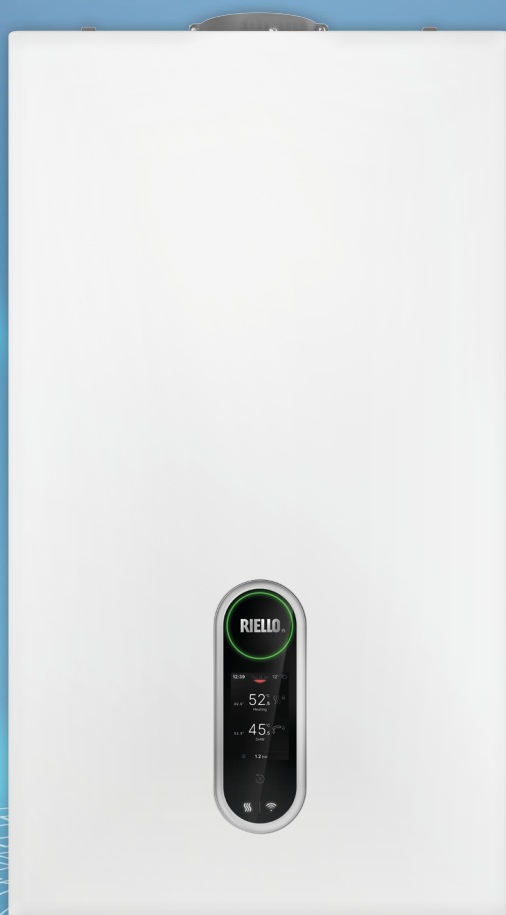


FAMILY HM FAMILY HM CONNECT

THE BEST OF RIELLO TECHNOLOGY,
IN AN ICONIC DESIGN

wall-hung condensing boilers



RIELLO
Energy For Life

www.riello.com

FAMILY HM and FAMILY HM CONNECT

RIELLO INTRODUCES FAMILY HM AND FAMILY HM CONNECT, THE WALL-HUNG CONDENSING BOILERS PROVIDING THE HIGHEST LEVELS OF COMFORT AND EFFICIENCY IN ITS OFFERING. FAMILY HM CONNECT MODELS ARE EQUIPPED AS STANDARD WITH THE ADVANCED HI, COMFORT T300 SMART CONTROL.

There are numerous **technological innovations** compared with the previous FAMILY range, developed in the pursuit of **energy saving** and **respect for the environment**, objectives that are increasingly important to Riello in this crucial time of energy transition.

FAMILY HM and FAMILY HM CONNECT stand out for the **wide 1:13 modulation ratio**, the **new stainless steel heat exchanger**, with the renewed **ACC adaptive combustion control**, the **silent operation** and the **excellent comfort in domestic hot water**.

The flagship of Riello's residential offering features a **stylish modern design** with an **advanced**, vertically developed, **fully touch control** that retraces the lines of the iconic Family boiler. Advanced electronics are combined with ease of use for both the end user and the technician, thanks also to a guided tour that FAMILY HM offers.

The **FAMILY HM CONNECT** models are supplied as standard with the **Hi, Comfort T300 advanced control**, forming a **class A+* system**, without adding further options. Also the FAMILY HM models, in combination with the Hi, Comfort T100 thermostat or with the advanced T300 control (available as accessories), achieve class A+*.

Like all new generation Riello boilers, FAMILY HM and FAMILY HM CONNECT are future-oriented: in fact, they are **designed to operate with blends of natural gas and hydrogen up to 20%**, thus helping to **reduce the environmental impact** and emissions of condensing boilers in the coming years.



WIDE MODULATION 1:13

High efficiency and reduced consumption, thanks to the wide modulation which reduces the frequency of switching on and off.



CLASS A+*

FAMILY HM CONNECT: Class A+*.
FAMILY HM: Class A+* in combination with Hi Comfort T300 or T100, available as options.



NEW ADVANCED INTERFACE

Advanced, full touch, color interface with guided tour for the user.



EXCELLENT DHW COMFORT

Hot water delivery without temperature fluctuations, with XXL load profile on 35 kW models.



VERY QUIET OPERATION

FAMILY HM offers very quiet operation, down to 45 dB.



STYLISH AND COMPACT DESIGN

The modern elegance of its design and the compact size make FAMILY HM easy to blend into any settings.



IOT READY

FAMILY HM can be remotely managed via App through the accessories of the Hi, Comfort offering.

* The range of energy efficiency class of this products category in system is between G and A+++.



THE RANGE

FAMILY HM is available in three output sizes and comes in a range of eight models, in combined (KIS) and/or heating-only (IS) versions.

Models with CONNECT extension come already equipped with Hi, Comfort T300 advanced control.

- **FAMILY HM 25 KIS / IS**
- **FAMILY HM CONNECT 25 KIS**
- **FAMILY HM 30 KIS**
- **FAMILY HM 35 KIS / IS**
- **FAMILY HM CONNECT 35 KIS / IS**

TECHNOLOGY AND TOP PERFORMANCE, FOR A HIGH-LEVEL COMFORT

FAMILY HM represents the top of the range of Riello's wall-hung offerings, both in terms of performance and comfort, thanks to its high technology.

New flue flange featuring **fast and safe, click-fit connections**.

Reduced NOx emissions:
CLASS 6 (EN 15502).

Wide 1:13 modulation over the entire range, for energy saving.

Seasonal efficiency **94%**.

New stainless steel primary exchanger with **renewed adaptive ACC Combustion control system**.

9-liter lateral expansion vessel.

Excellent DHW performance thanks to the increased plate heat exchanger.

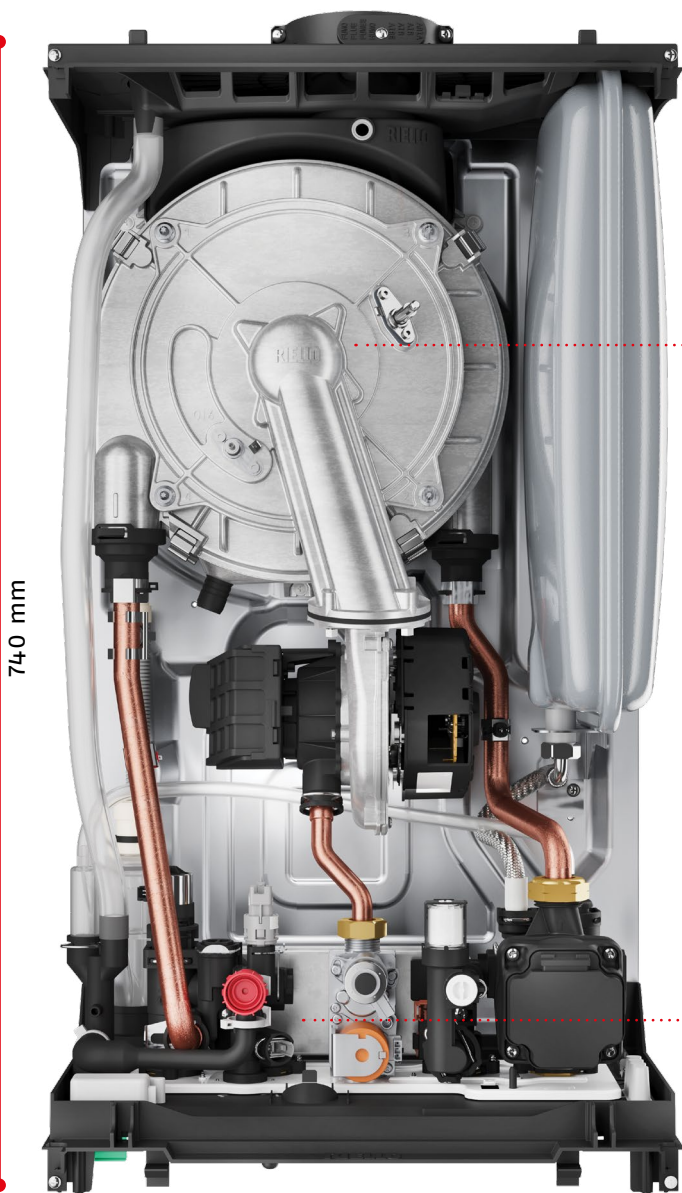
Automatic filling as standard.

New modulating, digital, high head (7 m) circulator, with low consumption.

New siphon and 3 Bar safety valve collection.

Hydraulic group with DIN type **connection sequence** for easy replacement.

Top cover and bottom shelf made of new co-molded **materials** to help durability and resistance.



Reduced dimensions (H x W x D) across the entire range. **Even the 35 kW model is only 275 mm deep!**



NEW ADAPTIVE ELECTRONIC COMBUSTION CONTROL

The FAMILY HM and FAMILY HM CONNECT ranges are equipped with the new intelligent ACC (Active Combustion Control) system, which can automatically adapt to the fuel (natural gas, LPG, etc.) without need of specific codes or accessory conversion kits. This innovative and sophisticated control system enables self-adjustment of combustion, eliminating the need for initial calibration. The ACC system is also capable of adapting the boiler to operate with different gas configurations, different pipe lengths and at different altitudes (within the design limits provided). In addition, the new adaptive system is capable of self-diagnosis for combustion that is always under control, with emissions constantly below regulatory limits.



**STABILITY OF
DOMESTIC HOT
WATER**



**MORE SIMULTANEOUS
DHW
WITHDRAWALS**

NEW DHW PLATE HEAT EXCHANGER WITH EXCELLENT PERFORMANCE

Thanks to the renewed plate exchanger, FAMILY HM and FAMILY HM CONNECT offer excellent DHW performance, for top comfort, both in terms of speed in reaching the set point and temperature stability during withdrawal. The 35 kW model reaches an XXL load profile, with the possibility of offering multiple withdrawals at the same time.



**FRONT
ACCESS**



**'ZERO TIME'
INSTALLATION**



**EASY
HANDLING**

EASE OF INSTALLATION AND MAINTENANCE

The ACC system simplifies installation. During start-up, the new boiler does not need calibration and it is sufficient to select the type of fuel used by the boiler via the interface, if different from the default (natural gas). The reduced dimensions and weight make the product easy to transport and move during installation. Frontal access to the components also makes the product easier to maintain for the technician in charge, speeding up intervention time.



HYBRID READY

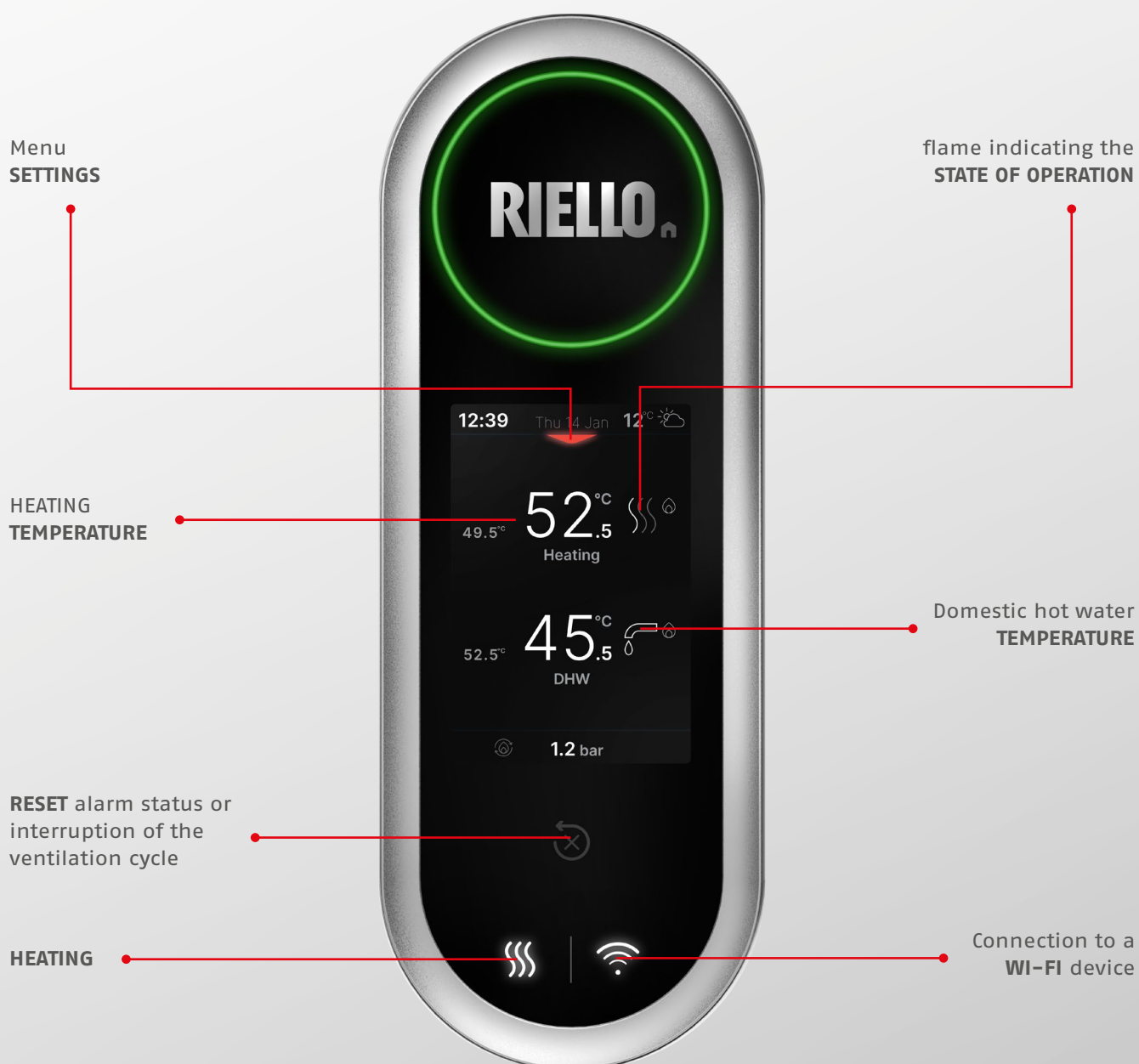
INTEGRABILITY INTO HYBRID SYSTEMS

FAMILY HM is able to integrate into Riello multi-energy systems (gas/ electricity and renewable) through the Hi, Comfort T300 advanced control, available as an accessory. FAMILY HM CONNECT models come already equipped with the T300 advanced control for immediate Wi-Fi connection and integration into hybrid systems.

ADVANCED INTERFACE, INTUITIVE USE

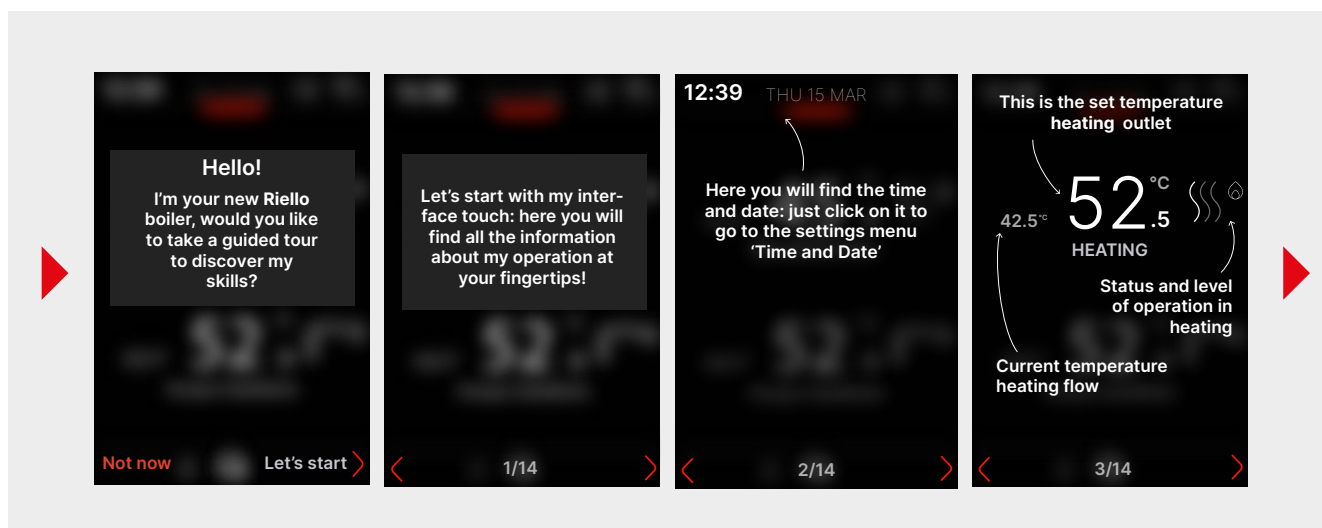
FAMILY HM and FAMILY HM CONNECT stand out for the **elegance of design**, conferred by the new **advanced interface with vertical orientation**, which traces the shapes of the ancestor boiler FAMILY, reinterpreting them in a modern key. The new **fully touch, color HMI, with graphical**

display of settings, retains the **simplicity and intuitive** use of the previous interfaces and communicates with the user both through icons and multilingual texts. A characteristic **"buzzer"** is generated to confirm each completed adjustment or setting operation.

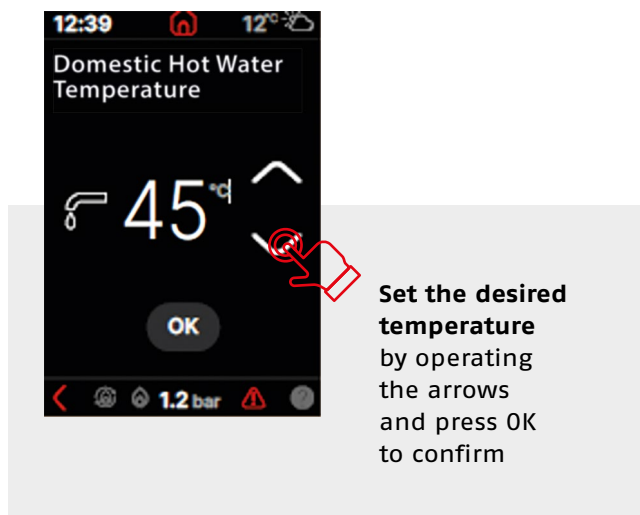
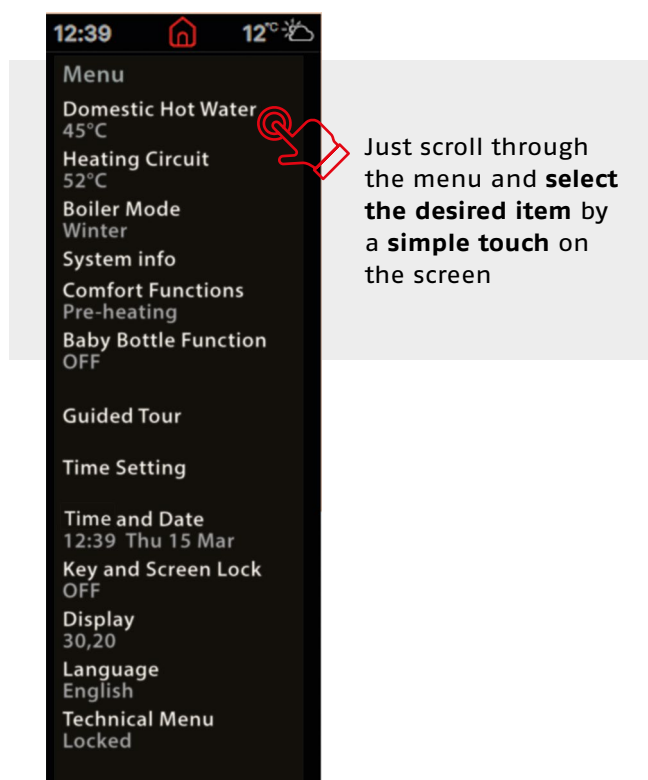


GUIDED TOUR

FAMILY HM and FAMILY HM CONNECT offer a guided tour to familiarize the user with the setting of the various functions, making the regulation and managing of the new boiler simple and intuitive, even for the less experienced user.



After the guided tour, it will be **very easy to set the various functions** from one of **three dedicated menus: user, technician and service menus** (the latter two are protected by password).





Hi, Comfort

**WITH FAMILY HM,
CONNECTIVITY IS NOT
JUST AN OPTION**



The entire FAMILY HM range is IoT ready, as it is designed to operate with the Hi, Comfort platform of integrated solutions. In particular, the recently introduced Hi, Comfort T300 advanced room control, available as an accessory, not only enables remote boiler control via App for Smartphones and Tablets, but is also capable of managing a complete hybrid system via App.

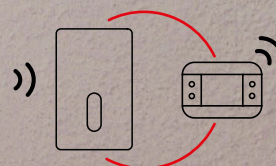
FAMILY HM CONNECT

The FAMILY HM CONNECT models are supplied as standard with the new Hi, Comfort T300 advanced control, forming a class A+* system.

FAMILY HM CONNECT 25 KIS

FAMILY HM CONNECT 35 KIS

FAMILY HM CONNECT 35 IS

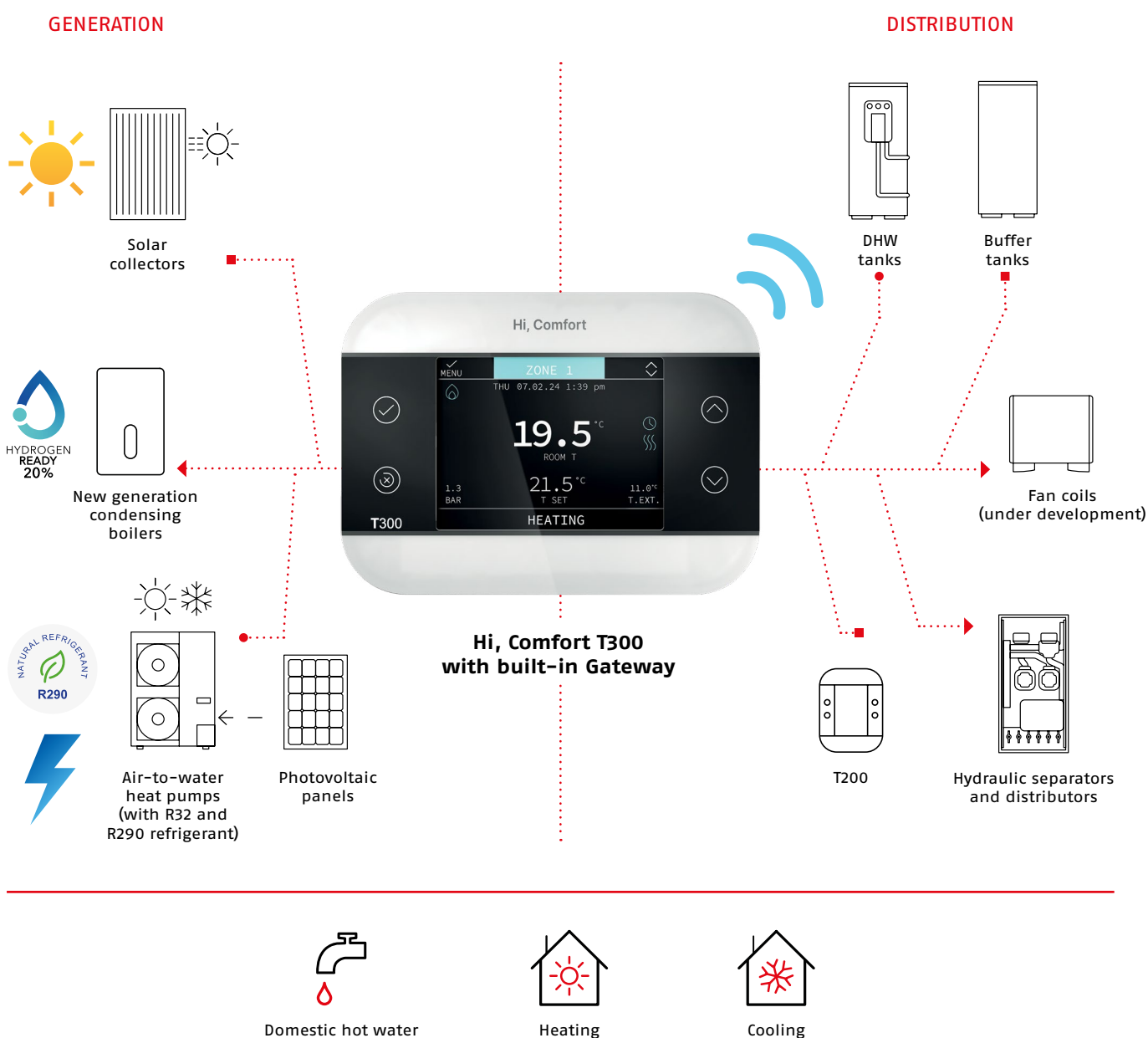


* The range of energy efficiency class of this products category in system is between G and A+++.

FAMILY HM and FAMILY HM CONNECT, ALSO FOR HYBRID SYSTEMS

The new ranges are compatible with Hi, Comfort T300, the new advanced room control with integrated gateway, which can manage up to 3 zones via expansion PCB and, in the case of hybrid installation, operates as a true system manager for optimized consumption. All this also via the Hi, Comfort App. Hi, Comfort T300 is compatible with the latest generation Riello boilers and heat pumps for optimized home comfort management even in hybrid installations.

The screen graphics of the Hi, Comfort T300 are completely new, easy to read and do not tire the eyes. The icons are self-explanatory while the menu tree respects Riello's traditional configuration logic.

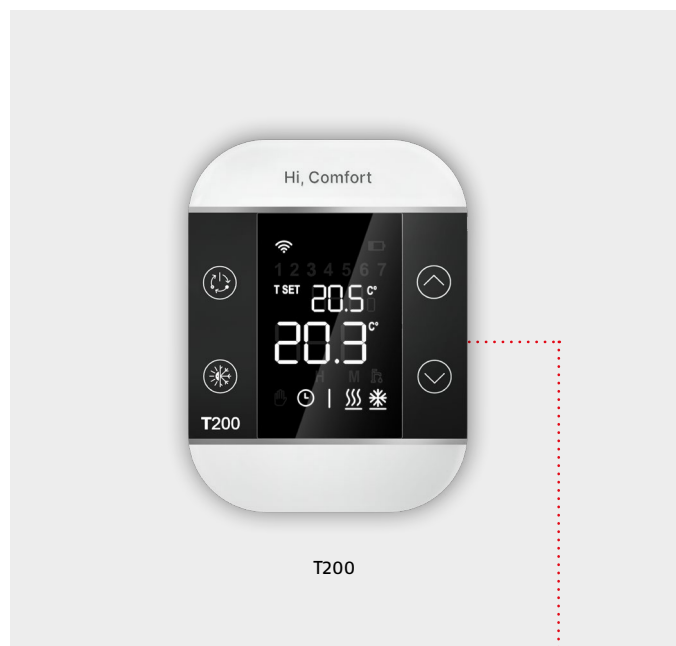


NB Hi, Comfort T300 is compatible with the Riello hybrid-ready products. Please refer to the Riello Product Catalogue.

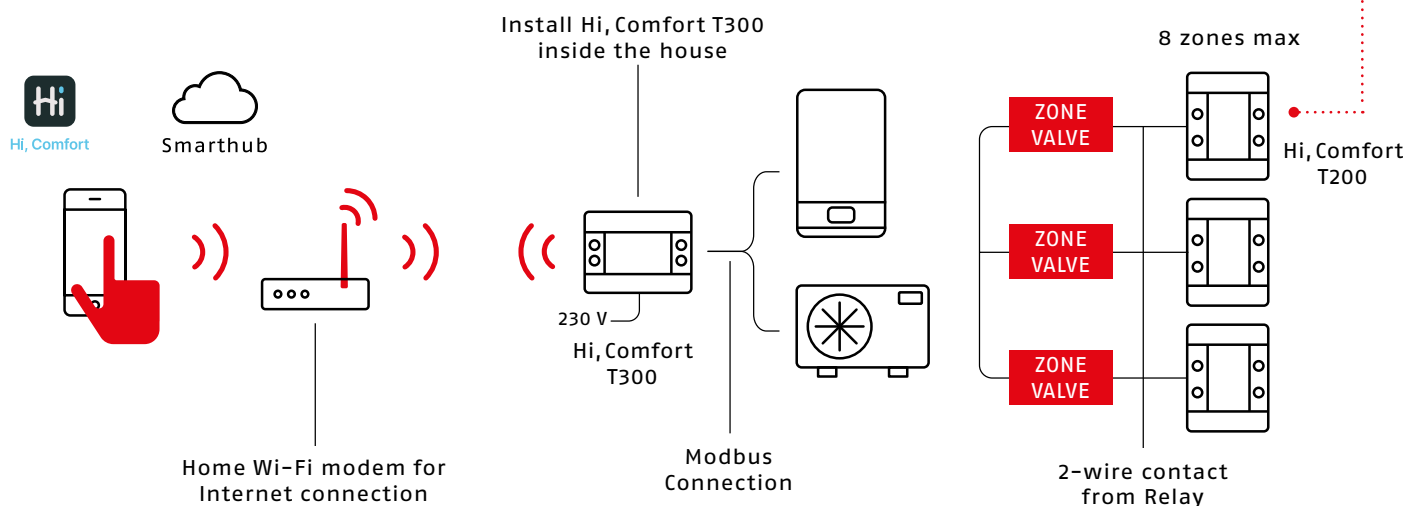
A TAILORED COMFORT

FAMILY HM and FAMILY HM CONNECT are also compatible with the new solutions of the Hi, Comfort platform, available as accessories, which allow you to manage residential well-being in a simple and intuitive way via Hi, Comfort App.

The new Hi, Comfort T200 thermostat, combined in RF with the Hi, Comfort T300 advanced room control, allows optimal control of comfort within each room of the home. Featuring an innovative design and touch key technology for menu navigation, it offers a dual installation solution, as it can be wall-mounted, or via a dedicated support, placed on any piece of furniture in the room. It is also compatible with Hi, Comfort App.



TYPICAL SYSTEM CONFIGURATION DIAGRAM WITH T300



FOR MORE IN-DEPTH INFORMATION ON THE Hi, Comfort SOLUTIONS,
REFER TO THE SITE www.hi-comfort.com

A LOOK INTO THE FUTURE

FAMILY HM is born now, thinking of tomorrow. The new condensing range is, in fact, designed to operate with blends of natural gas and hydrogen – up to a maximum of 20% – a contribution towards the decarbonisation process started by the European Union.



**HYDROGEN
READY
20%**

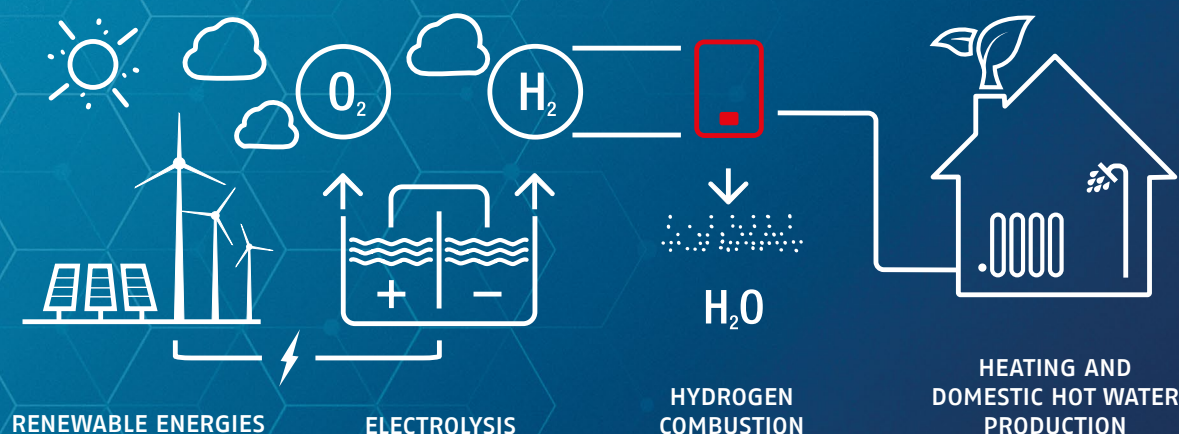
HYDROGEN USE CYCLE

Hydrogen is a safe and clean gas that, blended with natural gas up to a maximum ratio of 20 to 80 percent, makes it possible to generate heat and domestic hot water, with lower CO₂ emissions than other fuels*.

* Data from E. A. Polman (2003) "Reduction of CO₂ emissions by adding hydrogen to natural gas", IEA Greenhouse Gas R&D program, report number PH4/24.

GAS	HIGH CALORIFIC POWER	RELATIVE CO ₂ EMISSIONS
H ₂ - content [vol%]	Relative Wobbe [%]	[%]
0	100	100
20	94,7	93,7
100	85,0	13,3

Variation of Wobbe index and CO₂ reduction as a function of hydrogen content. The hydrogen is presumed to be made by large-scale steam reforming and that CO₂ is captured with a recovery rate of 86,7% of CO₂.



SUSTAINABLE AND RECYCLABLE PACKAGING

Riello's ongoing commitment to providing heating solutions that are conscious of the well-being of people and the environment now extends to packaging. FAMILY HM, like all new-generation Riello boilers, is **packaged in FSC-certified, plastic-free and fully recyclable packaging**, a further contribution aimed at minimizing the environmental impact of our products.

FAMILY HM'S CARDBOARD PACKAGING "IS MADE FROM A MIXTURE OF MATERIALS FROM FSC-CERTIFIED FORESTS, RECYCLED MATERIALS AND/OR FSC-CONTROLLED WOOD."

FSC (Forest Stewardship Council) is currently "the most accredited forest certification system in the world in terms of number of certificates issued, robustness of certification criteria and companies involved in the processes."



The FAMILY HM packaging is "plastic free", as the plastic of the elements commonly used for packaging has been completely removed and replaced with biodegradable materials.



The FAMILY HM packaging is also a communication vehicle, aimed at informing the user and raising awareness on the important issue of respect for the environment. On both sides of the cardboard, a series of icons, symbolically flanked by a stylized leaf, illustrate the characteristics of FAMILY HM and the packaging, which help to minimize the environmental footprint of the product.

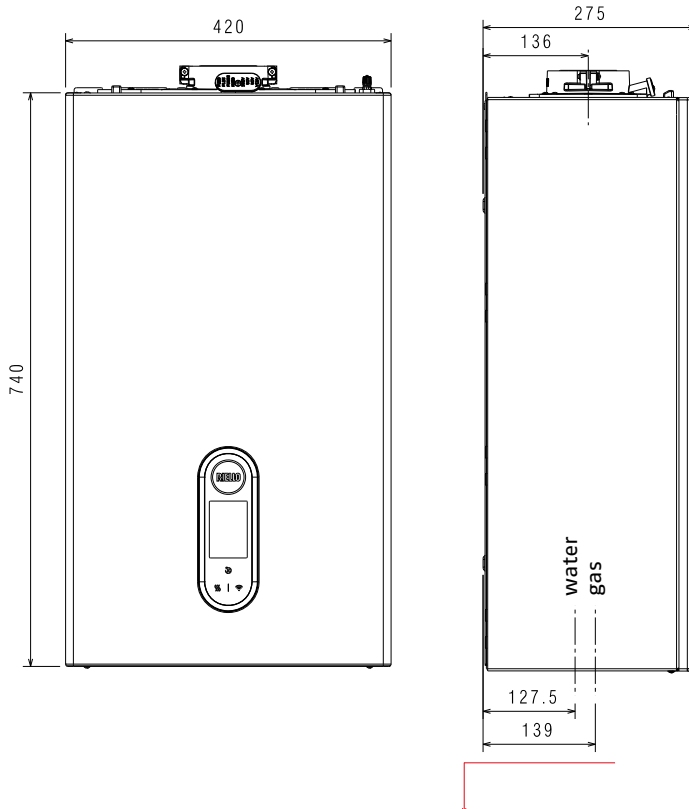


PRODUCT RECYCLABILITY

Special attention is also paid to the recycling of the product at the end of its life, through the declaration of the product's recyclability index of 78%* for FAMILY HM, an indicator that expresses the degree of **recovery of materials**, so-called Secondary Raw Materials (SRM), useful to be reused in the production of new goods, **contributing** in this way to the **reduction of environmental impact**.

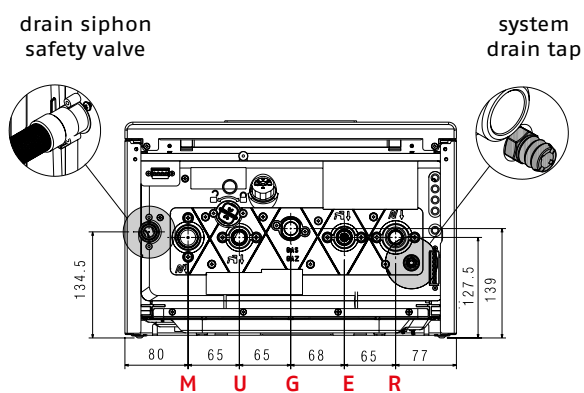
* The product recyclability index was obtained from internal estimates based on a study conducted in 2022 on a Riello condensing boiler, Model 20139525 Residence 25 KIS (DOMESTIC AEE belonging to Group R4 of the RAEE legislation according to Legislative Decree 49 /2014) by Ecoped, the Italian Consortium for the Management of Waste of Electrical and Electronic Equipment (WEEE), Batteries and Accumulators (Ri.P.A.) and Sports and Leisure Equipment.

TECHNICAL DRAWINGS



DISTANCE OF THE CONNECTIONS
FROM THE WALL DESIGNED FOR EASY REPLACEMENT,
EVEN ON A DIFFERENT CONNECTION SEQUENCE

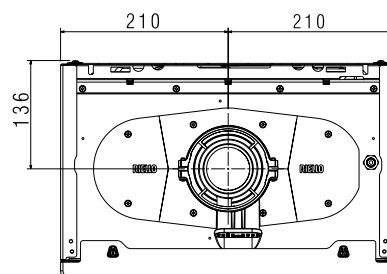
VIEW FROM BELOW



HYDRAULIC CONNECTIONS OF DIN TYPE

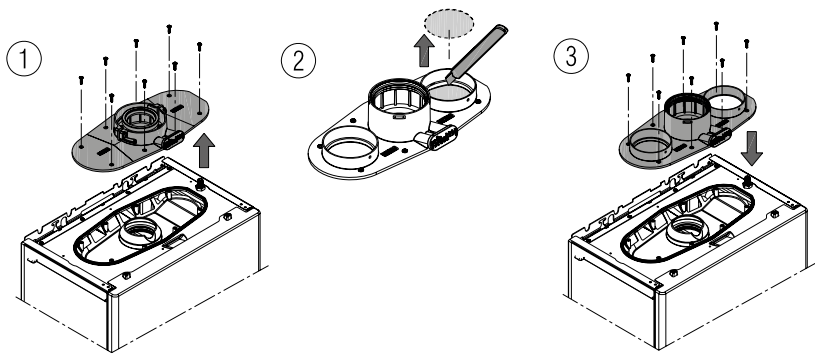
- M** FLOW
- U** DHW OUTLET
- G** GAS
- E** DCW INLET
- R** RETURN

VIEW FROM ABOVE

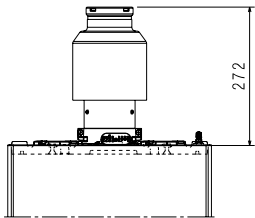


TECHNICAL DRAWINGS AND DATA

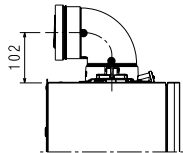
FLUE GAS FLANGE DISASSEMBLY



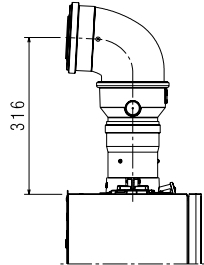
FLUE OPTIONS



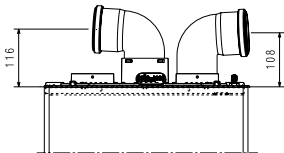
B23P-B53P
FLUE TYPE



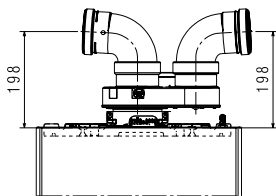
Ø60-100
CONCENTRIC FLUE



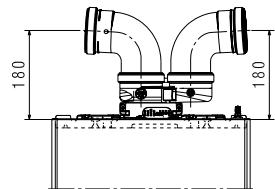
Ø80-125
CONCENTRIC FLUE



Ø80+80
TWIN FLUE



Ø80+80
TWIN FLUE
WITH ADAPTER



Ø80+80
TWIN FLUE
WITH COMPACT ADAPTER

NB: The boiler is certified also as C10 appliance for collective positive pressure chimneys via specific external kits, available as accessories.

TECHNICAL DATA

ENERGY LABELLING SPECIFICATIONS (according to ErP regulations)			25 KIS	30 KIS	35 KIS	25 IS(*)	35 IS(*)
BOILER MODEL			FAMILY HM/ HM CONNECT	FAMILY HM	FAMILY HM/ HM CONNECT	FAMILY HM	FAMILY HM/HM CONNECT
Seasonal space heating energy efficiency class			A ⁽¹⁾ /A+ ⁽³⁾	A	A ⁽¹⁾ /A+ ⁽³⁾	A	A ⁽¹⁾ /A+ ⁽³⁾
Water heating energy efficiency class			A ⁽²⁾ /A+ ⁽³⁾	A	A ⁽²⁾ /A+ ⁽³⁾	-	-
Rated heat output according ERP	pnominal	kW	20	24	31	20	31
Seasonal space heating energy efficiency		%	94	94	94	94	94
USEFUL HEAT OUTPUT							
At rated heat output, high-temperature regime (**)	P4	kW	19,5	24,4	31,2	19,5	31,2
At 30% of rated heat output and low-temperature regime (***)	P1	kW	6,6	8,2	10,5	6,6	10,5
USEFUL EFFICIENCY							
At rated heat output and high-temperature regime (**)		%	87,9	87,9	87,8	87,9	87,8
At 30% of rated heat output and low-temperature regime (***)		%	98,8	98,7	98,8	98,8	98,8
AUXILIARY ELECTRICAL CONSUMPTION							
At full load	elmax	W	30,0	31,1	54,9	30,0	54,9
At partial load	elmin	W	12,2	13,3	13,6	12,2	13,6
In stand-by mode	PSB	W	3,0	3,0	3,0	3,0	3,0
OTHER PARAMETERS							
Heat losses at stand-by mode	Pstby	W	30,0	35,0	35,0	30,0	35,0
Annual energy consumption	QHE	GJ	60	75	96	60	96
Sound power level, indoors	LWA	dB	47	45	48	47	48
N0x emissions	N0x	mg/kWh	22	20	31	22	31
FOR COMBI BOILERS							
Declared load profile			XL	XL	XXL	-	-
DHW energy efficiency		%	85	86	87	-	-
Daily electrical energy consumption	Qelec	kWh	0,142	0,089	0,131	-	-
Daily fuel consumption	Qfuel	kWh	22,880	22,734	27,951	-	-
Annual electrical energy consumption	AEC	kWh	31	19	28	-	-
Annual fuel consumption	AFC	GJ	17	17	22	-	-
OTHER TECHNICAL SPECIFICATIONS							
Heating thermal input (max-min)		kW	20,0-1,9	25,0-2,7	32,0-2,7	20,0-1,9	32,0-2,7
Nominal DHW heat input (max-min)		kW	25,0-1,9	30,0-2,7	34,9-2,7	25,0-1,9	34,9-2,7
Power supply		V-Hz	230-50	230-50	230-50	230-50	230-50
Electrical protection level		IP	X5D	X5D	X5D	X5D	X5D
N0x class			6	6	6	6	6
HEATING							
Max pressure-temperature		bar-°C	3-90	3-90	3-90	3-90	3-90
Pump: max available head (flow rate 1000 l/h)		mbar	450	450	450	450	450
Diaphragm expansion vessel capacity		l	9	9	9	9	9
DOMESTIC HOT WATER							
Maximum pressure		bar	8	8	8	-	-
DHW production at ΔT=25°C / 30°C / 35°C		l/min	14,3/11,9/10,2	17,2/14,3/12,3	20,0/16,7/14,3	-	-
Minimum DHW flow rate		l/min	2	2	2	-	-
HYDRAULIC and GAS CONNECTIONS							
Nominal gas pressure (G20-G31)		mbar	20-37	20-37	20-37	20-37	20-37
Heating flow-return / Gas inlet		Ø	3/4 "	3/4 "	3/4 "	3/4 "	3/4 "
DHW inlet - outlet / DHW tank flow - return		Ø	3/4 "	3/4 "	3/4 "	3/4 "	3/4 "
DIMENSIONS, WEIGHT							
Boiler dimensions (HxDxW)		mm	740x275x420	740x275x420	740x275x420	740x275x420	740x275x420
Net weight		kg	29	30	30	28	29
FLUE PIPES AND AIR INTAKE							
Max length for concentric flue (Ø60-100 mm)		m	10	8	8	10	8
Max length for twin flue (Ø80+80 mm)		m	69+69 (A)	36+36 (B)	36+36 (B)	69+69 (A)	36+36 (B)

(1) The range of energy efficiency class of this products category is between D and A+++.

(2) The range of energy efficiency class of this products category is between F and A+.

(3) The range of energy efficiency class of this products category in system is between G and A+++.

(*) The 'Only heating' models are supplied with a three-ways valve and are not equipped with filling tap.

(**) High-temperature regime means: 60°C Return and 80°C Flow of the boiler.

(***) Low temperature regime means for condensing boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature.

A) up to 75+75 m with swelling adapter available as option

B) up to 39+39 m with swelling adapter available as option

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FAMILY HM



FAMILY HM
CONNECT

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