

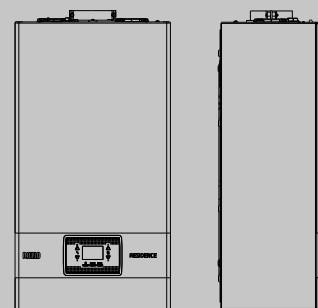
Wall-hung boilers



Residence

Wall-hung condensing boilers

Stainless steel primary heat exchanger
Electronic auto-adaptive combustion control
Class 6 NOx rating
Combi and heating only models, MTN and LPG compatible
65% tax-deductible when combined with RiCLOUD



RIELLO
Energy For Life

Residence

PRODUCT OVERVIEW

Residence is the ideal Riello wall-hung condensing boiler for replacing old boilers and new installations. The primary heat exchanger, made entirely of stainless steel with front access to the combustion chamber, guarantees maximum efficiency and reliability over time.

Residence is available in 20, 25, 30 e 35 kW, in combi instantaneous and heating only versions.

- ACC electronic auto-adaptive combustion control
- Range Rated type-approval
- New simple, intuitive digital control panel with backlit display
- Energy efficient modulating circulator
- Modulation ratio 1:8
- Standard flue gas flange with special flue gas system accessories
- Standard check valve and SRD device
- Standard thermoregulation combined with outdoor temperature sensor, available as accessory
- Can also be installed in a recessed installation (25 KIS model) and outdoors in a partially protected place (IPX5D)
- Easy to install and wide range of accessories
- Integrated control of up to 2 direct or mixed circuits (with BAG³ HYBRID accessories or zone control kit)

TECHNICAL DATA

DESCRIPTION		Residence					
		25 KIS – 20 IS		30 KIS		35 KIS – 35 IS	
HEATING		G20	G31	G20	G31	G20	G31
Heating Rated heat input	kW	20.00		25.00		30.00	
	kcal/h	17,200		21,500		25,800	
Nominal heat output (80°/60°)	kW	19.48		24.33		29.22	
	kcal/h	16,753		20,920		25,129	
Nominal heat output (50°/30°)	kW	21.24		26.50		32.07	
	kcal/h	18,266		22,790		27,580	
Reduced heat input	kW	3.60	5.00	4.90	7.00	4.90	7.00
	kcal/h	3,096	4,300	4,214	6,020	4,214	6,020
Reduced heat output (80°/60°)	kW	3.50	4.86	4.77	6.83	4.77	6.83
	kcal/h	3,006	4,180	4,104	5,870	4,104	5,870
Reduced heat output (50°/30°)	kW	3.81	5.30	5.13	7.34	5.13	7.34
	kcal/h	3,276	4,558	4,412	6,315	4,412	6,315
Nominal Range Rated heat output (Qn)	kW	20.00		25.00		30.00	
	kcal/h	17,200		21,500		25,800	
Minimum Range Rated heat output (Qn)	kW	3.60	5.00	4.90	7.00	4.90	7.00
	kcal/h	3,096	4,300	4,214	6,020	4,214	6,020
HOT WATER							
Rated heat input	kW	25.00		30.00		34.60	
	kcal/h	21,500		25,800		29,756	
Nominal heat output (*)	kW	26.25		31.50		36.33	
	kcal/h	22,575		27,090		31,244	
Reduced heat input	kW	3.60	5.00	4.90	7.00	4.90	7.00
	kcal/h	3,096	4,300	4,214	6,020	4,214	6,020
Reduced heat output (*)	kW	3.28	5.00	4.54	7.00	4.54	7.00
	kcal/h	2,822	4,300	3,905	6,020	3,905	6,020
Useful efficiency Pn max – Pn min (80°/60°)	%	97.4 – 97.1		97.3 – 97.4		97.4 – 97.4	
Combustion efficiency	%	97.8		97.6		97.7	
Useful efficiency Pn max – Pn min (50°/30°)	%	106.2 – 105.8		106.0 – 104.7		106.9 – 104.7	
Useful efficiency 30% Pn max (30° return)	%	108.4		108.1		108.2	
Efficiency at average P Range Rated (80°/60°)	%	97.3		97.0		97.5	
Efficiency at average P Range Rated 30% (30° return)	%	108.5		108.4		108.3	
Overall electric output (maximum heating output)	W	75		72		84	
Overall electric output (maximum domestic hot water output)	W	85		83		99	
Circulator electric power (1,000 l/h)	W	39		39		39	
CATEGORY		II2H3P		II2H3P		II2H3P	
Voltage supply	V – Hz	230–50		230–50		230–50	
Protection level	IP	X5D		X5D		X5D	
Stop loss	W	34		32		32	
Losses at the flue with burner off – burner on	%	0.10 – 2.23		0.08 – 2.39		0.06 – 2.33	
HEATING OPERATION							
Maximum pressure	bar	3		3		3	
Minimum pressure for standard operation	bar	0.25–0.45		0.25–0.45		0.25–0.45	
Maximum temperature	°C	90		90		90	
Selection field of CH water temperature	°C	20/45 ÷ 40/80		20/45 ÷ 40/80		20/45 ÷ 40/80	
Pump: maximum head available	mbar	286		286		286	
for system capacity	l/h	1,000		1,000		1,000	
Membrane expansion tank	l	9		9		9	
Expansion tank pre-loading (heating)	bar	1		1		1	
DHW OPERATION (KIS only)							
Maximum pressure	bar	8		8		8	
Minimum pressure	bar	0.15		0.15		0.15	
Quantity of hot water with Δt 25° C	l/min	15.1		18.1		20.8	
with Δt 30° C	l/min	12.5		15.1		17.4	
with Δt 35° C	l/min	10.8		12.9		14.9	
DHW minimum capacity	l/min	2		2		2	
Selection field of DHW temperature	°C	37–60		37–60		37–60	
Flow regulator	l/min	10		12		14	

WALL-HUNG BOILERS

Wall-hung condensing boilers

ERP TECHNICAL DATA

PARAMETER	SYMBOL	25 KIS – 20 IS	30 KIS	35 KIS – 35 IS	TERMINAL
Seasonal ambient heating energy efficiency class	-	A	A	A	-
Water heating energy efficiency class (KIS only)	-	A	A	A	-
Nominal output	Nominal P _n	19	24	29	kW
Seasonal ambient heating energy efficiency	η _S	93	93	93	%
EFFECTIVE HEAT OUTPUT					
At nominal heat output and in high temperature mode (*)	P ₄	19.5	24.3	29.2	kW
At 30% of nominal heat output and in low temperature mode (**)	P ₁	6.5	8.1	9.7	kW
EFFICIENCY					
At nominal heat output and in high temperature mode (*)	η ₄	87.6	87.3	87.8	%
At 30% of nominal heat output and in low temperature mode (**)	η ₁	97.7	97.6	97.5	%
AUXILIARIES ELECTRIC CONSUMPTION					
With full load	el _{max}	28.0	28.0	28.0	W
With partial load	el _{min}	14.0	14.0	14.0	W
In standby	PSB	3.0	3.0	3.0	W
OTHER PARAMETERS					
Heat losses in standby mode	P _{stby}	34.0	32.0	32.0	W
Energy consumption of the pilot light	P _{ign}	-	-	-	W
Annual energy consumption	Q _{HE}	36	45	53	GJ
Sound power level indoors	L _{WA}	50	50	52	dB
Nitrogen oxide emissions	NO _x	46	32	37	mg/kWh
FOR COMBINED HEATING APPLIANCES:					
Declared load profile		XL	XL	XL	
Water heating energy efficiency	η _{wh}	86	84	85	%
Daily electrical energy consumption	Q _{elec}	0.139	0.145	0.138	kWh
Daily fuel consumption	Q _{fuel}	22.668	23.484	23.046	kWh
Annual electrical energy consumption	AEC	30	32	30	kWh
Annual fuel consumption	AFC	17	18	17	GJ

* in high temperature mode: 60°C on return and 80°C on delivery.

** in low temperature mode: for condensing boilers 30°C, for low temperature boilers 37°C, for other heating appliances 50°C of return temperature

NOTE: With reference to the Delegated Regulation (EU) No. 811/2013, the information in the table can be used for completing the product data sheet and the labelling for room heating appliances, mixed heating appliances, appliances for enclosed space heating, temperature control devices and solar devices:

COMPONENT	Class	Bonus
Outdoor temperature sensor	II	2%
RiCLOUD room control	V	3%
Outdoor temperature sensor + RiCLOUD room control	VI	4%
3 (or more) RiCLOUD room control + WiFi Box	VIII	5%

TABLE LAW 10

BOILER MODELS		25 KIS – 20 IS	30 KIS	35 KIS – 35 IS
MAXIMUM HEAT OUTPUT				
	Effective (80/60 °C)	kW	19.48	24.33
	Effective (50/30 °C)	kW	21.24	26.50
	Furnace	kW	20.00	25.00
MINIMUM HEAT OUTPUT				
	Effective (80/60 °C)	kW	3.50	4.77
	Effective (50/30 °C)	kW	3.81	5.13
	Furnace	kW	3.60	4.90
EFFICIENCY				
	Effective (80/60 °C)	%	97.4 – 97.1	97.3 – 97.4
	Effective (50/30 °C)	%	106.2 – 105.8	106.0–104.7
	With 30% reduced load (return 30 °C)	%	108.4	108.1
COMBUSTION				
	Losses at stack and casing with the burner on	%	0.10 – 2.23	0.08 – 2.39
	Stop loss	W	34	32
	Flue gas capacity	g/s	9.086	11.357
EMISSIONS VALUE AT MAX AND MIN OUTPUT GAS G20 (**)				
MAXIMUM	CO s.a. lower than (***)	ppm	130	120
	CO ₂	%	9.0	9.0
	NOx (EN 677) (***)	ppm	30	50
	Flue gas temperature	°C	69	67
MINIMUM	CO s.a. lower than (***)	ppm	10	10
	CO ₂	%	9.0	9.0
	NOx (EN 677) (***)	ppm	30	25
	Flue gas temperature	°C	63	59
	Weighted NOx	mg/kWh	46	32
	NOx class		6	6
Electric power: circulator, total		W	39-85	39-83
				39-99

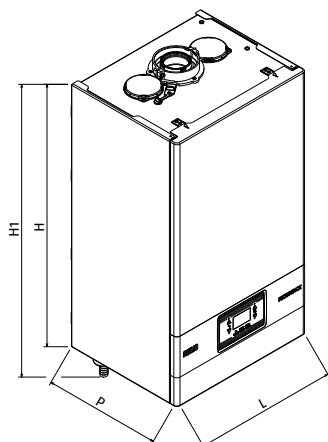
(**) Check performed with concentric pipe Ø 60–100, length 0.85 m; water temperature 80–60°C.

(***) Charts also available for intermediate output values. The data indicated must not be used to certify the system; for certification use the data indicated in the “System handbook” measured during first ignition.

WALL-HUNG BOILERS

Wall-hung condensing boilers

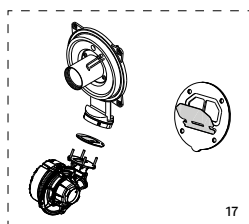
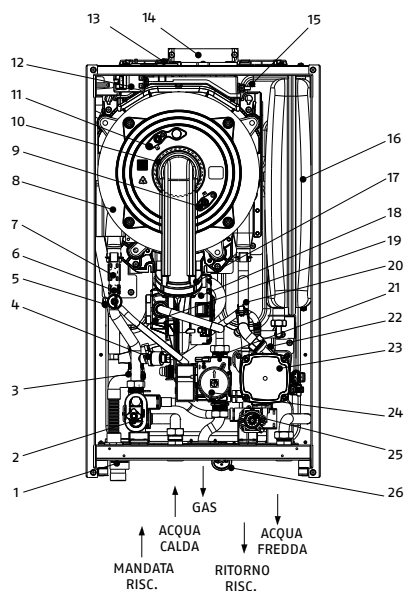
OVERALL DIMENSIONS OF RESIDENCE IS - KIS



MODEL		25 KIS - 20 IS	30 KIS	35 KIS - 35 IS
L	mm	420	420	420
P	mm	275	350	350
H	mm	740	740	740
H1	mm	822	822	822
Net weight	kg	35-34	37	37-36

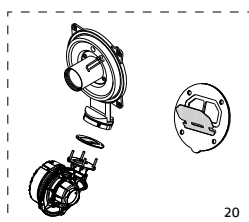
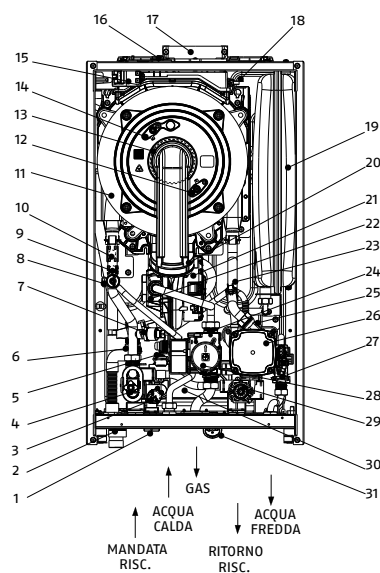
STRUCTURE

IS MODELS



- | | |
|--|-------------------------------------|
| 1. Siphon | 15. Flue gas probe |
| 2. Drain valve | 16. Expansion tank |
| 3. Safety valve | 17. Non-return valve (check) |
| 4. Pressure transducer | 18. Fan |
| 5. Drain tap | 19. High modulation mixer |
| 6. Flow sensor | 20. Return probe |
| 7. Limit thermostat | 21. Gas diaphragm |
| 8. Main heat exchanger | 22. Lower air vent valve |
| 9. Flame detection electrode/ionisation sensor | 23. Circulation pump |
| 10. Burner | 24. Gas valve |
| 11. Ignition electrode | 25. 3-way hydraulic valve (stepper) |
| 12. Ignition transformer | 26. Water gauge |
| 13. Flue gas analysis plug | |
| 14. Flue gas exhaust | |

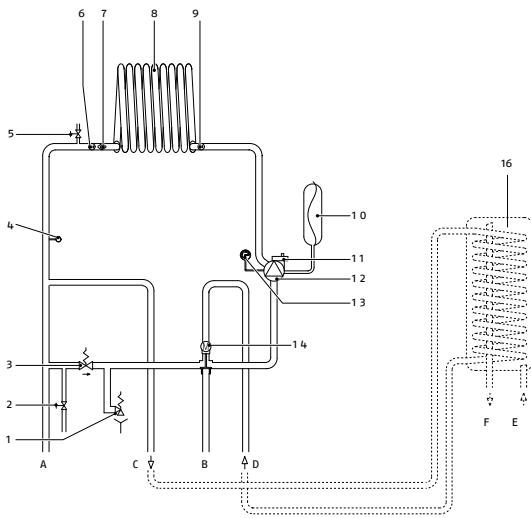
KIS MODELS



- | | |
|---|---------------------------------------|
| 1. Filling tap | 18. Flue gas probe |
| 2. Siphon | 19. Expansion tank |
| 3. Non-return valve | 20. Non-return valve (check) |
| 4. Drain valve | 21. Fan |
| 5. Domestic hot water probe | 22. High modulation mixer |
| 6. Safety valve | 23. Return probe |
| 7. Pressure transducer | 24. Gas diaphragm |
| 8. Drain tap | 25. Lower air vent valve |
| 9. Flow sensor | 26. Circulation pump |
| 10. Limit thermostat | 27. Flow meter |
| 11. Main heat exchanger | 28. Gas valve |
| 12. Flame detection electrode/ionisation sensor | 29. 3-way hydraulic valve (stepper) |
| 13. Burner | 30. Domestic hot water heat exchanger |
| 14. Ignition electrode | 31. Water gauge |
| 15. Ignition transformer | |
| 16. Flue gas analysis plug | |
| 17. Flue gas exhaust | |

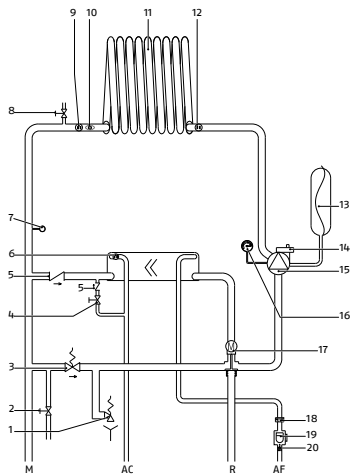
WATER CIRCUIT

IS MODELS



- | | | | |
|----|--------------------------------|-----|---|
| A | Heating delivery | 6. | Flow sensor |
| B | Heating return line | 7. | Limit thermostat |
| C | External storage tank delivery | 8. | Primary heat exchanger |
| D | External storage tank return | 9. | Return probe |
| E | Water inlet | 10. | Expansion tank |
| F | Water outlet | 11. | Lower air vent valve |
| 1. | Safety valve | 12. | Circulator |
| 2. | Drain valve | 13. | Pressure gauge |
| 3. | Automatic bypass | 14. | 3-way hydraulic valve (stepper) |
| 4. | Pressure transducer | 15. | Storage cylinder (accessory available on request) |
| 5. | Vent valve | | |

KIS MODELS



- | | | | |
|----|--------------------------|-----|---------------------------------|
| R | Heating return line | 10. | Limit thermostat |
| M | Heating delivery | 11. | Primary heat exchanger |
| AC | Hot water | 12. | Return probe |
| AF | Cold water | 13. | Expansion tank |
| 1. | Safety valve | 14. | Lower air vent valve |
| 2. | Drain valve | 15. | Circulator |
| 3. | Automatic bypass | 16. | Water gauge |
| 4. | Filling tap | 17. | 3-way hydraulic valve (stepper) |
| 5. | Non-return valve | 18. | Flow limiter |
| 6. | Domestic hot water probe | 19. | Flow meter |
| 7. | Pressure transducer | 20. | DHW filter |
| 8. | Vent valve | | |
| 9. | Flow sensor | | |

FLUE GAS EXHAUST AND COMBUSTION AIR SUCTION

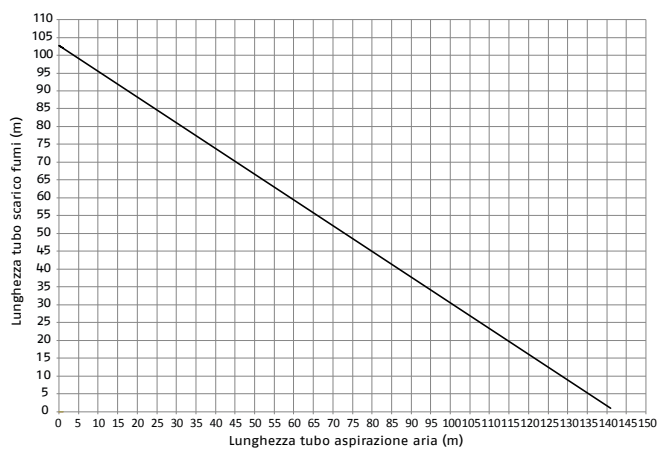
Pressure drop	Ø 50	Ø 60	Ø 80
Length	0.5	1.2	5.5 for flue gas pipe 7.5 for air pipe

If the Ø 60-100 to Ø 80-80 splitter kit is used instead of the twin pipe system, there is a loss in the maximum lengths as shown in the table.

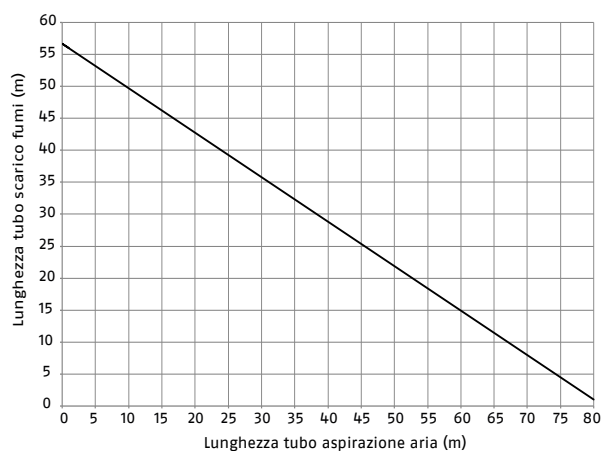
WALL-HUNG BOILERS

Wall-hung condensing boilers

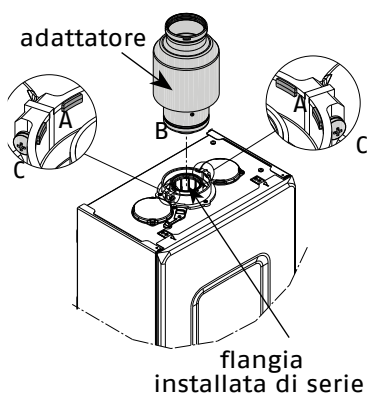
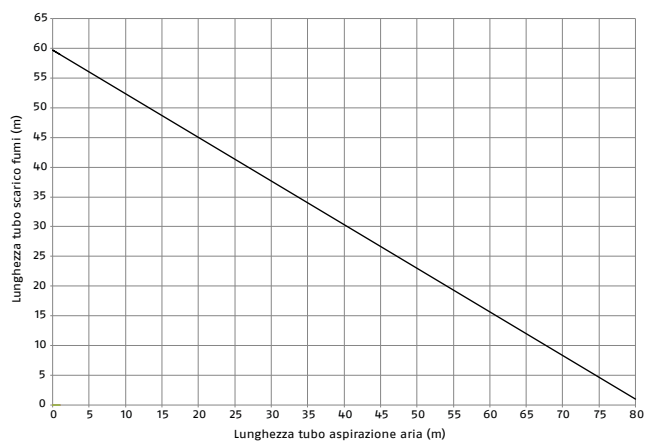
RESIDENCE 20 IS – 25 KIS BOILER MAXIMUM LENGTH OF Ø 80 mm PIPES



RESIDENCE 30 KIS BOILER MAXIMUM LENGTH OF Ø 80 mm PIPES



RESIDENCE 35 IS – 35 KIS BOILER MAXIMUM LENGTH OF Ø 80 mm PIPES



Once in position, make sure that the 4 notches (A) on the flange slot into the special groove (B). Fully tighten the screws (C) that tighten the two locking terminals of the flange so the bend itself is restrained.

Twin pipes with $\varnothing 80$ pipework $\varnothing 50 - \varnothing 60 - \varnothing 80$

Thanks to the boiler characteristics, a $\varnothing 80$ flue gas exhaust pipe can be connected to the $\varnothing 50 - \varnothing 60 - \varnothing 80$ piping ranges. For the pipe, you are advised to make a project calculation in order to respect the relevant regulations in force.

The table shows the standard configurations allowed.

Table of standard pipe configuration (*)

Air suction	190° curve $\varnothing 80$
	4.5m pipe $\varnothing 80$
	190° curve $\varnothing 80$
Flue gas exhaust	4.5m pipe $\varnothing 80$
	Reduction from $\varnothing 80$ to $\varnothing 50$ or from $\varnothing 80$ to $\varnothing 60$
	90° stack base curve, $\varnothing 50$ or $\varnothing 60$ or $\varnothing 80$
	For lengths of tubing pipes, see table

(*) Use flue gas system accessories in plastic (PP) for class H1 condensing boilers. All Riello flue gas system accessories are in class H1.

The boilers are factory set to:

20 IS: 6,200 r.p.m. in heating mode and in domestic hot water mode and the maximum attainable length is 5m for the $\varnothing 50$ pipe, 18 m for the $\varnothing 60$ pipe and 98 m for the $\varnothing 80$ pipe.

25 KIS: 6,200 r.p.m. in heating mode and 7,600 in domestic hot water mode and the maximum attainable length is 5m for the $\varnothing 50$ pipe, 18 m for the $\varnothing 60$ pipe and 98 m for the $\varnothing 80$ pipe.

30 KIS: 5,800 rpm in heating mode and 6,900 in domestic hot water mode, and the maximum length that can be reached is 2m for the $\varnothing 50$ and 11 m for the $\varnothing 60$ pipe and 53 m for the $\varnothing 80$ pipe.

35 IS / 35 KIS: 6,900 r.p.m. in heating mode and 7,800 in domestic hot water mode and the maximum attainable length is 2m for the $\varnothing 50$ pipe, 11 m for the $\varnothing 60$ pipe and 57 m for the $\varnothing 80$ pipe.

Should greater lengths be required, compensate the pressure drop with an increase in the r.p.m. of the fan, as shown in the adjustments table, to provide the rated heat input.

The minimum calibration should not be modified.

The $\varnothing 50$ or $\varnothing 60$ or $\varnothing 80$ configurations contain Lab test data. In the event of installations that differ from the indications in the "standard configurations" and "adjustments" tables, refer to the equivalent linear lengths below.

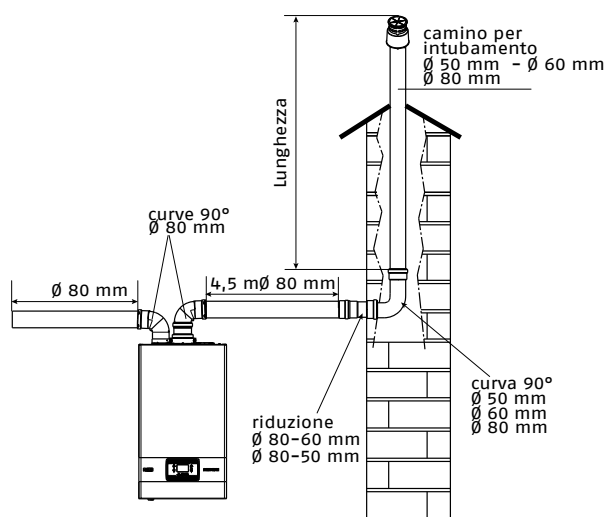
In any case, the maximum lengths declared in the booklet are guaranteed, and it is essential not to exceed them.

COMPONENT	Linear equivalent in metres $\varnothing 80$ (m)	
	$\varnothing 50$	$\varnothing 60$
bend 45°	12.3	5
bend 90°	19.6	8
0.5m extension	6.1	2.5
1.0m extension	13.5	5.5
2.0m extension	29.5	12

Adjustment table

	Fan rotations (r.p.m.)		Tubing pipes $\varnothing 50$	Tubing pipes $\varnothing 60$	Tubing pipes $\varnothing 80$	ΔP boiler outlet
	Heat- ing	DHW	maximum length [m]	maximum length [m]	maximum length [m]	
20 IS	6,200	6,200	5	18	98	174
	6,300	6,300	7*	23*	125*	213
	6,400	6,400	9*	28*	153*	253
	6,500	6,500	11*	33*	181*	292
	6,600	6,600	13*	38*	208*	332
	6,700	6,700	15*	43*	236*	371
	6,800	6,800	17*	48*	263*	410
	6,900	6,900	19*	53*	291*	450
	7,000	7,000	22*	58*	319*	489
	7,100	7,100	24*	63*	346*	528
25 KIS	7,100	7,100	24*	18	98	174
	6,300	7,700	7*	23*	125*	213
	6,400	7,800	9*	28*	153*	253
	6,500	7,900	11*	33*	181*	292
	6,600	8,000	13*	38*	208*	332
	6,700	8,100	15*	43*	236*	371
	6,800	8,200	17*	48*	263*	410
	6,900	8,300	19*	53*	291*	450
	7,000	8,400	22*	58*	319*	489
	7,100	8,500	24*	63*	346*	528
30 KIS	5,800	6,900	2	11	53	150
	5,900	7,000	4	15	73	189
	6,000	7,100	5*	19*	93*	229
	6,100	7,200	7*	24*	113*	268
	6,200	7,300	9*	28*	133*	308
	6,300	7,400	10*	32*	153*	347
	6,400	7,500	12*	36*	173*	386
	6,500	7,600	14*	40*	193*	426
	6,600	7,700	16*	44*	214*	465
	6,700	7,800	17*	49*	234*	504
35 KIS 35 IS	6,900	7,800	2	11	57	190
	7,000	7,900	3*	15*	75*	229
	7,100	8,000	4*	19*	93*	269
	7,200	8,100	6*	22*	112*	308
	7,300	8,200	7*	26*	130*	348
	7,400	8,300	9*	30*	148*	387
	7,500	8,400	10*	33*	166*	426
	7,600	8,500	12*	37*	184*	466
	7,700	8,600	13*	40*	202*	505
	7,800	8,700	15*	44*	220*	544

(*) Maximum length that can be installed ONLY with class H1 discharge pipes.

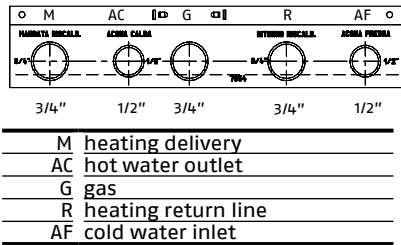
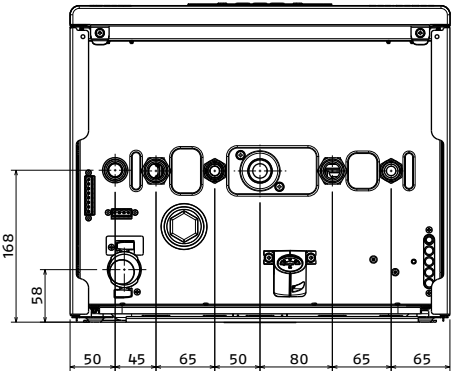
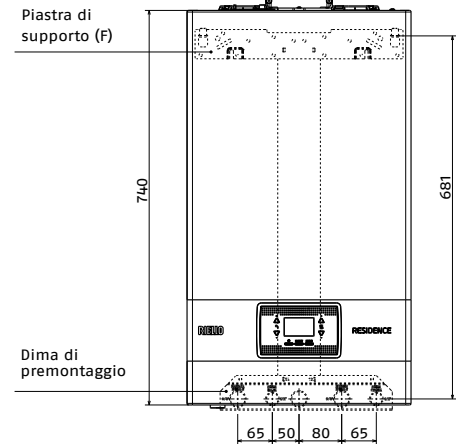


WALL-HUNG BOILERS

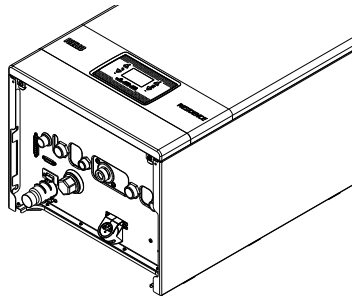
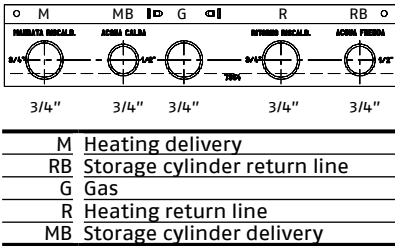
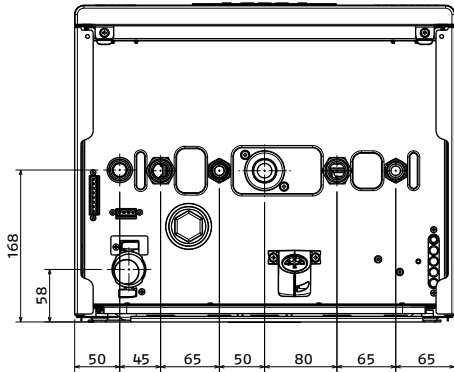
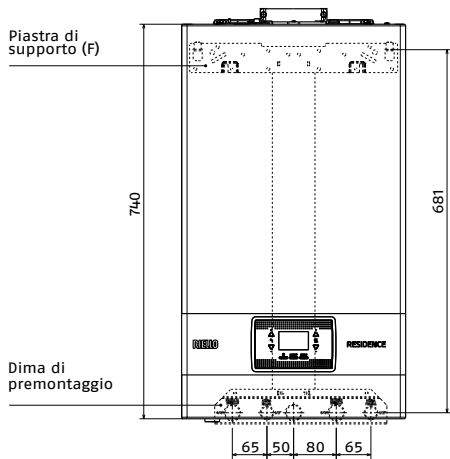
Wall-hung condensing boilers

HYDRAULIC CONNECTIONS

KIS MODELS

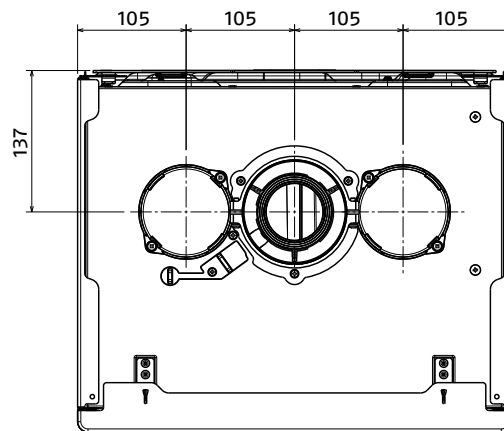


IS MODELS

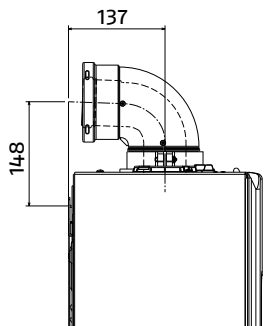


The hydraulic connections are concealed by the water panelling

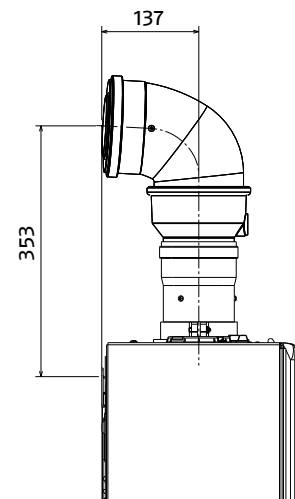
FLUE GAS EXHAUST AND COMBUSTION AIR SUCTION CONNECTIONS



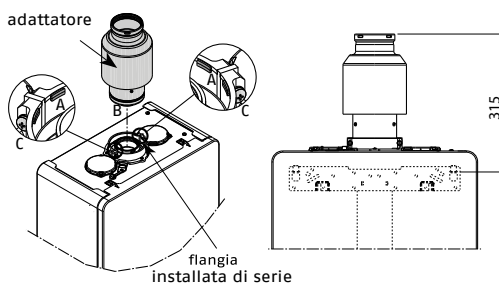
Concentric pipes (Ø 60 - 100 mm)



Concentric pipes (Ø 80 - 125 mm)

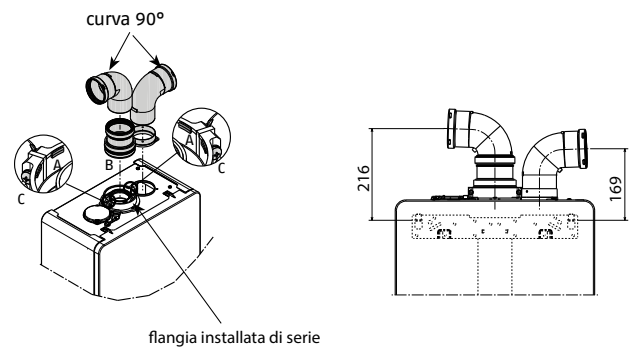


"Forced open" installation (type B23P/B53P)



* The accessories list includes an adjustable position splitter kit for making replacement in existing systems easier. For more information, refer to the specific manual

Twin pipes (Ø 80 mm)



* Adjustable position splitter

WALL-HUNG BOILERS

Wall-hung condensing boilers

CIRCULATOR

The Residence circulator is factory set to approx. 6 m

The modulating circulator function is only active in heating mode. In the switchover of the 3-way valve on the DHW system, the circulator operates constantly at maximum speed. The modulating circulator function only applies to the boiler circulator and not to the circulators on any external devices that are connected (e.g. relaunch circulator).

4 operating modes can be selected according to the situation and type of system.

When you enter the CH menu, parameter PUMP CONTROL TYPE, you can choose from these options:

1 - VARIABLE SPEED CIRCULATOR WITH PROPORTIONAL MODE (41 ≤ PUMP CONTROL TYPE ≤ 100)

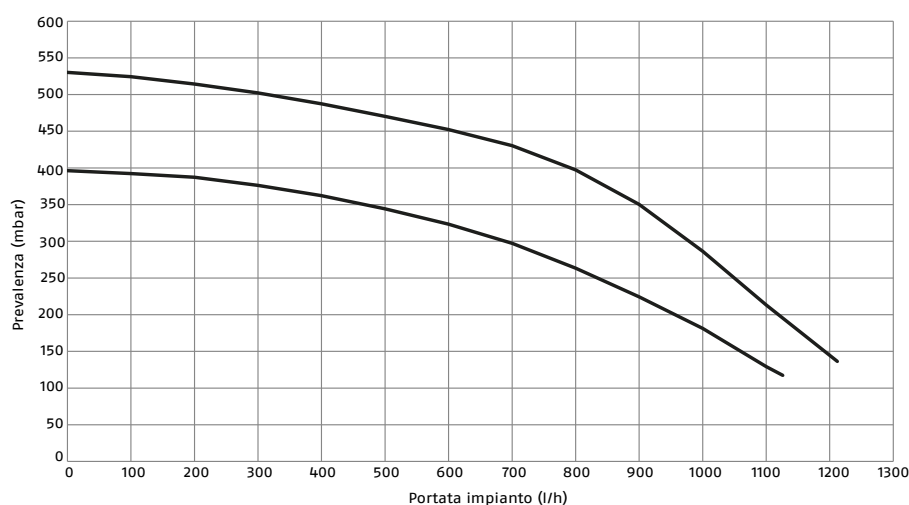
2 - VARIABLE SPEED CIRCULATOR WITH ΔT CONSTANT MODE (2 ≤ PUMP CONTROL TYPE ≤ 40)

3 - CIRCULATOR IN MAXIMUM FIXED SPEED MODE (PUMP CONTROL TYPE = 1)

4 - OCCASIONAL USE OF A STANDARD NON-VARIABLE SPEED CIRCULATOR (PUMP CONTROL TYPE = 0)

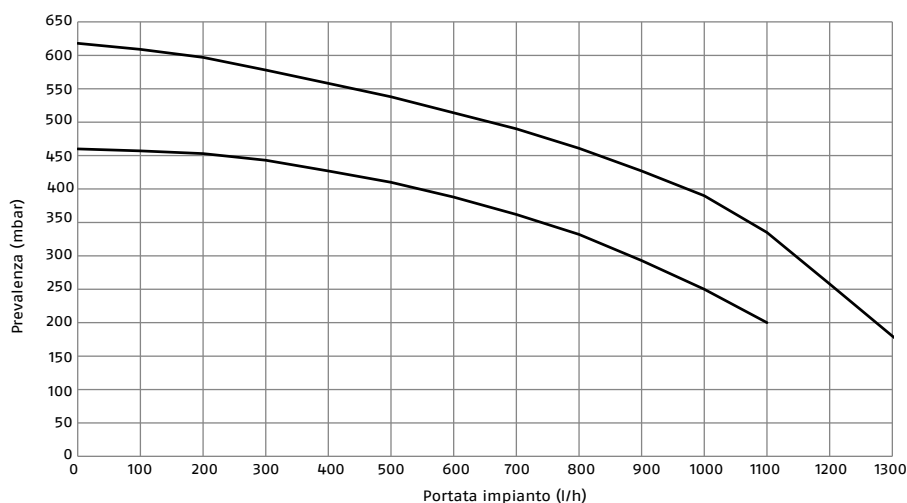
CIRCULATOR RESIDUAL DISCHARGE HEAD

6 METRE CIRCULATOR



The high discharge head circulator kit is available as an accessory and the characteristic curve is shown below:

7 METRE CIRCULATOR



ELECTRICAL WIRING

HIGH VOLTAGE CONNECTIONS

The connection to the mains supply must be made via a separation device with an omnipolar opening of at least 3.5 mm (EN 60335/1 – category 3). The appliance works with alternating current at 230 Volt/50 Hz, and is in compliance with Standard EN 60335-1. It is obligatory to make the connection with a safe ground/earth, in compliance with current directives.

The installer is responsible for ensuring the appliance is suitably earthed; the manufacturer will not be liable for any damage resulting from an incorrect or absent earth connection. It is also advisable to respect the phase-neutral connection (L-N).

The earth conductor must be a couple of cm longer than the others.

To create the seal of the boiler use a clamp and tighten it on the cable grommet used.

The boiler can operate with a phase-neutral or phase-phase (not floating) power supply.

For power supplies that are not earthed, it is necessary to use an isolating transformer with earth-anchored secondary.

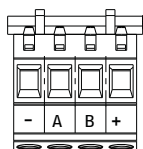
It is forbidden to use gas and/or water pipes to earth electrical appliances. Use the power cable supplied to connect the boiler to the mains power supply. If the power cable has to be replaced, use a HAR H05V2V2-F cable, 3 x 0.75mm², Ø max external 7 mm.

LOW VOLTAGE CONNECTIONS

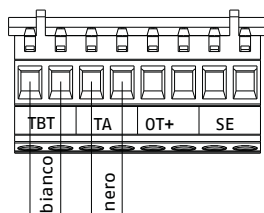
Make the low voltage connections as follows:

- use the supplied connectors:
 - 4-pole connector for BUS 485 signal (- A B +)
 - 8-pole connector for TBT - TA - OT+ - SE signals

CN4

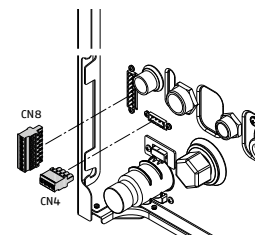


CN8



Utilizzare contatto privo di tensione

CN4	(- A B +)	Bus 485
CN8	TBT	Low temperature thermostat
	TA	Room thermostat (contact without voltage)
	OT+	Open therm
	SE	Outdoor temperature sensor



- make the connections using the desired connector as shown in the detailed drawing
- once you have made the electrical connections, correctly insert the connector into its connection.

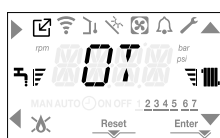
We recommend using conductors with a section no larger than 0.5 mm².

In the event of TA or TBT connection, remove the relative jumpers on the terminal board.

If the low voltage electrical connection box is not connected, the boiler does not ignite.

OTBus REMOTE CONTROL CONNECTION (in room)

If connected to the OTBus remote control system, the boiler displays this screen:



In particular on the boiler display:

- it is no longer possible to set the boiler OFF/WINTER/SUMMER status (it is set by the OTBus remote control)
- it is no longer possible to set the domestic hot water setpoint (it is set by the OTBus remote control)
- it is not possible to activate the COMBUSTION CONTROL function if a OTBus remote control is connected to the boiler

In addition:

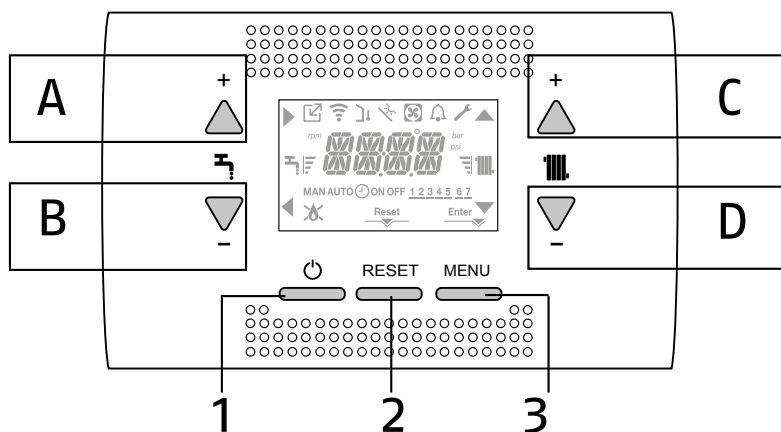
- The DHW setpoint value is displayed in the INFO menu
- The heating setpoint set on the boiler display is used only if there are heat requests from the TA and the OTBus remote control does not have a request. Note that it is not possible, with the OTBus remote control connected, to change the values of the parameters ACTUATION TYPE and REQUEST TYPE of the main zone.
- The combination of buttons A + B remains active to set the HOT DOMESTIC WATER COMFORT function.

WALL-HUNG BOILERS

Wall-hung condensing boilers

CONTROL PANEL

The control panel acts as a machine interface, displaying the system settings and providing access to the parameters. The display normally shows the temperature of the flow sensor unless a DHW request is in progress. If this is the case, the DHW probe temperature is displayed; if no button is touched for 10 secs, the interface will display the current time (backlight unlit).



A	È normalmente utilizzato per incrementare il valore di temperatura acqua calda sanitaria, quando evidenziata la freccia ► svolge invece la funzione di conferma
B	È normalmente utilizzato per decrementare il valore di temperatura acqua calda sanitaria, quando evidenziata la freccia ◀ svolge la funzione di backannulla
A+B	Accesso alle funzioni comfort sanitario
C	È normalmente utilizzato per incrementare il valore di temperatura acqua riscaldamento, quando evidenziata la freccia ▲ permette di muoversi all'interno del menu impostazioni
D	È normalmente utilizzato per decrementare il valore di temperatura acqua riscaldamento, quando evidenziata la freccia ▼ permette di muoversi all'interno del menu impostazioni
C+D	Quando abilitata la programmazione oraria riscaldamento consente di passare dal programma automatico a quello manuale
A+C	Accesso al menu impostazione dell'orologio
B+D	Accesso al menu programmazione oraria
1	Utilizzato per modificare lo stato di funzionamento della caldaia (OFF, ESTATE e INVERNO)
2	Utilizzato per l'azzeramento dello stato di allarme o per interrompere il ciclo di sfiato
3	Utilizzato per accedere ai menu INFO e IMPOSTAZIONI. Quando sul display è visualizzata l'icona Enter, il tasto assume la funzione di ENTER e viene utilizzato per confermare il valore impostato durante la programmazione di un parametro tecnico
1+3	Blocco e sblocco tasti
2+3	Quando la caldaia è in stato OFF serve per attivare la funzione analisi combustione (CO)

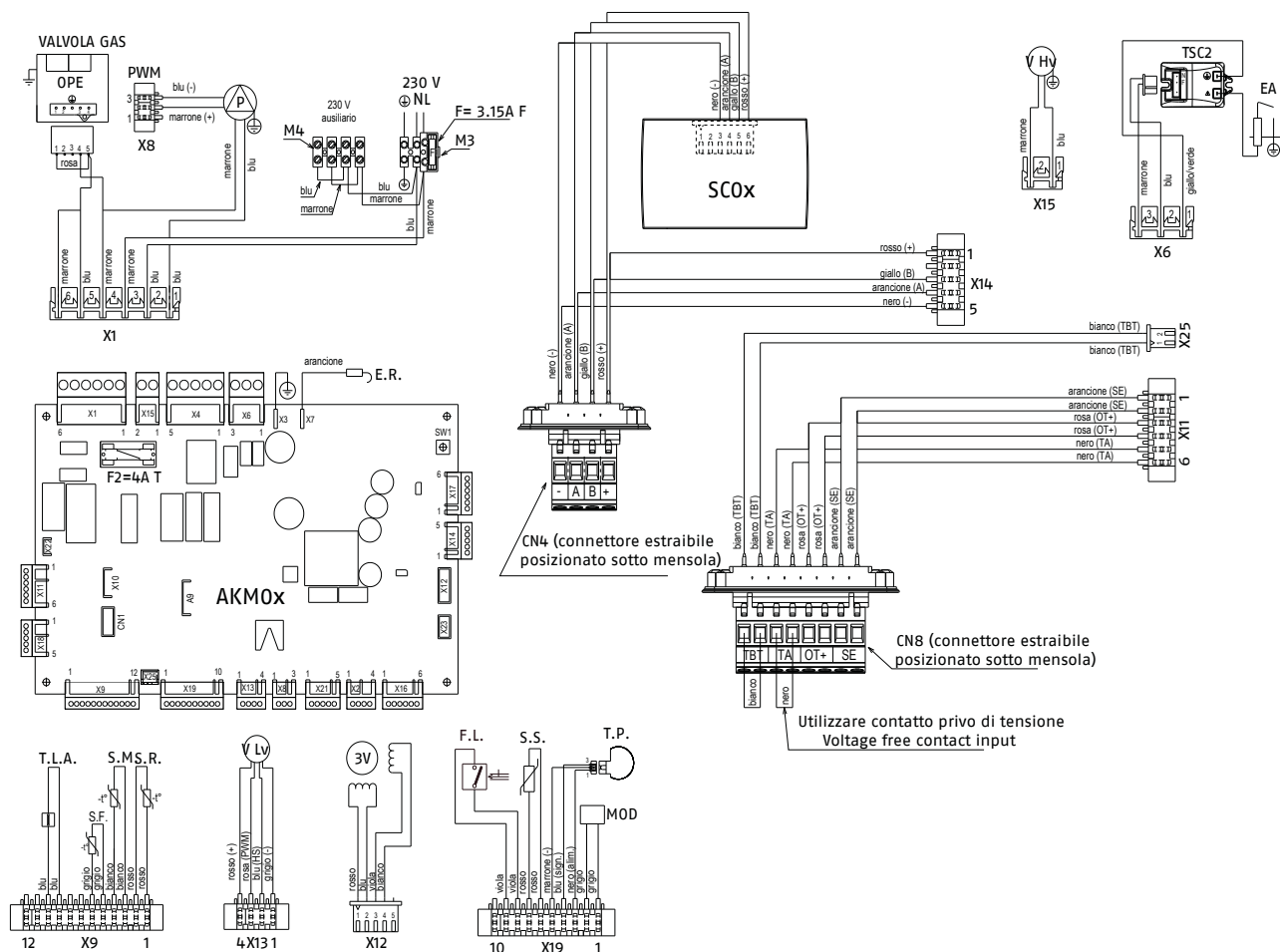
	Indica la connessione a un dispositivo OT
	Indica la connessione a un dispositivo WIFI
	Indica la presenza di una sonda esterna
	Indica l'attivazione di funzioni speciali sanitario o la presenza di impianto per la gestione del solare termico
	Indica il collegamento ad una pompa di calore (non utilizzato su questo modello)
	Icona che si accende a fronte di un allarme
	Si accende in caso di anomalia unitamente all'icona  , ad esclusione degli allarmi fiamma e acqua
	Indica la presenza di fiamma, in caso di blocco di fiamma l'icona si presenta 
	Si accende in presenza di allarmi che richiedono un intervento di sblocco manuale da parte dell'operatore.
	Si accende quando è richiesta un'operazione di conferma
	Quando l'icona è attiva, indica che è attiva la funzione "conferma" del tasto A
	Quando l'icona è attiva, indica che è attiva la funzione "backlannulla" del tasto B
	Quando l'icona è attiva, è possibile navigare nel menu o incrementare il valore del parametro selezionato
	Quando l'icona è attiva, è possibile navigare nel menu o decrementare il valore del parametro selezionato
	L'icona si accende se riscaldamento attivo, lampeggia se richiesta riscaldamento in corso
	L'icona si accende se sanitario attivo, lampeggia se richiesta sanitario in corso
	Indicano il livello di set point impostato (1 tacca valore minimo, 4 tacche valore massimo)
1 2 3 4 5 6 7	Indica i giorni della settimana
AUTO  ON	Quando abilitata la funzione "programmazione oraria riscaldamento" questa icona indica che il riscaldamento dell'impianto (zona principale) è in modalità AUTOMATICO (la gestione delle richieste riscaldamento segue la programmazione oraria impostata). Se ci troviamo fuori dalle fasce orarie di abilitazione del riscaldamento compare AUTO OFF.
MAN ON	Quando abilitata la funzione "programmazione oraria riscaldamento" questa icona indica che il riscaldamento dell'impianto (zona principale) è in modalità MANUALE (la gestione delle richieste riscaldamento non segue la programmazione oraria impostata, ma è sempre attiva).
MAN OFF	Questa icona indica, quando la funzione "programmazione oraria riscaldamento" non è abilitata

WALL-HUNG BOILERS

Wall-hung condensing boilers

MULTI-ROW WIRING DIAGRAM – KIS MODELS

NOTA: LA POLARIZZAZIONE L-N E' CONSIGLIATA

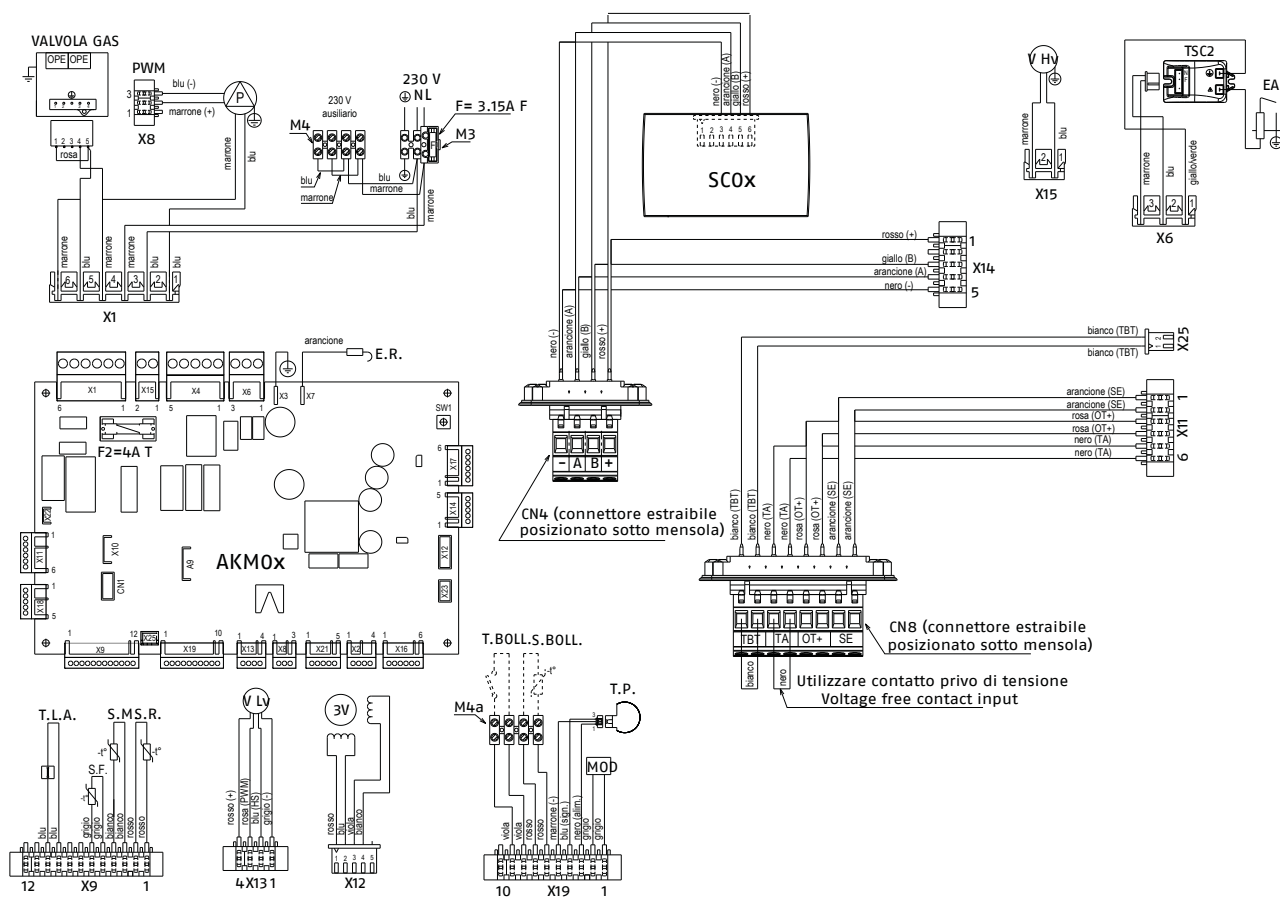


AKMOx	Control board
SC0x	Display board
X1-X25-	Connectors
CN1	
S.W.1	Combustion analysis and interruption of the venting cycle
E.R.	Flame detection electrode
F	External fuse 3.15A F
F2	Fuse 4A T
M3-M4	Terminal board for external connections: 230V
CN4	Connector for external connections: (- A B +) Bus 485
CN8	Connector for external connections: TBT Low temperature thermostat TA Room thermostat (contact without voltage) OT+ Open therm SE Outdoor temperature sensor

P	Pump
PWM	PWM signal, circulator with variable speed
OPE	Gas valve operator
V Hv	Fan power supply 230V
TSC2	Ignition transformer
E.A.	Ignition electrode
T.L.A.	Water limit thermostat
S.F.	Flue gas probe
S.M.	Temperature flow sensor on primary circuit
S.R.	Temperature return sensor on primary circuit
F.S.	DHW flow-meter
S.S.	Temperature return sensor on DHW circuit
T.P.	Pressure transducer
MOD	Modulator
V Lv	Fan control signal
3V	3-way hydraulic valve stepper servomotor

MULTI-ROW WIRING DIAGRAM – IS MODELS

NOTA: LA POLARIZZAZIONE L-N È CONSIGLIATA



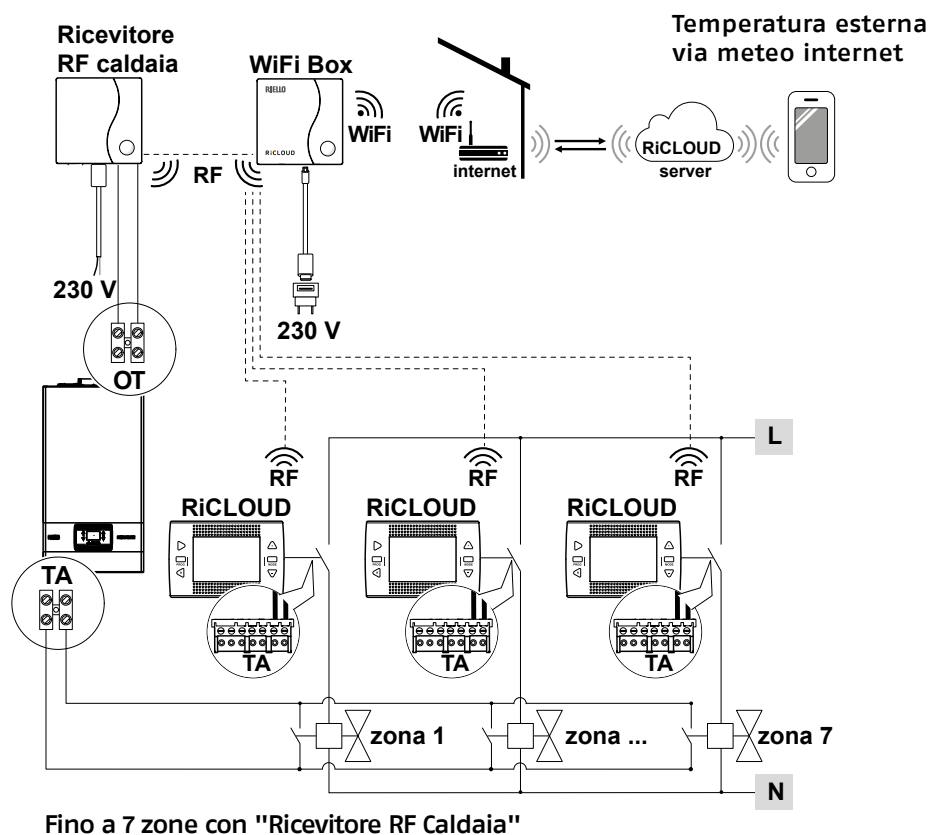
AKM0X	Control board
SC0X	Display board
X1-X25-	Connectors
CN1	
S.W.1	Combustion analysis and interruption of the venting cycle
E.R.	Flame detection electrode
F	External fuse 3.15A F
F2	Fuse 4A T
M3-M4	Terminal board for external connections: 230V
M4A	Terminal board for external connections: Storage cylinder thermostat - Storage cylinder probe
CN4	Connector for external connections: (- A B +) Bus 485
CN8	Connector for external connections:
TBT	Low temperature thermostat

TA	Room thermostat (contact without voltage)
OT+	Open therm
SE	Outdoor temperature sensor
P	Pump
PWM	PWM signal, circulator with variable speed
OPE	Gas valve operator
V Hv	Fan power supply 230V
TSC2	Ignition transformer
E.A.	Ignition electrode
T.L.A.	Water limit thermostat
S.F.	Flue gas probe
S.M.	Temperature flow sensor on primary circuit
S.R.	Temperature return sensor on primary circuit
T.P.	Pressure transducer
MOD	Modulator
V Lv	Fan control signal
3V	3-way hydraulic valve stepper servomotor

WALL-HUNG BOILERS

Wall-hung condensing boilers

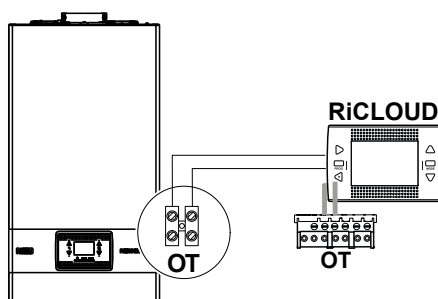
RiCLOUD WIRING DIAGRAM



NOTE: Boiler RF receiver to be added if the WiFi signal at the boiler is weak or absent.

For other diagrams, refer to the specific RiCLOUD system documentation.

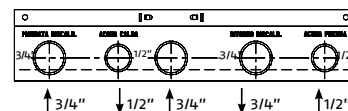
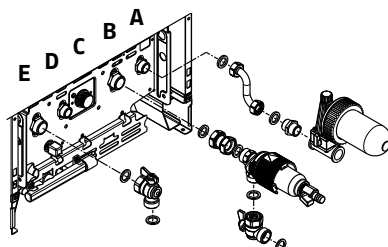
Note that the boiler control panel cannot be remote controlled: to take advantage of the 65% Ecobonus tax deduction or to check the boiler when installed outdoors, a RiCLOUD remote control must be provided plus the following layout:



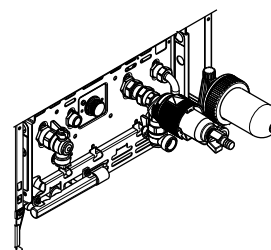
Magnetic filter and polyphosphate dosing unit kit

The kit consists of:

- 1 Polyphosphate dosing unit
- 1 Magnetic filter
- 1 2a Fitting
- 2 2b 3/4" gasket
- 1 Copper pipe
- 1 1/2" nipple
- 1 Heating system fluid
- 2 Heating tap
- 2 Flat 1/2" gasket, 18.5X11X2
- 4 Flat 3/4" gasket, 24X17X2
- 1 Instruction sheet



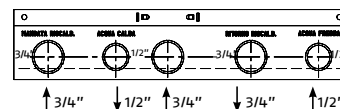
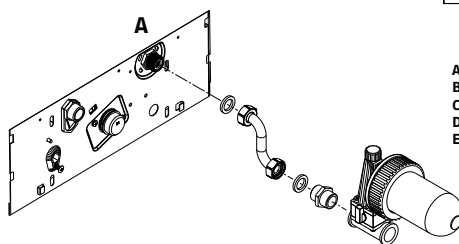
A Entrata acqua fredda
B Ritorno riscaldamento
C Gas
D Uscita acqua calda
E Mandata riscaldamento



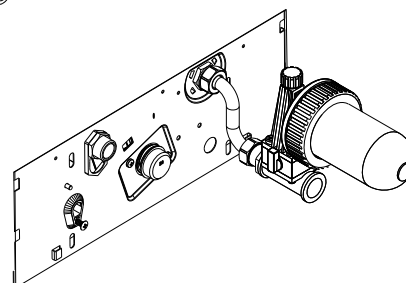
DHW softener kit

The kit consists of:

- 1 Polyphosphate dosing unit
- 1 Copper pipe
- 1 1/2" nipple
- 2 Flat 1/2" gasket, 18.5X11X2
- 1 Instruction sheet



A Entrata acqua fredda
B Ritorno riscaldamento
C Gas
D Uscita acqua calda
E Mandata riscaldamento



By using the control panel on the boiler (MASTER), you can control up to two heat only zones using the same number of BE16 (SLAVE) zone boards. Installers can choose to:

1. Use BAG³ Hybrid as an accessory, which includes both the electrical and the hydraulic part;
2. Or, alternatively, use the first zone control kit (and the additional zone control kit if necessary) which include only the electrical part.
In this case, the hydraulic part must be done by the installer.

Bag³ Hybrid (for heat only systems combined with Residence)

PRODUCT OVERVIEW

BAG³ HYBRID is a hydraulic distributor that can separate the water in the heat generator circuits from the rest of the heating system by dividing it into one or two zones; it should be used in conjunction with the boiler and other specific accessories (e.g. storage cylinders, modules and solar panels, etc.) in order to develop more complicated systems.

It consists of a mixing bottle, an electrical box with control board, one/two energy-efficient self-modulating circulators and a 3-way mixing valve that controls the temperature of the water in the low temperature zone (1D+1M version). The hydraulic distributor should be housed in a special box (supplied as an accessory) which can be wall-mounted (only in indoor installations) or recess-mounted.

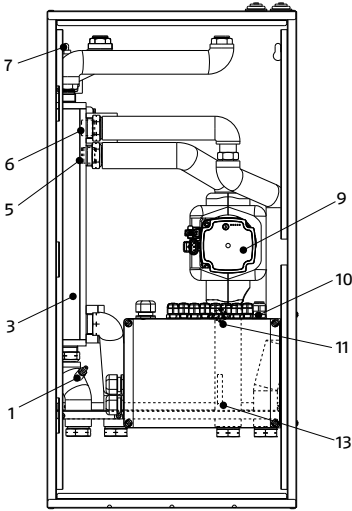
- BAG³ HYBRID 1D and 2D: in direct systems (1 or 2 zones), it can be used as a hydraulic separator between the boiler and the system. Equipped with energy-efficient self-modulating circulators.
- BAG³ HYBRID 1D+1M: in direct and mixed systems, it can be used as a hydraulic separator between the boiler and the dual temperature system. Equipped with energy-efficient self-modulating circulators. The mixing valve and the mixed circuit pump are controlled by system intelligence
- Suitable for recess or outdoor installation
- Box for recess mounting in galvanised sheet metal which can be painted white
- Hydraulic components supplied insulated so that they can also be used during summer cooling (N.B.: not combined with Residence)
- Prewired electrical and electronic components (circulators, valves, probes, etc.)
- The system and heat pump can be disconnected with stop cocks which can be installed in the bottom of the box
- A diverter valve, supplied as an accessory, can be installed so that any storage cylinder present can be preheated by the heat pump (N.B.: not combined with Residence)
- BAG³ HYBRID distributors come with a limit thermostat for low temperature systems

TECHNICAL DATA

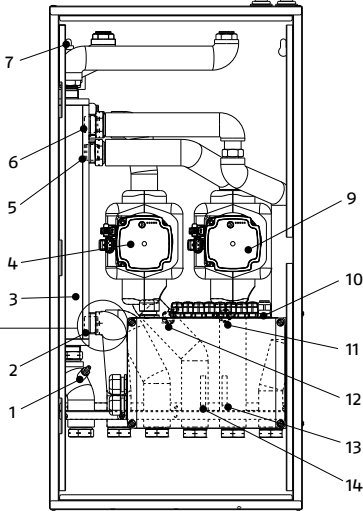
DESCRIPTION	UM	BAG ³ HYBRID		
		1D	2D	1D+1M
Electrical supply	V~Hz	230 (±10%) – 50 Hz		
Maximum power drawn	W	57	114	118
Power absorbed by individual circulator – min / max	W		5/52	
Energy absorption of individual circulator – min / max	A		0.07/0.52	
Operation temperature	°C		4–90	
Electrical protection level with wall-mounted version	°C		IP10D	
Electrical protection level with recessed version	-		IPX5D	
Maximum pressure	bar		3	

STRUCTURE

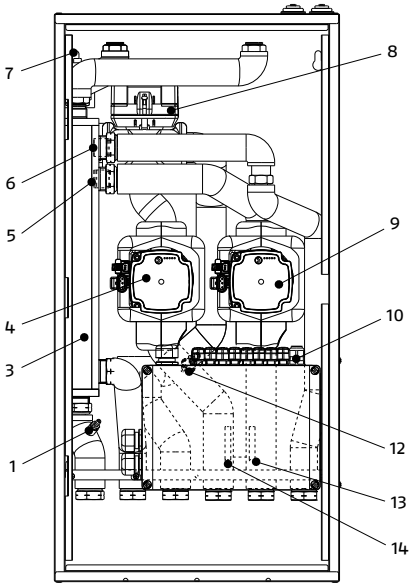
1 DIRECT ZONE (1D)



2 DIRECT ZONE (2D)

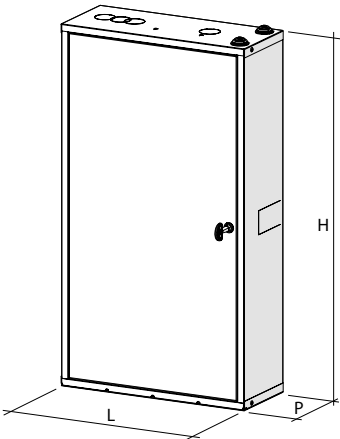


1 DIRECT ZONE + 1 MIXED ZONE (1D+1M)



- 1 Drain tap
- 2 Non-return valve, zone 1 (Z1) (only in 2D configuration)
- 3 Mixing bottle
- 4 System circulator, zone 1 (Z1)
- 5 Non-return valve, heat pump circuit
- 6 Non-return valve, main zone (ZP)
- 7 Air vent valve
- 8 Mixing valve, zone 1 (Z1)
- 9 System circulator, main zone (ZP)
- 10 Electric connections box
- 11 Low temperature limit thermostat, main zone (ZP) (only in 1D and 2D configuration)
- 12 Low temperature limit thermostat, zone 1 (Z1)
- 13 High temperature system probe, main zone (ZP)
- 14 Low temperature system probe, zone 1 (Z1)

OVERALL DIMENSIONS



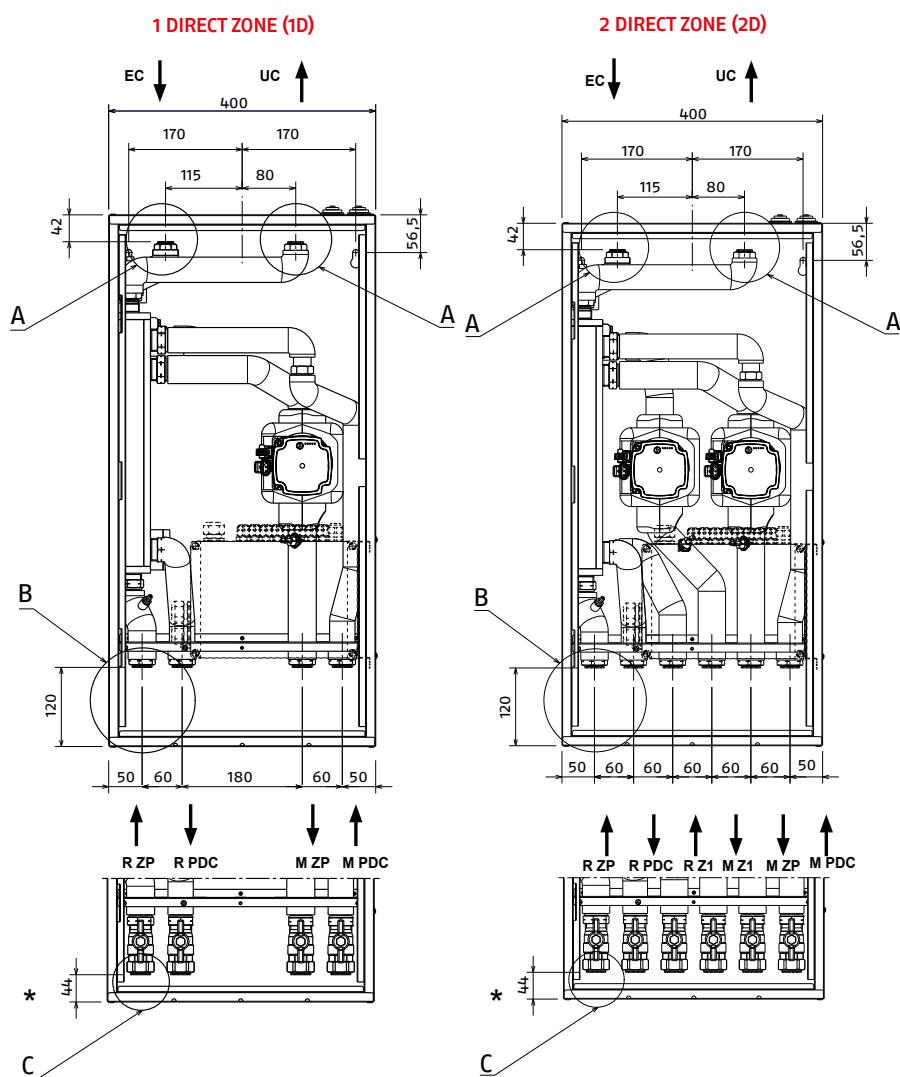
DESCRIPTION	UM	BAG ³ HYBRID		
		1D	2D	1D+1M
MODEL				
L	mm	400	400	400
P	mm	160	160	160
H	mm	797	797	797
Net weight of box *	kg	8	8	8
Net weight of appliance	kg	13	15	18

WALL-HUNG BOILERS

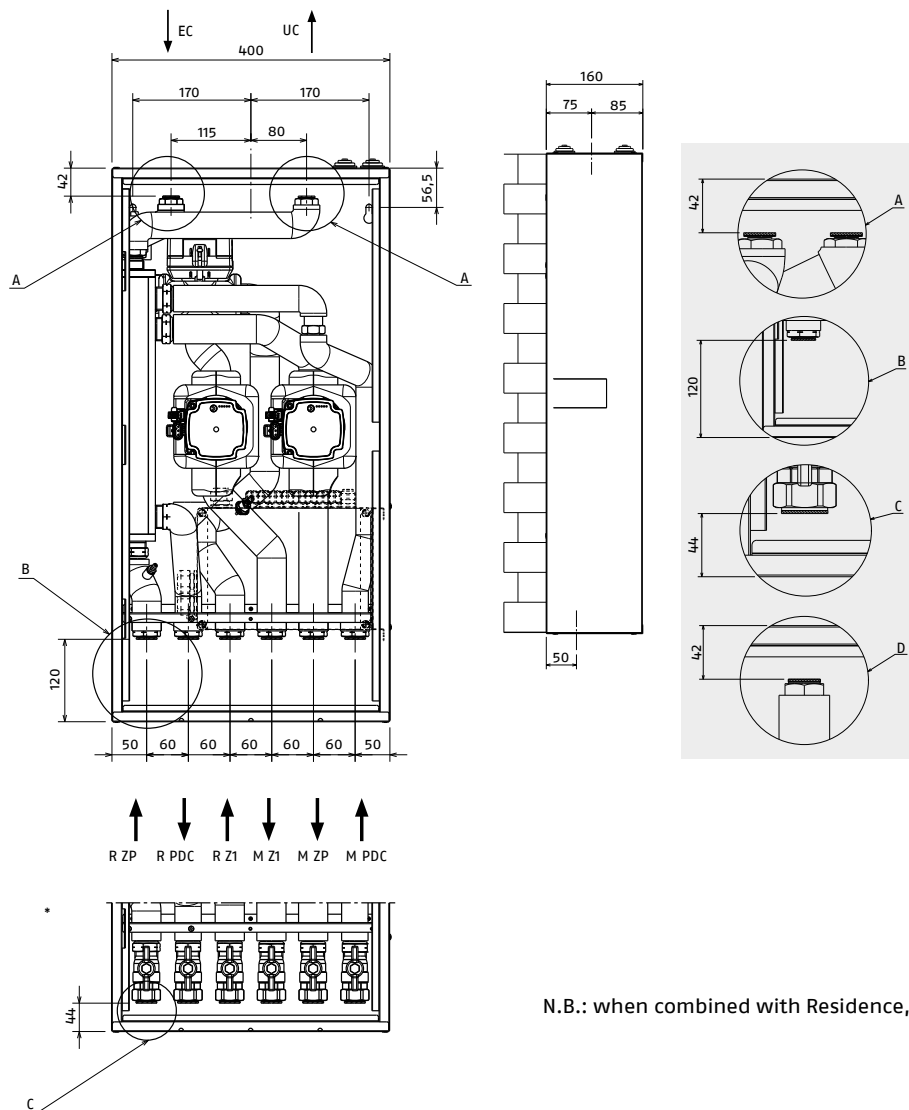
Wall-hung condensing boilers

HYDRAULIC CONNECTIONS

The connections can be made directly using the female couplings on the BAG3 HYBRID delivery and return pipes; stop cocks, supplied as accessories, can be fitted on the system and heat pump connections. These stop cocks are very useful when maintenance work is carried out because they allow the BAG³ HYBRID to be drained without having to drain the entire system.



1 DIRECT ZONE + 1 MIXED ZONE (1D+1M)



N.B.: when combined with Residence, plug M-R PDC.

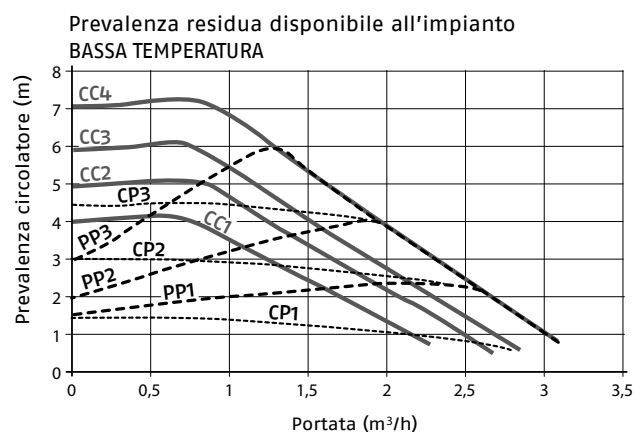
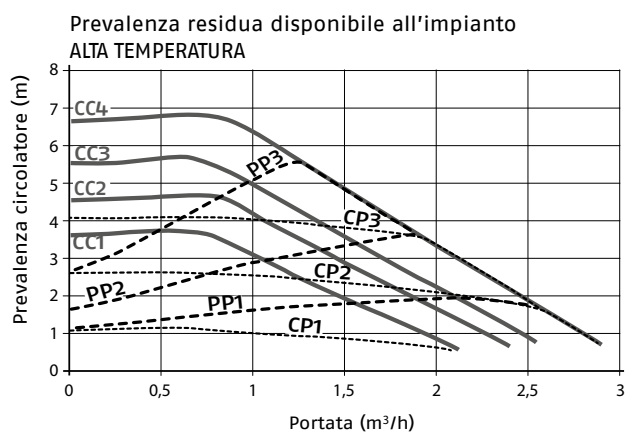
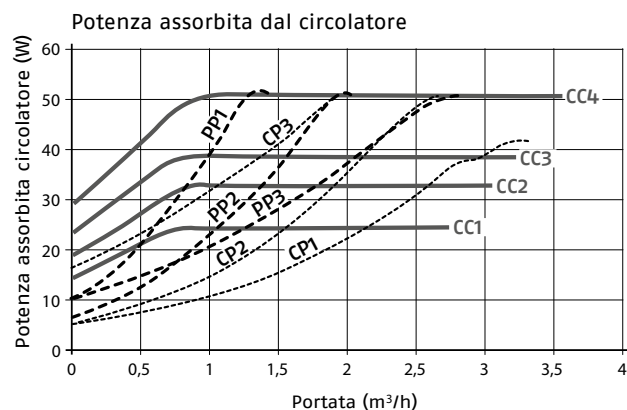
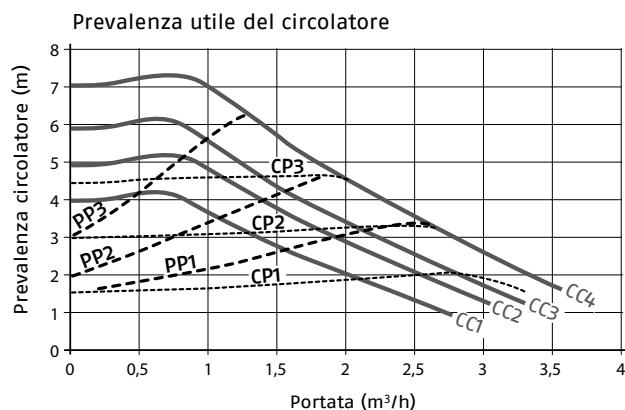
- EC Boiler inlet (Ø 3/4")
- UC Boiler outlet (Ø 3/4")
- UB DHW storage cylinder outlet (Ø 3/4")
- M PDC Delivery pipe from heat pump (Ø 1")
- M ZP Main zone delivery pipe (Ø 1")
- M Z1 Zone 1 delivery pipe (Ø 1")
- R PDC Return to heat pump (Ø 1")
- R ZP Main zone return pipe (Ø 1")
- R Z1 Zone 1 return pipe (Ø 1")
- * configuration with stop cocks (supplied as accessories)

WALL-HUNG BOILERS

Wall-hung condensing boilers

CHARACTERISTICS OF BAG³ HYBRID CIRCULATORS

BAG³ HYBRID is equipped with high efficiency electronically controlled circulators. The performance data for these units required to size the system are shown in the graph.

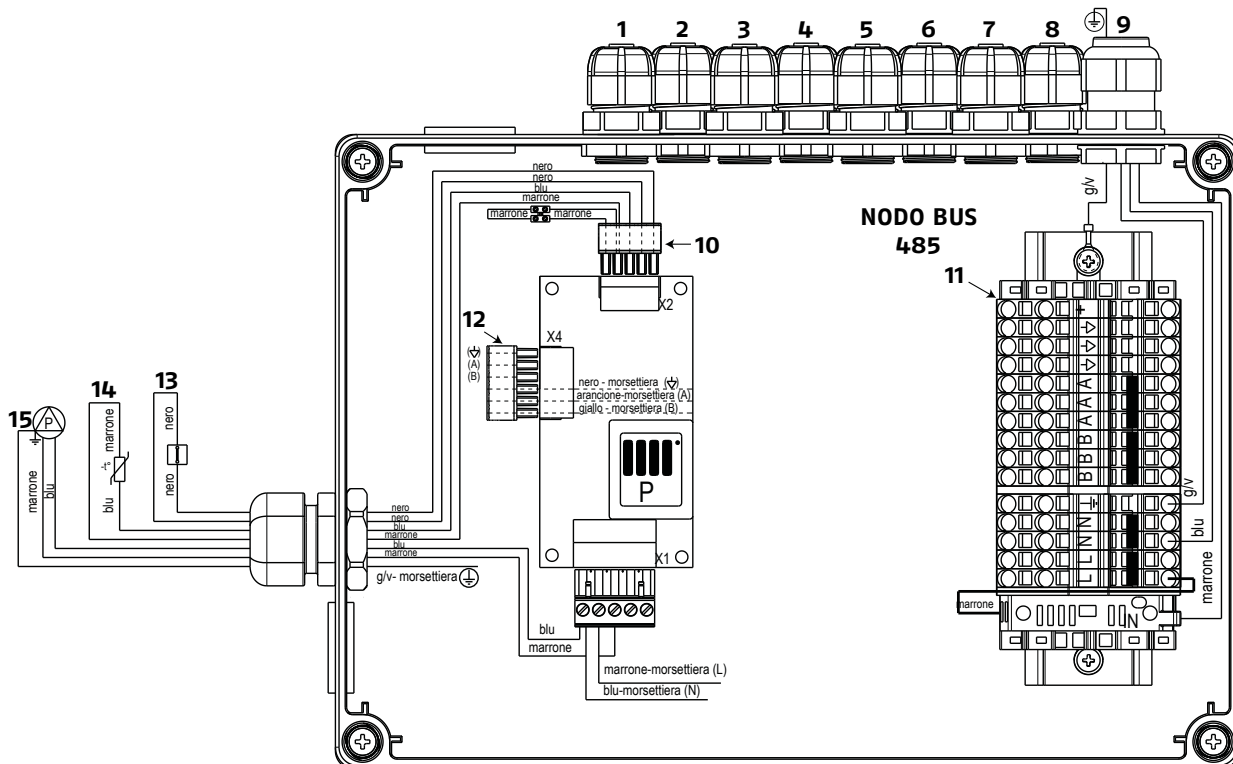


- PP1 Curva di prevalenza proporzionale BASSA
- PP2 Curva di prevalenza proporzionale MEDIA
- PP3 Curva di prevalenza proporzionale ALTA
- CP1 Curva di prevalenza costante BASSA
- CP2 Curva di prevalenza costante MEDIA
- CP3 Curva di prevalenza costante ALTA

- CC1 Curva 1 = 4 metri
- CC2 Curva 2 = 5 metri
- CC3 Curva 3 = 6 metri
- CC4 Curva 4 MAX = 7 metri

BAG³ HYBRID 1D WIRING DIAGRAM

BE16 (P)	Scheda gestione zona principale
P	Pompa zona principale
SONDA P.	Sonda zona principale
TBT P.	Termostato bassa temperatura zona principale



Settaggio indirizzo scheda

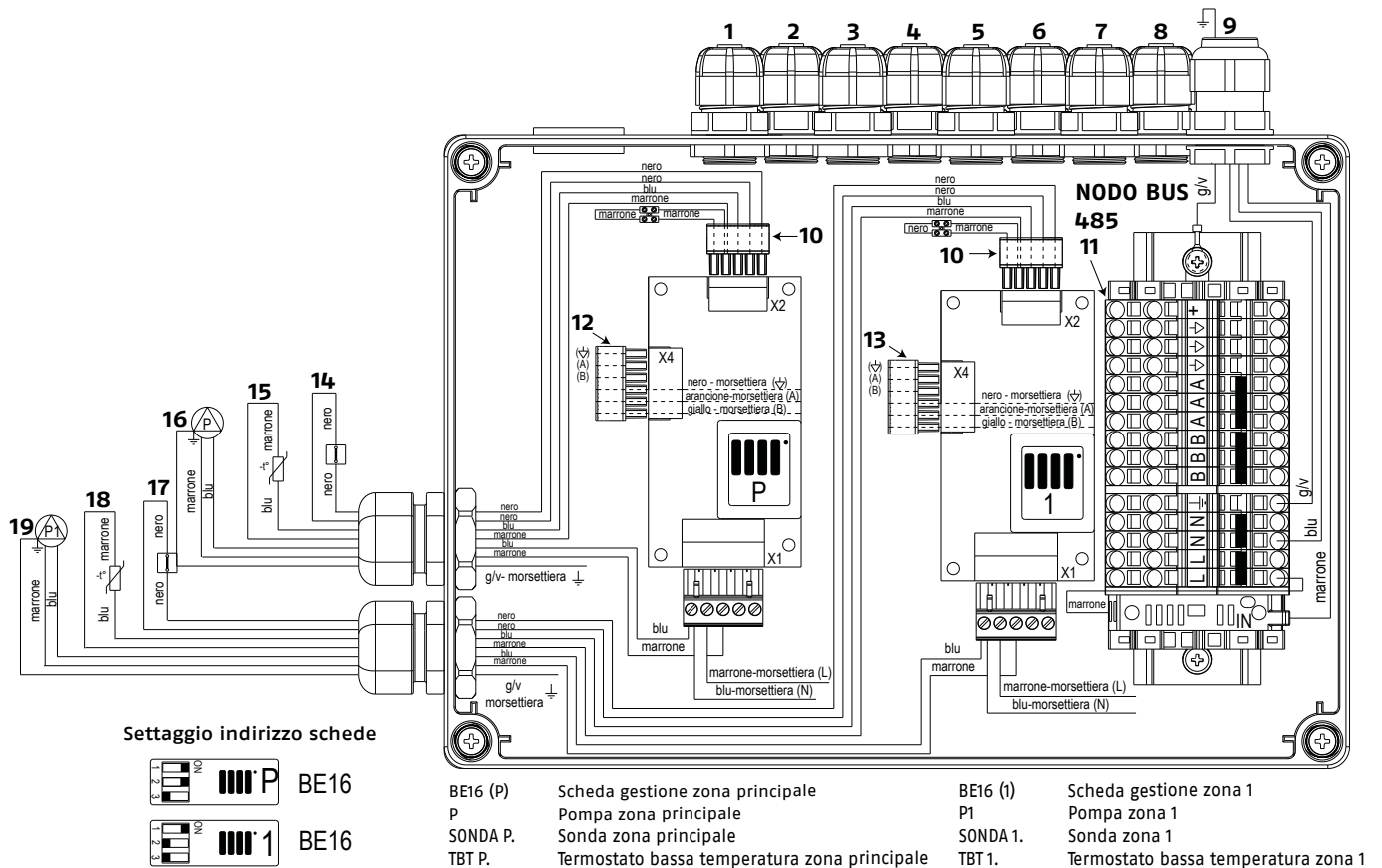


- 1-2 Various inputs
- 3 Input node 485 or TA zone P - VOLTAGE-FREE CONTACT - or room probe
- 4-5 Input node 485 from PDC (not used with Residence)
- 6 Input node 485 from solar system (A,B) (not used with Residence)
- 7 Input node 485 from Rec master (+,ϕ,A,B) (not used with Residence)
- 8 Input node 485 from boiler (+,ϕ,A,B) Ref. connector CN4
- 9 Input 230 V mains cable
- 10 TA contact - VOLTAGE-FREE CONTACT - or room probe zone P (X1, X2)
- 11 485 bus node
- 12 Connection of 485 node from Rec zone P (X4) (not used with Residence)
- 13 TBT zone P
- 14 Probe P zone P
- 15 Pump zone P

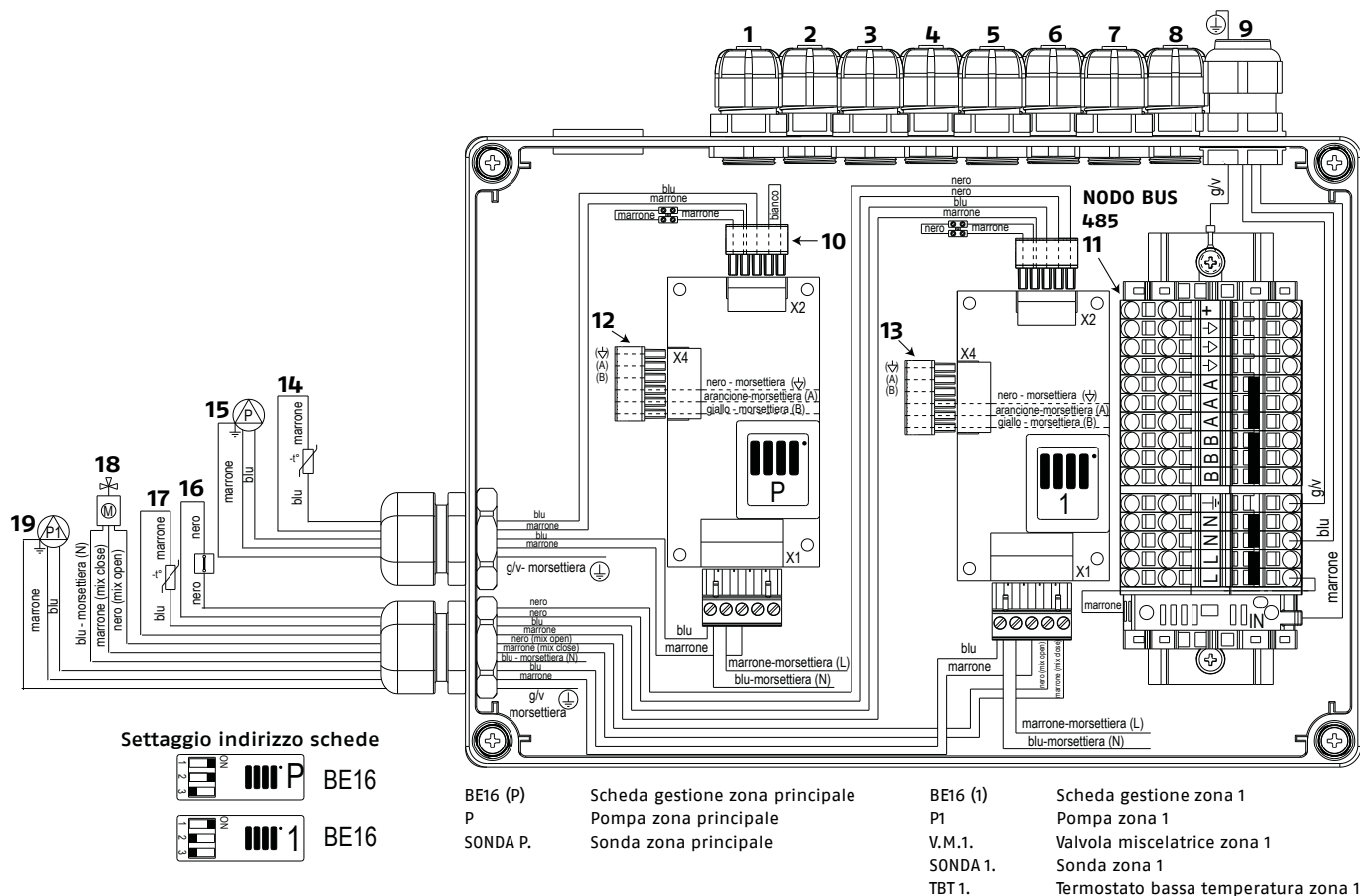
WALL-HUNG BOILERS

Wall-hung condensing boilers

BAG³ HYBRID 2D WIRING DIAGRAM



- 1-2 Various inputs
- 3 Input node 485 or TA zone P - VOLTAGE-FREE CONTACT - or room probe
- 4 Input node 485 or TA zone 1 - VOLTAGE-FREE CONTACT - or room probe
- 5 Input node 485 from PDC (not used with Residence)
- 6 Input node 485 from solar system (+, A, B) (not used with Residence)
- 7 Input node 485 from Rec master (+, A, B) (not used with Residence)
- 8 Input node 485 from boiler (+, A, B) Ref. connector CN4
- 9 Input 230 V mains cable
- 10 TA contact - VOLTAGE-FREE CONTACT - or room probe zone P (X1, X2)
- 11 485 bus node
- 12 Connection of 485 node from Rec zone P (X4) (not used with Residence)
- 13 Connection of 485 node from Rec zone 1 (X4) (not used with Residence)
- 14 TBT zone P
- 15 Probe P zone P
- 16 Pump zone P
- 17 TBT1 zone 1
- 18 Probe 1 zone 1
- 19 Pump 1 zone 1

BAG³ HYBRID 1+ 1M WIRING DIAGRAM

- 1-2 Various inputs
- 3 Input node 485 or TA zone P - VOLTAGE-FREE CONTACT - or room probe
- 4 Input node 485 or TA zone 1 - VOLTAGE-FREE CONTACT - or room probe
- 5 Input node 485 from PDC (not used with Residence)
- 6 Input node 485 from solar system (+, -, A, B) (not used with Residence)
- 7 Input node 485 from Rec master (+, -, A, B) (not used with Residence)
- 8 Input node 485 from boiler (+, -, A, B) Ref. connector CN4
- 9 Input 230 V mains cable
- 10 TA contact - VOLTAGE-FREE CONTACT - or room probe zone P (X1, X2)
- 11 485 bus node
- 12 Connection of 485 node from Rec zone P (X4) (not used with Residence)
- 13 Connection of 485 node from Rec zone 1 (X4) (not used with Residence)
- 14 TBT zone P
- 15 Probe P zone P
- 16 Pump zone P
- 17 TBT1 zone 1
- 18 Probe 1 zone 1
- 19 Pump 1 zone 1

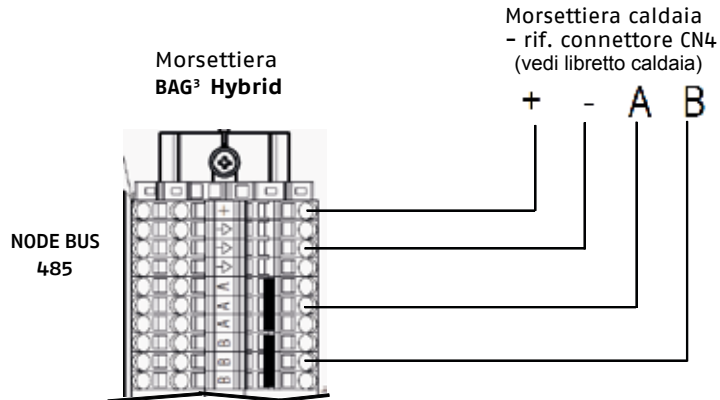
WALL-HUNG BOILERS

Wall-hung condensing boilers

ELECTRICAL WIRING

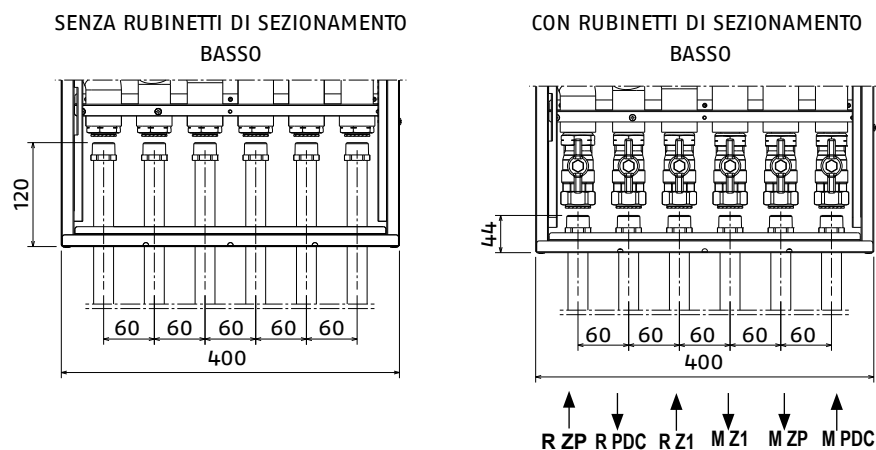
DETAIL OF BUS BOILER CONNECTION :

A 4-wire shielded cable must be used as shown in the diagram below (make sure the polarity is correct).



STOP COCK KIT (ACCESSORY)

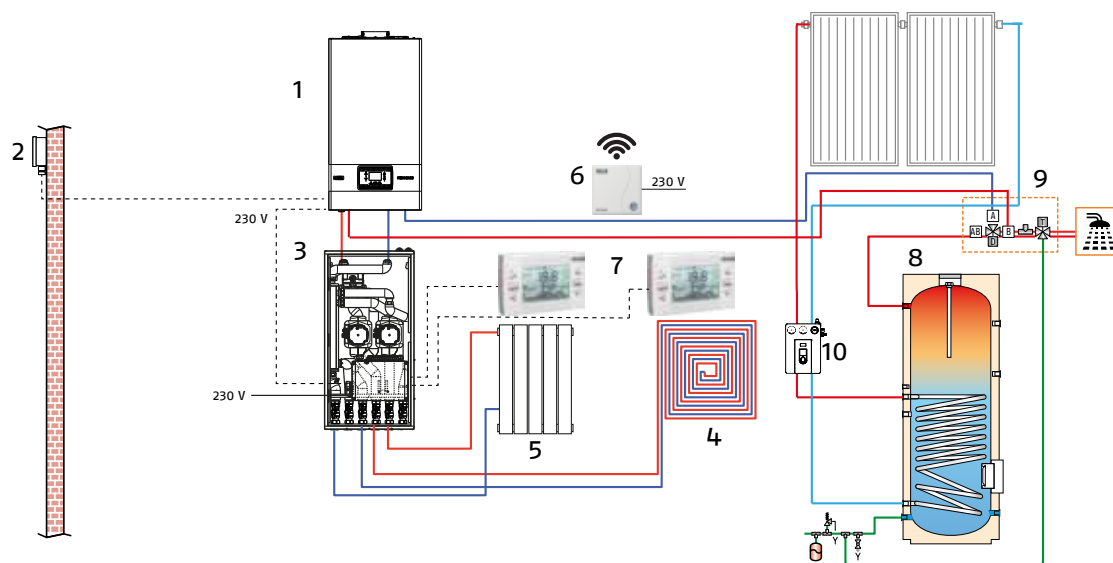
Kit to be installed inside the box: accessory consisting of 1" stop cocks which can be used to disconnect the BAG³ HYBRID from the system and the heat pump.



- R ZP Main zone return pipe (direct) 1"
- R PDC Return to heat pump 1"
- R Z1 Zone 1 return pipe (direct or mixed °) 1"
- M Z1 Zone 1 delivery pipe (direct or mixed °) 1"
- M ZP Main zone delivery pipe (direct) 1"
- M PDC Delivery pipe from heat pump 1"

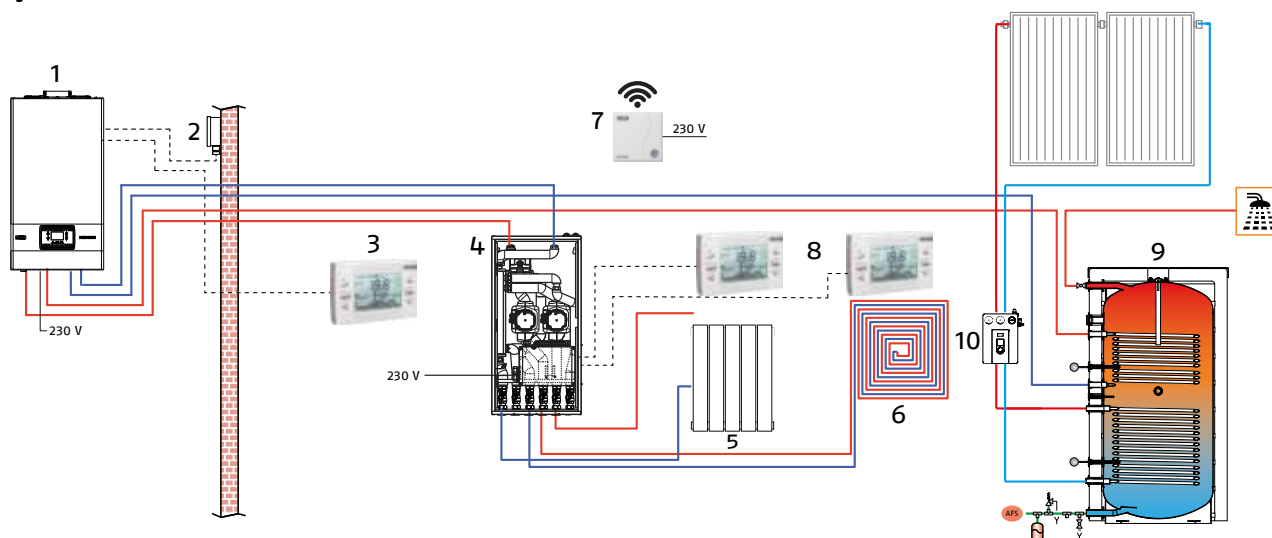
N.B.: when combined with Residence, plug M-R PDC.

Example of diagram of heating system; production of DHW with single-coil storage cylinder preheated by solar heat system with instantaneous combi boiler if necessary



1. Residence KIS combi boiler
2. Outdoor temperature sensor (accessory): the outdoor temperature is information that is also provided by RiCLOUD (if connected to the Internet)
3. Bag3 Hybrid distribution module (in 1 direct + 1 mixed configuration in the diagrams)
4. Low temperature area
5. High temperature area
6. Wi-Fi box for Internet connection via home Wi-Fi network
7. RiCLOUD remote control with ON/OFF connection (in diagrams 1 control for each zone)
8. Single-coil DHW storage cylinder, for preheating with solar heat system
9. Diverter/mixing valve for instantaneous wall-hung boiler
10. Solar hydraulic unit + regulator

Example of diagram of heating system; production of DHW with double-coil storage cylinder heating by solar heat system and heating only boiler



1. Residence IS heating only boiler
2. Outdoor temperature sensor (accessory): the outdoor temperature is information that is also provided by RiCLOUD (if connected to the Internet)
3. RiCLOUD with OT connection to the boiler
4. Bag3 Hybrid distribution module (in 1 direct + 1 mixed configuration in the diagrams)
5. High temperature area
6. Low temperature area
7. Wi-Fi box for Internet connection via home Wi-Fi network
8. RiCLOUD remote control with ON/OFF connection (in diagrams 1 control for each zone)
9. Double-coil DHW storage cylinder, for preheating with heat pump and integration with boiler
10. Solar hydraulic unit + regulator

WALL-HUNG BOILERS

Wall-hung condensing boilers

RESIDENCE IS

BRIEF DESCRIPTION FOR SPECIFICATIONS

Residence is a type C wall-hung condensing boiler to be used for heating and/or the production of domestic hot water with an external storage cylinder: Depending on the fume discharge accessory used, it is classified in categories B23P; B53P; C13, C13x; C10; C33, C33x; C43, C43x; C53, C53x; C83, C83x; C93, C93x. Wall-hung condensing boilers, with stainless steel primary heat exchanger and ACC (active combustion control) system which guarantees performance, efficiency and low emissions at all times.

Residence can be installed indoors or outdoors, in a partially protected place (i.e. a place where the boiler is not exposed to direct contact or infiltration of rain, snow or hail). The boiler can operate in a temperature range from 0°C to 60°C (from -15°C to 60°C with heater kit).

Class 6 NOx in line with UNI EN 15502-1 With a multifunctional control panel with backlit LCD display, buttons specifically for the individual user functions and descriptive slider buttons. Residence also allows you to change the type of supply gas by simply using the control panel; the auto-adaptive combustion control automatically adjusts all the combustion parameters without touching the gas valve.

PRODUCT DESCRIPTION FOR SPECIFICATIONS

Residence is a type C wall-hung condensing boiler to be used for heating and/or the production of domestic hot water with an external storage cylinder: Depending on the fume discharge accessory used, it is classified in categories B23P; B53P; C10; C13, C13x; C33, C33x; C43, C43x; C53, C53x; C83, C83x; C93, C93x. Wall-hung condensing boilers, with stainless steel primary heat exchanger and ACC (active combustion control) system which guarantees performance, efficiency and low emissions at all times.

They have:

- New innovative ACC (Active Combustion Control) system which guarantees performance, efficiency and low emissions at all times. The ACC system uses an ionisation sensor immersed in the burner flame whose information allows the control board to operate the gas valve that regulates the fuel. This sophisticated control system provides auto adjusts the combustion in real time, thereby eliminating the need for initial calibration
- Maximum heat input which can be adjusted to the heat requirements of the system for operating the boiler in heating mode. Once the required output has been set (maximum heating), make a note of the value and refer to the new value for subsequent controls;
- Thanks to the ACC system it can be adjusted to operate with different compositions of gas, different lengths of pipe and different altitudes (within the set design limits);
- Thanks to the ACC system, self-diagnosis can be performed which blocks the burner before the emissions thresholds which are higher than the legally prescribed limits are exceeded ;
- High efficiency modulating circulator that is already hydraulically and electrically connected with a 6 metre discharge head curve;
- Anti-blocking system which starts up an operation cycle after 24 hours in standby with the mode selector in any position;
- Stainless steel primary heat exchanger
- Premix low polluting emission burner, Class 6 NOx rating in line with UNI EN 15502-1, with non-return valve (check), fan, high modulation mixer and gas diaphragm
- Filling tap, drain tap
- Siphon
- Drain valve
- Pressure transducer
- Safety valve
- Return temperature sensor, flue gas probe and flow sensor
- Automatic antifreeze system which is activated when the temperature of the water on the primary circuit drops below 5°C. This system is always active and provides protection for the boiler up to an air temperature in the installation area of 0°C (protection up to -15°C with antifreeze heaters available as accessories).
- Limit thermostat
- Flame detection electrode/ionisation sensor and ignition electrode
- Ignition transformer
- With flue gas analysis plug
- 9 litre expansion tank
- 3-way hydraulic valve (stepper)
- Water gauge
- Lower air vent valve
- The control panel acts as a machine interface, displaying the system settings and providing access to the parameters. The screen normally displays the storage cylinder delivery temperature (if there is a storage cylinder with probe - optional) unless there is a heat request in heating mode, in this case the delivery temperature of the boiler is displayed; if no button is touched for 10 secs, the interface will display the current time (backlight unlit).
- Programmable anti-Legionella function

Supplied with:

- Bypass valve
- Flat gasket
- SRD device
- Condensate drain pipe
- Flexible hose safety valve
- 4-pole connector
- 8-pole connector

CONFORMITY

The Residence boiler is in conformity with:

- Directive 2009/142/EC on gas appliances up to 20 April 2018 and Regulation (EU) 2016/426 from 21 April 2018
- Efficiency Directive: Article 7(2) and Annex III of 92/42/EEC
- Electromagnetic Compatibility Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- The eco-design of energy-related products Directive 2009/125/EC

- Regulation (EU) 2017/1369 on energy labelling
- Delegated Regulation (EU) No. 811/2013
- Delegated Regulation (EU) No. 813/2013
- UNI EN 15502-1

RESIDENCE KIS

BRIEF DESCRIPTION FOR SPECIFICATIONS

Residence is a type C wall-hung condensing boiler to be used for heating and the production of domestic hot water: Depending on the fume discharge accessory used, it is classified in categories B23P; B53P; C10; C13,C13x; C33,C33x; C43,C43x; C53,C53x; C83, C83x; C93, C93x.

Wall-hung condensing boilers, with stainless steel primary heat exchanger and ACC (active combustion control) system which guarantees performance, efficiency and low emissions at all times.

Residence can be installed indoors or outdoors, in a partially protected place (i.e. a place where the boiler is not exposed to direct contact or infiltration of rain, snow or hail). The boiler can operate in a temperature range from 0°C to 60°C (from -15°C to 60°C with heater kit).

Class 6 NO_x in line with UNI EN 15502-1 With a multifunctional control panel with backlit LCD display, buttons specifically for the individual user functions and descriptive slider buttons. Residence also allows you to change the type of supply gas by simply using the control panel; the auto-adaptive combustion control automatically adjusts all the combustion parameters without touching the gas valve.

PRODUCT DESCRIPTION FOR SPECIFICATIONS

Residence is a type C wall-hung condensing boiler to be used for heating and the production of domestic hot water: Depending on the fume discharge accessory used, it is classified in categories B23P; B53P; C10; C13,C13x; C33,C33x; C43,C43x; C53,C53x; C83, C83x; C93, C93x.

Wall-hung condensing boilers, with stainless steel primary heat exchanger and ACC (Active Combustion Control) system which guarantees performance, efficiency and low emissions at all times.

They have:

- New innovative ACC (Active Combustion Control) system which guarantees performance, efficiency and low emissions at all times. The ACC system uses an ionisation sensor immersed in the burner flame whose information allows the control board to operate the gas valve that regulates the fuel. This sophisticated control system provides auto adjusts the combustion in real time, thereby eliminating the need for initial calibration
- Maximum heat input which can be adjusted to the heat requirements of the system for operating the boiler in heating mode. Once the required output has been set (maximum heating), make a note of the value and refer to the new value for subsequent controls;
- It can be adjusted to operate with different compositions of gas, different lengths of pipe and different altitudes (within the set design limits)
- thanks to the ACC system;
- Thanks to the ACC system, self-diagnosis can be performed which blocks the burner before the emissions thresholds which are higher than the legally prescribed limits are exceeded ;
- High efficiency modulating circulator that is already hydraulically and electrically connected with a 6 metre discharge head curve;
- Anti-blocking system which starts up an operation cycle after 24 hours in standby with the mode selector in any position;
- Stainless steel primary heat exchanger
- Premix low polluting emission burner, Class 6 NO_x rating in line with UNI EN 15502-1, with non-return valve (check), fan, high modulation mixer and gas diaphragm
- Filling tap, drain tap
- Siphon
- Drain valve
- Pressure transducer
- Safety valve
- DHW probe, return temperature sensor, flue gas probe, flow sensor
- Automatic antifreeze system which is activated when the temperature of the water on the primary circuit drops below 5°C. This system is always active and provides protection for the boiler up to an air temperature in the installation area of 0° C (protection up to -15°C with antifreeze heaters available as accessories)
- Limit thermostat
- Flame detection electrode/ionisation sensor and ignition electrode
- Ignition transformer
- With flue gas analysis plug
- 9 litre expansion tank
- 3-way hydraulic valve (stepper)
- DHW heat exchanger with large stainless steel plates
- Water gauge
- Lower air vent valve
- Flow meter
- The control panel acts as a machine interface, displaying the system settings and providing access to the parameters. The display normally shows the temperature of the flow sensor unless a DHW request is in progress. If this is the case, the DHW probe temperature is displayed; if no button is touched for 10 secs, the interface will display the current time (backlight unlit).

WALL-HUNG BOILERS

Wall-hung condensing boilers

Supplied with:

- Bypass valve
- Flat gasket
- SRD device
- Condensate drain pipe
- Flexible hose safety valve
- 4-pole connector
- 8-pole connector
-

CONFORMITY

The Residence boiler is in conformity with:

- Directive 2009/142/EC on gas appliances up to 20 April 2018 and Regulation (EU) 2016/426 from 26 April 2018
- Efficiency Directive: Article 7(2) and Annex III of 92/42/EEC
- Electromagnetic Compatibility Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- The eco-design of energy-related products Directive 2009/125/EC
- Regulation (EU) 2017/1369 on energy labelling
- Delegated Regulation (EU) No. 811/2013
- Delegated Regulation (EU) No. 813/2013
- Delegated Regulation (EU) No. 814/2013
- UNI EN 15502-1



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The company is constantly working to perfect the features of its entire production range, so the design and size, technical data, equipment and accessories may be subject to change.

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