



## Pellet boiler PelTec-Compact 12-24kW

We present PelTec-Compact: a modern, compact, high-efficiency wood pellet boiler.

A new boiler for a sustainable heating future.

In a world where energy efficiency and environmental sustainability are increasingly important, Centrometal, an innovative company in the field of heating, is proud to present its latest product PelTec-Compact, a high-efficiency compact wood pellet boiler. This premium product sets a new standard in heating family homes by combining advanced technology, superior performance and a commitment to reducing the carbon footprint.

PelTec-Compact, useful heat output 12, 18 and 24 kW is a compact boiler that uses wood pellets to provide exceptional heating efficiency for living house. This boiler is carefully engineered to offer not only high efficiency, but also to comply with environmentally conscious practices.

### PRODUCT CHARACTERISTICS:



#### SUITABLE FOR THE ENVIRONMENT

Low emission of harmful compounds in the flue gases.



#### EFFICIENT

High boiler efficiency and low maintenance requirements.



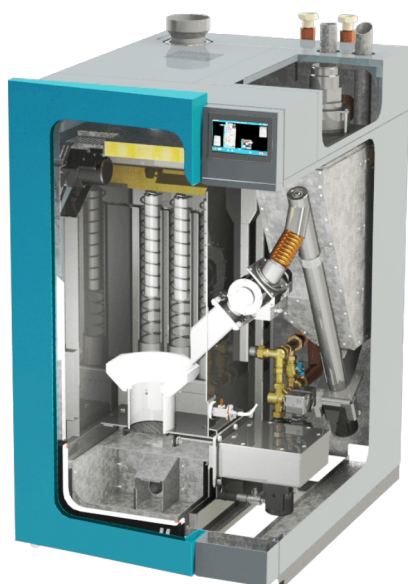
#### AUTOMATIC MAINTENANCE

Automatic cleaning of the burner grid and flue passages.



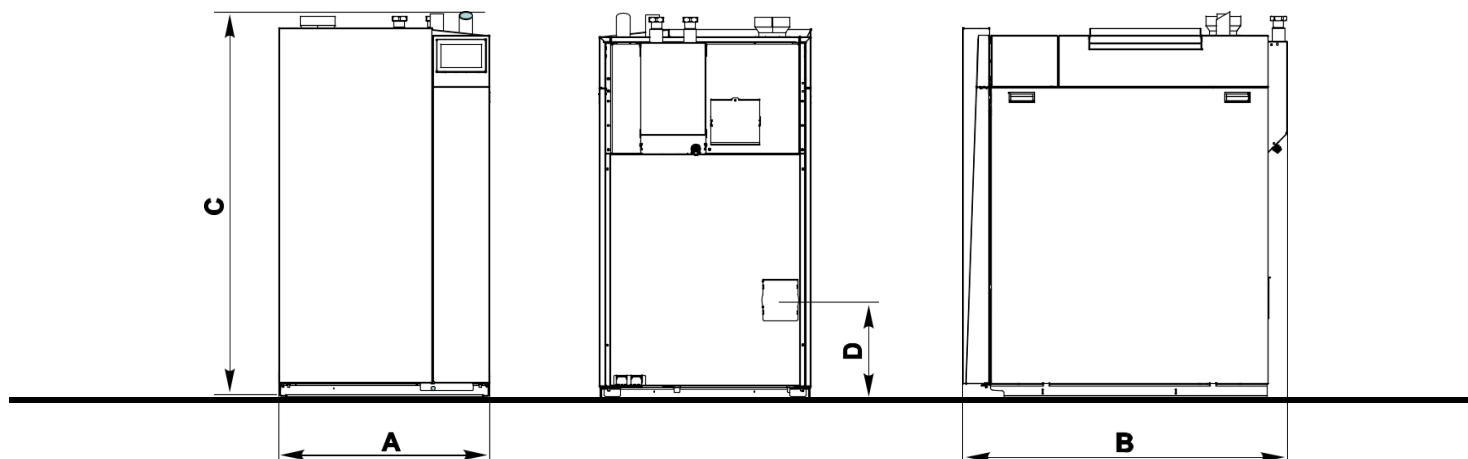
#### EXTENSIONS

Additional equipment for specific tasks (CM2K, room corrector etc..)



- **High efficiency:** PelTec-Compact has a high degree of efficiency, ensuring that the maximum amount of energy is extracted from each wood pellet.
- **Sustainable heating:** by using wood pellets as a fuel source, PelTec-Compact promotes sustainability by relying on renewable sources.
- **Space-saving design:** The compact design of PelTec-Compact makes it an ideal choice for homes with limited space.
- **Integration of modern technology:** Equipped with modern digital controller, PelTec-Compact in the basic equipment ensures precise management of one heating circuit guided by the outdoor temperature and the sanitary water tank. These features can be easily extended by adding different modules.
- **Simple maintenance:** The boiler is equipped with automatic cleaning of the grid and flue passages and ash removal into the ash tray, which only needs to be emptied as needed.
- **Reduced emissions:** PelTec-Compact's advanced combustion technology reduces flue gas emissions, making it a cleaner and more environmentally friendly heating solution compared to other traditional systems.
- **User-friendly interface:** PelTec-Compact's user interface is designed for effortless operation. With a user-friendly display and intuitive controls, homeowners can easily manage the heating system either via the 7" color touch screen or via a web portal i.e. mobile phone, tablet, PC.

## BASIC DIMENSIONS:



| Boiler dimensions |     | 12kW | 18kW | 24kW |
|-------------------|-----|------|------|------|
| Width             | (A) | 680  | 780  | 780  |
| Length            | (B) | 1135 | 1205 | 1205 |
| Height            | (C) | 1430 | 1430 | 1430 |
| Depth             | (D) | 368  | 368  | 368  |

## INTERNET SUPERVISION AND PelTec-Compact MANAGEMENT:



### REMOTE ACCESS

Access with your smartphone, tablet, or computer.  
Read the value through an intuitive graphical interface.



### SUPERVISION

Displays the amount of pellets in the tank. Temperature monitoring, boiler online ignition and parameter change.



### CONNECTIVITY OPTIONS

Connecting to a home WiFi internet network.



### ANALYTICAL DATA

History of temperature, graphs, error messages, warnings.



### DETAILED STATISTICS

Detailed statistics on the operation of individual boiler elements.

## TOUCH SENSITIVE SCREEN:



- Enables direct interaction with the content shown on the screen.
- Easy operation of the boiler.
- It can handle a one mixing heating circuit and the circuit of sanitary water.

## BASIC DIMENSIONS:

| Tip: PelTec-Compact                                                                 |                                                      | 12 kW                                                                           | 18 kW          | 24 kW       |
|-------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------|----------------|-------------|
| Useful heat output at rated heat output - P <sub>n</sub>                            | (kW)                                                 | 12                                                                              | 18             | 24          |
| Useful heat output at 30 % of rated heat output - P <sub>p</sub>                    | (kW)                                                 | 3.6                                                                             | 5.4            | 7.2         |
| Useful efficiency at rated heat output (Net calorific value "NCVar")                | (%)                                                  | 94,5                                                                            | 94,5           | 94,4        |
| Useful efficiency at 30 % of rated heat output (Net calorific value "NCVar")        | (%)                                                  | 91,7                                                                            | 91,9           | 92,1        |
| Useful efficiency at rated heat output (Gross calorific value "GCVar") - $\eta_n$   | (%)                                                  | 88,1                                                                            | 88,1           | 88,0        |
| Useful eff. at 30 % of rated heat output (Gross calorific value "GCVar") - $\eta_p$ | (%)                                                  | 85,5                                                                            | 85,7           | 85,8        |
| Heat output range                                                                   | (kW)                                                 | 3.6-12                                                                          | 5.4-18         | 7.2-24      |
| Boiler class                                                                        |                                                      | 5                                                                               |                |             |
| Required chimney underpressure                                                      | (mbar)                                               | 0,02                                                                            |                |             |
| Water amount in boiler                                                              | (l)                                                  | 61                                                                              | 91             | 91          |
| Exhaust gas temperature at nominal heat output                                      | (°C)                                                 | 80-130                                                                          |                |             |
| Exhaust gas temperature at minimal heat output                                      | (°C)                                                 | 65-120                                                                          |                |             |
| Exhaust mass flow at nominal heat output                                            | (g/s)                                                | -                                                                               | -              | -           |
| Exhaust mass flow at minimal heat output                                            | (g/s)                                                | -                                                                               | -              | -           |
| Operating (combustion) time                                                         | (h)                                                  | 6                                                                               |                |             |
| Setting range for temperature controller                                            | (°C)                                                 | 65-90                                                                           |                |             |
| Minimum return flow temperature                                                     | (°C)                                                 | > 0°C                                                                           |                |             |
| Boiler resistance on water side at nominal output                                   | (mbar)                                               | 0,030                                                                           | 0,050          | 0,100       |
| Fuel size                                                                           | (mm)                                                 | Ø6 x 50                                                                         |                |             |
| Fuel loading chamber capacity                                                       | (l)                                                  | 0,62                                                                            | 0,98           | 2,59        |
| Fuel loading chamber dimensions                                                     | (mm)                                                 | 680x210x210                                                                     | 680x260x260    | 680x260x260 |
| Combustion chamber volume                                                           | (l)                                                  | 29,2                                                                            | 43,5           | 43,5        |
| Combustion chamber type                                                             |                                                      | underpressure                                                                   |                |             |
| Pellet tank volume                                                                  | (l)                                                  | 47,7                                                                            |                |             |
| Ash box volume                                                                      | (l)                                                  | 11,5                                                                            | 17,5           | 17,5        |
| Auxiliary power requirements at Q <sub>N</sub>                                      | (W)                                                  | -                                                                               | -              | -           |
| Auxiliary power requirements at Q <sub>min</sub>                                    | (W)                                                  | -                                                                               | -              | -           |
| Supply voltage                                                                      | (V~)                                                 | 230                                                                             |                |             |
| Frequency                                                                           | (Hz)                                                 | 50                                                                              |                |             |
| Total mass - (boiler with tank and screw feeder)                                    | (kg)                                                 | 380                                                                             | 440            | 440         |
| Max. operating overpressure                                                         | (bar)                                                | 3,0                                                                             |                |             |
| Test pressure                                                                       | (bar)                                                | 6,0                                                                             |                |             |
| Max. operating temperature                                                          | (°C)                                                 | 90                                                                              |                |             |
| Flue gas tube - external diameter                                                   | (mm)                                                 | 100                                                                             | 130            | 130         |
| Boiler connections                                                                  | Main/return flow (thread)                            | (Rp) 6/4"                                                                       |                |             |
|                                                                                     | Filling/drainage (thread)                            | (Rp) 1/2"                                                                       |                |             |
| Heating appliance working                                                           |                                                      | with fan                                                                        |                |             |
| Heating appliance working                                                           |                                                      | under non-condensing conditions                                                 |                |             |
| Stoking mode                                                                        |                                                      | automatic                                                                       |                |             |
| The boiler should be operated with a hot water storage tank of a volume of at least | (l)                                                  | 240                                                                             | 360            | 480         |
| Condensing boiler                                                                   |                                                      | no                                                                              |                |             |
| Solid fuel cogeneration boiler                                                      |                                                      | no                                                                              |                |             |
| Combination boiler                                                                  |                                                      | no                                                                              |                |             |
| Preferred fuel                                                                      |                                                      | compressed wood in the form of pellets: C1 (EN 303-5:2012); A1 (EN ISO 17225-2) |                |             |
| Seasonal space heating energy efficiency - $\eta_s$                                 | (%)                                                  | 79                                                                              | 80             | 81          |
| Seasonal space heating emissions for preferred fuel *                               | PM                                                   | mg/m³ (10% O <sub>2</sub> )                                                     | 20             | 23          |
|                                                                                     | OGC                                                  | mg/m³ (10% O <sub>2</sub> )                                                     | 3              | 2           |
|                                                                                     | CO                                                   | mg/m³ (10% O <sub>2</sub> )                                                     | 124            | 102         |
|                                                                                     | NO <sub>x</sub>                                      | mg/m³ (10% O <sub>2</sub> )                                                     | 142            | 144         |
| Auxiliary electricity consumption                                                   | At rated heat output - el max                        | (KW)                                                                            | 0,081          | 0,034       |
|                                                                                     | At 30 % of rated heat output - el min                | (KW)                                                                            | 0,065          | 0,070       |
|                                                                                     | Of incorporated secondary emission abatement equipm. | (KW)                                                                            | Not applicable |             |
|                                                                                     | In standby mode - PSB                                | (KW)                                                                            | 0,004          |             |