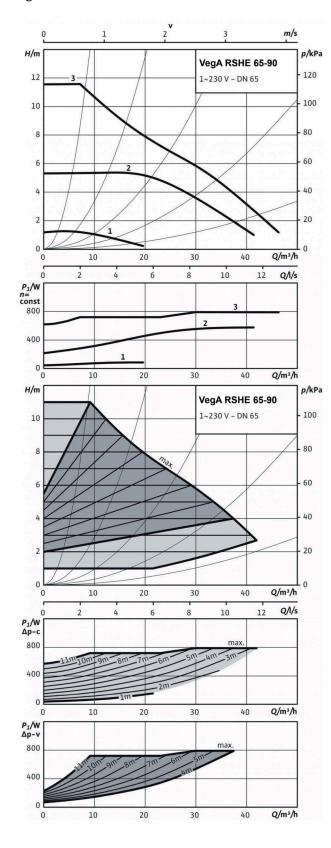
**RIELLO** 

# VegA RSHE 65-80 PN6/10

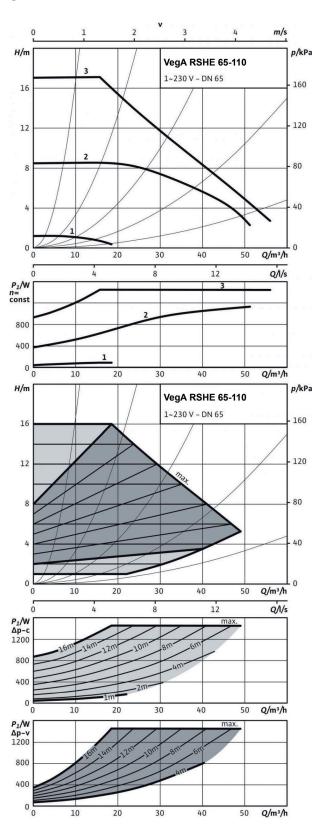




#### VegA RSHE 65-90 PN6/10



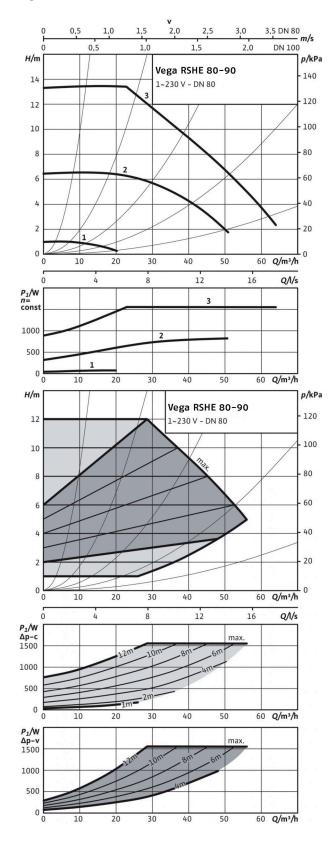
#### VegA RSHE 65-110 PN6/10



**TERMINAL UNITS** 

#### VegA RSHE 80-90 PN10

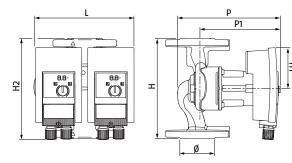
**RIELLO** 



Water circulators

# **VegA RTHE**







- Electronic twin pumps
- ErP ready

Description	H mm	H1 mm	H2 mm	L mm	P mm	P1 mm	ø mm	Net weight kg
VegA RTHE 32-60 PN6/10	220	110	223	231	240	180	DN32-PN6/10	10,4
VegA RTHE 32-80 PN6/10	220	110	245	251	321	364	DN32-PN6/10	17,1
VegA RTHE 40-60 PN6/10	220	110	245	269	330	266	DN40-PN6/10	17,5
VegA RTHE 40-80 PN6/10	250	125	277	302	388	326	DN40-PN6/10	24
VegA RTHE 50-70 PN6/10	280	140	292	310	392	330	DN50-PN6/10	26,4
VegA RTHE 50-80 PN6/10	280	140	292	310	392	330	DN50-PN6/10	26
VegA RTHE 50-110 PN6/10	340	170	340	398	385	315	DN50-PN6/10	47,2
VegA RTHE 65-90 PN6/10	340	170	340	406	422	334	DN65-PN6/10	50,7
VegA RTHE 80-90 PN6	360	170	360	456	439	339	DN80-PN6	56,6
VegA RTHE 80-90 PN10	360	170	360	456	439	339	DN80-PN10	56,6

Wet rotor electronic circulators, twin type, with high-performance motor that ensure high performance and energy savings related to the electronic management system that allows to vary the operating speed of the rotor, ensuring the correct input required by the system. Possibility to select the differential pressure regulation in constant or variable mode or to have the manual selection of the three speeds.

Circulators suitable for all heating, air conditioning and closed refrigeration circuits.

#### Features:

- Low energy consumptions
- Silent operation
- Easy wiring thanks to the front accessibility to the terminal block
- Pump body material suitable to avoid the corrosion due to the condensate
- LED indicator to set up either the hydraulic head or to display the error codes
- Power supply: 230V, 50/60 Hz

#### Operating limits:

- Max operating pressure: 10 bar
- Temperature range: from 20°C up to 110°C
- Protection degree: IP X4D

#### **TECHNICAL DATA**

**RIELLO** 

Description	Volume flow rate $Q_{max}$ $m^3/h$	Nominal pressure bar	Maximum hydraulic head H <sub>max</sub> mca	Notes	Code
VegA RTHE 32-60 PN6/10	7.9	6/10	7.6		20182783
VegA RTHE 32-80 PN6/10	13.3	6/10	9.2	(D)	20182784
VegA RTHE 40-60 PN6/10	17.5	6/10	8.0		20182785
VegA RTHE 40-80 PN6/10	22.0	6/10	12.3		20182786
VegA RTHE 50-70 PN6/10	26.4	6/10	9.6		20182787
VegA RTHE 50-80 PN6/10	26.0	6/10	12.1		20182788
VegA RTHE 50-110 PN6/10	39.0	6/10	16.4	(D)	20182789
VegA RTHE 65-90 PN6/10	43.0	6/10	11.5		20182790
VegA RTHE 80-90 PN6	61.0	6	13.0	(D)	20182791
VegA RTHE 80-90 PN10	61.0	10	13.0	(D)	20182792

<sup>(</sup>D) Availability of the material at our warehouse: 20 working days after the order validation date.

#### **ACCESSORIES**

Description	Notes	Code
COUNTER FLANGE KIT		
DN32 PN 6 counter flange	(D)	20158976
DN40 PN 6 counter flange	(D)	20158977
DN50 PN 6 counter flange	(D)	20158979
DN65 PN 6 counter flange	(D)	20158980
DN80 PN 6 counter flange	(D)	20158981
DN80 PN 10/16 counter flange	(D)	20158983
INTERMEDIATE FLANGE FOR LENGTH COMPENSATION		
DN40 intermediate flange		20158985
DN50 intermediate flange		20158986
DN65 intermediate flange		20158987
CONNECT MODULE		
Connect module	(1)	20182901

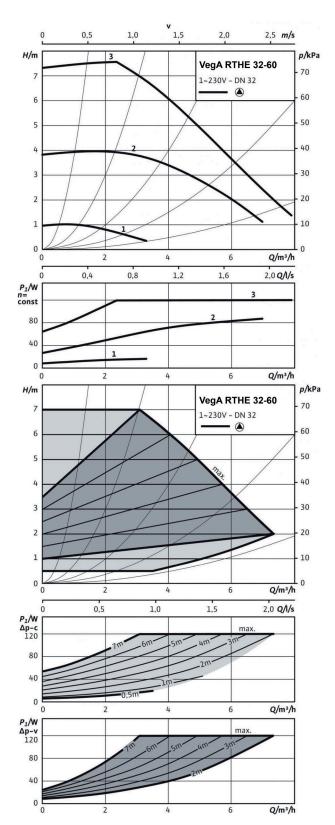
<sup>(</sup>D) Availability of the material at our warehouse: 7 working days after the order validation date. (1) Order one for each circulator.

#### **ACCESSORIES MATCHING TABLE**

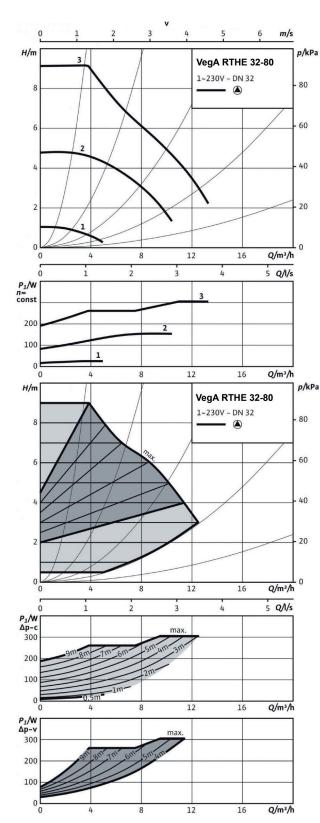
Description	Code	20158976	20158977	20158979	20158980	20158981	20158983
		DN32 PN 6 counter flange	DN40 PN 6 counter flange	DN50 PN 6 counter flange	DN65 PN 6 counter flange	DN80 PN 6 counter flange	DN80 PN 10/16 counter flange
VegA RTHE 32-60 PN6/10	20182783	•					
VegA RTHE 32-80 PN6/10	20182784	•					
VegA RTHE 40-60 PN6/10	20182785		•				
VegA RTHE 40-80 PN6/10	20182786		•				
VegA RTHE 50-70 PN6/10	20182787			•			
VegA RTHE 50-80 PN6/10	20182788			•			
VegA RTHE 50-110 PN6/10	20182789			•			
VegA RTHE 65-90 PN6/10	20182790				•		
VegA RTHE 80-90 PN6	20182791					•	
VegA RTHE 80-90 PN10	20182792						•

#### **HYDRAULIC PERFORMANCES**

#### VegA RTHE 32-60 PN6/10



#### VegA RTHE 32-80 PN6/10

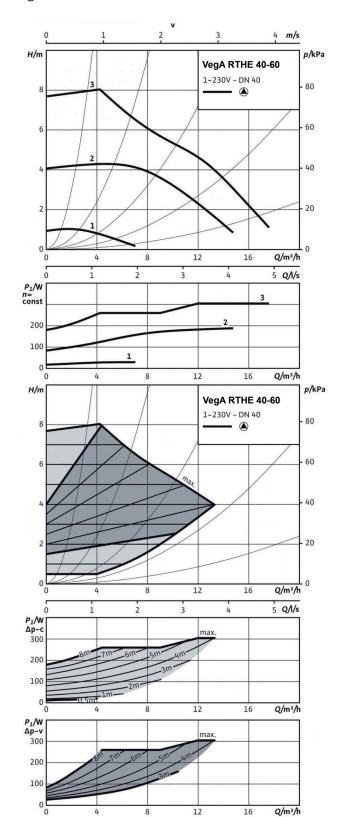


**TERMINAL UNITS** 

#### VegA RTHE 40-60 PN6/10

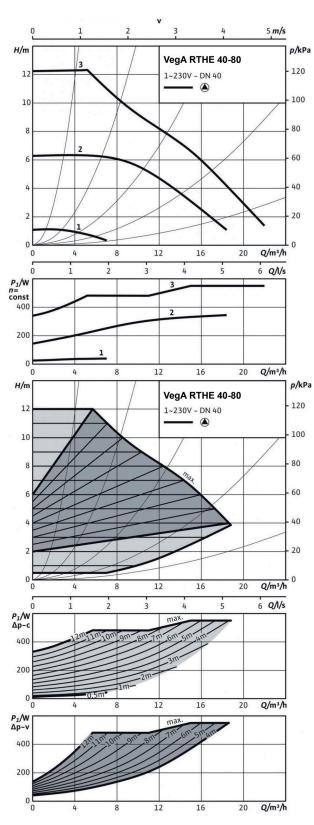
**RIELLO** 

#### VegA RTHE 40-80 PN6/10

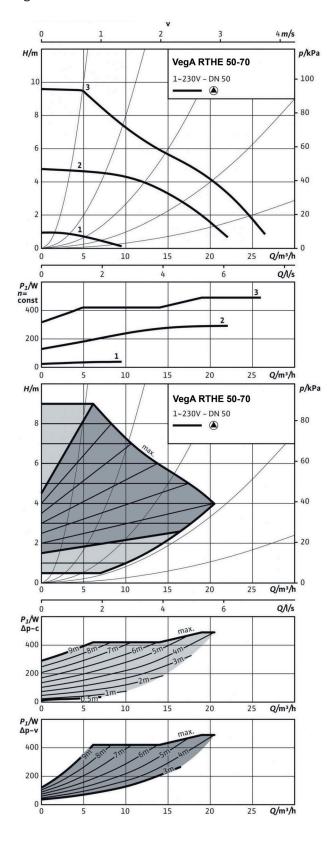


12

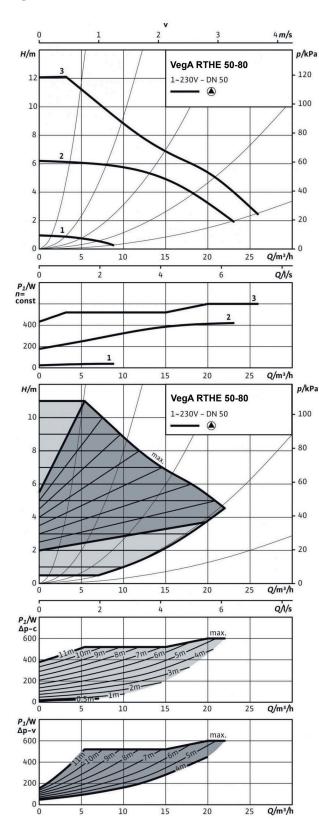
16



#### VegA RTHE 50-70 PN6/10



#### VegA RTHE 50-80 PN6/10

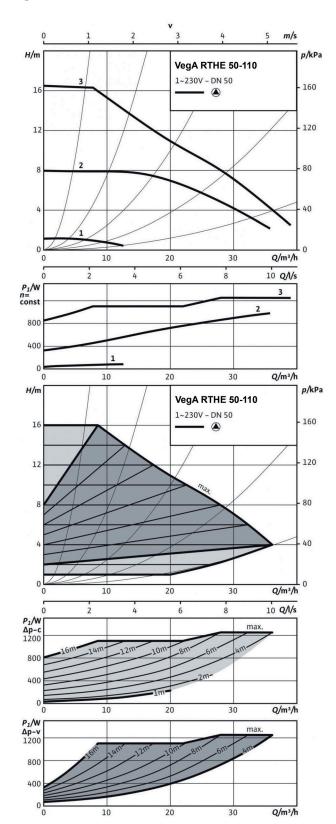


**TERMINAL UNITS** 

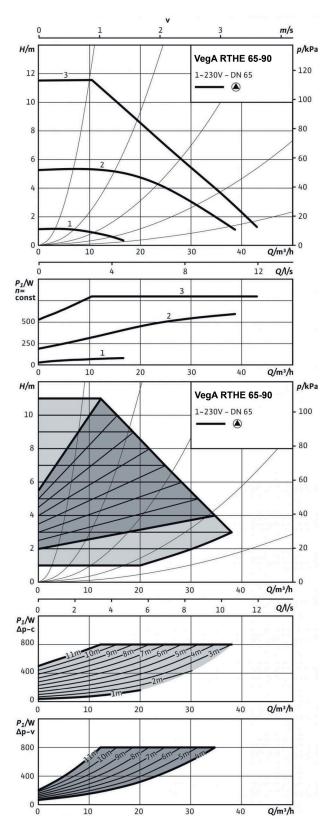
510

#### VegA RTHE 50-110 PN6/10

**RIELLO** 

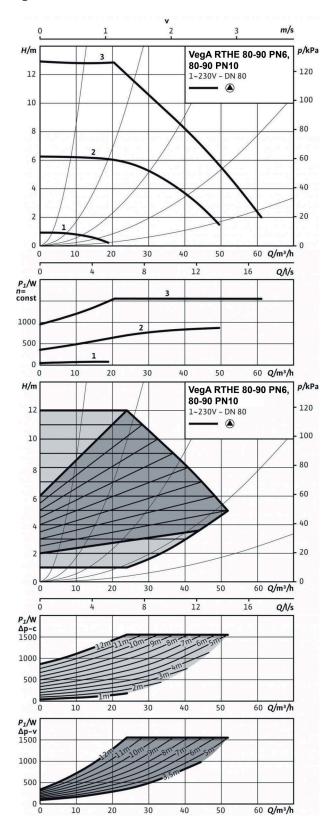


#### VegA RTHE 65-90 PN6/10



MAY 2022 EDITION

#### VegA RTHE 80-90 PN6 VegA RTHE 80-90 PN10





**HOT AIR GENERATORS** 



**GAS HOT AIR GENERATORS** 

515

## **GAS HOT AIR GENERATORS**



#### INTERNAL

GAS HOT AIR GENERATORS

#### **GP CONDENS**

GP CONDENS 30 (28 kW-3200 m³/h)\*
GP CONDENS 40 (37 kW-4400 m³/h)\*
GP CONDENS 50 (48 kW-5500 m³/h)\*
GP CONDENS 60 (57 kW-6500 m³/h)\*
GP CONDENS 90 (89 kW-10000 m³/h)\*
GP CONDENS 120 (115 kW-13000 m³/h)\*

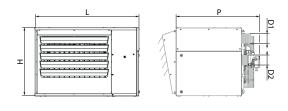
page 516

(\*) Max useful power at 80-60 °C

High efficiency indoor gas hot air generators

# **GP Condens**







- Wall-mounted gas hot air generators, premixed, high efficiency
- Up to 106% efficiency
- Axial fans

Description	H mm	L mm	P mm	D1 (*) mm	D2 (*) mm	Net weight kg
GP CONDENS 30	885	560	580	80	80	65
GP CONDENS 40	885	560	580	80	80	75
GP CONDENS 50	1225	610	650	80	80	90
GP CONDENS 60	1225	610	650	80	80	95
GP CONDENS 90	1775	710	800	100	100	205
GP CONDENS 120	1775	710	800	100	100	215

(\*) Female.

GP Condens is the new wall-mounted gas hot air generator for the direct, diffusion, condensing pre-mixed, designed specifically to attain a high performance. The heat exchanger, made entirely out of stainless steel, provide the best possible performances and make inspection easy for normal cleaning and maintenance operations.

On the inside there is a multi-function electronic board that handles the burner's ignition operations, the flame monitoring and the overall

The new remote control panel allows you to display and set the main operating parameters of the machine, carry out the hourly programming and manage installations in cascade up to 10 generators.

- Range composed of 6 models with an output of 10 to 116 kW.
- Condensate drain kit as standard.
- Possibility of fastening to the wall or the roof (new).
- Possibility of managing up to 10 GP Condens in cascade.
- Indoor and outdoor temperature probe (available as accessories) for a more efficient ambient temperature measurement.
- Wide range of accessories for flue gases discharge and suction.
- Ideal for the heating of industrial, commercial, sports areas etc.

#### **TECHNICAL DATA**

Description		output W		e output :W	Air output m³/h		ciency (*) %	Notes	Code
	min	max	min	max	nominal	min	max		
GP CONDENS 30	10	28	9.4	29.1	3.200	106.5%	96.1%	(1)	20139254
GP CONDENS 40	14	37	13.3	38.5	4.400	105.1%	96.1%	(1)	20139258
GP CONDENS 50	19	48	18.4	49.8	5.500	103.2%	96.4%	(1)	20139259
GP CONDENS 60	21	57	20	59	6.500	105.1%	96.6%	(1)	20139260
GP CONDENS 90	35	89	33.3	90.8	10.000	105.2%	98.0%	(1)	20139261
GP CONDENS 120	43	115	40.6	116	13.000	106.0%	99.1%	(1)	20139262

- With reference to Net Calorific Value (Hi) with recovery of the latent vaporisation heat.
- GP Condens is combined with the remote control panel code 20139270. For cascade operation one panel is sufficient for up to a maximum of 10 heater units in

The gas heaters are set up to operate with methane gas and can be converted to LPg with the relative kit supplied.

The accessories for the flue gas exhaust and the air intake are not included in the supply and need to be ordered separately choosing from those on page 517.

#### **ACCESSORIES**

Description	Destination	Code
ASSEMBLY ACCESSORIES		
GP Condens 30-40 shelf	GP Condens 30-40	20032159
GP Condens 50–120 shelf	GP Condens 50-120	20139265
Remote room sensor	GP Condens	20032160
Outdoor air temperature sensor	GP Condens	20139267
Remote control panel	GP Condens	20139270
Suspended GP Condens	GP Condens	20139273

#### FLUE GAS EXHAUST/SUCTION LINE ACCESSORIES

Drawing	Description	Code
CONCENTRIC SYSTEM		
3 S S S S S S S S S S S S S S S S S S S	100/100 concentric on wall	20032161
125 - 81 8 8	Fitting Ø80/100	20139281
200 E	100/100 concentric on roof	20139288
DOUBLE SYSTEM		
500	Discharge/suction pipe Ø80 x 500 mm	20139278
142 - 9 8	Terminal Ø80	20139279
142   81   61	Terminal Ø100	20139280
175 S	Bend Ø80	20139283
1000	Discharge/suction pipe Ø80 x 1000 mm	20139285
g g	Bend Ø80	20139287
15A	Roof terminal Ø80	20139289
1000	Discharge/suction pipe Ø100 x 1000 mm	4155552
500	Discharge/suction pipe Ø100 x 500 mm	4155554
g g	Bend Ø100	4155556

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Drawing	Description	Code
9	Bend Ø100	4155558
194 9 9	Roof terminal Ø100	4155564

### INSTALLATION DIAGRAMS FLUE GAS EXHAUST/SUCTION

Description													
	20139278	20139279	4155554	20139280	20139281	20032161	20139278	20139279	4155554	20139280			
		Flue gas	discharge		Flue gas e suction o	xhaust/air oncentric	Double flue gas exhaust/air suction						
GP CONDENS 30	•	•			•	•	•	•					
P CONDENS 40	•	•			•	•	•	•					
P CONDENS 50	•	•			•	•	•	•					
GP CONDENS 60	•	•			•	•	•	•					
GP CONDENS 90			•	•		•			•	•			
GP CONDENS 120			•	•		•			•	•			

FRONT WALL PIPES																								
Description																								
	20139283	20139278	20139285	20139279	4155556	4155554	4155552	20139280	20139283	20139278	20139285	20139281	20032161	4155556	4155554	4155552	20139283	20139278	20139285	20139279	4155556	4155554	4155552	20139280
			Flue	gas	disch	arge			Flue gas exhaust/air suction concentric						Double flue gas exhaust/air suction						ion			
GP CONDENS 30	•	•	•	•					•	•	•	•	•				•	•	•	•				
GP CONDENS 40	•	•	•	•					•	•	•	•	•				•	•	•	•				
GP CONDENS 50	•	•	•	•					•	•	•	•	•				•	•	•	•				
GP CONDENS 60	•	•	•	•					•	•	•	•	•				•	•	•	•				
GP CONDENS 90					•	•	•	•	•	•			•	•	•	•					•	•	•	•
GP CONDENS 120					•	•	•	•	•	•			•	•	•	•					•	•	•	•

PIPES ON ROOF																			
Description																			
	20139283	20139287	20139278	20139285	20139281	20139288	4155556	4155558	4155554	4155552	20139288	20139283	20139278	20139285	20139289	4155556	4155554	4155552	4155564
			Flue	gas e	xhaus	t/air sı	ıction	conce	ntric					Flu	ie gas	discha	rge		
GP CONDENS 30	•	•	•	•	•	•						•	•	•	•				
GP CONDENS 40	•	•	•	•	•	•						•	•	•	•				
GP CONDENS 50	•	•	•	•	•	•						•	•	•	•				
GP CONDENS 60	•	•	•	•	•	•						•	•	•	•				
GP CONDENS 90							•	•	•	•	•					•	•	•	•
GP CONDENS 120							•	•	•	•	•					•	•	•	•

# Certificate

Standard ISO 9001:2015

Certificate Registr. No. 01 100 1917589

Certificate Holder: RIELLO S.p.A

VIA INGEGNER PILADE RIELLO, 7

37045 Legnago (VR)

Italy

Scope:

Design, manufacture and service of: burners for residential heating and for commercial and industrial application; wall hung boilers and water heaters; units, floor-standing boilers and heating systems; solar collectors and solar boilers. Sales and assistance ofits own brand traded products for heating; products for conditioningand cooling, products for cogeneration and trigeneration; system accessories; spare parts and accessories; moduls, solar inverterand structures for photovoltaic systems.

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity: The certificate is valid from 2019-12-11 until 2022-12-10.

Certified by other CB from 1992.12.11 to 2019.12.11

2020-01-14







TÜV Rheinland Cert GmbH Am Grauen Stein 51105 Köln



NOTE	

MAY 2022 EDITION 521



NOTE		

522 MAY 2022 EDITION

WORLDWIDE LEADER IN COMBUSTION TECHNOLOGY AND REFERENCE PLAYER IN THE HVAC SECTOR



6

**PRODUCTION SITES** 

+1.700

EMPLOYEES\*

RESEARCH & DEVELOPMENT CENTERS

<del>1</del>120

**SALES COUNTRIES** 



RIELLO S.p.A. 37045 Legnago (VR) tel. +39 0442 6<u>30111</u>





www.riello.com



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