

Unical

# P A R.

FLOOR STANDING HOUSEHOLD HEATING APPLIANCE.  
FOR OIL OR GAS OPERATION.  
IN STEEL.



# *Versatile and compact in domestic environment*

PAR are floor-standing, steel fabricated, domestic boilers, equipped with pressure jet burners for gas (Natural or LPG) or oil, in open or room sealed version.

The range offers 20 different choices based on three basic models:

**R SERIES** heating only (24 and 30 kW);

**C SERIES** heating and instantaneous D.H.W. production (24 and 30 kW)

**B SERIES** heating and D.H.W. production with 60 liter storage tank (24 kW).

The flue gas passes on the PAR boilers have been specially designed to combine high capacity with minimum dimensions, yet without sacrificing the operational flexibility.

At the maximum output, with zero draught, counterpressure in the combustion chamber is 29.5 Pa.



## *Maximum safety with room sealed version*

The room sealed version (**S** version) can safely be installed anywhere in the house even when ventilation does not meet required standards. In fact the suction of the air necessary for combustion and the evacuation of the flue gases are directly conveyed to external terminals and are never in contact with the air within the room.

## *Accessibility and ease of installation in domestic environment*

Maintenance (cleaning, disassembly of the burner, release of the pumps etc.) can be carried out easily thanks to the way in which positioning of all the parts has been designed. Installation is made easy by:

- arrangement of all hydraulic connections in rigid bracket;
- rear, lateral and top flue outlet;
- Wieland plug provided on rear for electrical supply and room thermostat;
- hinged panel board.

## *Silentness (< 50 dBA)*

For maximum noise reduction, the combustion chamber and special flue gas passes underwent careful analysis both during the design stage and in laboratory and field tests.

Furthermore, the range of burners used, besides being extremely reliable, also start and operate silently.

# Silent, for peaceful heating

## Large quantity of hot water

The PAR C model offers instantaneous domestic hot water production and has a "self-cleaning stainless steel plate exchanger" which allows continuous water drawing of a full 870 l/h at 40 °C, enough to satisfy the needs of more than one tap at once.

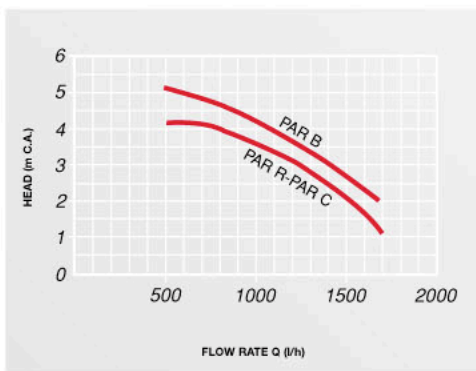
The D.H.W. tank model has been designed for homes where, thanks to its reduced cubic volume and high thermal insulation, low heating outputs are necessary but, in the mean time, large quantities of domestic hot water.

The two layer Bayer system enameled 60 liter hot water tank has a special internal exchanger (9.8 m coil) that ensures a production of 150 liters in 10 min. with  $\Delta t$  30 of K, and subsequent constant flow rate of over 11 l/min.

## Compliance with regulations

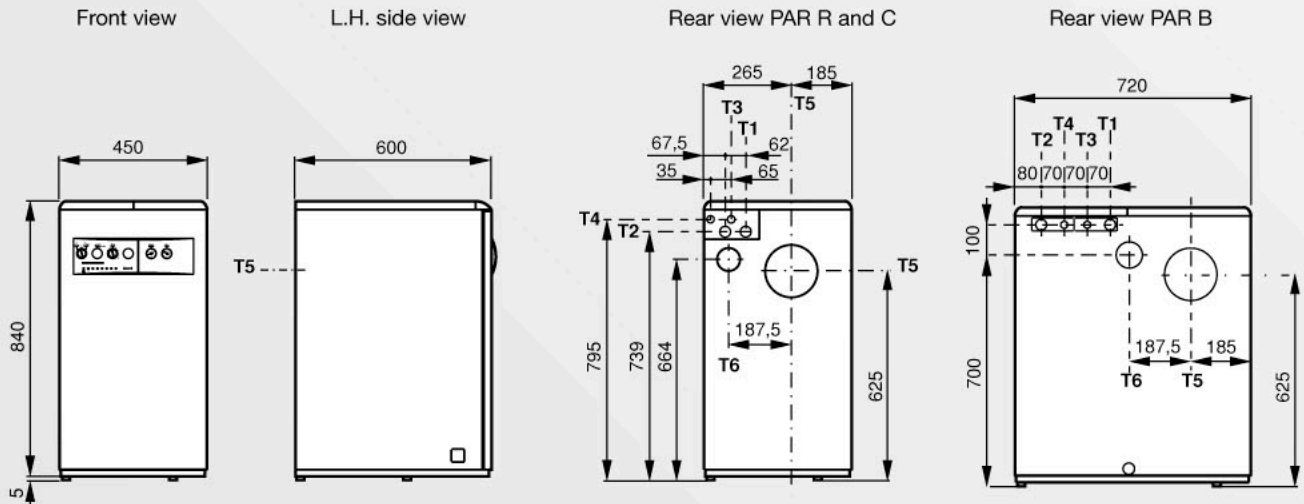
PAR boilers comply with the European Directives:

- Gas appliances Directive 90/396
- Efficiency Directive 92/42)
- Low Tension Directive 73/23
- Electro Magnetic Compatibility 89/336.



Circulating pump available head (at maximum speed) for C.H. system





Key:

- T1** - C.H. flow 1"
- T2** - C.H. return 1"
- T3** - D.H.W. outlet 1/2" (only for PAR C and B)
- T4** - D.C.W. inlet 1/2" (only for PAR C and B)
- T5** - Flue connection  $\varnothing$  100 mm
- T6** - Air intake connection for room sealed version  $\varnothing$  80 mm

| Model         | GAS OPERATION |             | OIL OPERATION |             | Boiler water content<br>litre | C.H. expans. vessel content<br>litre | C.H. expans. vessel preloading<br>bar | Max D.H.W. Production<br>(*)<br>litre/min | Max working pressure<br>bar | Content of D.H.W. expans. vessel (optional)<br>litre | Content of D.H.W. expans. vessel (standard)<br>litre | D.H.W. tank capacity<br>l | Max working pressure of D.H.W. tank<br>bar | Weight<br>kg | Room sealed burner |
|---------------|---------------|-------------|---------------|-------------|-------------------------------|--------------------------------------|---------------------------------------|---|-----------------------------|--|--|---------------------------|--|--------------|--------------------|
|               | Output<br>kW  | Input<br>kW | Output<br>kW  | Input<br>kW |                               |                                      |                                       |   |                             |  |  |                           |  |              |                    |
| <b>PAR. R</b> |               |             |               |             |                               |                                      |                                       |   |                             |  |  |                           |  |              |                    |
| 24            | -             | -           | 20,8+26,1     | 22,5+28,3   | 20                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 106          |                    |
| 24 S          | -             | -           | 20,8+26,1     | 22,5+28,3   | 20                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 108          | ○                  |
| 24 GAS        | 20,8+26,1     | 22,5+28,3   | -             | -           | 20                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 107          |                    |
| 24 GAS S      | 20,8+26,1     | 22,5+28,3   | -             | -           | 20                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 109          | ○                  |
| 30            | -             | -           | 26,9+30,1     | 29+32,5     | 18                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 114          |                    |
| 30 S          | -             | -           | 26,9+30,1     | 29+32,5     | 18                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 116          | ○                  |
| 30 GAS        | 26,9+30,1     | 29+32,5     | -             | -           | 18                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 115          |                    |
| 30 GAS S      | 26,9+30,1     | 29+32,5     | -             | -           | 18                            | 10                                   | 1,5                                   | -   | 3                           | -  | -  | -                         | -  | 117          | ○                  |
| <b>PAR. C</b> |               |             |               |             |                               |                                      |                                       |   |                             |  |  |                           |  |              |                    |
| 24            | -             | -           | 20,8+26,1     | 22,5+28,3   | 20                            | 10                                   | 1,5                                   | 11  | 3                           | 0,16   | -  | -                         | -  | 114          |                    |
| 24 S          | -             | -           | 20,8+26,1     | 22,5+28,3   | 20                            | 10                                   | 1,5                                   | 11  | 3                           | 0,16   | -  | -                         | -  | 115          | ○                  |
| 24 GAS        | 20,8+26,1     | 22,5+28,3   | -             | -           | 20                            | 10                                   | 1,5                                   | 11  | 3                           | 0,16   | -  | -                         | -  | 115          |                    |
| 24 GAS S      | 20,8+26,1     | 22,5+28,3   | -             | -           | 20                            | 10                                   | 1,5                                   | 11  | 3                           | 0,16   | -  | -                         | -  | 116          | ○                  |
| 30            | -             | -           | 26,9+30,1     | 29+32,5     | 18                            | 10                                   | 1,5                                   | 14  | 3                           | 0,16   | -  | -                         | -  | 122          |                    |
| 30 S          | -             | -           | 26,9+30,1     | 29+32,5     | 18                            | 10                                   | 1,5                                   | 14  | 3                           | 0,16   | -  | -                         | -  | 123          | ○                  |
| 30 GAS        | 26,9+30,1     | 29+32,5     | -             | -           | 18                            | 10                                   | 1,5                                   | 14  | 3                           | 0,16   | -  | -                         | -  | 123          |                    |
| 30 GAS S      | 26,9+30,1     | 29+32,5     | -             | -           | 18                            | 10                                   | 1,5                                   | 14  | 3                           | 0,16   | -  | -                         | -  | 124          | ○                  |
| <b>PAR. B</b> |               |             |               |             |                               |                                      |                                       |   |                             |  |  |                           |  |              |                    |
| 24            | -             | -           | 20,8+26,1     | 22,5+28,3   | 20                            | 7,5                                  | -                                     | 11  | 3                           | -  | 3  | 60                        | 6  | 162          |                    |
| 24 S          | -             | -           | 20,8+26,1     | 22,5+28,3   | 20                            | 7,5                                  | -                                     | 11  | 3                           | -  | 3  | 60                        | 6  | 163          | ○                  |
| 24 GAS        | 20,8+26,1     | 22,5+28,3   | -             | -           | 20                            | 7,5                                  | -                                     | 11  | 3                           | -  | 3  | 60                        | 6  | 163          |                    |
| 24 GAS S      | 20,8+26,1     | 22,5+28,3   | -             | -           | 20                            | 7,5                                  | -                                     | 11  | 3                           | -  | 3  | 60                        | 6  | 164          | ○                  |

(\*) With  $\Delta t=30$  K ( $t_{in}=15^{\circ}\text{C}$ ;  $t_{out}=45^{\circ}\text{C}$ )