Библиотека СОК





Powercond

POWER BOILERS

POWERCOND (113 KW TO 275 KW)
POWERCOND (320 KW TO 580 KW)
ACCESSORIES

BIASI
BENESSERE MADE IN ITALY

THE COMPANY

Biasi has been in the Italian heating sector for more than 90 years, investing in solutions that offer comfort in both the domestic and professional sectors. Our product lines cover every market segment, from wall-mounted condensing boilers to floor-standing boilers, along with hot water heaters and a wide range of systems integrated with energy-efficient solar power.

We can also provide comprehensive new systems with heat pumps and hybrids, which can be integrated with low-temperature radiant heating solutions we make.



OUR STORY

1930 — Leopoldo Biasi had a dream: to create comfort that would improve quality of life.

1940 — A dream became reality as the first boiler manufacturing facility was opened.

1960 — The first radiator production was launched, confirming the company's success.

1980 — More models for the market with a new steam boiler facility.

1990 — In 1994, **Biasi** acquired BSG from ENI (Ente Nazionale Idrocarburi) and thus became a top name in the field of wall-mounted gas boilers.

2000 — The Biasi Group consolidated its place on the European market with new products.

2010 — Biasi continues to expand its product range, benefitting from new electronics with a graphic interface and display, developed in-house, to make our products even easier for users to use.

2018 — The Belloni family acquired BSG Caldaie S.p.A.

2020 — Our range of models continues evolve; the R&D department is already testing the products of the future using the latest technology.

QUALITY

TECHNOLOGY AND RELIABILITY

RESEARCH AND INNOVATION

ITALIAN DESIGN

CUSTOMER-FOCUSED APPROACH

FLEXIBILITY

STRUCTURED LOGISTICS

Our wall-mounted boiler production facility is structured to manufacture 500 different products, over 16 product ranges and up to 160,000 boilers/year.

At Biasi, we continue to improve and redesign our products. We assemble them on our production lines, check quality at every stage, and take care of the final distribution. The value of an Italian product lies in the details.



OUR PRODUCTS

RESIDENTIAL LINE
Condensing boilers
Traditional boilers
Hybrid systems
Heat pumps
Water heaters
Air conditioning
Solar
Water heaters and accumulation tanks
Systems with solar integration

PROFESSIONAL LINE
Boilers for centralised systems

UNDERFLOOR HEATING LINE
Radiant heating systems

SPARE PARTS

Powercond (113 kW to 275 kW)



CLASSE NOx 6 | WI-FI READY | 110% SUPERBONUS (main intervention)

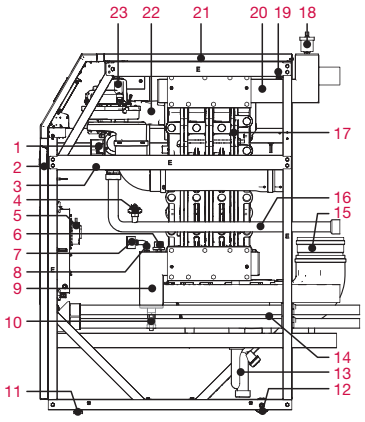
50% ECO BONUS | 50% BONUS CASA | 2.0 CONTO TERMICO



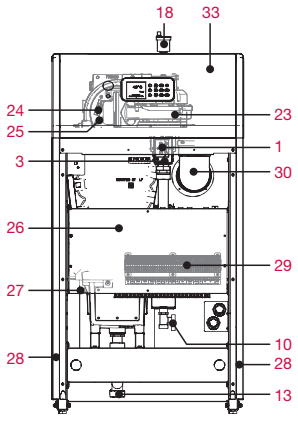
Powercond are latest-generation high-efficiency condensing thermal units equipped with a pre-mixed modulating blown-air burner with low emissions and body in aluminium and high calorific power values.
There are 5 available models, with heat input ranging from 113 to 275 kW.
They can be installed individually or in cascade, each consisting of 2 to 4 generators of the same output or different output, controlled by a cascade manger.
The Powercond thermal units must be installed in a boiler room and they must be integrated with system components and devices supplied by the manufacturer. These include specific kits, to be ordered separately, which simplify the work of the installer when installing systems with a single generator, and those of the primary circuit of cascade systems.

TECHNICAL DESCRIPTION OF A SINGLE GENERATOR

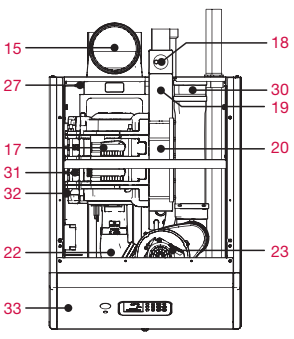
Technical specifications



Side view



Front view



Top view

1. Gas valve
2. Front panel
3. Gas pressure switch (for models 200-240-280)
4. Gas pressure switch (for models 115-150)
5. Siphon pressure switch
6. Heating pressure transducer
7. Pressure gauge
8. Return probe
9. System return collector
10. Boiler drain cock
11. Supporting foot
12. Wheel
13. Condensate outlet siphon
14. Condensate collection tank
15. Flue gas outlet connection
16. Gas evacuation pipe
17. Boiler body
18. Automatic bleed valve
19. NTC heating delivery probe
20. System delivery collector
21. Upper panel
22. Burner
23. Fan
24. Ignition electrodes
25. Flame detection electrode
26. Boiler board container
27. Flue gas probe
28. Side panels
29. Electrical connections terminal board
30. Combustion air inlet
31. Boiler body probe
32. Doors for inspection and cleaning
33. Control panel

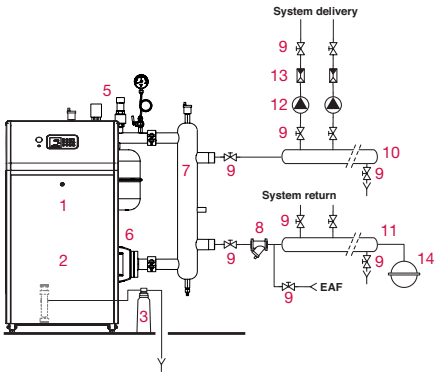
Technical specifications

Hot water condensing heat generator with low pollutant emissions, type B23, B33, C43, C53, C63, C83, consisting of a high calorific power heat exchanger in aluminium, pre-mixed modulating blown-air burner with low pollutant emissions with modulating operation. Complete with climatic temperature control via an external probe for variable management of the water temperature supplied to the system.

- Heat exchanger body with parts in silicon aluminium, with high exchanging surface area and reduced water content
- Microflame total-premix burner in aluminium which allows high modulation (exceeding 1:5), stable combustion and low polluting emissions (NOx class = 5)
- Maximum operating pressure: 6 bar
- Delivery and return connection with 2" threaded connections
- 1"1/4 gas supply connection
- Electrical protection rating IP 20
- Hydraulic circuit drain cock
- Condensate outlet siphon
- NTC probe to control the delivery temperature
- NTC probe to control the return temperature
- Flue gas safety NTC probes
- Manual reset overtemperature safety thermostat on the heat exchanger body
- Maximum DHW and heating output adjustable individually
- Electronics can interface with remote management systems
- Remote alarm dry contact for boiler faults
- Innovative climatic adjustment 5+1 parameters
- Modulating input management 0...10 V
- Zone controlling connections using OpenTherm
- PWM management of the primary pump
- Secondary pump and DHW/diverter pump management
- Production of DHW through combination with the remote water heater, managed by the electronic control unit of the boiler
- Inspection window on the control panel allowing the user to see the flame
- User interface with graphic display with symbols and self-diagnostics, with error codes and programming keys
- Electronic start-up with double electrode ionisation flame control
- Low polluting emissions - class 5 according to UNI-EN 297: CO< 35 ppm and NOx <20 ppm.

The generator can be combined in a cascade with a simple bus connection (**does not require external regulators**). Using the designated hydraulic accessories, the boiler plant can be easily installed and is ready to combine the thermal units consisting of up to 4 boilers.

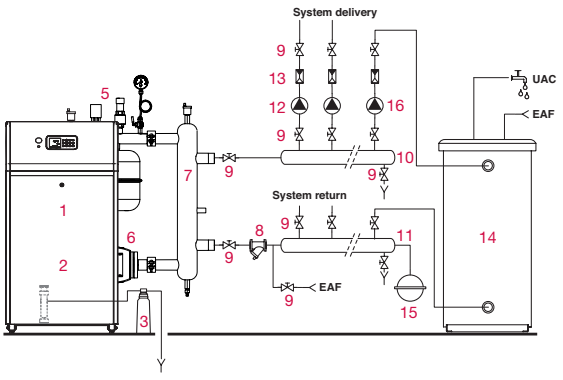
System for heating only



1. Thermal unit
2. Condensate outlet siphon
3. Condensate neutraliser
4. Drain
5. INAIL safety module
6. Primary pump
7. Hydraulic separator
8. Purification filter
9. Shut-off valve
10. Delivery collector
11. Return collector
12. System pump
13. Non-return valve
14. Expansion vessel

EAF Cold water inlet

System for heating and DHW production with downstream water heater

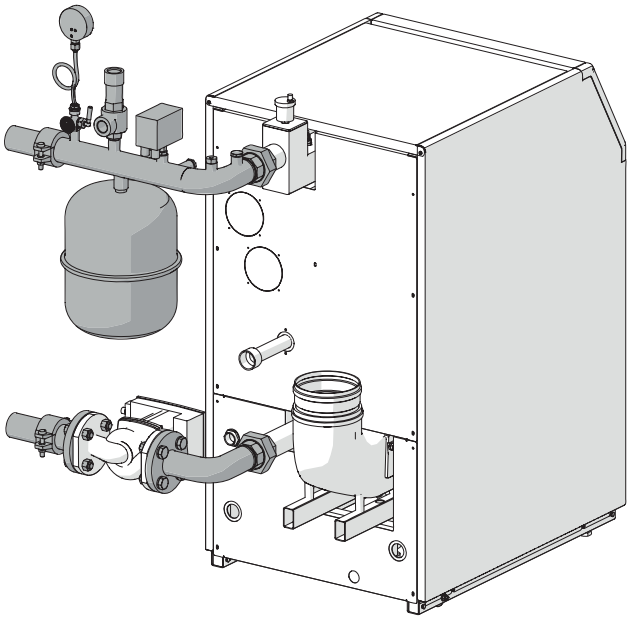


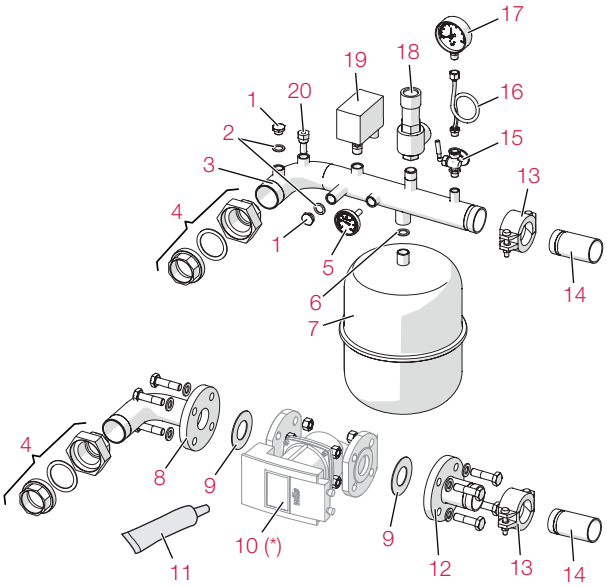
1. Thermal unit
2. Condensate outlet siphon
3. Condensate neutraliser
4. Drain
5. INAIL safety module
6. Primary pump
7. Hydraulic separator
8. Purification filter
9. Shut-off valve
10. Delivery collector
11. Return collector
12. System pump
13. Non-return valve
14. Remote water heater
15. Expansion vessel
16. Water heater pump

EAF Cold water inlet
UAC DHW users

Where the water heater pump on the delivery collector produces DHW, use boiler pump 2 as the system pump (without the mix valve). This allows operation of the two previous or parallel pumps to be managed, to prevent increases in the heating circuit temperature.

Base primary ring

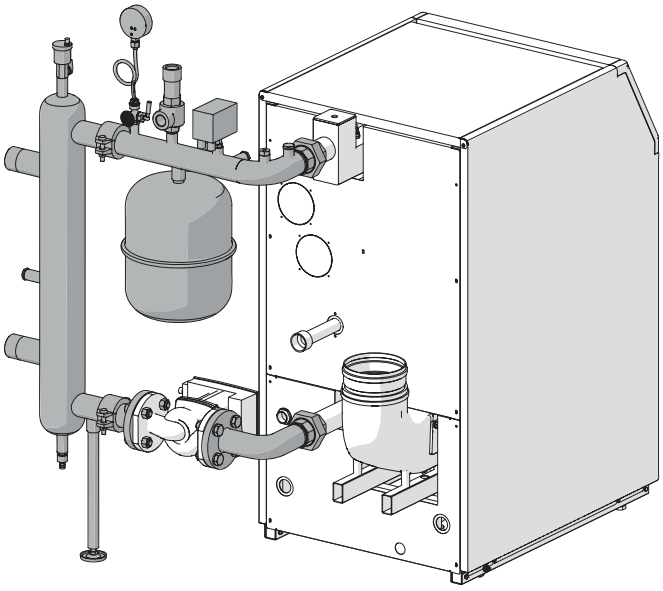


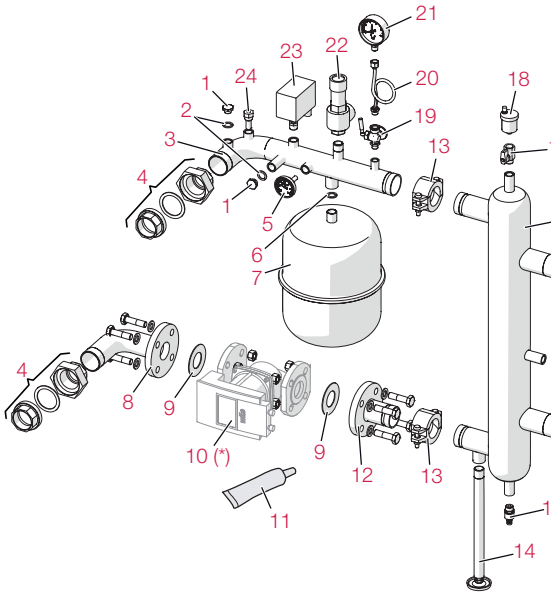


1. G1/2 M Plug
2. 1" Gasket
3. INAIL stub pipe
4. 3-part joint
5. Thermometer
6. 3/4" Gasket
7. Expansion vessel
8. Flanged stub pipe
9. Primary pump gasket
10. Primary pump (*)
11. Grease for joints
12. Flanged stub pipe
13. Split coupling
14. Stub pipe DN50 L100
15. 3-way cock
16. Insulation ring with gaskets
17. Pressure gauge
18. Safety valve
19. Water pressure switch (reducer supplied)
20. Probe holder

(*) Component supplied in a separate kit (optional).

Primary ring with hydraulic separator

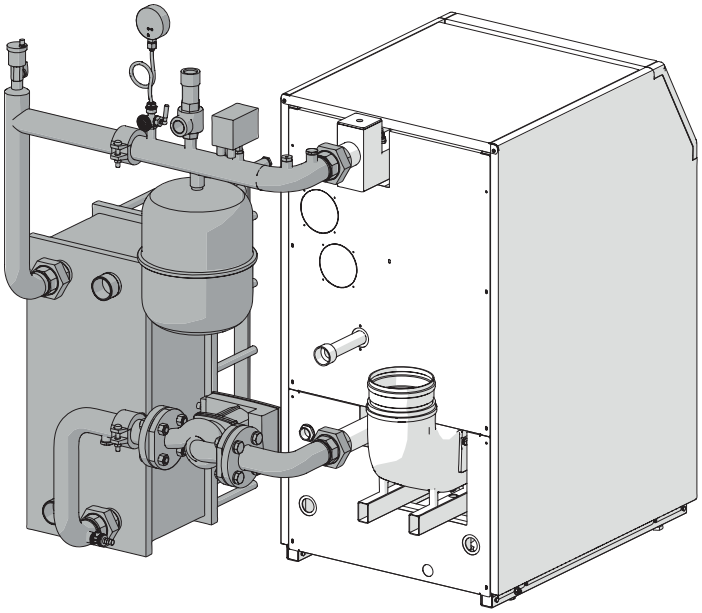


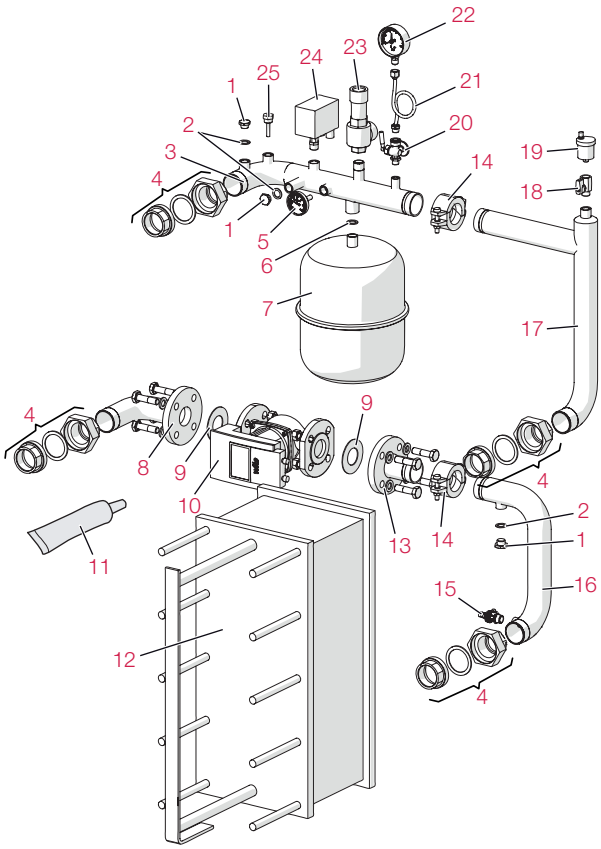


1. G1/2 M Plug
2. 1" Gasket
3. INAIL stub pipe
4. 3-part joint
5. Thermometer
6. 3/4" Gasket
7. Expansion vessel
8. Flanged stub pipe
9. Primary pump gasket
10. Primary pump (*)
11. Grease for joints
12. Flanged stub pipe
13. Split coupling
14. Hydraulic separator mount
15. Drain cock
16. Hydraulic separator
17. G1/2 MF cock
18. Automatic bleed valve
19. 3-way cock
20. Insulation ring with gaskets
21. Pressure gauge
22. Safety valve
23. Water pressure switch (reducer supplied)
24. Probe holder

(*) Component supplied in a separate kit (optional).

Primary ring with exchanger

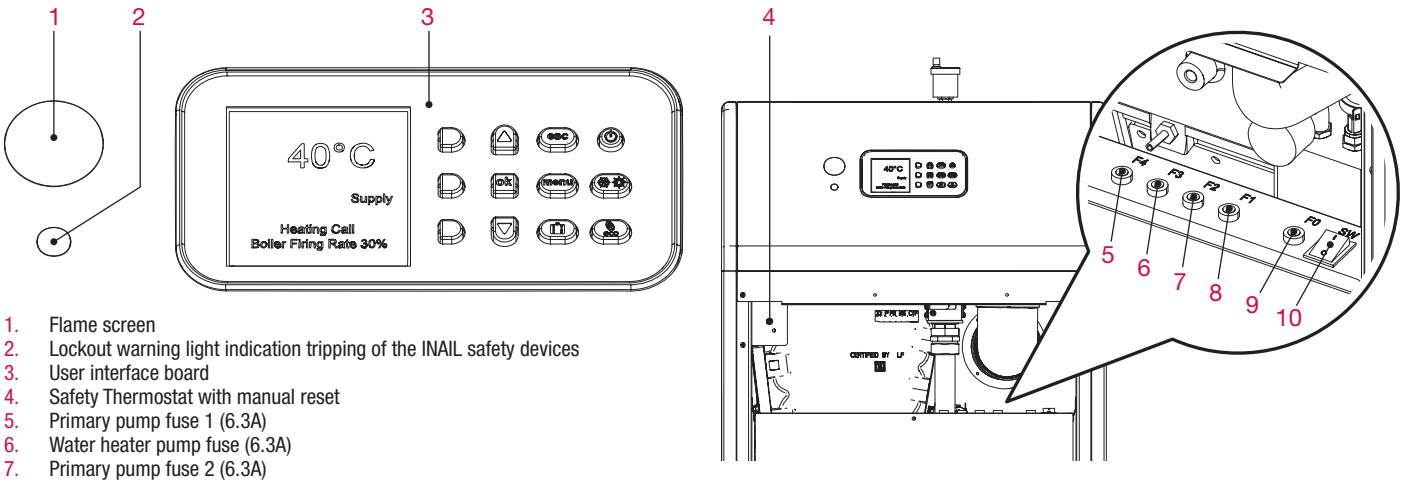




1. G1/2 M Plug
2. 1" Gasket
3. INAIL stub pipe
4. 3-part joint
5. Thermometer
6. 3/4" Gasket
7. Expansion vessel
8. Flanged stub pipe
9. Primary pump gasket
10. Primary pump
11. Grease for joints
12. Hydraulic exchanger
13. Flanged stub pipe
14. Split coupling
15. Drain cock
16. Exchanger return pipe
17. Exchanger delivery pipe
18. G1/2 MF cock
19. Automatic bleed valve
20. 3-way cock
21. Insulation ring with gaskets
22. Pressure gauge
23. Safety valve
24. Water pressure switch (reducer supplied)
25. Probe holder

Control panel and user interface

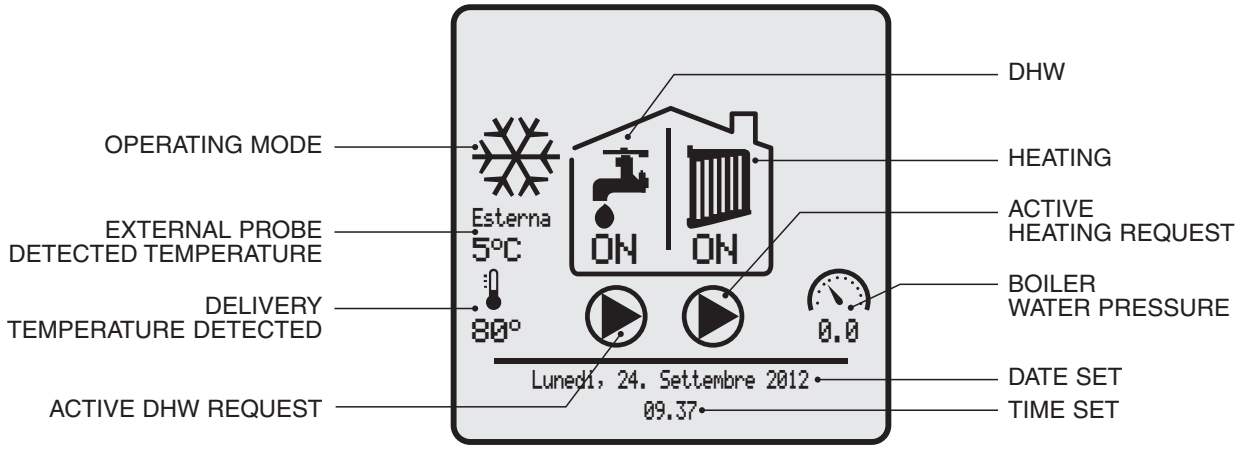
The control panel of the Powercond is equipped with the components indicated below, and is simple and intuitive to use.



1. Flame screen
2. Lockout warning light indication tripping of the INAIL safety devices
3. User interface board
4. Safety Thermostat with manual reset
5. Primary pump fuse 1 (6.3A)
6. Water heater pump fuse (6.3A)
7. Primary pump fuse 2 (6.3A)
8. Cascade pump fuse (6.3A)
9. Main fuse (10A)
10. Main switch with light signalling indicators

Button	Function description
H	**ON/STAND-BY** **STAND-BY:** Stops the appliance, preventing the use of the buttons on the user interface board. **ON:** Starts the appliance, authorising the use of the buttons on the user interface board.
I	**OPERATING MODE** **SUMMER:** only DHW production. **WINTER:** heating only or heating and DHW. **NONE:** neither heating, nor DHW. Anti-freeze or “Manual Test” active.
J	**ECO - Manual:** Reduces the set temperature of the DHW and the heating water (reduced operation).
E	**ESC:** Stops the activity currently in progress and returns to the home screen.
F	**MENU:** Shows the menu selection page (USER or TECHNICAL).
G	**HOLIDAY:** Sets the holiday start and end dates and the temperatures for the DHW and the heating water for this period.

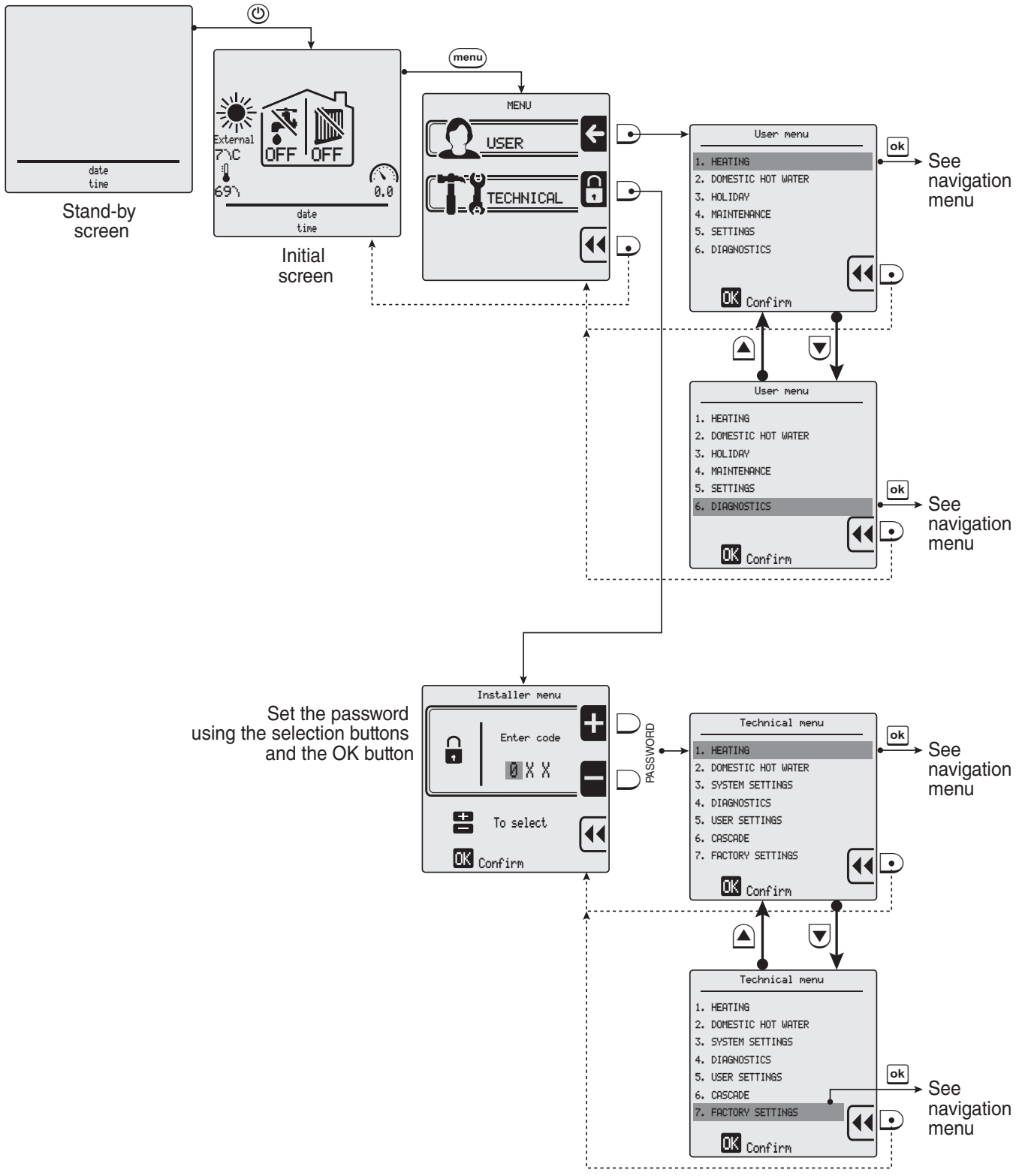
Button	Function description
B D	**UP:** Scrolls upwards through the rows on the screen. **DOWN:** Scrolls downwards through the rows on the screen. Press and hold for quick skip.
C	**OK** Used for: - opening the selected row in the menu or submenu; - confirming a new value where data has been changed.
A	**RED (top)** Used for: - accessing the USER menu; - increasing the value to be changed. Press and hold for quick skip.
A	**RED (middle)** Used for: - accessing the TECHNICAL menu; - reducing the value to be changed. Press and hold for quick skip.
A	**RED (bottom)** Returns to the selected row without saving/storing the changed value.



INITIAL SCREEN

Navigation procedure

The appliance leaves the factory configured in STAND-BY mode.
To scroll through the menu screens, use the buttons shown in the diagram below.



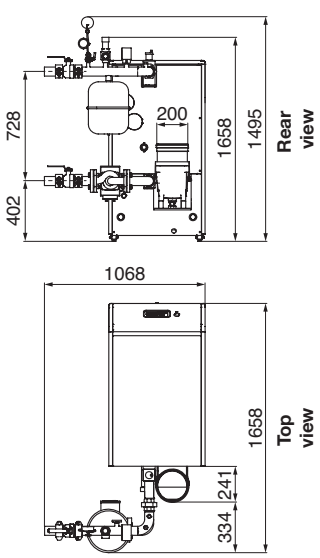
Powercond

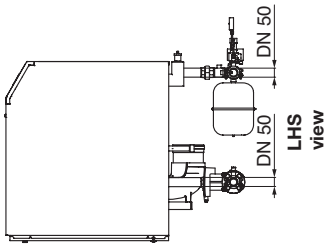
	Powercond	U.M.	115	150	200	240	280
	Series		Powercond				
Classification	Category		II2H3P				
	Country of destination		EN				
	Type		B23, B33, C43, C53, C63, C83				
	Efficiency directive rating		Condensing boiler				
Heat inputs	Nominal heat input (ref. Lower calorific power value)	kW	113.0	150.0	200.0	235.0	275.0
	Minimum heat input (ref. Lower calorific power value)	kW	21.0	30.0	35.5	42.5	49.5
Useful output	Nominal useful output (60/80°C)	kW	109.7	146.7	196.0	229.8	269.2
	Minimum useful output (60/80°C)	kW	20.0	29.0	34.7	41.5	48.3
	Nominal useful output (30/50°C)	kW	116.1	156.2	207.8	243.9	285.5
	Minimum useful output (30/50°C)	kW	22.6	32.3	38.2	45.7	53.2
Efficiency	Efficiency measured at nominal heat input (60/80°C)	%	97.1	97.8	98.0	97.8	97.9
	Efficiency measured at nominal heat input (30/50°C)	%	102.7	104.1	103.9	103.8	103.8
	Efficiency measured at 30% of load (30°C return)	%	107.6	107.5	107.5	107.5	107.5
	Efficiency measured at minimum heat input (60/80°C)	%	95.0	96.5	97.7	97.6	97.5
	Efficiency measured at minimum heat input (30/50°C)	%	107.6	107.5	107.5	107.5	107.5
	Star rating		★★★★				
	Heat loss at the flue with burner operating (P_f)	%	2.1	1.5	1.4	1.5	1.4
	Heat loss into the room through the casing (P_d)	%	0.8	0.7	0.6	0.7	0.7
Emissions	T flue gas at outlet with nominal heat input (60/80°C) - Gas G20	°C	65 - 70				
	T flue gas at outlet with minimum heat input (60/80°C) - Gas G20	°C	60 - 65				
	T flue gas at outlet with nominal heat input (30/50°C) - Gas G20	°C	40 - 45				
	Flue gas mass flow rate with nominal heat input (60/80°) - Gas G20	kg/s	0.0531	0.0740	0.0940	0.1104	0.1292
	Flue gas mass flow rate with minimum heat input (60/80°) - Gas G20	kg/s	0.0101	0.0144	0.0170	0.0204	0.0237
	Air mass flow rate with nominal heat input - Gas G20	kg/s	0.0507	0.0673	0.0898	0.1050	0.1230
	Air mass flow rate with minimum heat input - Gas G20	kg/s	0.0097	0.0139	0.0164	0.0197	0.0229
	CO_2 max / min - G20	%	9.3 / 9.1				
	CO_2 max / min - G31	%	10.6 / 10.3				
	CO - G20	ppm	25	30	35	30	28
	NOx - G20	ppm	15	20	18	18	18
	NOx class		5				
	Maximum condensate quantity	dm^3/h	15	19	25	30	36
	pH of the condensate (UNI 11071 2003)	pH	4				

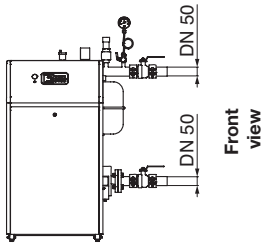
	Powercond	U.M.	115	150	200	240	280
Gas flow rates	Nominal gas flow rate G20	m^3/h	11.96	15.87	21.16	24.87	29.10
	Nominal gas flow rate G31	kg/h	8.78	11.66	15.54	18.26	21.37
	Minimum gas flow rate G20	m^3/h	2.22	3.17	3.76	4.50	5.24
	Minimum gas flow rate G31	kg/h	1.63	2.33	2.76	3.30	3.85
Electrical specifications	Voltage / Frequency	V ~ Hz	230 ~ 50				
	Absorbed power	W	225	260	320	320	320
	Protection rating (according to EN 60529)		IP X0D				
Supply pressures	Minimum supply pressure G20	mbar	17				
	Nominal supply pressure G20	mbar	20				
	Maximum supply pressure G20	mbar	25				
	Minimum supply pressure G31	mbar	25				
	Nominal supply pressure G31	mbar	37				
	Maximum supply pressure G31	mbar	45				
Boiler specifications	Adjustable temperature	°C	20 - 85				
	Maximum operating temperature	°C	90				
	Maximum / minimum pressure	bar	6 / 1.2				
	Water content	l	15.3	18.0	22.9	25.6	28.4
	Head losses water side ΔT 20	mbar	80	80	90	90	100
	ΔT Maximum delivery/return at Pn max	°C	25				
	ΔT Maximum delivery/return at Pn min	°C	35				
	Water flow rate ΔT 20	m^3/h	4.86	6.45	8.60	10.11	11.83
	Water flow rate ΔT 10	m^3/h	9.72	12.90	17.20	20.21	23.65
Boiler dimensions	Height		1200				
	Width		640				
	Depth (including flue)	mm	1100	1100	1320	1320	1320
Boiler weight	Net	kg	180	190	240	257	274
Flue gas / air duct specifications	Flue fitting	Ø	150	150	200	200	200
	Air fitting	Ø	100				
	Maximum straight line length	m	28	24	20	16	10

Powercond

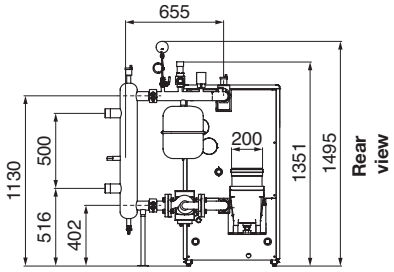
Measurements and overall dimensions of 1 boiler with base primary ring (no separator / no heat exchanger / no pump)

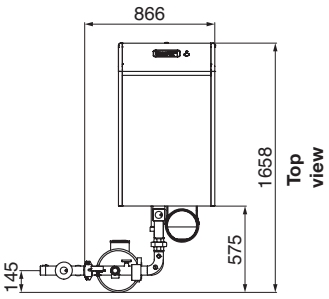


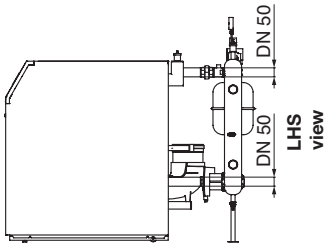


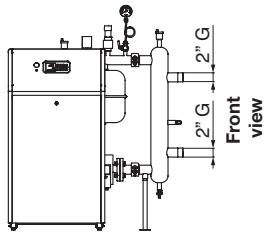


Measurements and overall dimensions of 1 boiler with separator primary ring

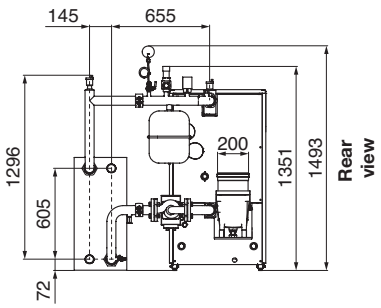


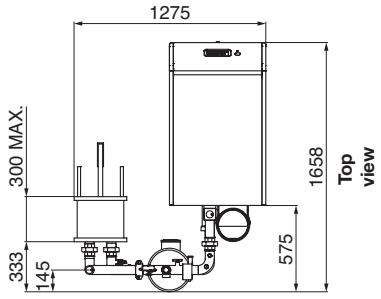


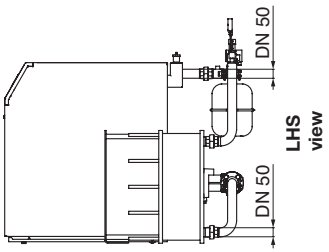


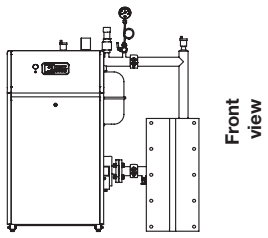


Measurements and overall dimensions of 1 boiler with HEAT EXCHANGER complete with pump

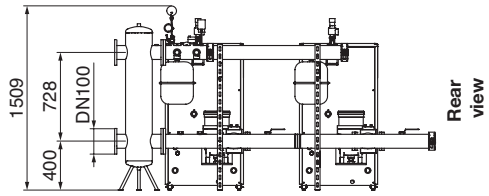


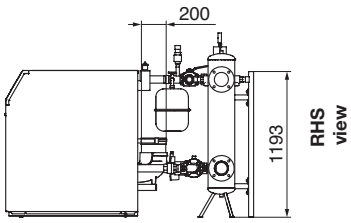


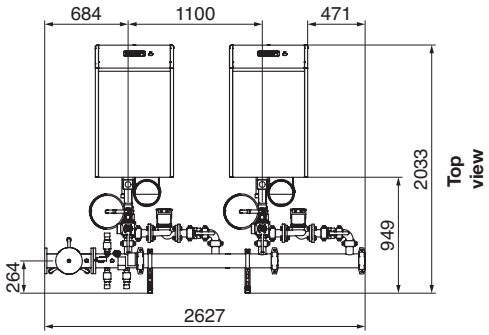




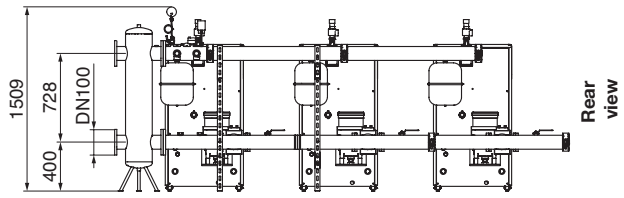
Measurements and overall dimensions of 2 cascade boilers

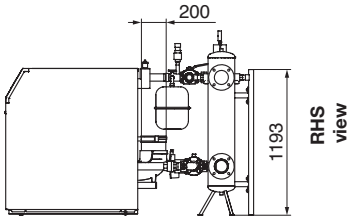


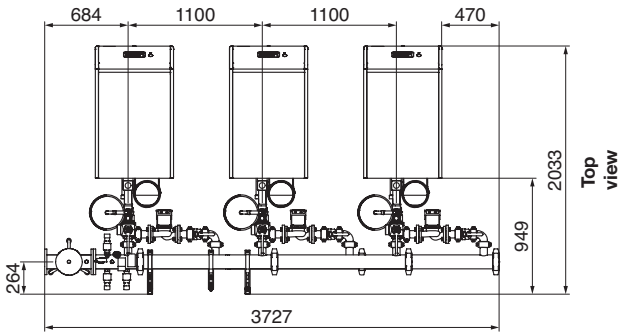




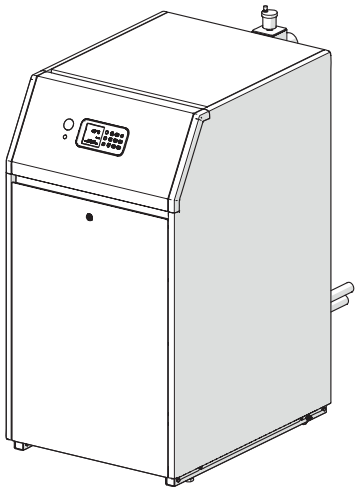
Measurements and overall dimensions of 3 cascade boilers



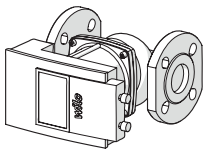




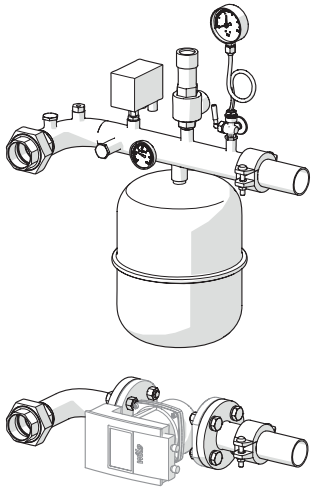
Powercond



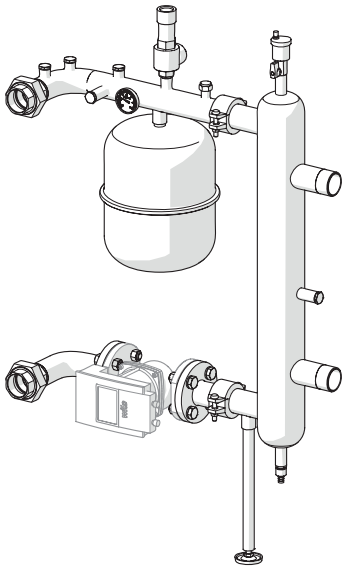
Description	Code	Output (kW)
Powercond 115 boiler	10568.2000.1	115
Powercond 150 boiler	10568.2001.1	150
Powercond 200 boiler	10568.2002.1	200
Powercond 240 boiler	10568.2003.1	240
Powercond 280 boiler	10568.2004.1	280



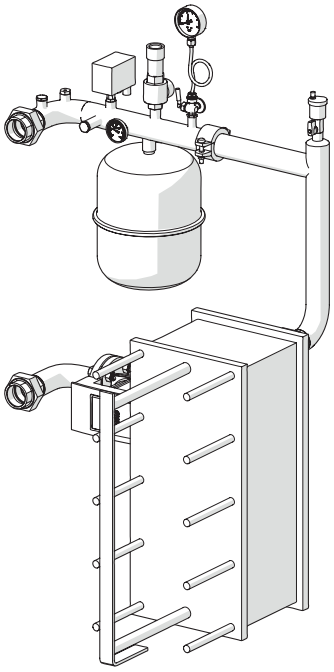
Description	Code	Output (kW)
Pump kit (0.5-8 MT)	10999.1079.0	All



Description	Code	Output (kW)
Base primary ring kit (no separator / no heat exchanger / no pump)	10999.1092.0	All

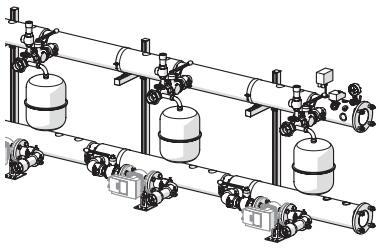


Description	Code	Output (kW)
Single boiler separator primary ring kit (no pump)	10999.1085.0	All



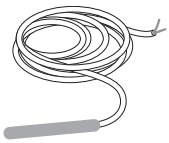
Description	Code	Output (kW)
Kit 115 HEAT EXCHANGER complete with pump	10999.1086.0	115
Kit 150 HEAT EXCHANGER complete with pump	10999.1088.0	150
Kit 200 HEAT EXCHANGER complete with pump	10999.1089.0	200
Kit 240 HEAT EXCHANGER complete with pump	10999.1090.0	240
Kit 280 HEAT EXCHANGER complete with pump	10999.1091.0	280

Description	NO. boilers	Code
Hydraulic separator	Separator assembly	14350.0038.0
	Drain cock	4022.3135.76
	Cock 1/2" G MF	4022.3134.18
	Bleed valve 1/2" G	4021.1198.00

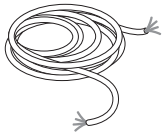


Description	NO. boilers	Code
INAIL cascade boiler primary ring kit for each generator, cascade probe, cascade probe holder (excluding safety valve and pump)	1 Boiler	N/A
	2 Boilers	10999.4000.0
	3 Boilers	10999.4001.0

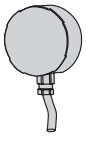
Description	Code	Output (kW)
VS INAIL 5.4 bar 3/4"Gx1"G **	10999.0489.0	All



Description	Code	Output (kW)
Cascade/ remote water heater probe kit	10999.0576.0	All



Description	Code	Output (kW)
Cascade connection wiring kit	10999.1139.0	All



Description	Code	Output (kW)
External probe kit	10999.3417.0	All

Description	Code	Output (kW)
Condensate neutraliser kit	10999.0664.0	All

Powercond (320 kW to 580 kW)



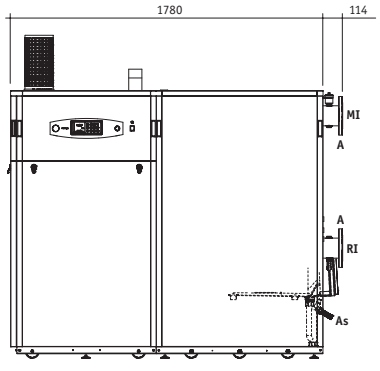
CLASSE NOx 6 | WI-FI READY | 110% SUPERBONUS (main intervention)

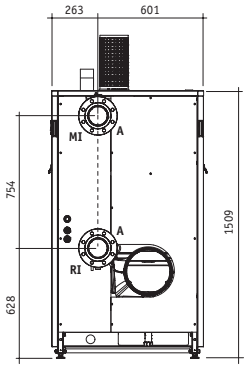
50% ECO BONUS | 50% BONUS CASA | 2.0 CONTO TERMICO



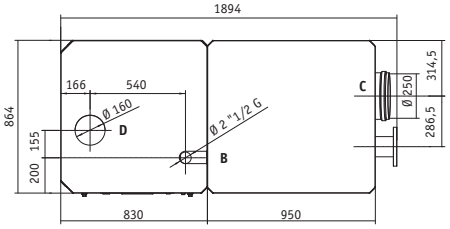
Lightweight, compact design occupying minimal space.
Silent operation.
Modular structure.
Intuitive user interface.
Heat input at firebox from 320 to 585 kW.
Efficiency class in accordance with EcoDesign requirements (Reg. 813/2013/EC).
Class 6 NOx.

Dimensions and connections





A Water connections DN100 PN16
B Gas connection G2"1/2 male
C Flue gas outlet DN250
D Air inlet DN160



Boiler technical data

Model	Code	Nominal heat input LHV kW	Nominal useful heat output (80/60°C) kW	Nominal useful heat output (50/30°C) kW	Minimum useful heat output (80/60°C) kW	LHV efficiency			Dimensions (mm)			Weight kg
						A nominal power (50/30°C)	A nominal power (80/60°C)	At 30% of load	W	H	D	
Powercond 340	10168.2013.0	320	313.6	340.2	57	106.3	98.0	109.1	2,000	1,509	865	410
Powercond 425	10168.2014.0	390	383	412.6	66.9	105.8	98.2	107.9	2,000	1,509	865	440
Powercond 510	10168.2015.0	460	452	488	79.4	106.0	98.2	108.9	2,000	1,509	865	470
Powercond 595	10168.2016.0	520	511	551	89.0	106.0	98.2	107.8	2,000	1,509	865	500
Powercond 620	10168.2017.0	585	575	620	100.8	106.0	98.2	107.0	2,000	1,509	865	535

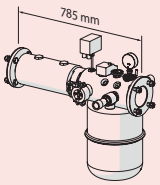
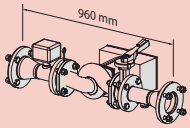
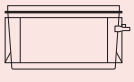


Main features:

- High modulation range (18% to 100 % power)
- Maximum DHW and heating output adjustable individually
- Certified for gas category I2H (methane)
- Boiler panel can be moved, meaning you can choose which side of the boiler will face the wall
- Front casing can be opening without any tools Space provided to house condensate neutraliser inside the boiler
- Boiler and pallet can be divided into two parts to facilitate handling
- Air suction unit has sliding mechanism for easy maintenance
- Mixing unit has a check valve to prevent flue gas leakage in cascade systems
- Option to pair in cascade with a simple bus connection (no external regulators required)
- Electronics can interface with remote management systems
- Innovative 5+1 climatic adjustment parameters
- Modulating input management 0-10 V (temperature or power)
- Connections to zone controls using OpenTherm
- PWM management of the primary pump and cascade
- Secondary pump and DHW/diverter pump management
- DHW production via combination with remote water heater, managed by boiler electronics
- Light or contact powered (230 V AC) for INAIL lock
- Remote alarm dry contact for boiler faults.

* In combination with a class V or higher temperature-control device.

On request

	Description	Details	Code
	External probe	By connecting a probe outside the boiler room, the boiler regulates the temperature according to the temperature detected outside.	10999.3417.0
	Hot water heater probe	3-metre probe. 10 KΩ sensor.	10999.0576.0
	DN 100 INAIL stub pipe kit	INAIL kit including safety devices according to regulation Raccolta R/09, and an expansion vessel (safety valve not supplied)	10999.1173.0
	Return manifold kit DN 100 with pump	Return kit DN 100 including circulation pump	10999.1174.0
	Condensate neutraliser	Condensate neutraliser for up to 1500 kW	10999.0664.0
	VS 5.4 bar 1"Gx1"1/4G	Certified safety valve	10999.0489.0

Powercond

Technical specifications

Description	Powercond					
	340	425	510	595	620	
Fuel	G20 (20 mbar)					
Destination country	ITALY					
Appliance category	I2H					
Appliance type	B23p, C43, C53, C63, C83					
Max. rated heat input (Qn)	320.0	390.0	460.0	520.0	585.0	kW
Minimum heat input (Qmin)	57.0	69.0	81.0	92.0	104.0	kW
Nominal heat output (80-60°C) (Pn)	313.6	383.0	451.7	510.6	574.5	kW
Nominal heat output (50-30°C)	340.2	412.6	487.6	551.2	620.1	kW
Minimum heat output (80-60°C) (Pmin)	55.2	66.9	79.4	89.0	100.8	kW
EFFICIENCY						
Useful efficiency at Pn (80-60°C)	98.0	98.2	98.2	98.2	98.2	%
Useful efficiency at Pn min (80-60°C)	96.9	97.0	98.0	96.7	96.9	%
Useful efficiency at Pn (50-30°C)	106.3	105.8	106.0	106.0	106.0	%
Useful efficiency at 30% (return 30°C)	109.1	107.9	108.9	107.8	107.0	%
Max. gas consumption (G20)	35.621	41.784	49.208	54.978	62.100	m^3/h
Min. gas consumption (G20)	5.997	7.512	8.679	9.924	11.258	m^3/h
EMISSIONS						
Flue gas temperature (80-60°C) at Pn	61.3	60.7	62.3	63.7	62.6	°C
Flue gas temperature (80-60°C) at min. Pn	53.5	55.0	55.1	54.0	55.5	°C
Flue gas temperature (50-30°C) Pn	41.6	42.9	40.8	41.5	41.4	°C
Flue gas temperature (50-30°C) min. Pn	28.6	29.1	29.3	29.3	29.5	°C
Flue gas mass flow rate at Pn (80-60°C)	144.7	176.9	203.9	232.8	273.7	g/s
Flue gas mass flow rate at min. Pn (80-60°C)	24.8	32.1	36.3	42.9	49.1	g/s
Max. condensation production	27.6	34.7	42.8	51.2	54.9	l/h
CO_2 max/min (G20)	9.7/9.5	9.4/9.3	9.5/9.4	9.4/9.2	9.4/9.1	%
CO max/min (G20)	76/12	67/9	82/15	79/9	57/5	ppm
NOx	47	34	58	47	52	mg/kWh
NOx CLASS	6	6	5	6	6	-
ELECTRICAL DATA						
Absorbed electric power	500	563	771	658	689	W
Power supply voltage	220-240 ~ 50/60					V ~ Hz
Protection rating	X0D					IP
BOILER						
Max heating pressure	6					bar
Maximum operating temperature	85					°C
Heating water contents	45.0	50.6	56.3	61.9	67.6	l
Load loss water side ΔT nom. (20°C)	85.14	81.31	79.58	76.04	75.32	mbar
ΔT Maximum delivery/return	35					°C
Nominal water flow ΔT (20°C)	13.773	16.635	19.831	21.848	24.837	m^3/h
Water flow ΔT 15°C	18.364	22.180	26.441	29.131	33.116	m^3/h
Combustion chamber back pressure: ignition	0.80	1.26	0.95	0.85	0.90	mbar
Combustion chamber back pressure: minimum	0.14	0.12	0.11	0.11	0.12	mbar
Combustion chamber back pressure: maximum	3.30	3.20	3.05	2.80	2.78	mbar
Inlet air speed Pn	6.2	7.71	9.4	8.1	12.4	m/s
Inlet air flow rate Pn	448.766	558.062	680.387	586.279	897.085	m^3/h
Inlet air speed min. Pn	0.2	0.81	0.9	1.2	1.5	m/s
Inlet air flow rate min. Pn	14.476	58.629	65.143	86.856	108.573	m^3/h
FLUE GAS OUTLET						
Flue outlet fitting	250					Ø mm
Air inlet connection	160					Ø mm
Total residual head (outlet + inlet)	170	170	170	170	120	Pa
FAN						
Number of rotations Pn	5000	5200	5700	5350	4100	revs/min.
Number of rotations min. Pn	1150	1200	1250	1200	900	revs/min.
Number of rotations ignition Pn	2450	2400	2400	2400	1750	revs/min.
DIMENSIONS and WEIGHT						
Width	864					mm
Depth (including flue)	1894					mm
Height (excluding inlet grille)	1525					mm
Weight	410	440	470	500	535	Kg





Code 4823.0745.00 - Powercond

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