



WALL-HUNG MODULAR condensing gas boilers

A Carrier Company

POWER EVO-X THE MODULAR AND COMPACT SOLUTION BY BERETTA

BERETTA PRESENTS POWER EVO-X, THE MODULAR WALL-HUNG CONDENSING BOILER, WHICH IS THE IDEAL SOLUTION FOR THE REPLACEMENT OF OLD GENERATORS IN SMALLER PLANT ROOMS.

The range consists of 4 condensing models from 35 to 70 kW, with the possibility of stand-alone and cascade installation up to a maximum of 4 thermal modules, both in in-line and back-to-back configurations, reaching up to 280 kW of power.

POWER EVO-X, thanks to its compactness and low weight, is the ideal solution in all situations where limited space is a critical issue when selecting a generator.

The range is suitable for indoor or partially protected installation (IPX5D) and is equipped as standard with low-consumption modulating circulators. Beretta has developed a configuration software to facilitate the designer in the process of selecting accessories and identifying the best solution in response to the thermal and plant engineering requirements of the plant.

THE RANGE

POWER EVO-X is available in 4 room-sealed models:

- POWER EVO-X 50 DEP
- POWER EVO-X 50
- POWER EVO-X 65
- POWER EVO-X 80

The POWER EVO-X range is designed to run on blends of natural gas and hydrogen, up to a maximum of 20%: an important first step towards achieving environmental sustainability targets and in the decarbonisation path started by the European Union.





EFFICIENCY IN A COMPACT LAYOUT

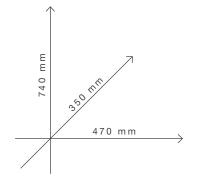
- ➤ ROOM-SEALED CONFIGURATION AS STANDARD
- > PREMIXED BURNER WITH LOW POLLUTING EMISSIONS
- > NEW STAINLESS STEEL HEAT EXCHANGER
 WITH LOW WATER CONTENT
- > LOW CONSUMPTION HYDRAULIC CIRCULATOR AS STANDARD ON EACH MODEL
- > COMPACT AND LIGHTWEIGHT STRUCTURE
- ➤ COMPLETE FRONT ACCESSIBILITY FOR MAINTENANCE OPERATIONS

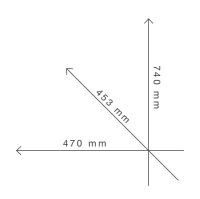
 $35 \div 45 \text{ kW}$



 $55 \div 70 \text{ kW}$







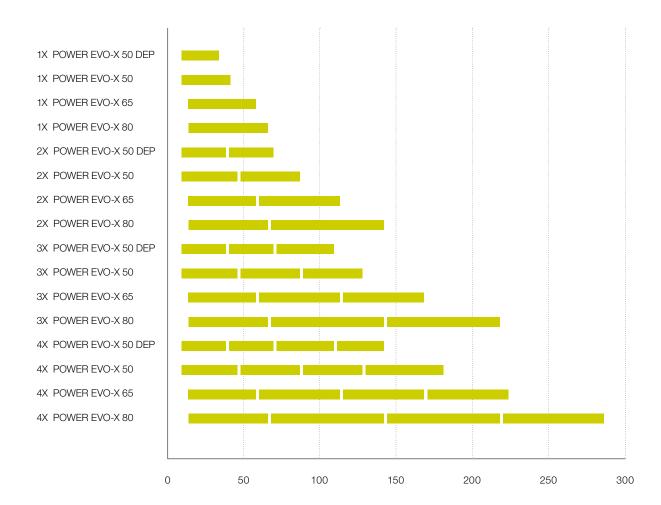
ONE RANGE, 28 CONFIGURATIONS

With the POWER EVO-X range, consisting of 4 models, 28 configurations can be realised, to meet the most varied space requirements of the plant room. Beretta is thus expanding its wall-hung range in the professional segment, introducing a range that ensures installation flexibility while maximising the compactness of the system.









TECHNICAL FEATURES

STAND ALONE CONFIGURATION

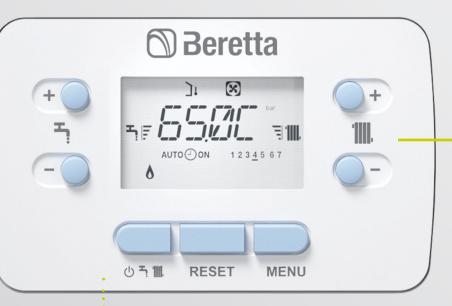
- > Heating only
- > Clapet as standard
- > Modulation ratio up to 1:8
- > IPX5D protection degree as standard
- > Concentric flues as standard
- ➤ Up to 3 zones management by means of specific accessories



CASCADE CONFIGURATION

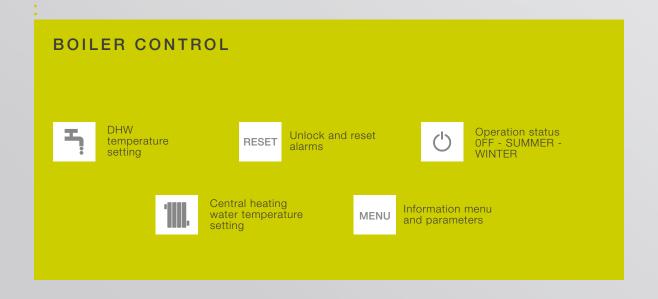
- ➤ LINEAR or BACK-TO-BACK configuration
- ➤ Modulation ratio up to 1:32
- ➤ System height <2 metres in all configurations
- ➤ Possibility of combining either with hydraulic separator or with plate heat exchanger for the separation between primary and secondary circuit
- ➤ Wide range of accessories, both hydraulic and flue gas exhaust

ELECTRONIC CONTROL AND DISPLAY

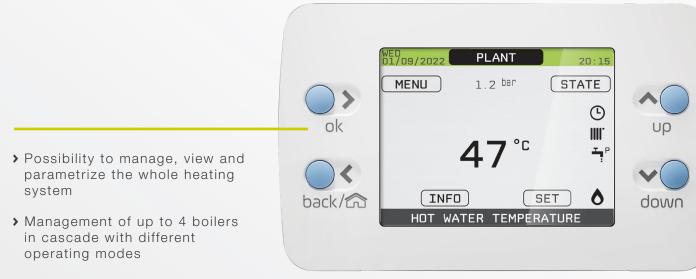


INTUITIVE - SIMPLE - IMMEDIATE

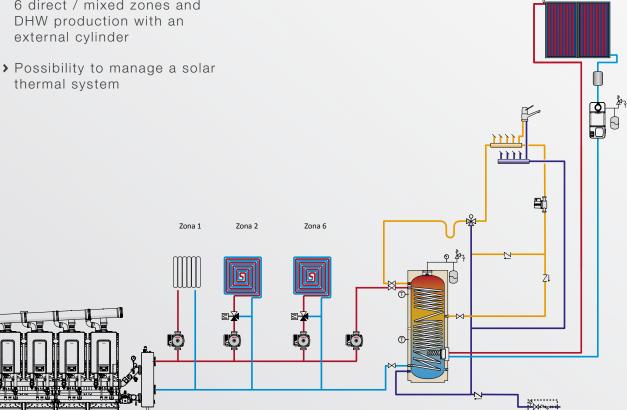
- ➤ Simple and intuitive backlit LCD display which shows the main operating information
- > Ease of setting thanks to the keys with symbols dedicated to the end-user functions
- Clock function weekly programmer integrated into the display



SYSTEM REMOTE CONTROL WITH POWER EVO-X IN CASCADE



- > Display of the operating status of the system and of the individual generators of the system
- > Management of up to 6 direct / mixed zones and DHW production with an



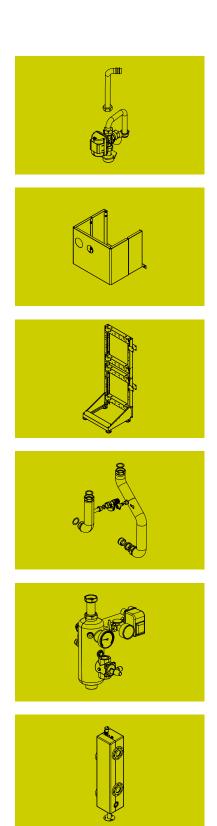
A WIDE RANGE OF ACCESSORIES FOR ANY CONFIGURATIONS

POWER EVO-X is completed with a wide range of accessories able to adapt to the needs for each type of system. The accessories have been specially designed to maximize the flexibility of the system and to obtain the ideal solution for every installation requirement, both in stand alone and in cascade installation.

- ➤ A safety kit is also available for all models, which is completed with specific shut-off and safety valves, both to be selected according to the boiler model
- Possibility of installation either with hydraulic separator or plate heat exchanger both in single installation and in cascade, thanks to the specifically designed accessories
- Flue collectors, hydraulic manifolds and connections specifically designed for cascade installation in linear or back-to-back configuration
- ➤ A series of useful accessory kits are also available for managing the heating zones, which allow the management of up to 6 direct or mixed zones when combined with the use of the remote control.



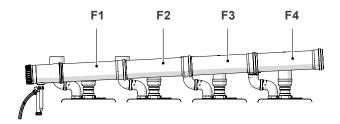




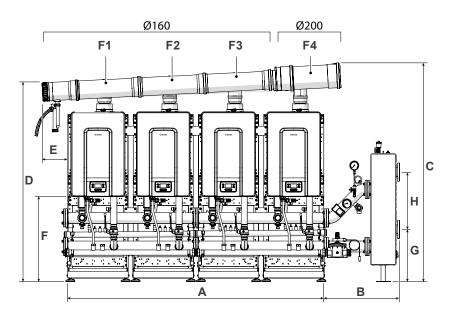


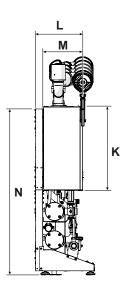
TECHNICAL DRAWINGS

 $35 \div 45 \text{ kW}$



 $55 \div 70 \text{ kW}$





| Description | uom | Α | В | С | D | Ε | F | G | Н | K | L | M | N | F1 | F2 | F3 | F4 |
|-----------------|-----|------|-----|------|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| POWEREVO-X50DEP | mm | 2240 | 658 | 1921 | 1777 | 285 | 743 | 457 | 500 | 740 | 423 | 351 | 1483 | Ø160 | Ø160 | Ø160 | Ø160 |
| POWEREVO-X50 | mm | 2240 | 658 | 1921 | 1777 | 285 | 743 | 457 | 500 | 740 | 423 | 351 | 1483 | Ø160 | Ø160 | Ø160 | Ø160 |
| POWEREVO-X65 | mm | 2240 | 658 | 1892 | 1740 | 226 | 743 | 457 | 500 | 740 | 383 | 312 | 1481 | Ø160 | Ø160 | Ø160 | Ø200 |
| POWEREVO-X80 | mm | 2240 | 658 | 1892 | 1740 | 226 | 743 | 457 | 500 | 740 | 383 | 312 | 1481 | Ø160 | Ø160 | Ø160 | Ø200 |
| NOxClass | | 6 | 6 | | 6 | 6 | | 6 | 6 | | 6 | 6 | | 6 | 6 | 6 | |

TECHNICAL DATA

| Description | | UoM | POWER EVO-X 50 DEP | POWER EVO-X 50 | POWER EVO-X 65 | POWER EVO-X 80 |
|---|-----------------|-----------------------|--|--|--|--|
| Appliance type | | | Wall-hung indoor installation | Wall-hung indoor installation | Wall-hung indoor installation | Wall-hung indoor installation |
| Device category | | | II2H3P | II2H3P | II2H3P | II2H3P |
| Combustion chamber | | | Only heating sealed condensing with forced draught |
| Maximum rated heat input (LHV) | | kW | 34,9 | 45 | 55 | 70 |
| Minimum rated heat input (LHV) | | kW | 5,2 | 5,2 | 8,2 | 8,2 |
| Maximum useful heat output (80÷60°C) | | kW | 33,99 | 43,88 | 53,6 | 68,2 |
| Maximum useful heat output (50÷30°C) | | kW | 37,31 | 47,3 | 58,25 | 74,19 |
| Minimum useful heat output (80÷60°C) | | kW | 4,98 | 4,98 | 7,87 | 7,87 |
| Minimum useful heat output (50÷30°C) | | kW | 5,57 | 5,57 | 8,78 | 8,78 |
| Combustion efficiency | | % | 97,6 | 97,7 | 97,6 | 97,6 |
| Efficiency with nominal heat output (80÷60°C) | | % | 97,4 | 97,5 | 97,5 | 97,5 |
| Efficiency with minimum heat output (80÷60°C) | | % | 95,8 | 95,8 | 96 | 96 |
| Efficiency with nominal heat output (50÷30°C) | | % | 106,9 | 105,1 | 105,9 | 106 |
| Efficiency with minimum heat output (50÷30°C) | | % | 107,2 | 107,2 | 107 | 107 |
| Useful efficiency at max. rated output (30° return) | | % | 108,2 | 107,9 | 107,6 | 107,5 |
| Seasonal energy efficiency in room heating mode ηs | | % | 93 | 92 | 92 | 92 |
| Efficiency class in heating mode | | $D \rightarrow A+++*$ | A | Α | Α | A |
| Maximum operating pressure | | bar | 5 | 5 | 5 | 5 |
| Minimum operating pressure | | bar | 0,8 | 0,8 | 0,8 | 0,8 |
| Safety thermostat intervention temperature | | °C | 102 (±3) | 102 (±3) | 102 (±3) | 102 (±3) |
| Max. allowed temperature | | °C | 90 | 90 | 90 | 90 |
| Adjustment temperature (min ÷ max) | | °C | 20 ÷ 90 | 20 ÷ 90 | 20 ÷ 90 | 20 ÷ 90 |
| Useful head available (@1000 l/h) | | mbar | 820 | 820 | 430 | 430 |
| Boiler residual head | | Pa | 166 | 198 | 180 | 200 |
| NOx emissions | | mg/kWh | 30 | 33 | 41 | 48 |
| NOx class | | | 6 | 6 | 6 | 6 |
| Emissions at max/min flow rate | CO ₂ | % | 9 | 9 | 9 | 9 |
| Emissions at maximin now rate | CO | ppm | 120/30 | 150/30 | 170/40 | 220/40 |
| Chimney losses with burner off/on | | % | 0,06/2,38 | 0,05/2,35 | 0,04/2,41 | 0,03/2,44 |
| Flue mass flow rate | | g/s | 15,855-2,362 | 20,443-2,362 | 24,986-3,725 | 31,800-3,725 |
| Noise levels (sound pressure) | | dB(A) | 57 | 60 | 57 | 61 |
| Electrical power supply | | V-Hz | 230-50 | 230-50 | 230-50 | 230-50 |
| Electrical protection level | | IP | X5D | X5D | X5D | X5D |
| Total electrical power | | W | 158 | 175 | 201 | 284 |
| Dimensions (H×W×D) | | mm | 740 x 470 x 350 | 740 x 470 x 350 | 740 x 470 x 453 | 740 x 470 x 453 |
| Net weight | | kg | 35 | 35 | 53,5 | 53,5 |

 $^{^{\}star}$ The range of energy efficiency class of this products category is between D and A+++.

Technical data referring to operation with G20.





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