



MULTIPARVA 3.0 SR  
MULTIPARVA 3.0 SV  
ACCESSORIES

# Multiparva 3.0

POWER CONDENSING BOILERS

PROFESSIONAL 2020





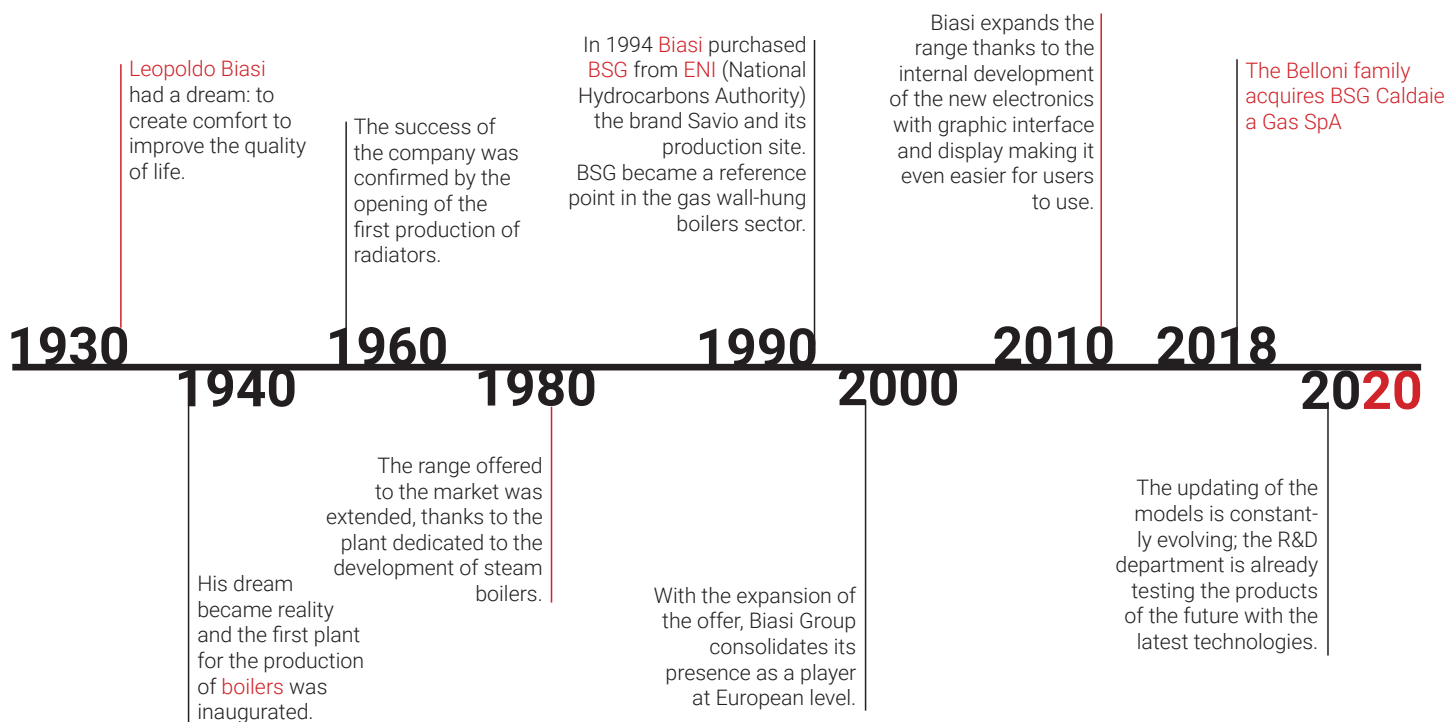
## OUR COMPANY

Biasi engages the experience, skills, organization and patents of a company history that started in the 1930s and developed to become an industry professional. For over 80 years we have been operating in the heating industry, investing in Italy and abroad looking for solutions for comfort in the domestic and professional industries. Today our offer covers all market segments: from wall-hung to floor-standing condensing boilers, water heaters, a wide range of integrated systems with solar based on high energy efficiency. It also supplies new complete systems with heat pumps and hybrids, which can be integrated with radiant solutions, operating at low temperatures.





# OUR HISTORY



## QUALITY

TECNOLOGY AND RELIABILITY

RESEARCH AND INNOVATION

ITALIAN DESIGN

COSTUMER CARE

FLEXIBILITY

STRUCTURED LOGISTIC

We constantly design and improve our products. We assemble them in our assembly lines, we check the quality at each step of the process. **The value of Made in Italy is in every detail.**



Our wall hung boilers' factory is equipped to:

- produce up to 160,000 boilers per year;
- produce 500 different part numbers;
- produce more than 16 product ranges,

# OUR PRODUCTS

## RESIDENTIAL

Condensing boilers

Traditional boilers

Hybrid systems

Heat pumps

Water heaters

Air conditioning

Solar panels

Boilers

Integrated systems with solar

## PROFESSIONAL

Boilers for centralized systems

## SPARE PARTS

# Summary

The range:

## **01 MULTIPARVA 3.0 / single installation** 06

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# Multiparva 3.0 Biasi



## Power condensing boilers

Comfort and energy savings, this is what a climate control system of today has to provide. In the past, we simply needed to carefully select one component, the boiler, to take care of all user needs and comply with legal requirements. That careful choice translated into the search for a quality boiler, which was generally oversized. Today, the requirements of these two parameters have to be met simultaneously: comfort and energy savings. To obtain this, it is not enough to simply choose a boiler with care, but there also has to be the synergetic combination of multiple elements, which must be managed intelligently within a logic of energy savings. Therefore the plant becomes a system.

The Biasi Professional line, to which the Biasi solar catalogue is a natural complement, offers a series of products designed to be smoothly integrated with this system. Furthermore, Biasi is able to provide its customers with the fruits of its experience, matured over the years within this sector.



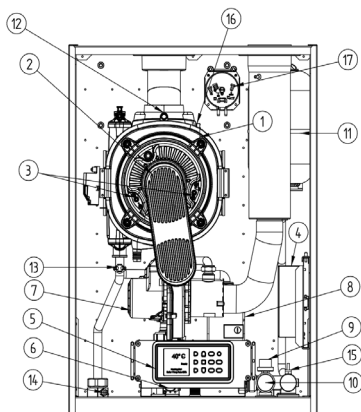
# Multiparva 3.0

Multiparva 3.0 is a latest generation extremely high efficiency condensing boiler for heating only, equipped with a pre-mixed modulating burner with low emissions and stainless steel condensing heat exchanger with high calorific power values.

It is available from 35, 45, 70, 95, 110, 115, 150 heat capacity. It can be installed individually or up to 6 modules can be combined, of the same or mixed heat outputs, directly exploiting the boiler electronic control unit.

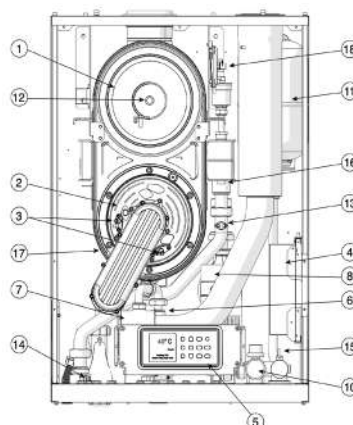
Multiparva Cond 3.0 exploits the condensing principle: thanks to the innovative heat exchanger in stainless steel and the two separate sections, one dedicated to condensing only, it is able to recover the latent heat contained in the flue gases, obtaining efficiency levels which are some of the highest in the category.

Multiparva 3.0 F 35 - 45 - 70

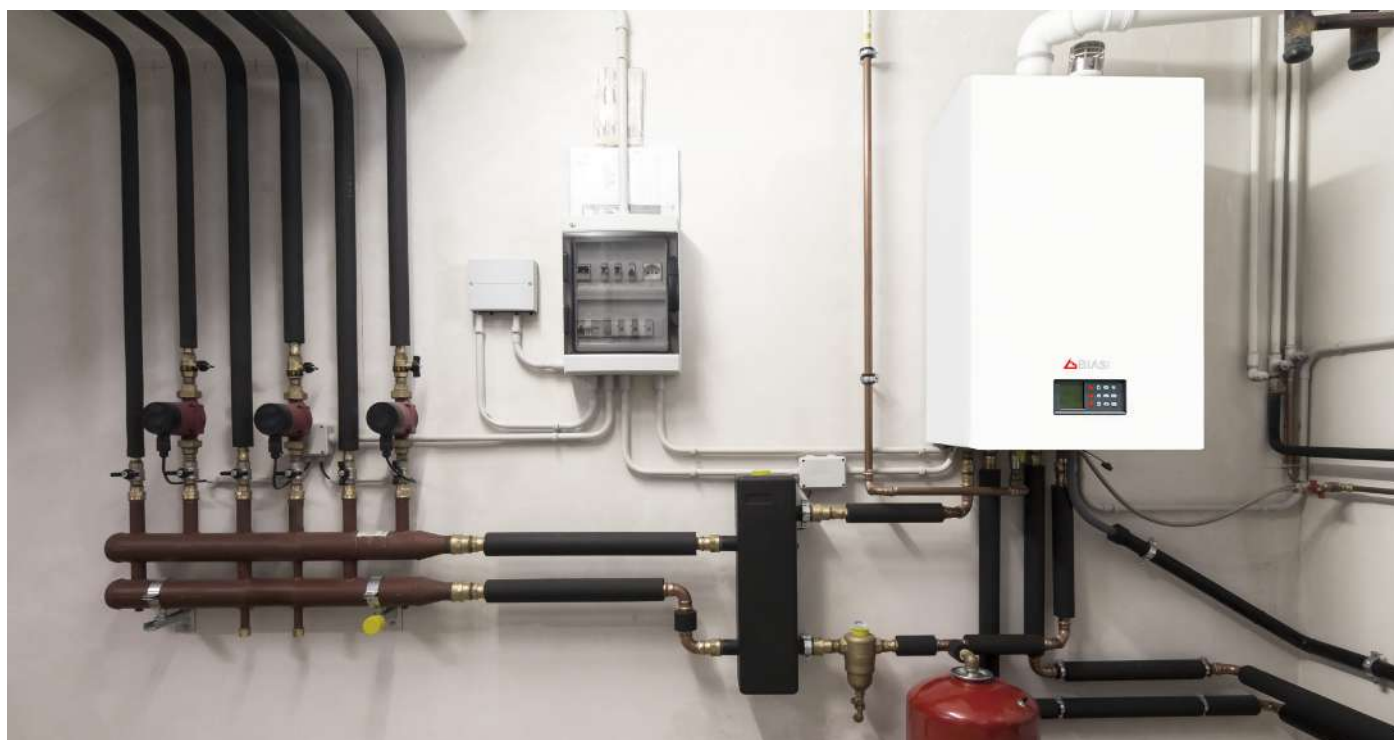


1. Exchanger
2. Burner
3. Electrodes
4. Electronic board
5. Display
6. Gas valve
7. Fan
8. Circulator
9. Pressure transmitter
10. Safety valve (4 bar)
11. Expansion vessel
12. Flue gas probe
13. Safety thermostat
14. Discharge probe
15. Return probe
16. Thermal fuse
17. Siphon pressure switch

Multiparva 3.0 F 95 - 110 - 115 - 150



1. Exchanger
2. Burner
3. Electrodes
4. Electronic board
5. Display
6. Gas valve
7. Fan
8. Circulator
9. Pressure transmitter
10. Safety valve (5.4 bar)
11. Expansion vessel
12. Flue gas probe
13. Safety thermostat
14. Discharge probe
15. Return probe
16. Body probe
17. Thermal fuse
18. Siphon pressure switch (all models)  
Pressure switch APS (M158HE.115/F & M158HE.150/F)



# MULTIPARVA 3.0

WALL MOUNTED LOW EMISSION  
GAS-FIRED BOILER



**MODULATION** MAX MIN FROM 1 : 6 TO 1:9 (DEPENDING BY THE SIZES)



**MAX PRESSURE** (BAR) 4,5 (FOR SIZES 35,45,70 KW) AND 6 (FOR SIZES 95,110,115,150 KW)



**NATURAL GAS OR LPG**



★★★★ NOX 6 CLASS

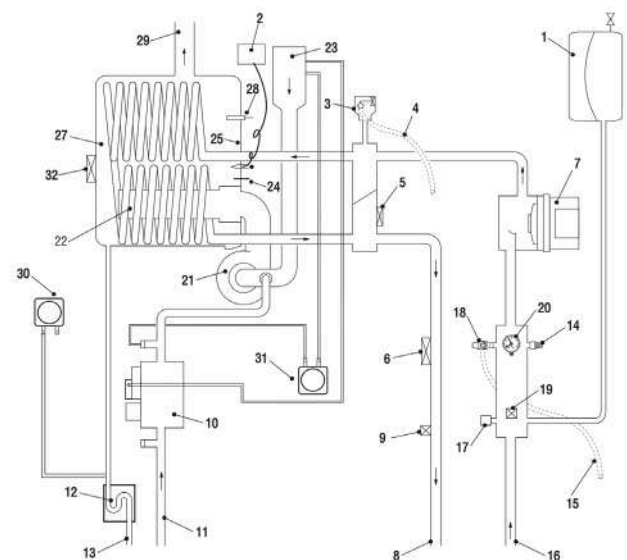
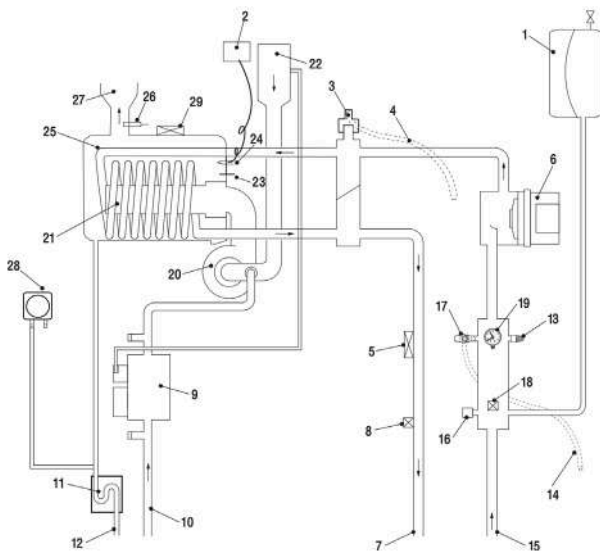


**PERFORMANCE** FROM 97,4 TO 97,8% (DEPENDING BY THE SIZES)

## SCHEMES

Multiparva 3.0 F 35 - 45 - 70

Multiparva 3.0 F 95 - 110 - 115 - 150



- |  |  |
|--|--|
| 1. Expansion vessel (model only/F)                       | 18. NTC probe heating return               |
| 2. Remote igniter  | 19. Manometer                              |
| 3. Manual vent valve                                     | 20. Fan                                    |
| 4. Exhaust vent  | 21. Burner                                 |
| 5. Safety thermostat                                     | 22. Air intake duct complete with silencer |
| 6. Modulating circulator (only model /F only)            | 23. Flame detection electrode              |
| 7. Heating flow pipe                                     | 24. Ignition electrode                     |
| 8. Heating flow NTC probe                                | 25. Condensation exchanger                 |
| 9. Gas valve   | 26. Flue gas probe                         |
| 10. Gas inlet  | 27. Smoke expulsion duct                   |
| 11. Condensate drain trap                                | 28. Siphon pressure switch                 |
| 12. Condensate drain pipe                                | 29. thermal fuse heat exchanger            |
| 13. Boiler drain tap                                     |  |
| 14. Safety valve drain                                   |  |
| 15. Heating return pipe                                  |  |
| 16. Pressure transducer                                  |  |
| 17. Non-qualified safety valve qualified (model /F only) |  |

- |   |  |
|---|--|
| 1. Expansion vessel (model /F only)           | 19. NTC probe heating return                                     |
| 2. Remote igniter                             | 20. Pressure gauge   |
| 3. Automatic vent valve                       | 21. Fan 22. Burner   |
| 4. Vent discharge                             | 23. Air intake duct complete with silencer                       |
| 5. Boiler body NTC probe                      | 24. Flame detection electrode                                    |
| 6. Safety thermostat                          | 25. Combustion chamber thermostat                                |
| 7. Modulating circulator (only model /F)      | 26. siphon electrode   |
| 8. Heating flow pipe                          | 27. Condensing primary exchanger                                 |
| 9. Heating flow NTC probe                     | 28. Flue gas probe   |
| 10. Gas valve                                 | 29. Flue gas expulsion duct connection                           |
| 11. Gas inlet                                 | 30. siphon pressure switch                                       |
| 12. Condensate drain trap                     | 31. Air pressure switch (APS) (only M158HE.115/F & M158HE.150/F) |
| 13. Condensate drain pipe                     | 32. rear thermal-fuse  |
| 14. Boiler drain tap                          |  |
| 15. Safety valve drain                        |  |
| 16. Heating return pipe                       |  |
| 17. Pressure transducer                       |  |
| 18. Safety valve not qualified (only model/F) |  |



# The new boiler body

New condensing exchangers/new powers

New ISOTHERMIC exchanger

Plus:

- EASE OF MAINTENANCE

By removing only some front nuts the combustion chamber is easily accessed

- LOW FLUE GAS PRESSURE DROPS

Thanks to the uniform space between the coils, low flue gas-side pressure drops are guaranteed

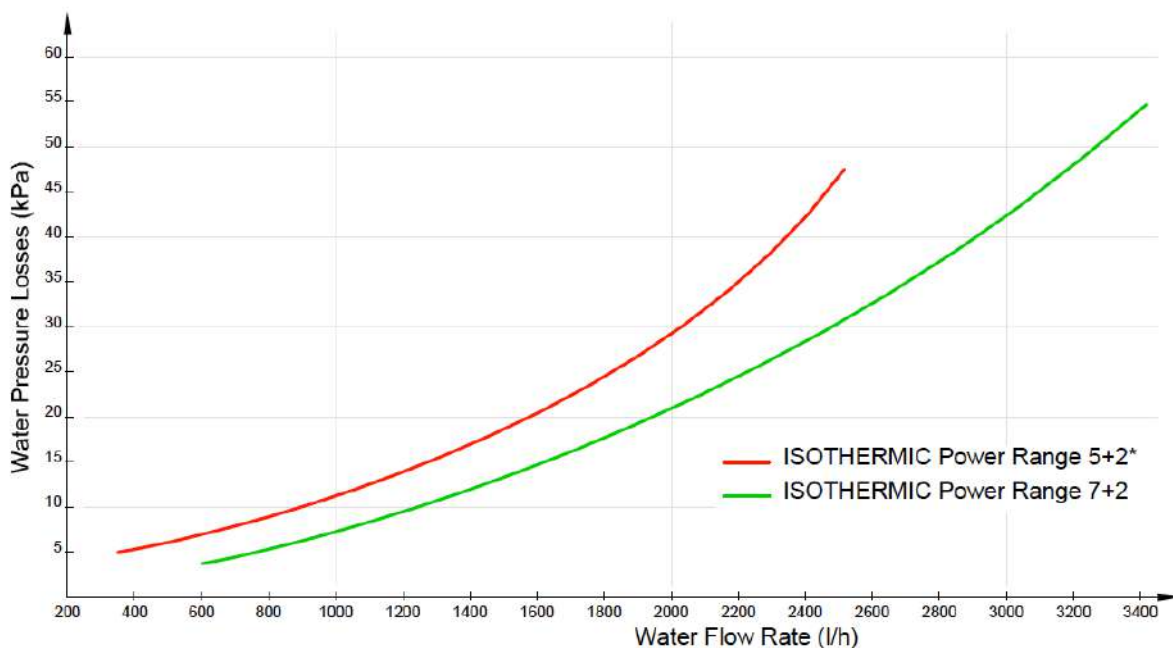
- LIGHT

This exchanger is made in double structure, composite material, and stainless steel. Thanks to the choice to use the composite material, it is very light and low radiation losses



34 kW (unpowered boiler)  
45 kW  
70 kW

- maximum working pressure
- maximum pressure drops 4.5 mca
- improved prevalence





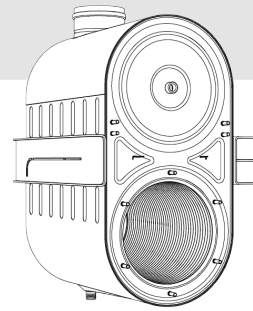
# MULTIPARVA 3.0

WALL MOUNTED LOW EMISSION  
GAS-FIRED BOILER



## New DUOPOWER exchanger

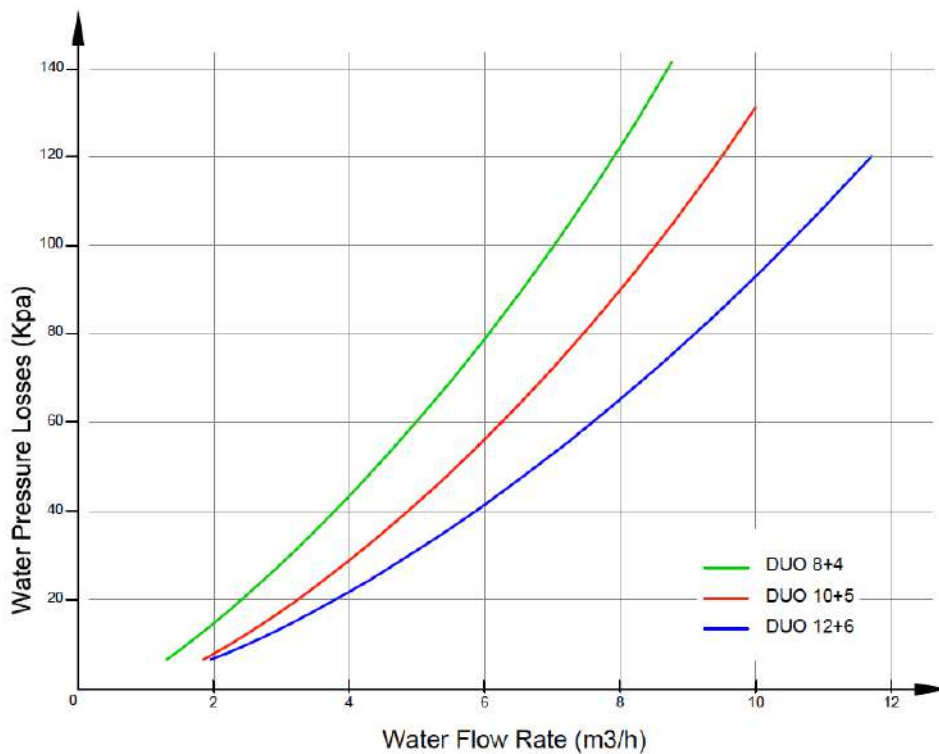
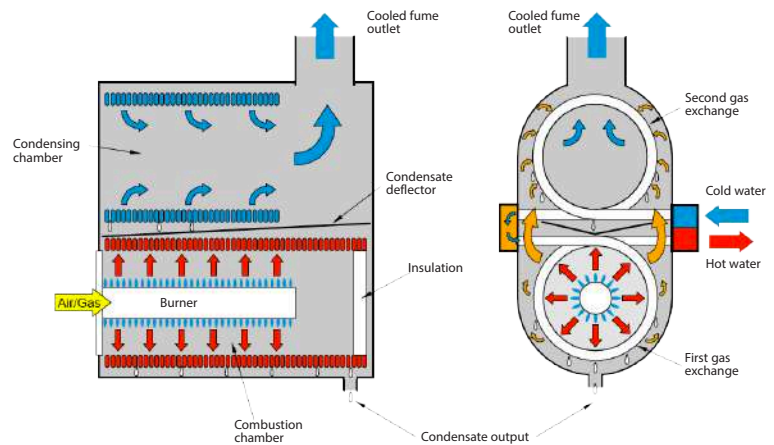
- powers: 95 / 110 / 115 / 150 kW
- for 95 kW power duopower model 8+4
- for power from 110 kW duopower model 10+5
- for power from 115/150 kW duopower model 12+6



95 kW  
110 kW  
115 kW (unpowered boiler)  
150 kW

## FEATURES:

- Composed by two overlapping chambers
- entirely in stainless steel
- Maximum working pressure 6bar
- Maximum pressure drops between 4.2 and 4.5 mca

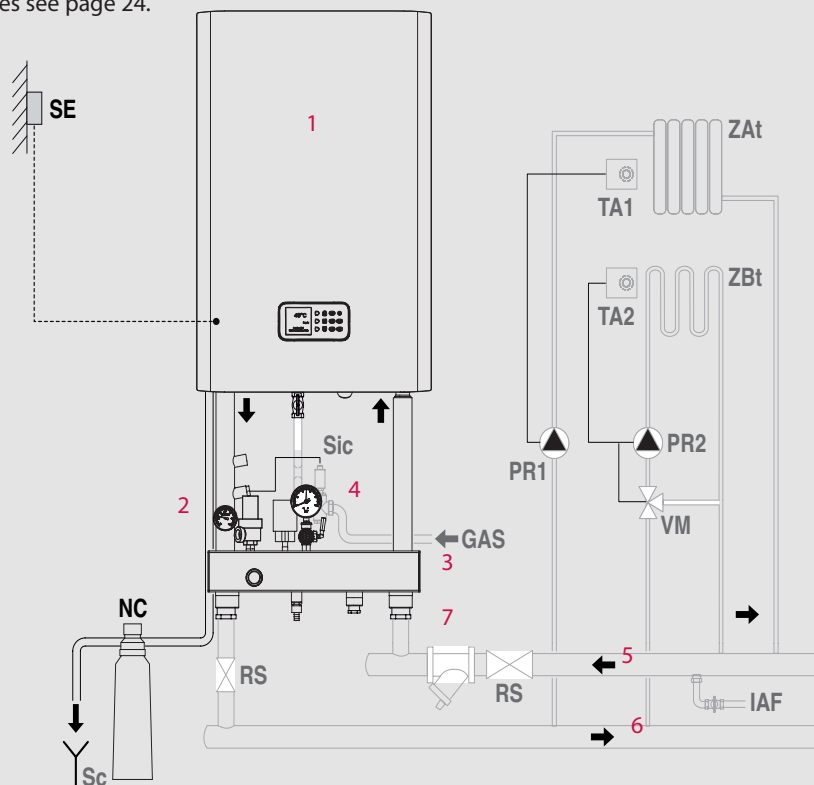


# Multiparva 3.0 F SR

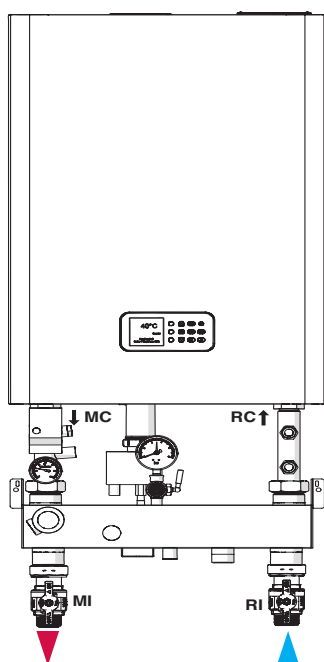
SINGLE INSTALLATION

## HEATING ONLY CONFIGURATIONS | SR

The SV application kit is made by a hydraulic separator, useful for interfacing the boiler with the system, and an INAIL safety unit compliant with the "R" collection. Safety unit complying with the requirements of the "R" collection. It is also available in the version for free installation with heat exchanger and INAIL safety group, as an alternative to the SR application kit. For accessories see page 24.



Management of a HIGH TEMPERATURE zone and a LOW TEMPERATURE zone with external control.



1. Boiler
2. INAIL safety module
3. Hydraulic separator (\*)
4. Fuel shut-off valve
5. System return collector
6. System delivery collector
7. Purification filter

- SE External probe (\*)  
 NC Condensate neutraliser (\*)  
 Sc Discharge  
 RS System breaker cock  
 ZAt High temperature zone  
 ZBt Low temperature zone  
 TA1 High temperature zone ambient thermostat  
 TA2 Low temperature zone ambient thermostat  
 PR1 High temperature system pump  
 PR2 Low temperature system pump  
 VM Low temperature system mixer valve  
 Sic Fuel shut-off probe  
 GAS Fuel supply  
 IAF Cold water inlet



Examples of package:  
Multiparva 3.0 F SR installation package from 35 to 150 KW only heating

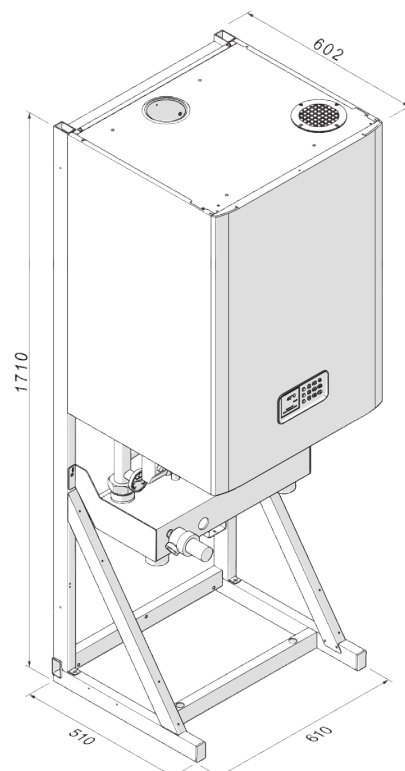
| POWER CONDENSING BOILERS |                      |
|--------------------------|----------------------|
| Code (natural gas)       | Description          |
| 10277.2068.0             | Multiparva 3.0 F 35  |
| 10277.2069.0             | Multiparva 3.0 F 45  |
| 10277.2070.0             | Multiparva 3.0 F 70  |
| 10277.2071.0             | Multiparva 3.0 F 95  |
| 10277.2072.0             | Multiparva 3.0 F 110 |
| 10338.2020.0             | Multiparva 3.0 F 115 |
| 10277.2073.0             | Multiparva 3.0 F 150 |

## OPTIONAL

| STANDARD INSTALLATION KIT |   |
|---------------------------|---|
| Code                      | Description                               |
| 10999.1057.0              | Kit for single SR boiler separator        |
| 10999.1055.1              | Boiler plant structure kit                |
| 10999.0725.0              | Condensate neutraliser kit from 35 to 150 |
| 10999.3417.0              | External probe kit                        |

| NATURAL GAS - LPG CONVERSION |  |
|------------------------------|--|
| Code                         | Description                                |
| 10999.1408.0                 | Natural Gas - LPG conversion KIT 70        |
| 10999.1409.0                 | Natural Gas - LPG conversion KIT 95        |
| 10999.1410.0                 | Natural Gas - LPG conversion KIT110        |
| 10999.1411.0                 | Natural Gas - LPG conversion KIT 115 - 150 |

| SAFETY DEVICES - 'INAIL' QUALIFIED |  |
|------------------------------------|--|
| Code                               | Description  |
| 10999.0485.0                       | Qualified safety valve 4 bar 1/2" G x 3/4" G - for 35-45-70 powers         |
| 10999.0486.0                       | Qualified safety valve 5,4 bar 1/2" G x 3/4" G - for 95-110-115-150 powers |



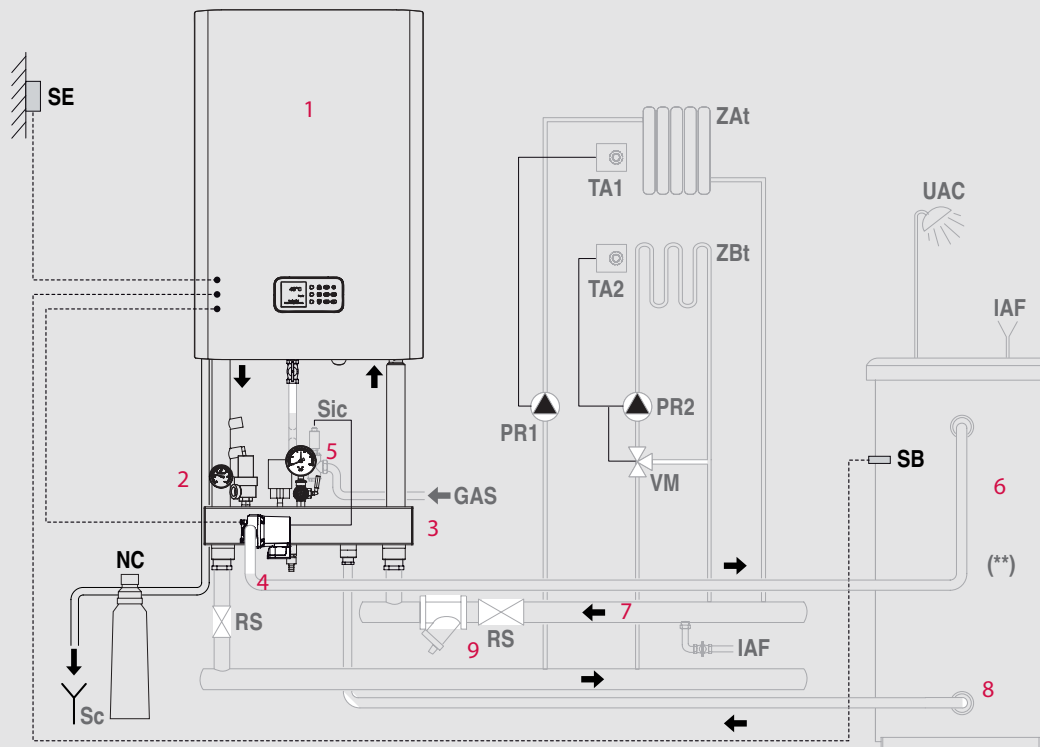


# Multiparva 3.0 F SV

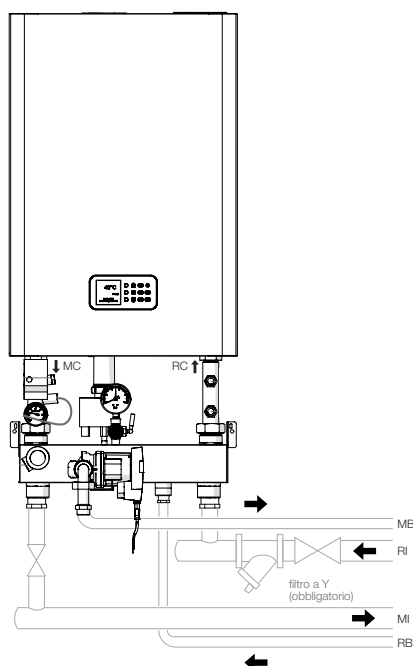
SINGLE INSTALLATION

## HEATING CONFIGURATIONS + DHW | SV

The SV application kit consists of a hydraulic separator, which is useful for interfacing the boiler with the system, and a unit INAIL safety according to the requirements of the "R" collection, it is also equipped with a circulator for loading a possible boiler.



Management of a HIGH-temperature zone, a LOW-temperature zone with external control and a LOW-temperature zone with external control of a remote BOILER directly from the heat generator.



1. Boiler
2. INAIL safety module
3. Hydraulic separator (\*)
4. Water heater coil pump (\*)
5. Fuel shut-off valve
6. Remote water heater (\*\*) (managed directly from the boiler via a 3-way valve)
7. System return collector
8. System delivery collector
9. Purification filter

(\*) Available as an accessory.

(\*\*) In this configuration the use of a water heater with a coil of a suitable size is recommended.

- SE External probe (\*)
- NC Condensate neutraliser (\*)
- SB Water heater probe (\*)
- Sc Discharge
- RS System breaker cock
- ZAt High temperature zone
- ZBt Low temperature zone
- TA1 High temperature zone ambient thermostat
- TA2 Low temperature zone ambient thermostat
- PR1 High temperature system pump
- PR2 Low temperature system pump
- VM Low temperature system mixer valve
- Sic Fuel shut-off probe
- GAS Fuel supply
- IAF Cold water inlet
- UAC Hot water outlet



Examples of package:

Multiparva 3.0 F SV installation package from 35 to 150 KW heating and sanitary boiler management.

## POWER CONDENSING BOILERS

| Code (natural gas) | Description          |
|--------------------|----------------------|
| 10277.2068.0       | Multiparva 3.0 F 35  |
| 10277.2069.0       | Multiparva 3.0 F 45  |
| 10277.2070.0       | Multiparva 3.0 F 70  |
| 10277.2071.0       | Multiparva 3.0 F 95  |
| 10277.2072.0       | Multiparva 3.0 F 110 |
| 10338.2020.0       | Multiparva 3.0 F 115 |
| 10277.2073.0       | Multiparva 3.0 F 150 |

## OPTIONAL

### STANDARD INSTALLATION KIT

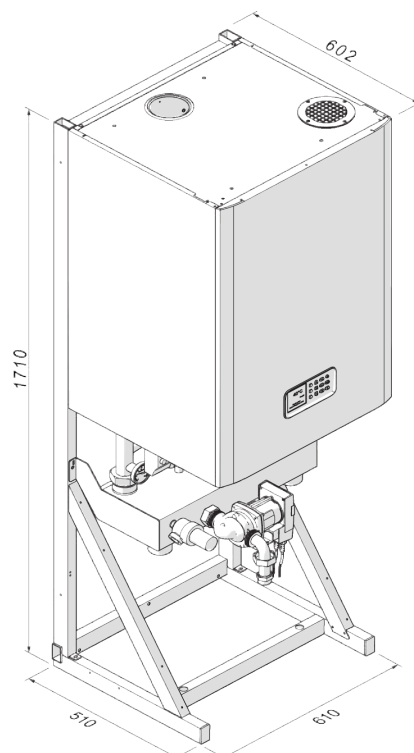
| Code         | Description                               |
|--------------|---|
| 10999.1058.0 | Kit for single SR boiler separator        |
| 10999.1055.1 | Boiler plant structure kit                |
| 10999.0725.0 | Condensate neutraliser kit from 35 to 150 |
| 10999.3417.0 | External probe kit                        |
| 10999.3429.0 | Remote tank probe kit                     |

### NATURAL GAS - LPG CONVERSION

| Code         | Description                                |
|--------------|--|
| 10999.1408.0 | Natural Gas - LPG conversion KIT 70        |
| 10999.1409.0 | Natural Gas - LPG conversion KIT 95        |
| 10999.1410.0 | Natural Gas - LPG conversion KIT 110       |
| 10999.1411.0 | Natural Gas - LPG conversion KIT 115 - 150 |

### SAFETY DEVICES - 'INAIL' QUALIFIED

| Code         | Description  |
|--------------|--|
| 10999.0485.0 | Qualified safety valve 4 bar 1/2" G x 3/4" G - for 35-45-70 powers         |
| 10999.0486.0 | Qualified safety valve 5.4 bar 1/2" G x 3/4" G - for 95-110-115-150 powers |



# Multiparva 3.0 F 35 - 45 -70



## Multiparva 3.0 F 45



MODULATION 1 : 9



MAX PRESS 4,5 BAR



NATURAL GAS OR LPG



NOX 6 CLASS ★★★★★



PERFORMANCE 97,8%

(referred to 45 kW version)

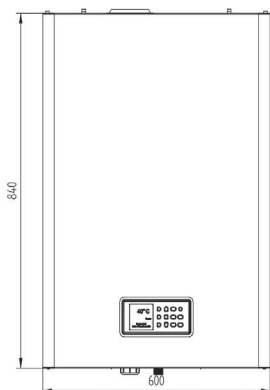


Multiparva 3.0 is a latest generation extremely high efficiency condensing boiler for heating only, equipped with a pre-mixed modulating burner with low emissions and stainless steel condensing heat exchanger with high calorific power values.

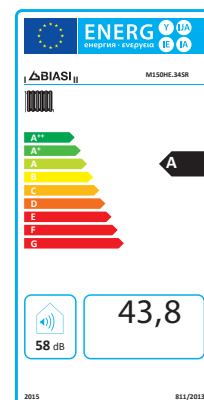
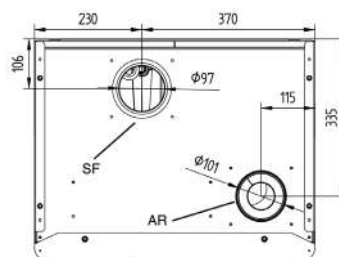
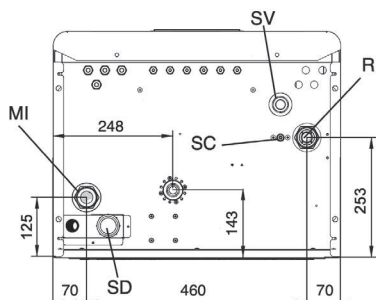
It is available from 35, 45, 70, 95, 110, 115, 150 heat capacity . It can be installed individually or up to 6 modules can be combined, of the same or mixed heat outputs, directly exploiting the boiler electronic control unit. Multiparva Cond 3.0 exploits the condensing principle: thanks to the innovative heat exchanger in stainless steel and the two separate sections, one dedicated to condensing only, it is able to recover the latent heat contained in the flue gases, obtaining efficiency levels which are some of the highest in the category.

Multiparva Cond H can be installed inside a boiler room or, thanks to the Roof Top version, it can be enclosed inside a cabinet on the outside of the building or on the roof itself. This solution is extremely advantageous in the case of thermal requalification of a boiler plant.

### Dimensions and connections



- MI Heating delivery (1"1/4 M)
- RI Heating return (1"1/4 M)
- SD Condensate siphon drain (Ø 25 mm)
- SV Safety valve exhaust
- SC Boiler drain



### POWER CONDENSING BOILER

| Natural gas code | Description         |
|------------------|---------------------|
| 10277.2068.0     | Multiparva 3.0 F 35 |
| 10277.2069.0     | Multiparva 3.0 F 45 |
| 10277.2070.0     | Multiparva 3.0 F 70 |



# MULTIPARVA 3.0

WALL MOUNTED LOW EMISSION  
GAS-FIRED BOILER



## Technical data

| DESCRIPTION   | MULTIPARVA 3.0 F                        |             |             |         |
|---|---|-------------|-------------|---------|
|   | 154HE.35/F                              | M154HE.45/F | M155HE.70/F |         |
| <b>General</b>  |   |             |             |         |
| Fuel  | G20 (20 mbar) - G31 (37 mbar)           |             |             |         |
| Country of destination                                    | ITALY                                   |             |             |         |
| Category  | II2H3P                                  |             |             |         |
| Type  | B23, C13, C33, C43, C53, C63, C83, C13X |             |             |         |
| Max nominal heat input (Q <sub>n</sub> )                  | kW                                      | 34,8        | 45,0        | 69,9    |
| Min nominal heat input (Q <sub>min</sub> )                | kW                                      | 5,0         | 5,0         | 7,7     |
| Nominal output power (80-60°C)                            | kW                                      | 33,9        | 43,8        | 68      |
| Minimum output power for heating (80-60°C)                | kW                                      | 4,8         | 4,8         | 7,5     |
| Nominal output power (50-30°C)                            | kW                                      | 36,8        | 46,4        | 74,5    |
| Minimum output power for heating (50-30°C)                | kW                                      | 5,3         | 5,3         | 8,1     |
| <b>Performances</b>                                       |   |             |             |         |
| Efficiency measured at nominal heat input (80-60°C)       | %                                       | 97,3        | 97,3        | 97,3    |
| Efficiency measured at minimum heat input (80-60°C)       | %                                       | 96,6        | 96,5        | 97,2    |
| Efficiency measured at nominal heat input (50-30°C)       | %                                       | 105,7       | 103,1       | 106,6   |
| Efficiency measured at minimum heat input (50-30°C)       | %                                       | 106,6       | 106,7       | 105,8   |
| Efficiency measured at 30% of the load (30°C)             | %                                       | 108,1       | 108,1       | 108,4   |
| Max gas consumption G20                                   | m <sup>3</sup> /h                       | 3,7         | 4,7         | 7,4     |
| Min gas consumption G20                                   | m <sup>3</sup> /h                       | 0,5         | 0,5         | 0,8     |
| Max gas consumption G31                                   | m <sup>3</sup> /h                       | 1,4         | 1,9         | 2,7     |
| Min gas consumption G31                                   | m <sup>3</sup> /h                       | 0,2         | 0,2         | 0,3     |
| <b>Performances UE 813/2013</b>                           |   |             |             |         |
| η <sub>1</sub>  | %                                       | 87,5        | 87,5        | 87,4    |
| η <sub>4</sub>  | %                                       | 97,3        | 97,3        | 97,6    |
| <b>Emissions</b>  |   |             |             |         |
| Flue temperature measured at nominal heat input (80-60°C) | °C                                      | 65 - 80     |             |         |
| Flue temperature measured at minimum heat input (80-60°C) | °C                                      | 55 - 65     |             |         |
| Flue temperature (50-30°C) max/min                        | °C                                      | 35 - 45     |             |         |
| Condensate production measured at nominal heat input      | l/h                                     | 5,5         | 7           | 11      |
| Flue max flow at nominal heat input                       | kg/sec                                  | 0,0166      | 0,0213      | 0,0322  |
| Flue max flow at minimum heat input                       | kg/sec                                  | 0,0024      | 0,0024      | 0,0036  |
| CO <sub>2</sub> min/max (G20)                             | %                                       | 8,8/9,1     | 8,8/9,1     | 9,1/9,4 |
| CO <sub>2</sub> min/max (G31)                             | %                                       | 9,6/9,9     | 9,6/10,1    | 9,8/10  |
| CO at nominal heat input (G20)                            | ppm                                     | 85          | 110         | 180     |
| CO at nominal heat input (G31)                            | ppm                                     | 60          | 95          | 110     |
| NO <sub>x</sub>   | mg/kWh                                  | 25          | 29          | 31      |
| NO <sub>x</sub> class                                     |   | 6           |             |         |
| <b>Electrical data</b>                                    |   |             |             |         |
| Electronic power consumption @ 20°K                       | W                                       | 80          | 120         | 230     |
| Power supply voltage                                      | V~Hz                                    | 230~50      |             |         |
| Protection rating   |   | IPX4D       |             |         |
| <b>Boiler</b>   |   |             |             |         |
| Max working pressure                                      | bar                                     | 4,5         |             |         |
| Safety valve calibration (model /PV only)                 | bar                                     | 4           |             |         |
| Maximum operating temperature                             | °C                                      | 85          |             |         |
| Max Δt delivery-return                                    | °C                                      | 35          |             |         |
| Water flow rate . t nominal (20°C)                        | m <sup>3</sup> /h                       | 1,5         | 1,9         | 3,0     |
| Content of exchanger water                                | l                                       | 2,74        | 2,74        | 3,52    |
| Residual head at . tnom=20°K                              | mH <sub>2</sub> O                       | 5,5         | 3,5         | 3,8     |
| <b>Flue gas discharge</b>                                 |   |             |             |         |
| Chimney connection exhaust/air inlet                      | mm                                      | 100/100     |             |         |
| Residual air/flue pressure available (ø100/80) (G20)      | Pa                                      | 110/90      | 140/120     | 190/160 |
| Residual air/flue pressure available (ø100/80) (G31)      | Pa                                      | 110/90      | 140/120     | 190/160 |
| <b>Dimensions and weights</b>                             |   |             |             |         |
| Width   | mm                                      | 600         |             |         |
| Depth   | mm                                      | 477         |             |         |
| Height  | mm                                      | 840         |             |         |
| Weight  | kg                                      | 60          | 60          | 65      |

# Multiparva 3.0 F 95 - 110



## Multiparva 3.0 F 95



MODULATION 1 : 9



PRESS MAX 6,0 BAR



NATURAL GAS OR LPG



NOX 6 CLASS ★★★★★



PERFORMANCE 97,8%

(referred to 95 kW version)



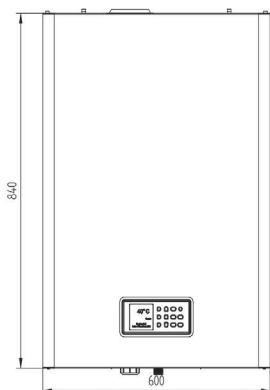
Multiparva 3.0 is a latest generation extremely high efficiency condensing boiler for heating only, equipped with a pre-mixed modulating burner with low emissions and stainless steel condensing heat exchanger with high calorific power values.

It is available from 95, 110 heat capacity. It can be installed individually or up to 6 modules can be combined, of the same or mixed heat outputs, directly exploiting the boiler electronic control unit.

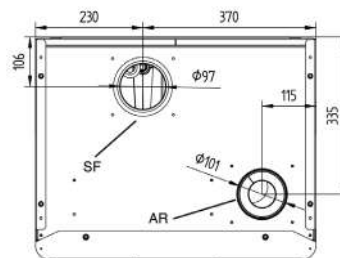
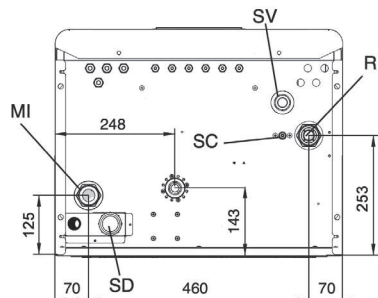
Multiparva Cond 3.0 exploits the condensing principle: thanks to the innovative heat exchanger in stainless steel and the two separate sections, one dedicated to condensing only, it is able to recover the latent heat contained in the flue gases, obtaining efficiency levels which are some of the highest in the category.

Multiparva Cond H can be installed inside a boiler room or, thanks to the Roof Top version, it can be enclosed inside a cabinet on the outside of the building or on the roof itself. This solution is extremely advantageous in the case of thermal requalification of a boiler plant.

### Dimensions and connections



- MI Heating delivery (1"1/4 M)
- RI Heating return (1"1/4 M)
- SD Condensate siphon drain (Ø 25 mm)
- SV Safety valve exhaust
- SC Boiler drain



#### POWER CONDENSING BOILERS

| Natural gas code | Description          |
|------------------|----------------------|
| 10277.2071.0     | Multiparva 3.0 F 95  |
| 10277.2072.0     | Multiparva 3.0 F 110 |

# MULTIPARVA 3.0

WALL MOUNTED LOW EMISSION  
GAS-FIRED BOILER



## Technical data

### MULTIPARVA 3.0 F

| DESCRIPTION   |                   | M156HE.95/F                             | M157HE.110/F |
|---|-------------------|---|--------------|
| <b>General</b>  |                   |   |              |
| Fuel  |                   | G20 (20 mbar) - G31 (37 mbar)           |              |
| Country of destination                                    |                   | ITALIA                                  |              |
| Category  |                   | II2H3P                                  |              |
| Type  |                   | B23, C13, C33, C43, C53, C63, C83, C13X |              |
| Max nominal heat input (Q <sub>n</sub> )                  | kW                | 95,0                                    | 115,0        |
| Min nominal heat input (Q <sub>min</sub> )                | kW                | 10,5                                    | 12           |
| Nominal output power (80-60°C)                            | kW                | 92,9                                    | 112          |
| Minimum output power for heating (80-60°C)                | kW                | 10,2                                    | 11,8         |
| Nominal output power (50-30°C)                            | kW                | 101,2                                   | 118,7        |
| Minimum output power for heating (50-30°C)                | kW                | 11,2                                    | 12,5         |
| <b>Performances</b>                                       |                   |   |              |
| Efficiency measured at nominal heat input (80-60°C)       | %                 | 97,8                                    | 97,4         |
| Efficiency measured at minimum heat input (80-60°C)       | %                 | 97,1                                    | 98,2         |
| Efficiency measured at nominal heat input (50-30°C)       | %                 | 106,5                                   | 103,2        |
| Efficiency measured at minimum heat input (50-30°C)       | %                 | 106,9                                   | 104          |
| Efficiency measured at 30% of the load (30°C)             | %                 | 108,7                                   | 108,3        |
| Max gas consumption G20                                   | m <sup>3</sup> /h | 10,1                                    | 12,2         |
| Min gas consumption G20                                   | m <sup>3</sup> /h | 1,1                                     | 1,3          |
| Max gas consumption G31                                   | m <sup>3</sup> /h | 3,9                                     | 4,5          |
| Min gas consumption G31                                   | m <sup>3</sup> /h | 0,4                                     | 0,5          |
| <b>Performances UE 813/2013</b>                           |                   |   |              |
| η <sub>1</sub>  | %                 | 87,8                                    | 87,5         |
| η <sub>4</sub>  | %                 | 97,9                                    | 97,6         |
| <b>Emissions</b>  |                   |   |              |
| Flue temperature measured at nominal heat input (80-60°C) | °C                | 65-80                                   |              |
| Flue temperature measured at minimum heat input (80-60°C) | °C                | 55-65                                   |              |
| Flue temperature (50-30°C) max/min                        | °C                | 35-50                                   |              |
| Condensate production measured at nominal heat input      | l/h               | 14,8                                    | 18           |
| Flue max flow at nominal heat input                       | kg/sec            | 0,045                                   | 0,053        |
| Flue max flow at minimum heat input                       | kg/sec            | 0,005                                   | 0,006        |
| CO <sub>2</sub> min/max (G20)                             | %                 | 9,0/9,2                                 | 9,0/9,4      |
| CO <sub>2</sub> min/max (G31)                             | %                 | 9,6/10                                  | 9,1/10,1     |
| CO at nominal heat input (G20)                            | ppm               | 170                                     | 210          |
| CO at nominal heat input (G31)                            | ppm               | 130                                     | 125          |
| NO <sub>x</sub>   | mg/kWh            | 43                                      | 32           |
| NO <sub>x</sub> class                                     |                   | 6                                       |              |
| <b>Electrical data</b>                                    |                   |   |              |
| Electronic power consumption @ 20°K                       | W                 | 300                                     | 330          |
| Power supply voltage                                      | V~Hz              | 230V - 50Hz                             |              |
| Protection rating   |                   | IPX4D                                   |              |
| <b>Boiler</b>   |                   |   |              |
| Max working pressure                                      | bar               | 6                                       |              |
| Safety valve calibration (model /PV only)                 | bar               | 5,4                                     |              |
| Maximum operating temperature                             | °C                | 85                                      |              |
| Max Δt delivery-return                                    | °C                | 35                                      |              |
| Water flow rate . t nominal (20°C)                        | m <sup>3</sup> /h | 4,1                                     | 4,7          |
| Content of exchanger water                                | l                 | 6,8                                     | 8,4          |
| Residual head at .tnom=20°K                               | mH <sub>2</sub> O | 2,2                                     | 7,8          |
| <b>Flue gas discharge</b>                                 |                   |   |              |
| Chimney connection exhaust/air inlet                      | mm                | 100/100                                 |              |
| Residual air/flue pressure available (ø100/80) (G20)      | Pa                | 200/170                                 | 220/180      |
| Residual air/flue pressure available (ø100/80) (G31)      | Pa                | 170/150                                 | 190/160      |
| <b>Dimensions and weights</b>                             |                   |   |              |
| Width   | mm                | 600                                     |              |
| Depth   | mm                | 477                                     |              |
| Height  | mm                | 840                                     |              |
| Weight  | kg                | 97                                      | 103          |



# Multiparva 3.0 F 115 - 150



## Multiparva 3.0 F 150



MODULATION 1 : 8



PRESS MAX 6,0 BAR



NATURAL GAS OR LPG



NOX 6 CLASS ★ ★ ★ ★



PERFORMANCE 97,4%

(referred to 150 kW version)



Multiparva 3.0 is the latest generation of condensing boilers with very high efficiency for heating only. modulating premix burner with low emissions and high-performance stainless steel condensing exchanger. Available in versions from 115 to 150, of thermal capacity: it can be installed individually or can be used as a stand-alone boiler.

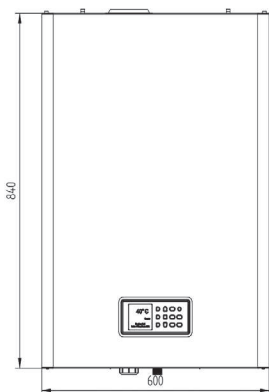
It can be installed individually or up to 6 modules can be combined, of the same power or mixed, directly exploiting the boiler electronics.

Multiparva Cond 3.0 use the principle of condensation: thanks to the innovative INOX exchanger - one dedicated only to condensation - it is able to recover the latent heat contained in the flue gases, achieving the highest efficiency in its category.

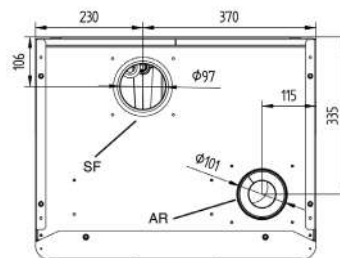
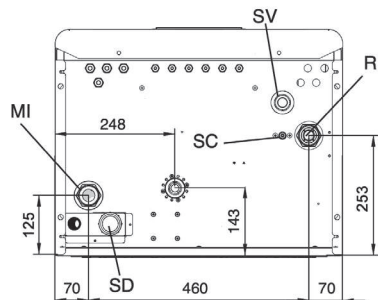
Multiparva Cond H can be installed inside a boiler room or, thanks to the special version Roof Top version enclosed in a cabinet, outside the building or on the roof, which is an extreme solution.

This is an extremely advantageous solution in case of thermal upgrading of a central heating.

### Dimensions and connections



- MI Heating delivery (1"1/4 M)
- RI Heating return (1"1/4 M)
- SD Condensate siphon drain (Ø 25 mm)
- SV Safety valve exhaust
- SC Boiler drain



#### POWER CONDENSING BOILERS

| Natural gas code | Description          |
|------------------|----------------------|
| 10338.2020.0     | Multiparva 3.0 F 115 |
| 10277.2073.0     | Multiparva 3.0 F 150 |

# MULTIPARVA 3.0

WALL MOUNTED LOW EMISSION  
GAS-FIRED BOILER



## Technical data

### MULTIPARVA 3.0 F

| DESCRIPTION   |                   | M158HE.115/F                            | M158HE.150/F |
|---|-------------------|---|--------------|
| <b>General</b>  |                   |   |              |
| Fuel  |                   | G20 (20 mbar) - G31 (37 mbar)           |              |
| Country of destination                                    |                   | ITALIA                                  |              |
| Category  |                   | II2H3P                                  |              |
| Type  |                   | B23, C13, C33, C43, C53, C63, C83, C13X |              |
| Max nominal heat input (Q <sub>n</sub> )                  | kW                | 115,0                                   | 150,0        |
| Min nominal heat input (Q <sub>min</sub> )                | kW                | 20                                      | 20           |
| Nominal output power (80-60°C)                            | kW                | 112                                     | 146,1        |
| Minimum output power for heating (80-60°C)                | kW                | 19,0                                    | 19,2         |
| Nominal output power (50-30°C)                            | kW                | 121,0                                   | 154,5        |
| Minimum output power for heating (50-30°C)                | kW                | 21                                      | 20,7         |
| <b>Performances</b>                                       |                   |   |              |
| Efficiency measured at nominal heat input (80-60°C)       | %                 | 97,4                                    | 97,4         |
| Efficiency measured at minimum heat input (80-60°C)       | %                 | 95,1                                    | 96,2         |
| Efficiency measured at nominal heat input (50-30°C)       | %                 | 105,2                                   | 103          |
| Efficiency measured at minimum heat input (50-30°C)       | %                 | 105,2                                   | 103,4        |
| Efficiency measured at 30% of the load (30°C)             | %                 | 108,2                                   | 108,3        |
| Max gas consumption G20                                   | m <sup>3</sup> /h | 12,2                                    | 15,5         |
| Min gas consumption G20                                   | m <sup>3</sup> /h | 2,1                                     | 2,1          |
| Max gas consumption G31                                   | m <sup>3</sup> /h | 4,5                                     | 6            |
| Min gas consumption G31                                   | m <sup>3</sup> /h | 0,8                                     | 0,8          |
| <b>Performances UE 813/2013</b>                           |                   |   |              |
| η <sub>1</sub>  | %                 | 87,6                                    | 87,6         |
| η <sub>4</sub>  | %                 | 97,4                                    | 97,5         |
| <b>Emissions</b>  |                   |   |              |
| Flue temperature measured at nominal heat input (80-60°C) | °C                | 65-80                                   |              |
| Flue temperature measured at minimum heat input (80-60°C) | °C                | 55-65                                   |              |
| Flue temperature (50-30°C) max/min                        | °C                | 35-50                                   |              |
| Condensate production measured at nominal heat input      | l/h               | 18                                      | 22,5         |
| Flue max flow at nominal heat input                       | kg/sec            | 0,054                                   | 0,069        |
| Flue max flow at minimum heat input                       | kg/sec            | 0,010                                   | 0,010        |
| CO <sub>2</sub> min/max (G20)                             | %                 | 8,9/9,1                                 | 8,9/9,4      |
| CO <sub>2</sub> min/max (G31)                             | %                 | 9,6/9,9                                 | 9,6/10,2     |
| CO at nominal heat input (G20)                            | ppm               | 108                                     | 210          |
| CO at nominal heat input (G31)                            | ppm               | 91                                      | 160          |
| NO <sub>x</sub>   | mg/kWh            | 29                                      | 47           |
| NO <sub>x</sub> class                                     |                   | 6                                       |              |
| <b>Electrical data</b>                                    |                   |   |              |
| Electronic power consumption @ 20°K                       | W                 | 280                                     | 540          |
| Power supply voltage                                      | V~Hz              | 230V - 50Hz                             |              |
| Protection rating   |                   | IPX4D                                   |              |
| <b>Boiler</b>   |                   |   |              |
| Max working pressure                                      | bar               | 6                                       |              |
| Safety valve calibration (model /PV only)                 | bar               | 5,4                                     |              |
| Maximum operating temperature                             | °C                | 85                                      |              |
| Max Δt delivery-return                                    | °C                | 35                                      |              |
| Water flow rate . t nominal (20°C)                        | m <sup>3</sup> /h | 4,7                                     | 6,4          |
| Content of exchanger water                                | l                 | 10,1                                    | 10,1         |
| Residual head at .tnom=20°K                               | mH <sub>2</sub> O | 8,1                                     | 4,1          |
| <b>Flue gas discharge</b>                                 |                   |   |              |
| Chimney connection exhaust/air inlet                      | mm                | 100/100                                 |              |
| Residual air/flue pressure available (ø100/80) (G20)      | Pa                | 150/135                                 | 200/180      |
| Residual air/flue pressure available (ø100/80) (G31)      | Pa                | 150/135                                 | 200/180      |
| <b>Dimensions and weights</b>                             |                   |   |              |
| Width   | mm                | 600                                     |              |
| Depth   | mm                | 577                                     |              |
| Height  | mm                | 840                                     |              |
| Weight  | kg                | 108                                     | 108          |

# MMI remote control

Simple MMI is a remote user interface (or ambient unit) equipped with an OpenTherm® communication protocol which is designed to control the boiler (remote control) and the zones in which it is installed (chronothermostat with weekly settings).

Thanks to two-way communication with the boiler, the Simple MMI module lets the user check/set the temperature of the heating water and the DHW without having to go to the boiler plant.



## Functional features

The Simple MMI is a remote control for boilers with a weekly time program.

The main features are:

- Weekly programming clock
- Automatic or manual operating mode
- Activation/deactivation of DHW and heating (radiators)
- Display of ambient temperature and time
- "Smart Shower" function which allows the temperature of the DHW to
- be set at the required level for a set time
- Display of boiler settings
- Two-way communication with the boiler via the OpenTherm® protocol.

## Display of system information

- Each time the knob K4 is pressed, the following system information is displayed in a cycle:
- Temperature outside the building (simple display, only if connected to the relative sensor)
- Temperature set for the water in the heating system (turn the knob K4 to modify the set value)
- Temperature set for the hot water in the DHW system (turn the knob K4 to modify the set value). This is the
- default temperature when the "Smart Shower" function is not active • Actual temperature of the water in the heating system (simple display)
- Actual temperature of the hot water in the DHW system (simple display)
- Ambient temperature (simple display).

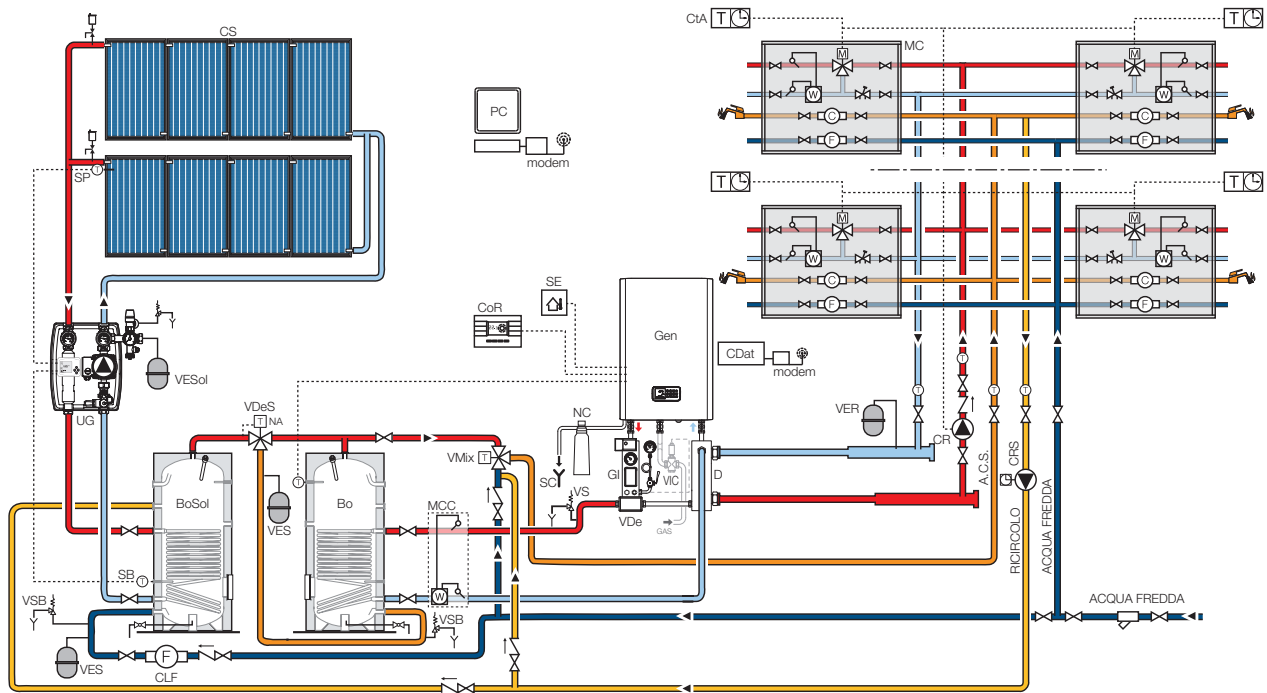
| Code         | Description                              |
|--------------|--|
| 10999.1296.0 | Programmable remote control - Simple MMI |



# Plant standard schemes



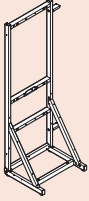
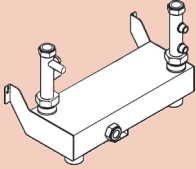
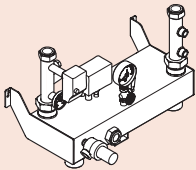
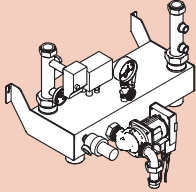
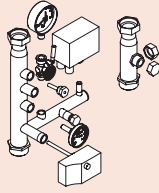
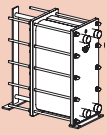
Schematic diagram of centralised system with single boiler, heating with metering, DHW produced by boiler + solar thermal.

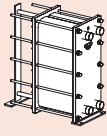
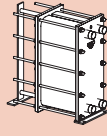
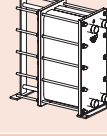








|       |                                |     |                                |       |   |
|-------|--------------------------------|-----|--------------------------------|-------|---|
| Bo    | Single-coil water heater       | GI  | INAIL safety unit              | UG    | lectronic control unit and hydraulic unit |
| BoSol | Single-coil solar water heater | Gen | Gas combination heat generator | VDe   | 3-way diverter valve                      |
| CDat  | Data concentrator              |     |                                | VDeS  | 3-way DHW diverter valve                  |
| CLF   | Cold water meter (litres)      | MCC | Central plant heat meter       | VER   | Heating expansion vessel                  |
| CoR   | Remote control                 | NC  | Acidic water passivator        | VES   | DHW expansion vessel                      |
| CR    | Heating system pump            | SB  | Water heater probe             | VESol | Solar expansion vessel                    |
| CRS   | DHW recirculation system pump  | SC  | Condensate drain               | VIC   | Fuel shut-off valve                       |
| CS    | Solar collector                | SE  | External probe                 | VMix  | DHW mixing valve                          |
| CtA   | Ambient chrono-thermostat      | SP  | Panel probe                    | VS    | Safety valve                              |
| D     | Separator                      |     |                                | VSB   | Water heater safety valve                 |


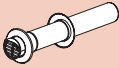







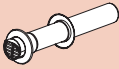


# Accessories

## Accessories for Multiparva 3.0 / single installation

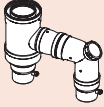
|   | Product  | Description  |
|---|--|--|
| SUPPORTING STAND  | 10999.1055.1   |  |
|   |   | Central heating structure kit  |
| HYDRAULIC ACCESSORIES   | 10999.3427.0   |  |
|   |   | Circuit breaker kit single boiler SR.<br>(NO INAIL)  |
|   | 10999.1057.0   |  |
|   |    | Circuit breaker kit single boiler SR with INAIL.<br><br>It includes:<br>safety immersion thermostat, pressure switch,<br>pressure gauge, 3-way valve, shock absorber,<br>control box, fuel stop valve box. |
|   | 10999.1058.0   |  |
|   |   | Circuit breaker kit single boiler SV + pump<br><br>It includes:<br>safety immersion thermostat, pressure switch,<br>pressure gauge, 3-way valve, shock absorber,<br>control box, fuel stop valve box.      |
|   | 10999.1024.0   |  |
|  | INAIL kit for free installation<br>On boilers from 35 to 150KW and usable with 1"<br>1/4 F - 1" 1/2 M reduction (not supplied) |  |
| 10999.1412.0  |  |  |
|  | 35/45 KW single boiler exchanger kit<br>(15 inspectionable plates and primary and secondary connections 1" 1/4)                |  |

|  | Product   | Description  |
|--|---|--|
| HYDRAULIC ACCESSORIES  | 10999.1413.0  |  |
|  |                                 | Separate heat exchanger single boiler for 70 KW<br>(25 plates serviceable primary and secondary connections 1" 1/4)      |
|  | 10999.1414.0  |  |
|  |                                 | Separate heat exchanger single boiler for 95-110-115 KW (35 plates serviceable primary and secondary connections 1" 1/4) |
|  | 10999.1415.0  |  |
|    | Separate heat exchanger single boiler for 150 KW (45 plates serviceable primary and secondary connections 1" 1/4) |  |
| 10999.0725.0   |   |  |
|    | Condensing neutralizer boiler kit from 35 to 150 kW   |  |
| 10999.0763.0   |   |  |
|  | Reduction kit DN 80/100 for single boiler   |  |
| 10999.0657.0   |   |  |
|  | Pipe + exhaust inspection kit DN 80   |  |
| 10999.0640.0   |   |  |
|  | Inspection curve kit DN 80  |  |
| 10999.0639.0   |   |  |
|  | 87° curve kit DN 80   |  |
| 10999.0794.0   |   |  |
|  | 45° curve kit DN 80   |  |



| Product   | Description                          |
|---|--------------------------------------|
| 10999.0642.0  | Roof extension kit DN 80             |
|    |                                      |
| 10999.0641.0  | Terminal kit DN 80                   |
|    |                                      |
| 10999.0638.0  | 500 mm extension kit DN 80           |
|    |                                      |
| 10999.0644.0  | 1000 mm extension kit DN 80          |
|    |                                      |
| 10999.0727.0  | 45° curve kit DN 100                 |
|   |                                      |
| 10999.0739.0  | 87° curve kit DN 100                 |
|  |                                      |
| 10999.0741.0  | Inspection curve kit DN 100          |
|  |                                      |
| 10999.0879.0  | 500 mm extension kit DN 100          |
|  |                                      |
| 10999.1087.0  | 1000 mm extension kit DN 100         |
|  |                                      |
| 10999.1219.0  | Terminal kit DN 100                  |
|  |                                      |
| 10999.0614.0  | Pipe + exhaust inspection kit DN 100 |
|  |                                      |
| 10999.0600.0  | Roof extension kit DN 100            |
|  |                                      |

HEATING SECTOR

| Product  | Description                       |
|--|-----------------------------------|
| 10999.1126.1   | 100/100 split to coax adaptor kit |
|  |                                   |
| 10999.3417.0   | External probe                    |
| 10999.3429.0   | Probe kit for external tank       |
| 10999.1296.0   | Professional MMI remote kit       |

#### KIT TRASFORMAZIONE METANO - GPL

| Code         | Description                                  |
|--------------|--|
| 10999.1408.0 | Natural Gas - LPG kit for 70 KW version      |
| 10999.1409.0 | Natural Gas - LPG kit for 95 KW version      |
| 10999.1410.0 | Natural Gas - LPG kit for 110 KW version     |
| 10999.1411.0 | Natural Gas - LPG kit for 115-150 KW version |

#### STANDARD INSTALLATION KIT / SR model

| Code         | Description                               |
|--------------|---|
| 10999.1057.0 | Kit for single SR boiler separator        |
| 10999.1055.1 | Boiler plant structure kit                |
| 10999.0725.0 | Condensate neutraliser kit from 35 to 150 |
| 10999.3417.0 | External probe kit                        |

#### STANDARD INSTALLATION KIT / SV model

| Code         | Description                               |
|--------------|---|
| 10999.1058.0 | Kit for single SR boiler separator        |
| 10999.1055.1 | Boiler plant structure kit                |
| 10999.0725.0 | Condensate neutraliser kit from 35 to 150 |
| 10999.3417.0 | External probe kit                        |
| 10999.3429.0 | Remote tank probe kit                     |

#### SAFETY DEVICES - 'INAIL' QUALIFIED

| Code         | Description   |
|--------------|---|
| 10999.0485.0 | Safety valve qualified 4 bar 1/2"G x 3/4"G for versions 35 - 45-70 KW   |
| 10999.0486.0 | Safety valve qualified 5.4 bar 1/2"G x 3/4"G for versions 95-110-150 KW |



Cod. 4823.0671.00 EN

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