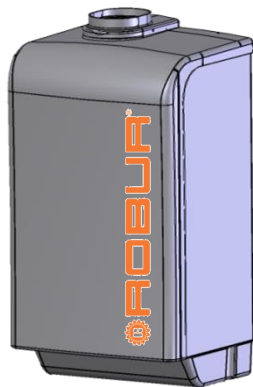


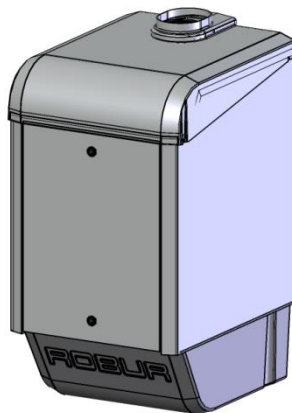


CALDARIA EXPORT

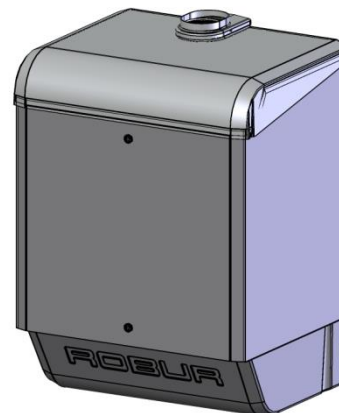
Condensing boilers for outdoor installation



**Caldaria 35
Condensing+**



**Caldaria 55.1
Condensing+**



**Caldaria 100.2
Condensing+**

Key features

Boilers derived from Caldaria product series for Italian market, **feature the following:**

- Wall-hung, suitable for outdoor installation
- Equipped with water pump, expansion tank and safety valve
- Equipped with pressure gauge
- Management of a 3-way DHW diverting valve and DHW buffer tank probe
- Manageable with remote control or via Modbus
- Power modulation 1:9 (1:18 for 100.2)

Key features

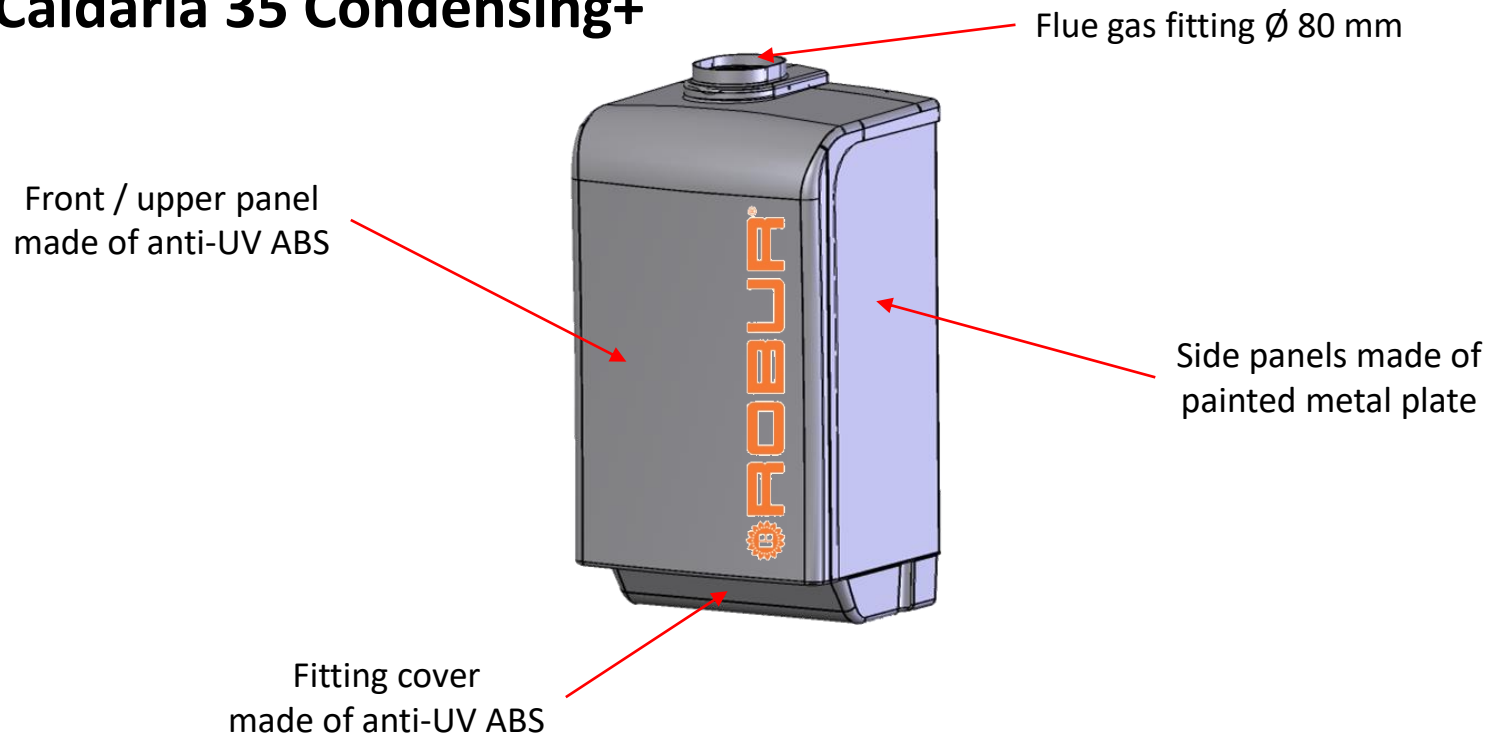
Compared to boilers for the Italian market, they present the **following differences**:

- **-25 °C** outdoor temperature operation guaranteed (equipped with antifreeze system)
- They feature **oversized pumps** compared to Italian market versions
- Can be **managed in cascade**, up to 8 boilers
- Safety valve outlet and condensate drain outlet ducted separately

Key advantages

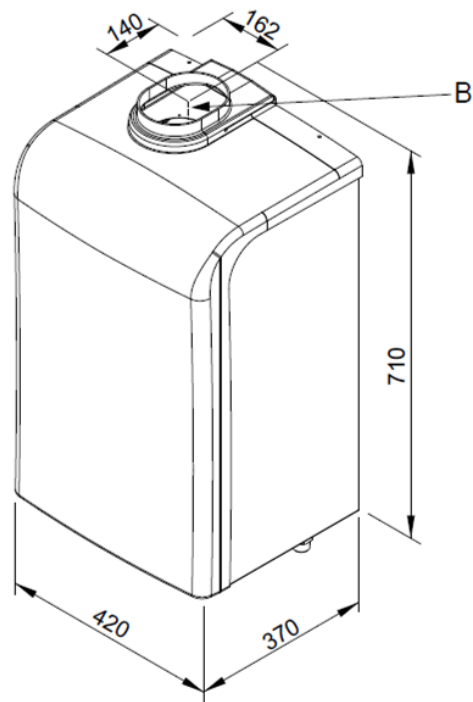
- Outdoor installation saving space of technical rooms or ground area.
- Operation even in coldest climates (down to -25 °C).
- Oversized pumps for systems with heat exchanger and/or water/glycol mix.
- Maximum system power up to 800 kW (8x100kW units in cascade).
- Centralized management of secondary, DHW and DHW recirculation circuits (through 3-way valve or dedicated delivery).

Caldaria 35 Condensing+

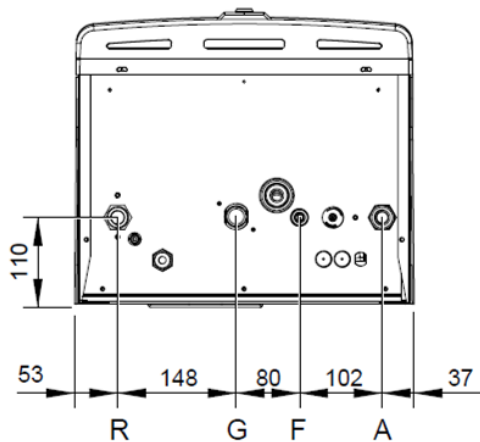


Caldaria Export presentation

Caldaria 35 Condensing+



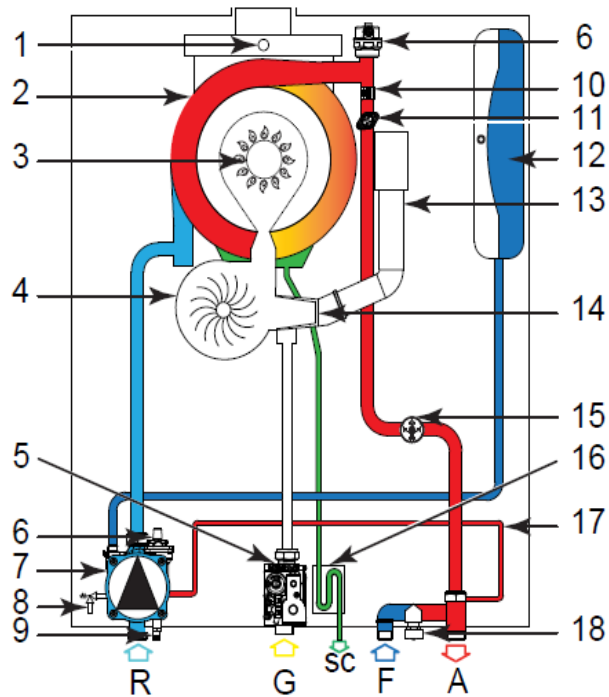
- R Water inlet connection $\text{\O} 3/4'' \text{ M}$
- G Gas connection $\text{\O} 3/4'' \text{ M}$
- F System filling connection $\text{\O} 1/2''$



- A Water outlet connection $\text{\O} 3/4'' \text{ M}$
- B Flue gas outlet $\text{\O} 80 \text{ mm}$

Caldaria Export presentation

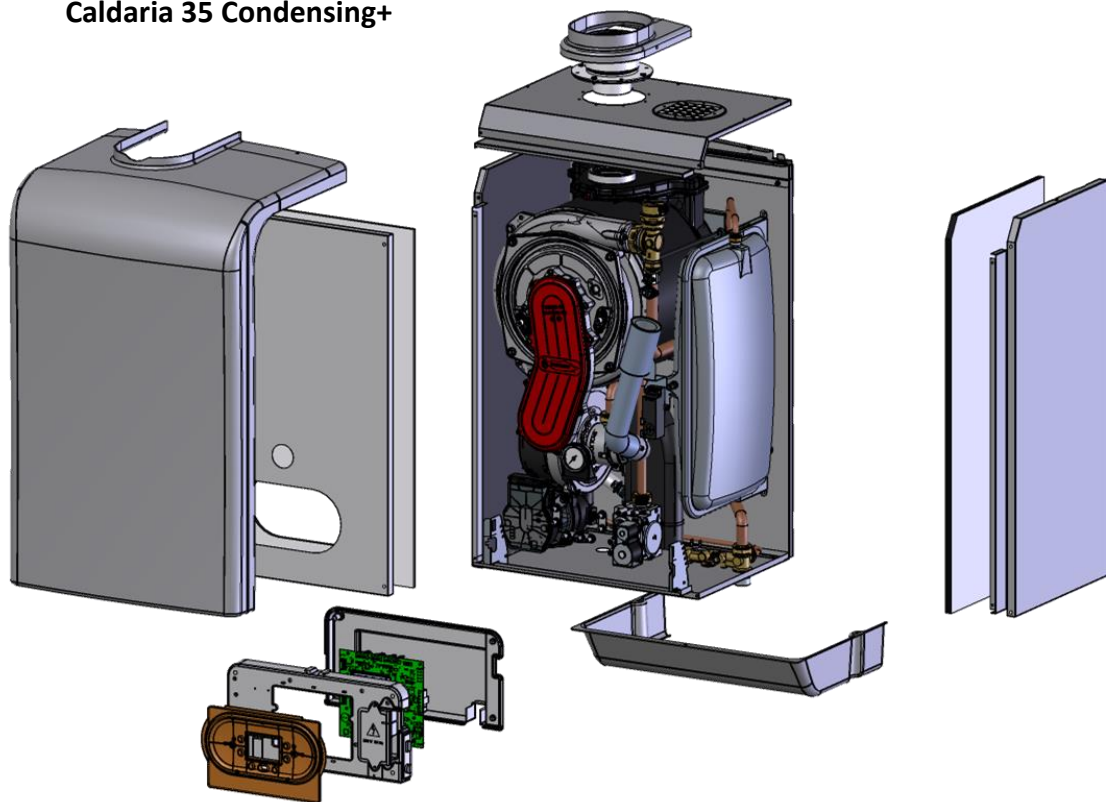
Caldaria 35 Condensing+



- R Heating return
- G Gas inlet
- SC Condensate drain
- F Cold water inlet
- A Heating delivery
- 1 Flue safety thermal fuse
- 2 Heat exchanger
- 3 Burner unit
- 4 Blower
- 5 Gas valve
- 6 Air vent valve
- 7 Modulating circulator
- 8 Safety valve
- 9 System drain tap
- 10 Heating delivery probe
- 11 Safety thermostat
- 12 Expansion tank
- 13 Air intake pipe
- 14 Venturi
- 15 Water pressure switch
- 16 Condensate drain siphon
- 17 Bypass
- 18 SYstem filling tap

Caldaria Export presentation

Caldaria 35 Condensing+



Caldaria 35 C+ standard equipment

Flue gas fitting 50/80 mm made of PP

Flue gas fitting rain cover gasket

Manual system isolation valves

Automatic air venting on heat exchanger

Condensate siphon antifreeze protection

Wall support bracket

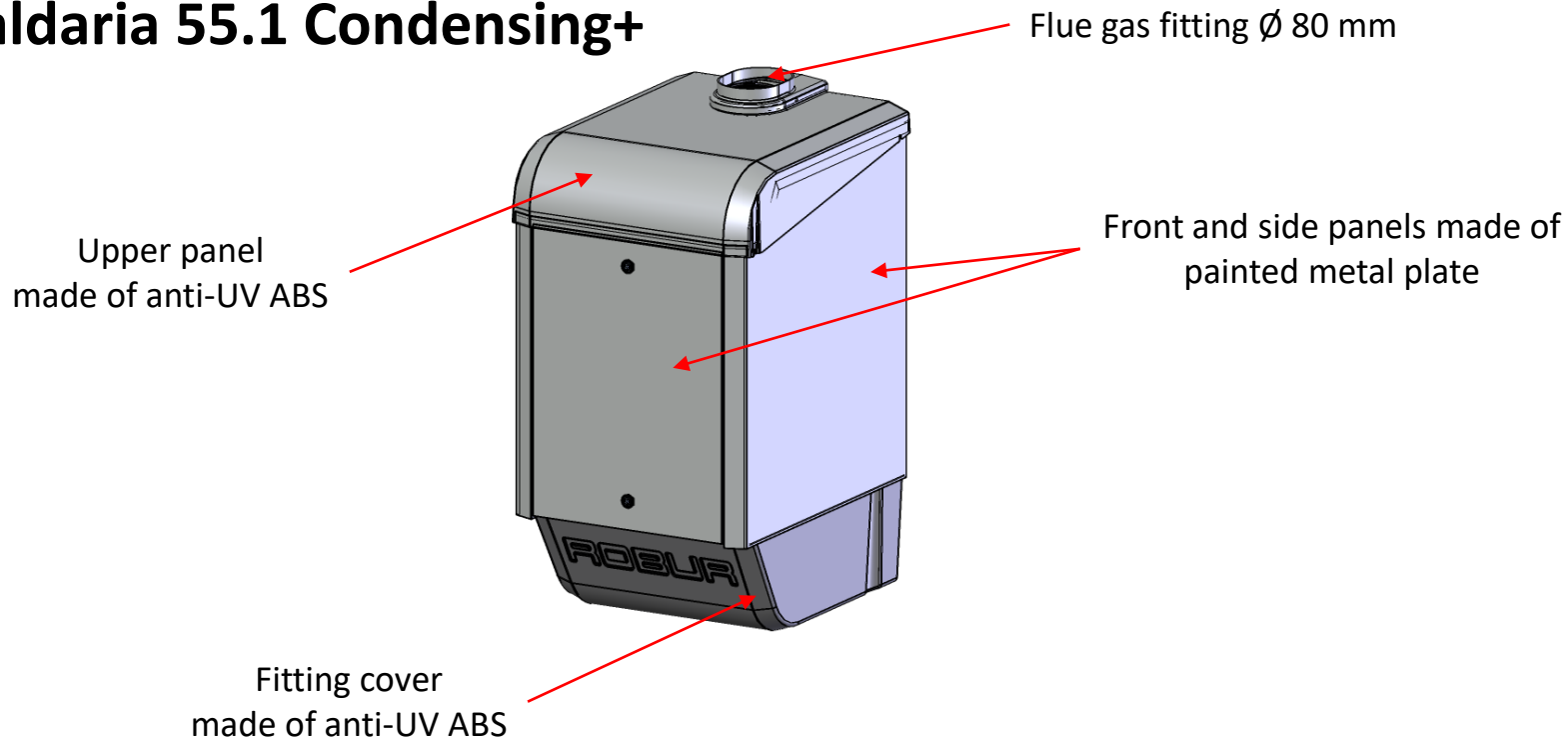
Installation jig

Caldaria Export presentation

Caldaria 35 Condensing+

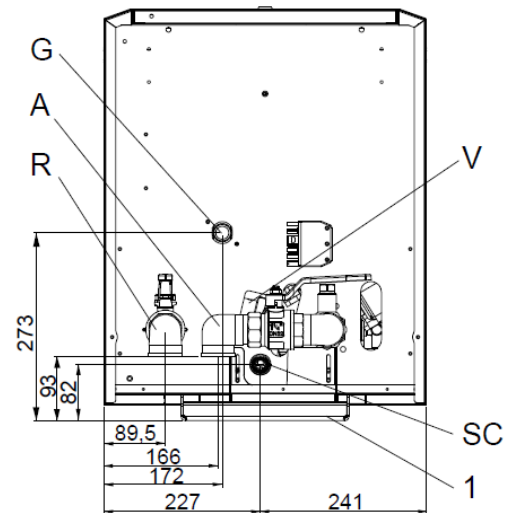
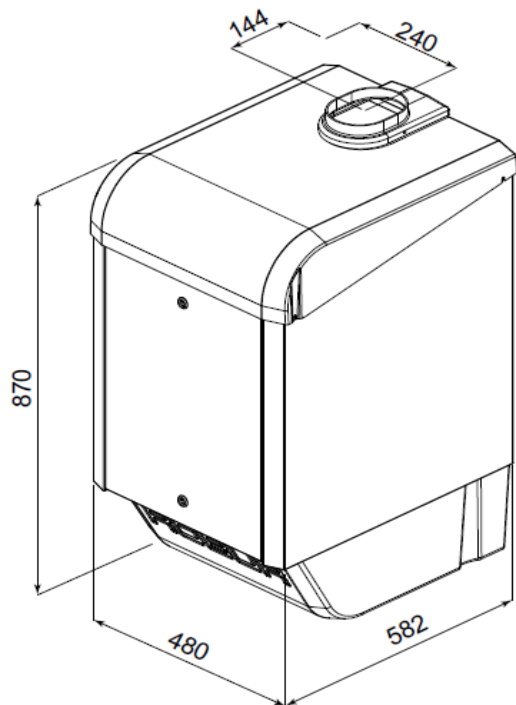
Heating mode			
seasonal space heating energy efficiency class (ErP)			A
Heat input	nominal (1013 mbar - 15 °C) (1)	kW	34,0
	minimum (1)	kW	4,1
Operating point 80/60	Nominal heat input	effective power	33,4
		efficiency	98,1
Operating point 50/30	Nominal heat input	efficiency	106,4
Operating point Tr = 30 °C	Heat input 30%	efficiency	108,6
Operating point Tr = 47 °C	Heat input 30%	efficiency	102,1
Heat loss	to jacket in operation	%	0,25
	to flue in operation	%	2,40
	in off mode	%	0,03
Hot water delivery temperature	maximum	°C	80
Electrical specifications			
Power supply	voltage	V	230
	type	-	SINGLE PHASE
	frequency	Hz	50
Electrical power absorption	nominal	kW	0,08
Degree of protection	IP	-	X5D
Installation data			
Gas consumption	G20 natural gas (nominal)	m ³ /h	3,60
	G25 (nominal)	m ³ /h	4,18
	G25.3 (nominal)	m ³ /h	4,09
	G30 (nominal)	kg/h	2,68
	G31 (nominal)	kg/h	2,64
Water fitting	type	-	M
	thread	"	3/4
Gas connection	type	-	M
	thread	"	3/4
Flue gas exhaust	diameter (Ø)	mm	80
	residual head	Pa	91

Caldaria 55.1 Condensing+



Caldaria Export presentation

Caldaria 55.1 Condensing+

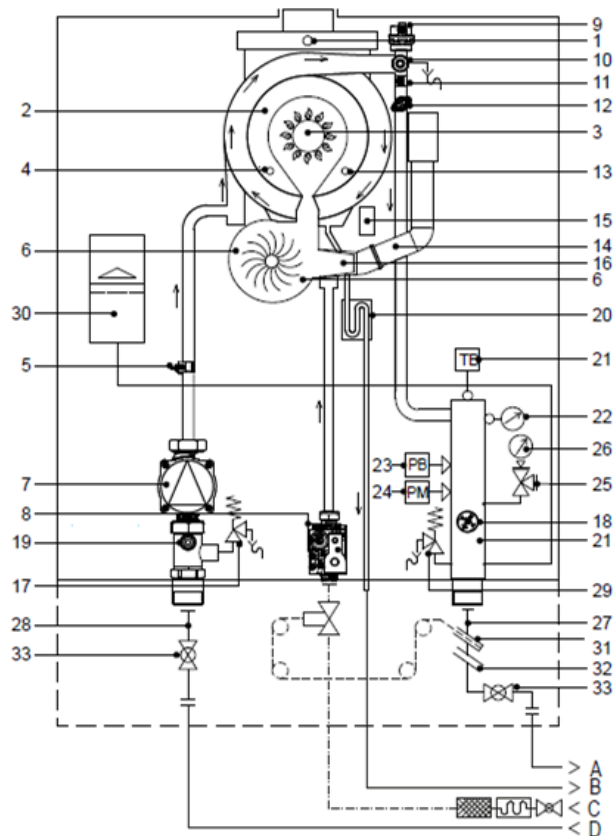


- A Delivery \varnothing 1 1/4" M
- R Return \varnothing 1 1/4" M
- G Gas \varnothing 1" M
- SC Condensate drain
- V Safety valve drain
- 1 Side resting on the installation wall

Caldaria Export presentation

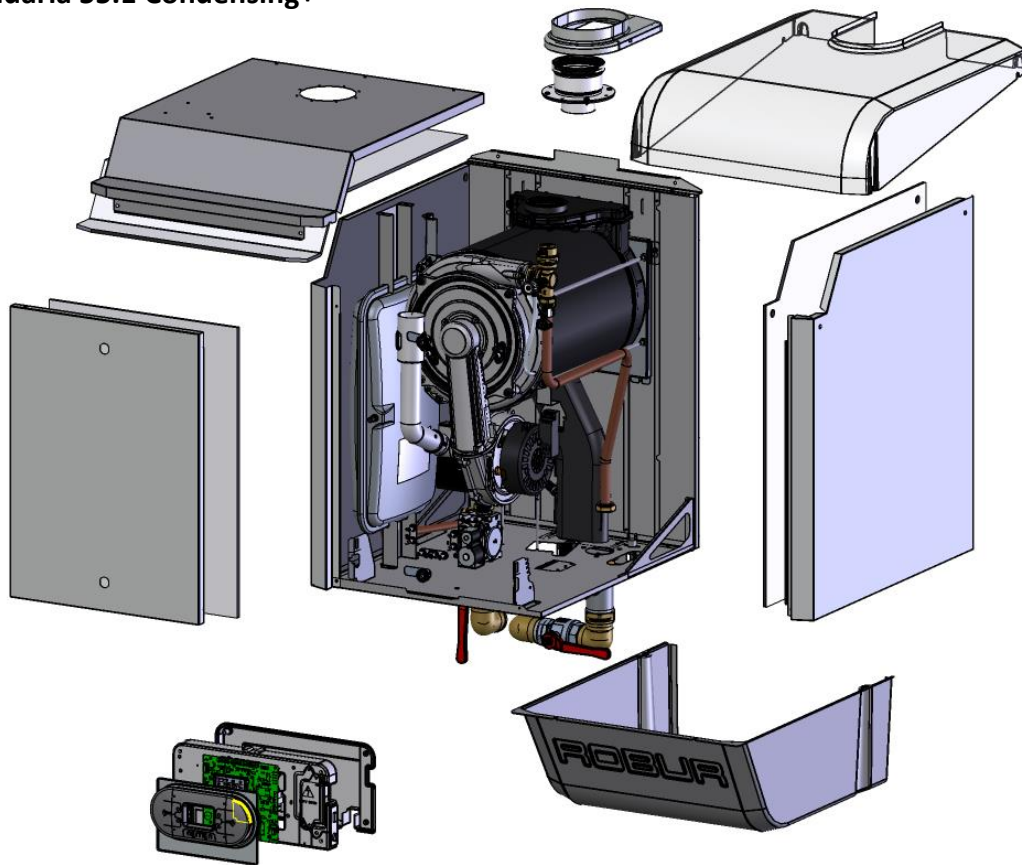
Caldaria 55.1 Condensing+

- | | | | | | |
|----|--------------------------|----|--|----|--|
| 1 | Flue safety thermal fuse | 14 | Air intake pipe | 26 | INAIL-compliant pressure gauge |
| 2 | Heat exchanger | 15 | Ignition transformer | 27 | System delivery connection |
| 3 | Burner unit | 16 | Venturi | 28 | System return connection |
| 4 | Flame detector | 17 | Safety valve | 29 | INAIL approved safety valve |
| 5 | Heating return probe | 18 | Water pressure switch | 30 | Expansion tank |
| 6 | Blower | 19 | System drain tap | 31 | Gas shut-off valve sensing bulb thermowell |
| 7 | Modulating circulator | 20 | Condensate drain siphon | 32 | Inspection well |
| 8 | Gas valve | 21 | INAIL approved manual reset lock thermostat | 33 | In-line shut-off valve |
| 9 | Air vent valve | 22 | INAIL approved thermometer | A | Heating outlet |
| 10 | System drain tap | 23 | INAIL approved minimum pressure lock switch | B | Condensate discharge |
| 11 | Heating delivery probe | 24 | INAIL approved maximum pressure lock switch | C | Gas |
| 12 | Safety thermostat | 25 | Pressure gauge connection tap with test flange and shock absorber pipe | D | Heating return |
| 13 | Ignition electrode | | | | |



Caldaria Export presentation

Caldaria 55.1 Condensing+



Caldaria 55.1 C+ standard equipment

Flue gas fitting 50/80 mm made of PP

Flue gas fitting rain cover gasket

Manual system isolation valves

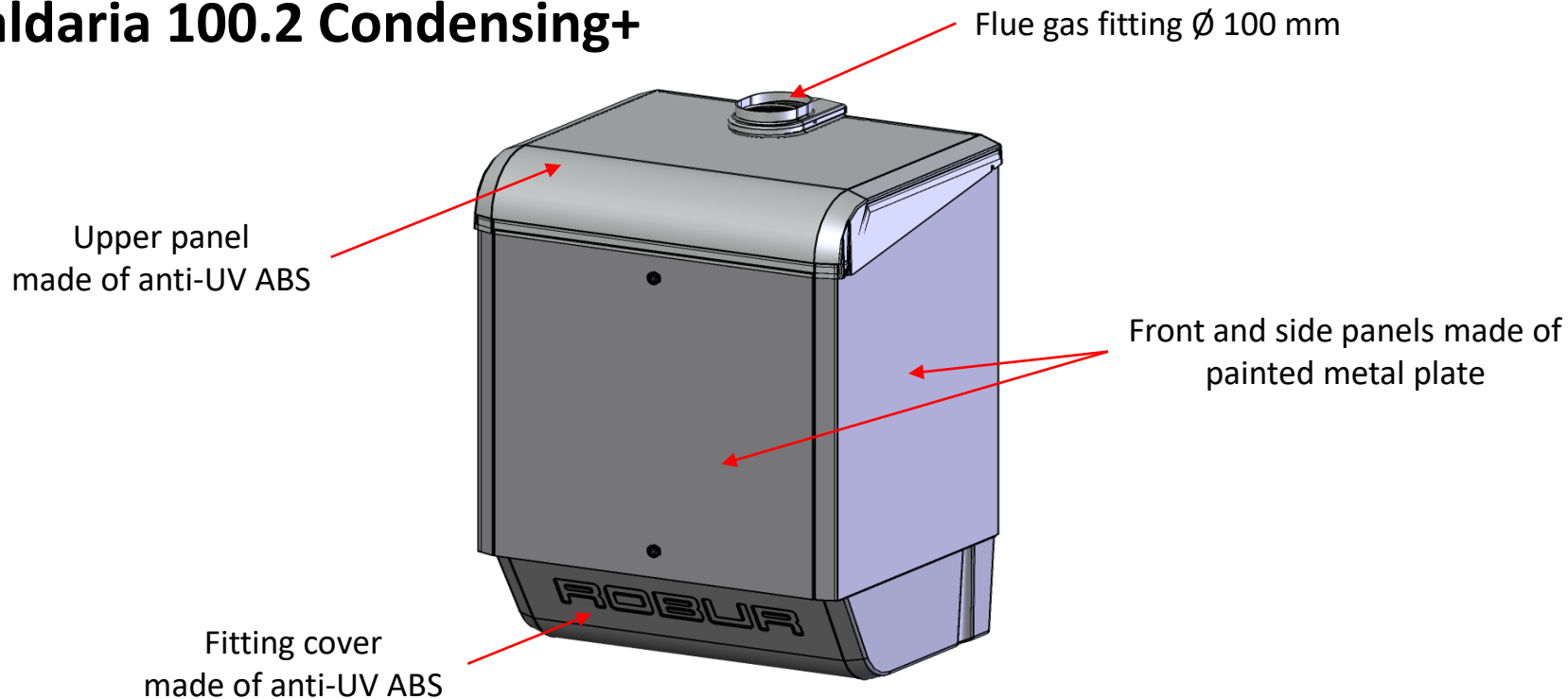
Automatic air venting on heat exchanger

Condensate siphon antifreeze protection

Wall support bracket

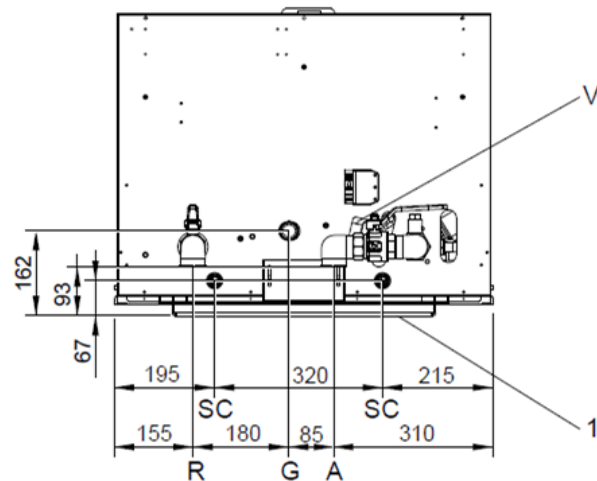
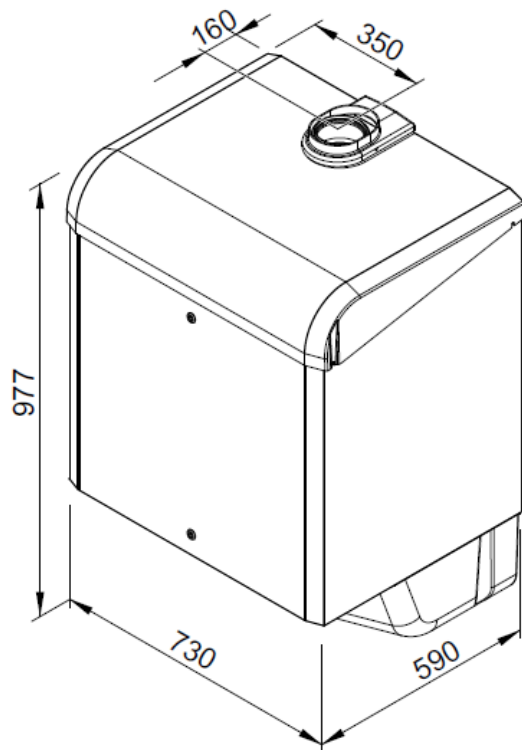
Installation jig

Caldaria 100.2 Condensing+



Caldaria Export presentation

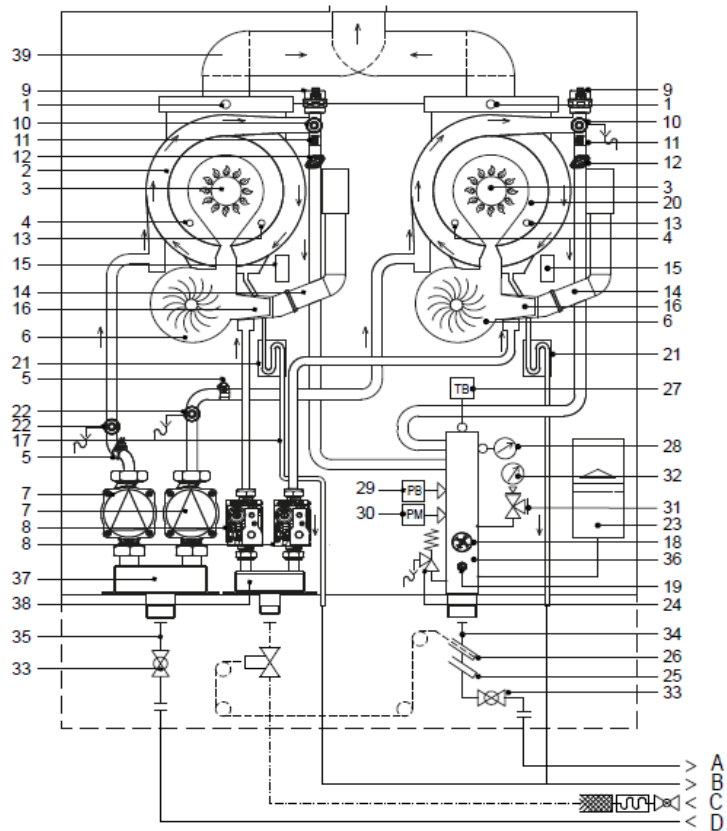
Caldaria 100.2 Condensing+



- A Delivery \varnothing 1 1/2" M
- R Return \varnothing 1 1/2" M
- G Gas \varnothing 1" M
- SC Condensate drain
- V Safety valve drain
- 1 Side resting on the installation wall

Caldaria Export presentation

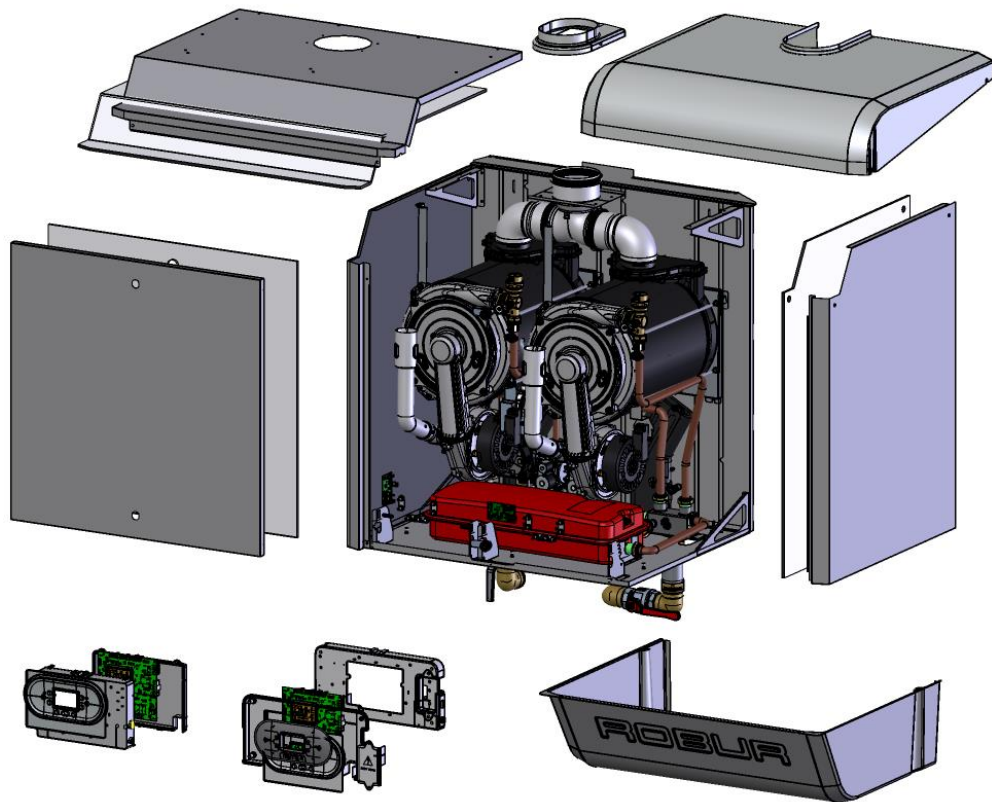
Caldaria 100.2 Condensing+



- | | | | | | |
|----|---------------------------|----|---|----|--|
| 1 | Flue safety thermal fuse | 17 | Condensate drain hose | 31 | Pressure gauge connection tap with test flange and shock absorber pipe |
| 2 | Slave unit heat exchanger | 18 | Water pressure switch | 32 | INAIL-compliant pressure gauge |
| 3 | Burner unit | 19 | Manifold probe | 33 | In-line shut-off valve |
| 4 | Flame detector | 20 | Master unit heat exchanger | 34 | System delivery connection |
| 5 | Heating return probe | 21 | Condensate drain siphon | 35 | System return connection |
| 6 | Blower | 22 | System drain tap | 36 | Delivery manifold |
| 7 | Modulating circulator | 23 | Expansion tank | 37 | Return manifold |
| 8 | Gas valve | 24 | INAIL approved safety valve | 38 | Gas manifold |
| 9 | Air vent valve | 25 | Inspection well | 39 | Flue gas manifold |
| 10 | System drain tap | 26 | Gas shut-off valve sensing bulb thermowell | A | Heating outlet |
| 11 | Heating delivery probe | 27 | INAIL approved manual reset lock thermostat | B | Condensate discharge |
| 12 | Safety thermostat | 28 | INAIL approved thermometer | C | Gas |
| 13 | Ignition electrode | 29 | INAIL approved minimum pressure lock switch | D | Heating return |
| 14 | Air intake pipe | 30 | INAIL approved maximum pressure lock switch | | |
| 15 | Ignition transformer | | | | |
| 16 | Venturi | | | | |

Caldaria Export presentation

Caldaria 100.2 Condensing+



Caldaria 100.2 C+ standard equipment

Flue gas fitting rain cover gasket

Manual system isolation valves

Automatic air venting on heat exchangers

Condensate siphon antifreeze protection

Wall support bracket

Installation jig

Caldaria Export presentation

Caldaria 100.2 Condensing+

			Caldaia 55.1 Tech	Caldaia 100.2 Tech
Heating mode				
seasonal space heating energy efficiency class (ErP)			A	-
Heat input	nominal (1013 mbar - 15 °C) (1)	kW	50,0	99,8
	minimum (1)	kW	5,0	
Operating point 80/60	Nominal heat input	effective power	kW	49,2
		efficiency	%	98,4
Operating point 50/30	Nominal heat input	efficiency	%	106,8
Operating point Tr = 30 °C	Heat input 30%	efficiency	%	108,8
Operating point Tr = 47 °C	Heat input 30%	efficiency	%	102,8
Heat loss	to jacket in operation	%	0,10	0,47
	to flue in operation	%	2,10	
	in off mode	%	0,05	0,03
Hot water delivery temperature	maximum	°C	80	
Electrical specifications				
Power supply	voltage	V	230	
	type	-	SINGLE PHASE	
	frequency	Hz	50	
Electrical power absorption	nominal	kW	0,11	0,22
Degree of protection	IP	-	X5D	
Installation data				
Gas consumption	G20 natural gas (nominal)	m ³ /h	5,29	10,59
	G25 (nominal)	m ³ /h	6,15	12,30
	G25.3 (nominal)	m ³ /h	6,01	12,03
	G30 (nominal)	kg/h	3,94	7,88
	G31 (nominal)	kg/h	3,88	7,77
Water fitting	type	-	M	
	thread	"	1 1/4	1 1/2
Gas connection	type	-	M	
	thread	"	1	
Flue gas exhaust	diameter (Ø)	mm	80	100
	residual head	Pa	100	

New optionals

Cascade controller – ODSP039

Manages:

- Up to 8 boilers (800 kW)
- Up to 4 pumps (2 delivery, DHW and DHW recirculation)
- Up to 2 mixing valves
- Up to 4 water probes (manifold, 2 mixed circuits, DHW buffer tank)

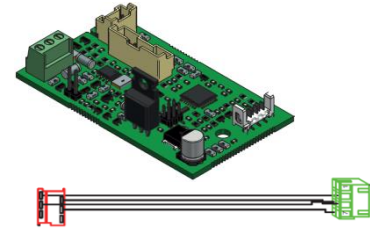


New optionals

OT/Modbus interface – ODSP040

Allows the connection of 35 and 55.1 boilers to the cascade controller ODSP039.

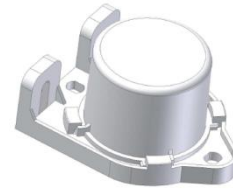
The 100.2 boiler already has 2 of those interfaces as standard.



New optionals

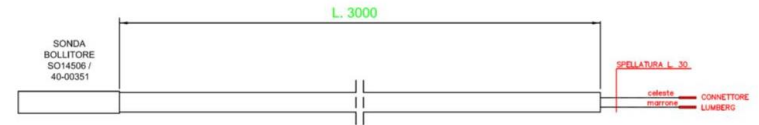
Outdoor temperature probe – OSND009

To be connected to the first boiler of the cascade



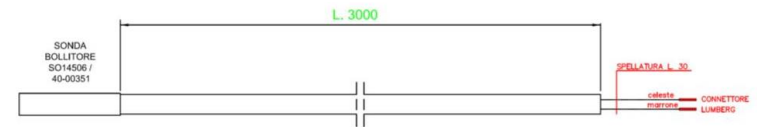
Manifold probe – OSND010

To be connected to the cascade controller



DHW buffer tank probe – OSND011

To be connected to the first boiler of the cascade



Already available optionals

OT remote control – OCDS006

For the management of a single boiler

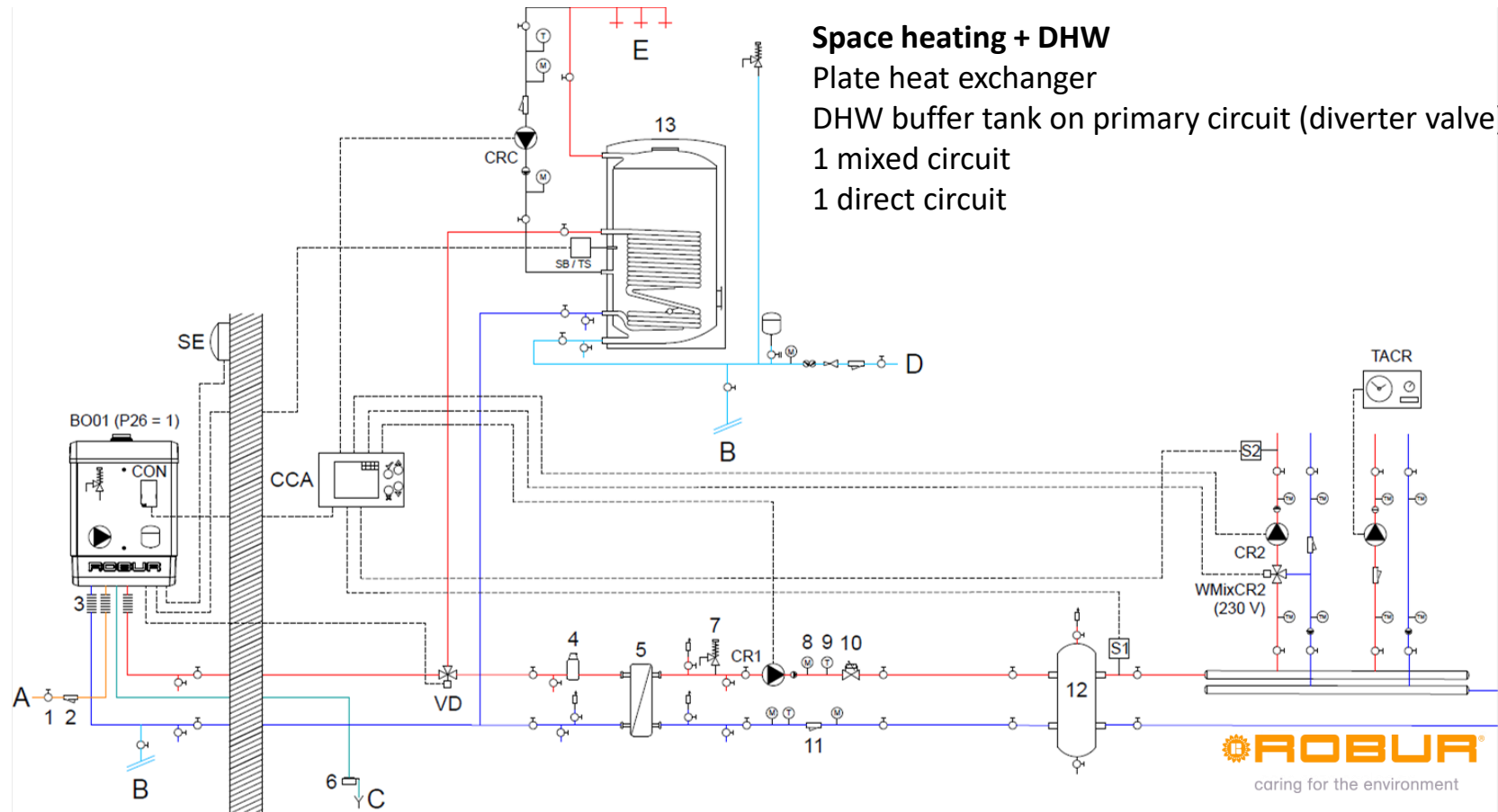


Vertical flue gas discharge terminal 80 mm – OTRM031

Vertical flue gas discharge terminal 100 mm – OTRM009



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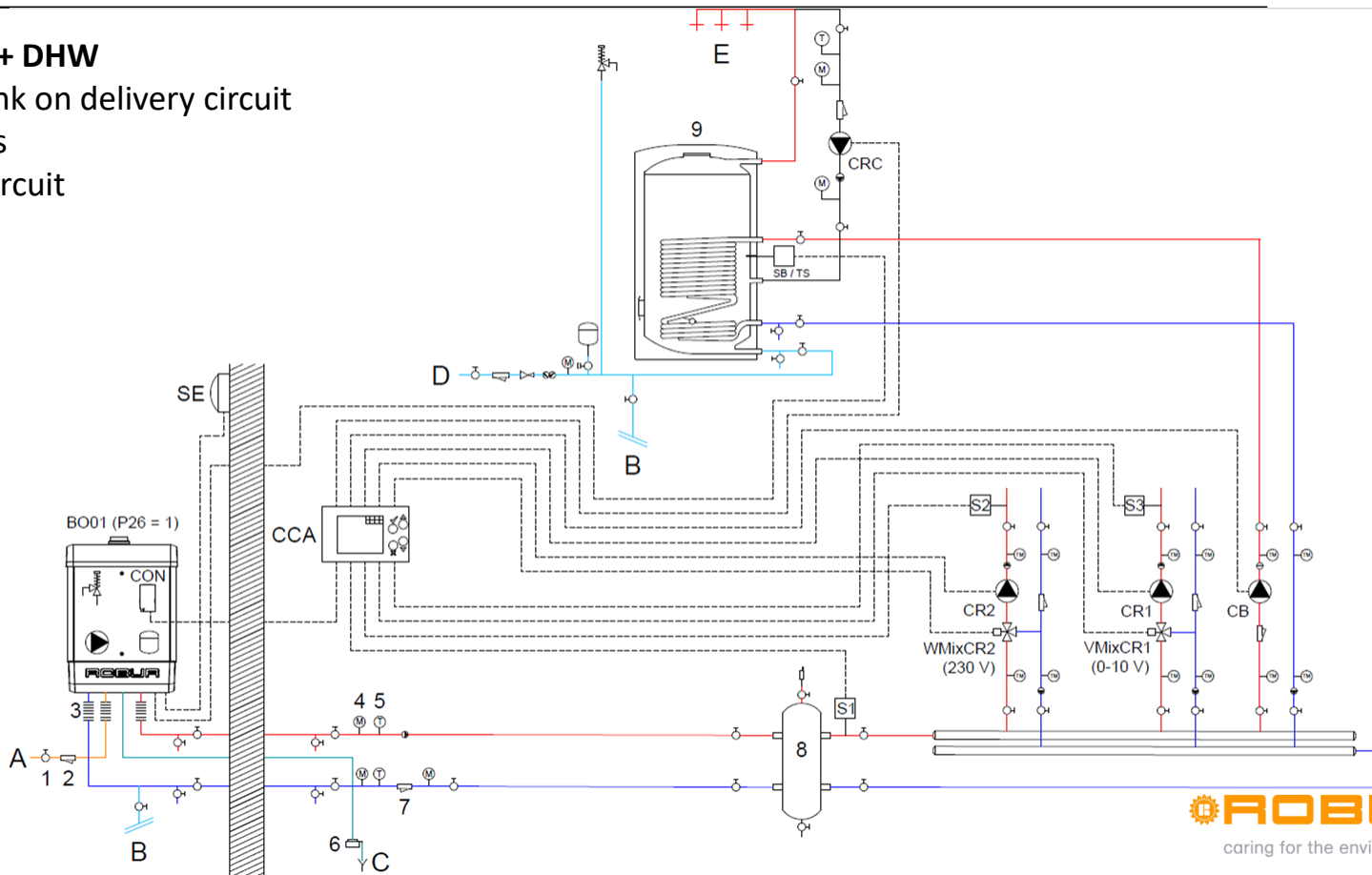
Caldaria Export presentation

Space heating + DHW

DHW buffer tank on delivery circuit

2 mixed circuits

1 buffer tank circuit



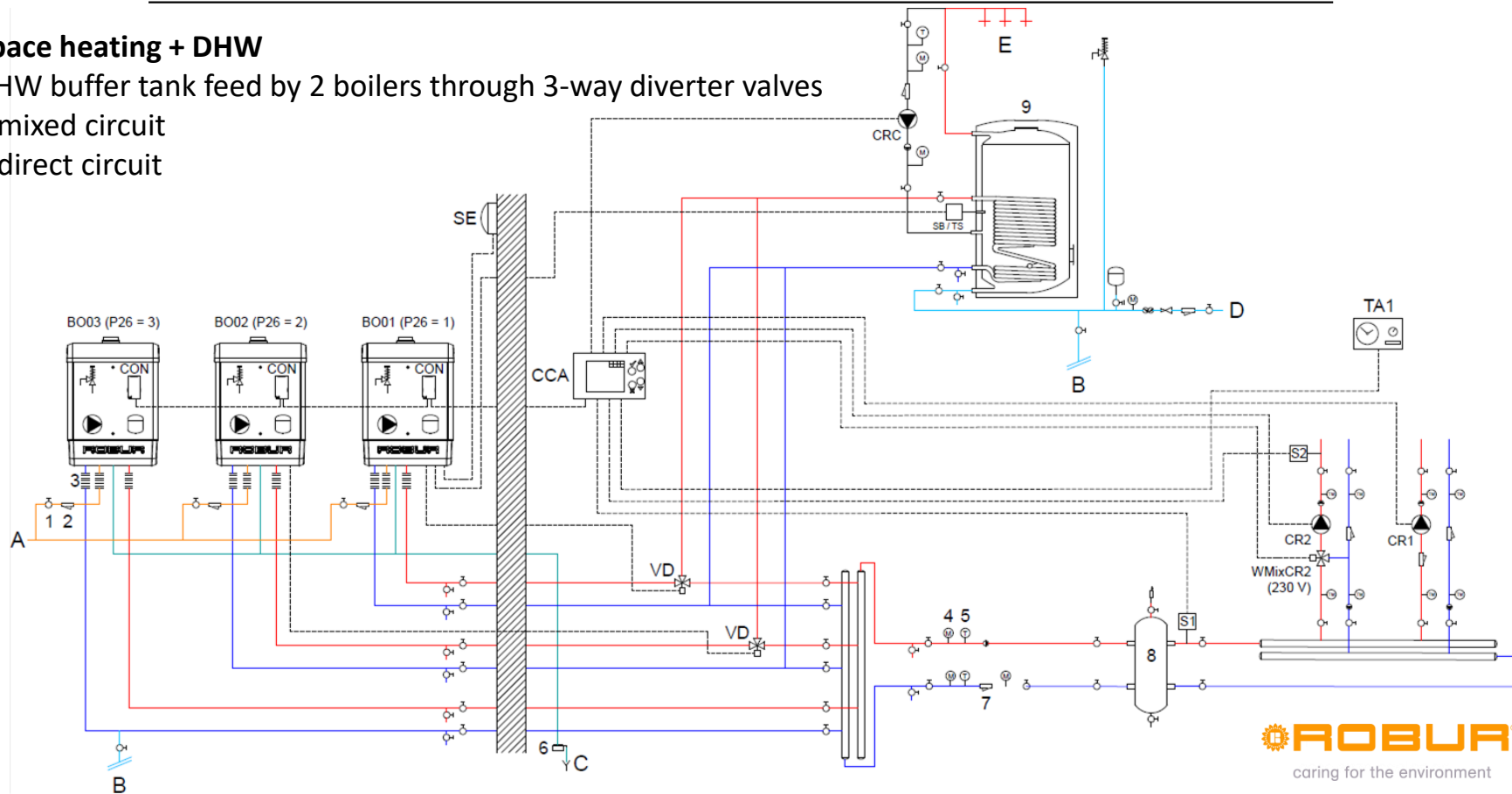
Caldaria Export presentation

Space heating + DHW

DHW buffer tank feed by 2 boilers through 3-way diverter valves

1 mixed circuit

1 direct circuit



CALDARIA EXPORT – KEY ADVANTAGES OVER COMPETITORS

Wall-hung outdoor boilers **down to – 25 °C.**

No space occupation
Negative outdoor temperature operation

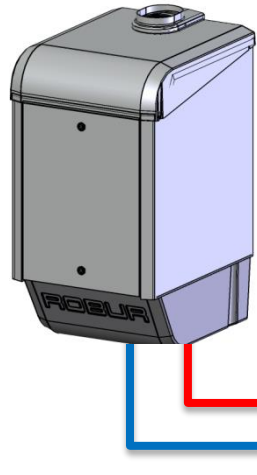
Up to **800 kW** total system power.

Wide power modulation

Management of **secondary circuits.**

Better performance and comfort

Caldaria Export presentation



**A CALDARIA SYSTEM
WITH AIR HEATERS?**



- What do **you** think?

**Thank you
For your attention.**