METAL-FACH
HEATING TECHNOLOGY


## Technical and operational documentation

# SLIM PELLET | SLIM PELLET MINI 10-20

English

Original instructions Edition I, 05/2026

# Contents:

# Introduction

Dear Customer, thank you for purchasing a heating boiler from METAL-FACH Technika Grzewcza Sp. z o. o. We hope that the operation of the device will meet your expectations and provide you with much satisfaction. The heating boiler has been designed and manufactured in accordance with applicable norms and standards, ensuring safe and reliable operation. Strict adherence to the instructions in the manual included with the device will ensure optimal and reliable operation of the central heating boiler for many years. This product is not intended for use by persons with impaired physical or mental abilities or lacking experience and knowledge, provided they are supervised or instructed by a person responsible for their safety. Operation by children is prohibited.

# Symbols used in the manual

| | |
|---|---|
|  | **ATTENTION!**<br>Very important information, always read it if it appears in a given place. |
|  | **TIP!**<br>It is worth reading this information, it makes it easier to use. |

# Introductory Activities

**(User)**

Activities to be performed when accepting a METAL-FACH Technika Grzewcza Sp. z o. o. boiler:

- carefully check the completeness of the delivered boiler (Chapter: Boiler equipment) and whether the boiler has not been damaged during transport,
- compare the nameplate mounted on the boiler housing on the left or right side with your order,
- read the operating instructions carefully - it contains information necessary for the proper use of the boiler.



Should any problems arise, please contact the service department or an authorized METAL-FACH Technika Grzewcza Sp. z o. o. service center. These individuals have appropriate training and access to original parts enabling proper service and installation of METAL-FACH Technika Grzewcza Sp. z o. o. boilers, confirmed by a certificate issued at the company's headquarters.

# General information

**(User)**

The Operation and Maintenance Manual is part of the product and is delivered with the purchased central heating boiler. The Operation and Maintenance Manual contains information regarding the construction, installation, and operation of pellet- burner boilers. self-cleaning SLIM PELLET and SLIM PELLET MINI series. Carefully reading the user manual will ensure the correct and safe use of our boiler.

**ATTENTION!**
The user is advised to follow all instructions regarding the device contained in this Technical and Operating Manual, Warranty Terms and Conditions and generally applicable legal regulations.

The boilers are delivered fully assembled. They are positioned and permanently attached to the pallet. They are additionally protected by foil packaging.
When transporting a boiler, it should be secured against shifting or rotation on the truck's cargo bed using safety devices, such as belts. Boilers should be transported in accordance with the regulations for the transport of materials. Loading and unloading should be performed using lifting equipment (forklift) with a lifting capacity exceeding 1000 kg.

# Application

**(User | Installer)**

These boilers are designed for heating residential buildings such as single-family and multi-family homes, outbuildings, public buildings, and domestic hot water. They are equipped with an automatic fuel feed system. Thanks to the use of modern design solutions, the SLIM PELLET and SLIM PELLET MINI series boilers achieve an efficiency of ≤90%. Proper operation and achieving the boiler's full potential depend on the quality of the installation, appropriate chimney draft, and proper operation and maintenance.

**ATTENTION!**
The boilers are designed for operation in open and closed water systems with gravity or forced circulation, equipped with safety devices compliant with the requirements of the applicable PN-B-02413 Heating and District Heating standard, and a closed system compliant with the PN-EN 12828 Heating systems in buildings. Design standard.

# Boiler equipment

**(User)**

The scope of delivery includes both basic and additional components, depending on the order placed. Upon receipt, please carefully inspect the product to ensure it has not been damaged during transport and to verify the completeness of the accessories. The components included in the basic and additional equipment are described below.

| **Basic equipment:** | **Unit of measurement** | **Quantity** |
|---|---|---|
| Central heating boiler | pcs. | 1 |
| Microprocessor regulator | pcs. | 1 |
| Fuel feeding system with self-cleaning pellet burner | set | 1 |
| Fuel tank | pcs. | 1 |
| Boiler cleaning tools:<br>- poker - brush - scraper | set | 1 |
| Feet for leveling the boiler | pcs. | 4 |

| **Additional equipment:** | **Unit of measurement** | **Quantity** |
|---|---|---|
| LAMBDA SENSOR module* | pcs. | 1 |

| **Documentation:** | **Unit of measurement** | **Quantity** |
|---|---|---|
| Technical and operational documentation of the boiler | pcs. | 1 |
| Controller user manual and warranty card | pcs. | 1 |
| Instruction manual and warranty card for the blower fan | pcs. | 1 |

**ATTENTION!**
The user should carefully read the operating instructions for the regulator, fan and feeder, including the self-cleaning pellet burner .

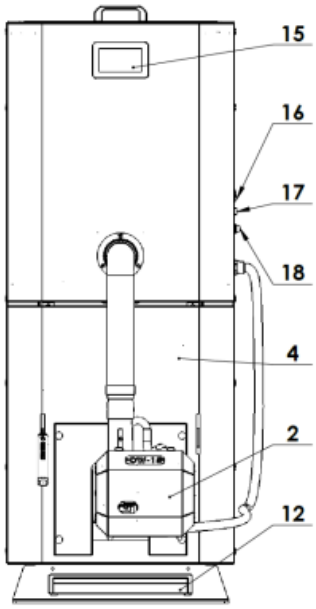
**ATTENTION!**
METAL-FACH Technika Grzewcza Sp. z o. o. reserves the right to introduce changes to the technical parameters, equipment and specifications of the goods offered without prior notice.

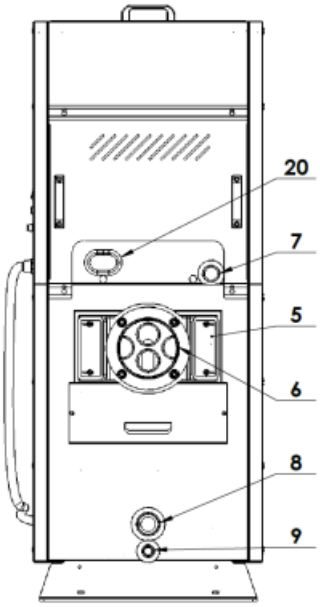
# Basic elements of boiler construction

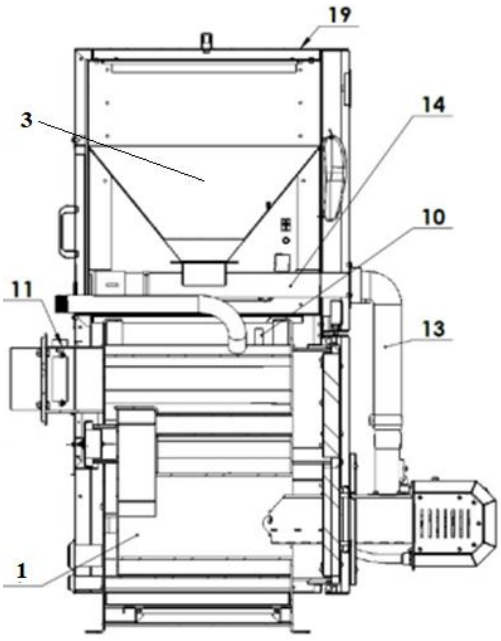
**(User | Installer)**

The SLIM PELLET and SLIM PELLET MINI are boilers with an automatic burner for biomass in the form of wood pellets. The boiler is constructed of certified steel sheets for the combustion chamber and water jacket components, and heat-resistant steel for the burner components exposed to direct flame. The boiler heat exchanger is a flame-tube design with two horizontal flue gas passages. The lower part of the body houses a flame tube, which serves as the combustion chamber, housing a self-cleaning pellet burner . An automatic feeder supplies fuel from a hopper located above the heat exchanger (in the SLIM PELLET version) or independently to the side of the heat exchanger (in the SLIM PELLET MINI version). An electronic controller seamlessly controls the operation of the burner and the heating system's pumps.

## SLIM PELLET 10-20 boiler



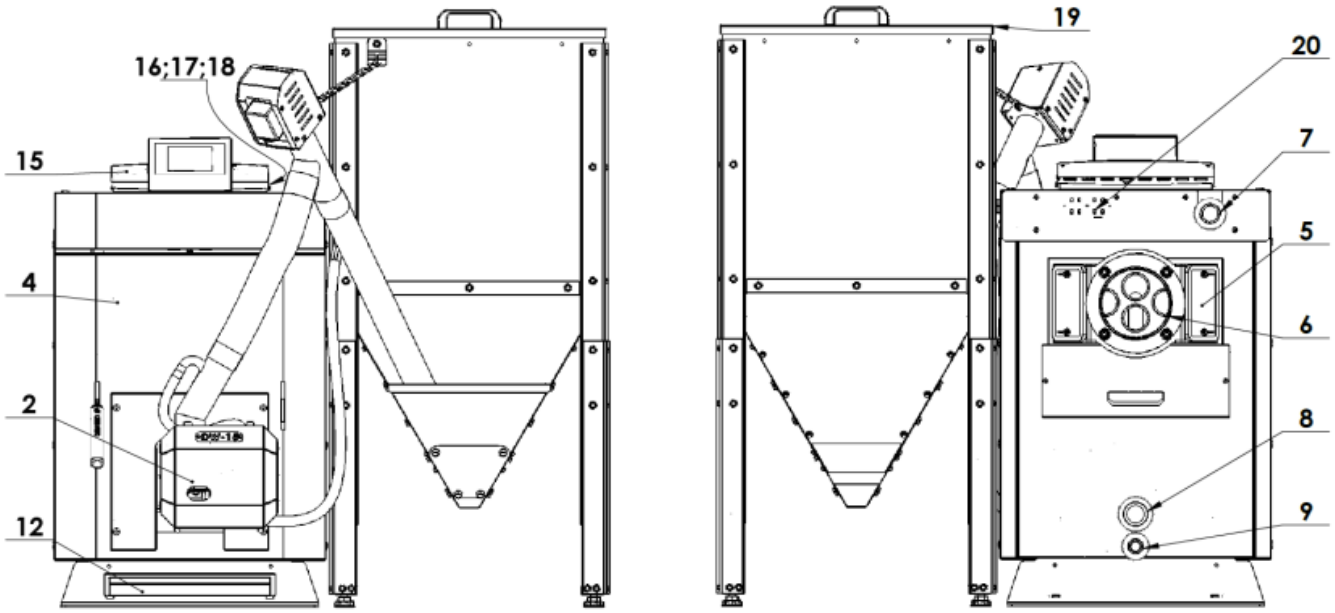



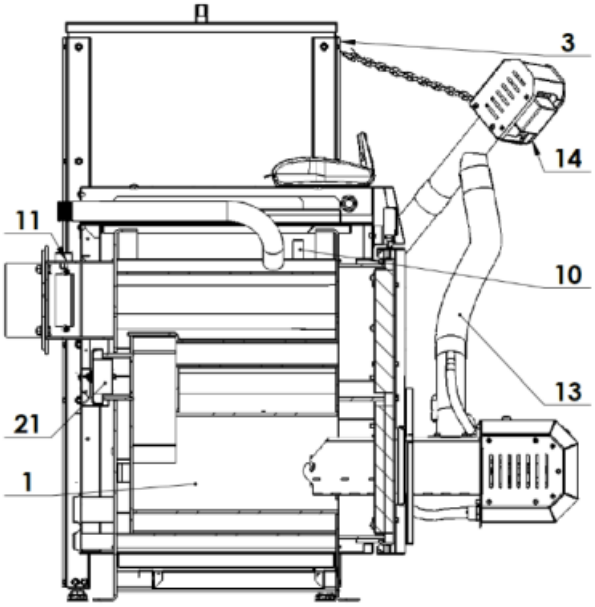



**Legend :**

1. Exchanger
2. Self-cleaning pellet burner
3. Fuel tank
4. Firebox and ash pan doors
5. Flue cleanout
6. The flue
7. Supply connector
8. Return pipe
9. Drain connector
10. Boiler and STB temperature capillaries
11. Exhaust gas sensor capillary
12. Ash drawer
13. Flexible fuel supply pipe
14. Feeder
15. Controller display
16. Main switch
17. Fuse
18. STB
19. Tray cover
20. Cable outlet
21. Cleanout

**SLIM PELLET MINI 10-20 boiler**



**Legend :**

1. Exchanger
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13. Flexible fuel supply pipe
14. Feeder
15. Controller display
16. Main switch
17. Fuse
18. STB
19. Tray cover
20. Cable outlet
21. Cleanout

# Technical data of the SLIM PELLET 10-20 boiler

**(User | Installer)**

| Parameters | | SLIM PELLET | | |
|---|---|---|---|---|
| | | **10** | **15** | **20** |
| Nominal thermal power | [kW] | 10 | 15 | 20 |
| Boiler power range | [kW] | 3-10 | 4.5-15 | 6-20 |
| Heating surface | [$m^2$] | 1.5 | 2.1 | 2.5 |
| Water capacity | [L] | 45 | 65 | 75 |
| Maximum operating pressure | [bar] | 3 | 3 | 3 |
| Maximum operating temperature | [$^oC$] | 80 | 80 | 80 |
| Test pressure | [bar] | 4.5 | 4.5 | 4.5 |
| Boiler class | [-] | 5 | 5 | 5 |
| Boiler efficiency | [%] | 92.26 | 92.07 | 92.51 |
| Fuel tank capacity | [L] | 120 | 160 | 180 |
| Fuel | [-] | pellets in accordance with point 5.3 (Table 9) of the PN EN 303-5:2021-09 standard (diameter: 6 ± 1 mm; 8 ± 1 mm, length 3.15 ≤ L ≤ 40, moisture ≤ 10%, ash content ≤ 0.7%, calorific value >17 MJ / kg) | | |
| Electrical connection | [-] | 2A;~230V;50Hz | | |
| Electric power consumption | [W] | 115 | 115 | 115 |
| Electric power consumption (momentary during ignition) | [W] | 415 | 415 | 415 |
| Temperature controller setting range | [$^oC$] | 60-80 (every 1 $^oC$) | | |
| Required chimney draft | [Pa] | 15 | 18 | 20 |
| Exhaust gas mass flow | [g/s] | 6.8 | 10.77 | 13.6 |
| Design flow resistance ΔT [10K] | [mbar] | 2.38 | 3.58 | 4.77 |
| Design flow resistance ΔT [20K] | [mbar] | 1.19 | 1.79 | 2.39 |
| Boiler weight | [kg] | 260* | 310* | 340* |

*Boiler weight +/- 5kg.

# Technical data of the SLIM PELLET MINI 10-20 boiler

**(User | Installer)**

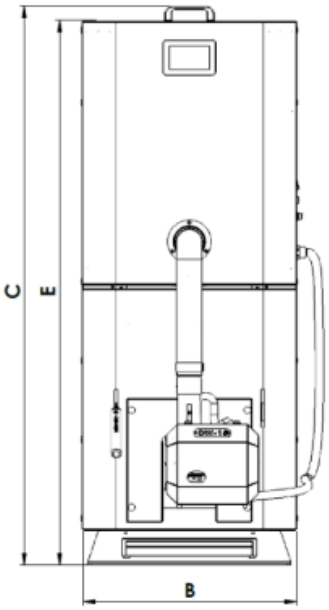
| Parameters | | SLIM PELLET MNI | | |
|---|---|---|---|---|
| | | **10** | **15** | **20** |
| Nominal thermal power | [kW] | 10 | 15 | 20 |
| Boiler power range | [kW] | 3-10 | 4.5-15 | 6-20 |
| Heating surface | [$m^2$] | 1.5 | 2.1 | 2.5 |
| Water capacity | [L] | 45 | 65 | 75 |
| Maximum operating pressure | [bar] | 3 | 3 | 3 |
| Maximum operating temperature | [$^oC$] | 80 | 80 | 80 |
| Test pressure | [bar] | 4.5 | 4.5 | 4.5 |
| Boiler class | [-] | 5 | 5 | 5 |
| Boiler efficiency | [%] | 92.26 | 92.07 | 92.51 |
| Fuel tank capacity | [L] | 230 | 230 | 230 |
| Fuel | [-] | pellets in accordance with point 5.3 (Table 9) of the PN EN 303-5:2021-09 standard (diameter: 6 ± 1 mm; 8 ± 1 mm, length 3.15 ≤ L ≤ 40, moisture ≤ 10%, ash content ≤ 0.7%, calorific value >17 MJ / kg) | | |
| Electrical connection | [-] | 2A;~230V;50Hz | | |
| Electric power consumption | [W] | 115 | 115 | 115 |
| Electric power consumption (momentary during ignition) | [W] | 415 | 415 | 415 |
| Temperature controller setting range | [$^oC$] | 60-80 (every 1 $^oC$) | | |
| Required chimney draft | [Pa] | 15 | 18 | 20 |
| Exhaust gas mass flow | [g/s] | 6.8 | 10.77 | 13.6 |
| Design flow resistance ΔT [10K] | [mbar] | 2.38 | 3.58 | 4.77 |
| Design flow resistance ΔT [20K] | [mbar] | 1.19 | 1.79 | 2.39 |
| Boiler weight | [kg] | 270* | 305* | 345* |

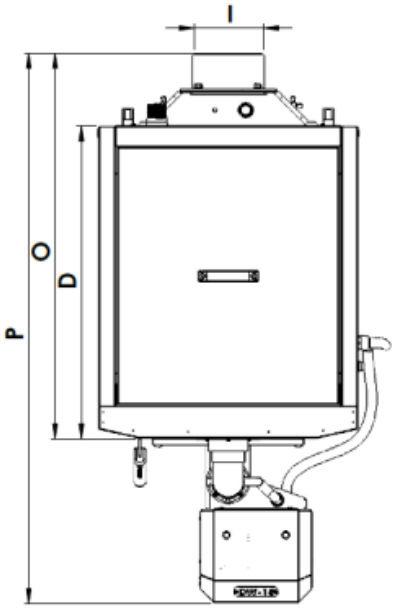
*Boiler weight +/- 5kg.

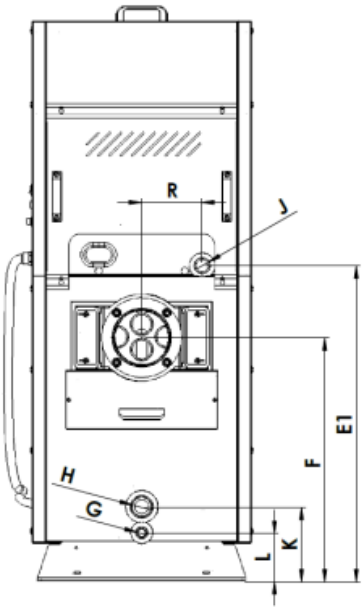
# Dimensions of the SLIM PELLET 10-20 boiler

**(User | Installer)**

## SLIM PELLET 10-20 boiler



| Dimensions | SLIM PELLET | | |
|---|---|---|---|
| | **10** | **15** | **20** |
| A | - | - | - |
| B | 590 | 590 | 690 |
| C | 1550 | 1550 | 1550 |
| C1 | - | - | - |
| D | 705 | 920 | 920 |
| E | 1510 | 1510 | 1510 |
| E1 | 850 | 850 | 868 |
| F | 656 | 656 | 656 |
| G | G ¾" | G ¾" | G ¾" |
| H | G 1 ¼ " | G 1 ¼ " | G 1 ¼ " |
| I | 160 | 160 | 160 |
| J | G 1 ¼ " | G 1 ¼ " | G 1 ¼ " |
| K | 200 | 200 | 200 |
| L | 130 | 130 | 130 |
| M | - | - | - |
| N | - | - | - |
| O | 870 | 1090 | 1090 |
| P | 1250 | 1465 | 1465 |
| R | 162 | 162 | 162 |

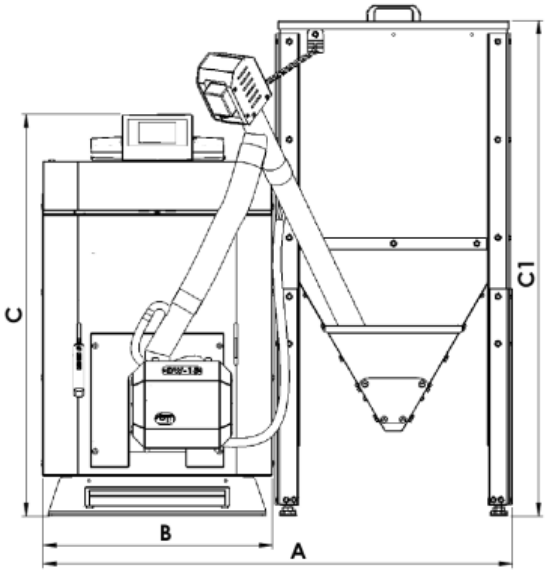
*The dimension does not include the height of the boiler leveling feet.

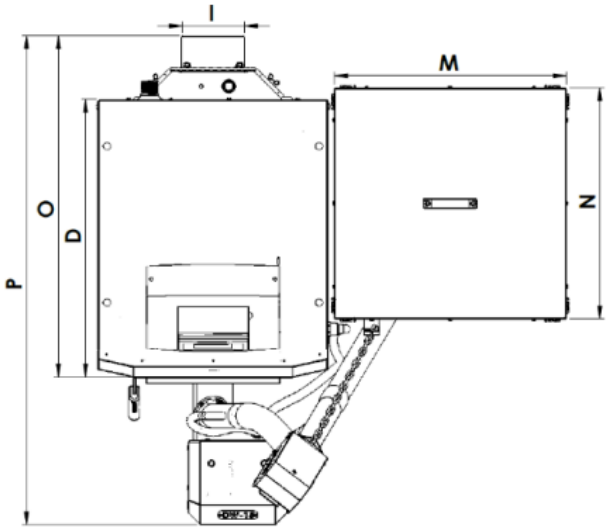
**ATTENTION!**
The boilers have 30 mm high feet.

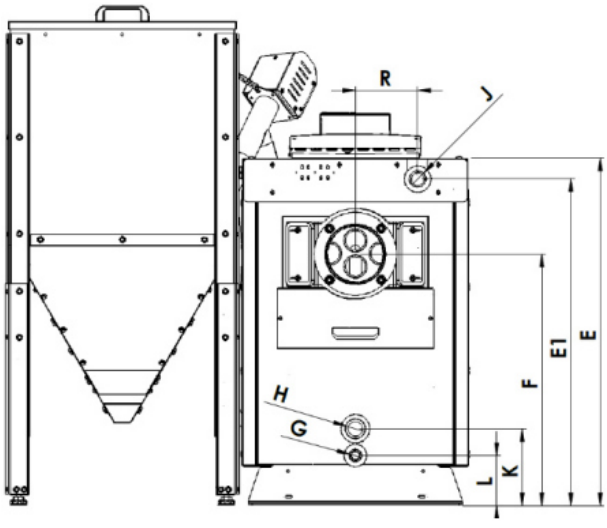
# Dimensions of the SLIM PELLET MINI 10-20 boiler

**(User | Installer)**

**SLIM PELLET MINI 10-20 boiler**



| Dimensions | SLIM PELLET MINI | | |
|---|---|---|---|
| | **10** | **15** | **20** |
| A | 1200 | 1200 | 1300 |
| B | 590 | 590 | 690 |
| C | 1020 | 1020 | 1020 |
| C1 | 1270 | 1270 | 1270 |
| D | 705 | 920 | 920 |
| E | 905 | 905 | 905 |
| E1 | 850 | 850 | 868 |
| F | 656 | 656 | 656 |
| G | G ¾" | G ¾" | G ¾" |
| H | G 1 ¼ " | G 1 ¼ " | G 1 ¼ " |
| I | 160 | 160 | 160 |
| J | G 1 ¼ " | G 1 ¼ " | G 1 ¼ " |
| K | 200 | 200 | 200 |
| L | 130 | 130 | 130 |
| M | 605 | 605 | 605 |
| N | 605 | 605 | 605 |
| O | 870 | 1090 | 1090 |
| P | 1250 | 1465 | 1465 |
| R | 162 | 162 | 162 |

*The dimension does not include the height of the boiler leveling feet.

**ATTENTION!**
The boilers have 30 mm high feet.

## Automation , safety and regulation

**(User | Installer)**

1. The boiler automation allows you to set:
- boiler temperature;
- domestic hot water temperature;
- fuel feeder operation;
- manual control of the fan feeder
2. Thermal sensor

A mechanical STB is located in the boiler and protects the heating system from overheating. It is set to 95 ° C. Above this temperature, it turns off the fan, while simultaneously activating the central heating and domestic hot water pumps, as well as two additional ones, and opening the mixing valve.

3. Rising screw feeder feeding fuel to the burner.

## Fuel

**(User)**

The fuel for firing boilers equipped with a self-cleaning pellet burner is:
pellets in accordance with point 5.3 (Table 9) of the PN EN 303-5:2021-09 standard:

- diameter: 6 ± 1 mm; 8 ± 1 mm;
- length 3.15 ≤ L ≤ 40;
- humidity ≤ 10%;
- ash content ≤ 0.7%;
- calorific value >17 MJ / kg;

The fuel should not contain stones, pieces of wood or other impurities.

## Requirements for the boiler room and boiler installation

**(User | Installer)**

In Poland, boiler rooms built for solid fuel should meet the requirements of the PN-87/B-02411 standard "Boiler rooms built for solid fuel" and Journal of Laws 2015.0.1422. They are divided into two types:

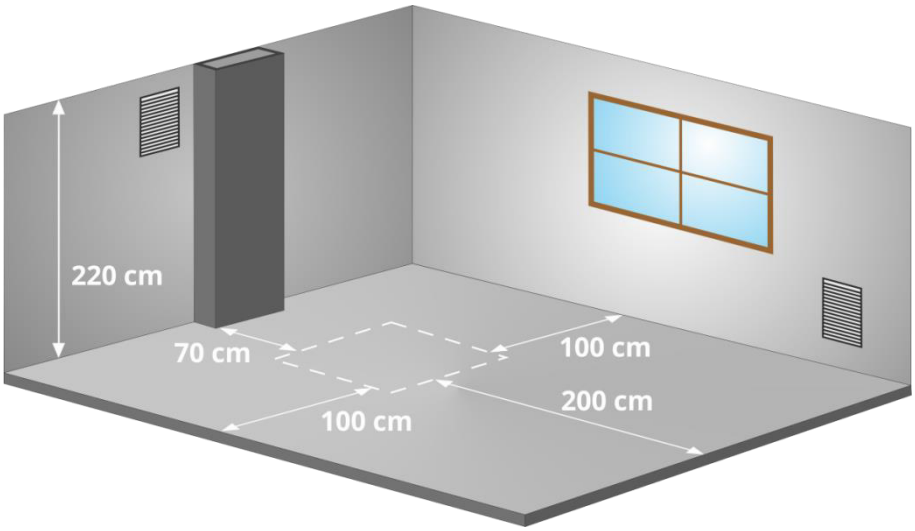
1. For small boiler rooms up to 25kW, the following requirements should be met:
- the boiler should be placed as centrally as possible in relation to the heated rooms and in a separate room;
- the material from which the floor in the boiler room is made should be non-flammable; in the case of flammable material, the floor should be covered with a 0.7 mm thick steel sheet at a distance of at least 50 cm from the edge of the boiler; the boiler should be placed on a foundation made of non-flammable materials, protruding 0.05 m above the floor level and edged with steel angles;
- There should be artificial lighting in the room, but natural lighting is also recommended;
- the positioning of the wheel in the room should allow free access to the boiler during cleaning and maintenance; the distance from the back of the boiler to the wall should not be less than 70 cm, from the side of the boiler to the wall not less than 100 cm, and from the front of the boiler to the opposite wall not less than 200 cm;
- the height in new buildings should be at least 220 cm, in the case of existing buildings the height of the boiler room is at least 190 cm, with proper ventilation ( supply and exhaust);
- supply ventilation should be provided through an unclosable opening with a minimum cross-section of 200 cm2 and located no more than 100 cm above the floor level;
- exhaust ventilation should be provided by means of an exhaust duct made of non-flammable material with a minimum cross-section of 14 x 14 cm with an inlet opening under the ceiling of the boiler room; the exhaust duct should be led above the roof and placed near the chimney; the exhaust duct must not be fitted with devices that would allow it to be closed;
- the cross-section of the chimney should be no less than 20 x 20 cm;
- there should be a floor drain in the floor of the boiler room;

- the optimal place for storing fuel is a separate room located near the boiler room;
- ash and slag should be collected in appropriate containers that can be emptied daily.

2. Boiler rooms with a thermal power of 25kW or more should additionally meet the following requirements:

- the distance of the boiler furthest from the chimney, with gravity draft, cannot exceed 50 cm of the chimney height;
- the fuel storage and slag storage should be located next to the boiler room at a storage height of up to 220 cm with a free space above the fuel of at least 50 cm;
- devices and equipment enabling vertical and horizontal transport of fuel and slag should be taken into account;
- the fuel storage room should have natural, unforced ventilation, allowing for one full air exchange per hour in the fuel storage room and three full air exchanges per hour in the slag storage room;
- the entrance door to the boiler room should be non-flammable (EI30 fire resistance class), minimum width 90 cm, opening outwards; it should have a handleless closing system enabling it to be opened outwards under pressure and inwards using a handle;
- ventilation requirements are the same as for boiler rooms with lower power; additionally, in boiler rooms with power exceeding 400 kW, in addition to supply and exhaust ventilation, there should be mechanical ventilation, switched on periodically during fuel charging and boiler deslagging, ensuring at least 10 full air changes per hour;
- in the boiler room, natural lighting should be provided, illuminating the boiler from its front, and the area of windows should be at least 1/15 of the floor area of the boiler room; half of the installed windows should be openable; electric lighting and an electrical socket with a voltage not exceeding 24 V should also be located in the room;
- there should be a sewage pit in the floor to allow for cooling of water, and its capacity should be equal to the water capacity of the largest boiler, but not greater than 2 m3 ;
- in the boiler room, the heat pipes should be insulated;
- The boiler setup with the minimum required distances is shown in the boiler room diagram below.

**Minimum distances for setting the boiler in the boiler room**



**ATTENTION!**
Mechanical exhaust ventilation should not be used in the boiler room.

**ATTENTION!**
Ensuring that there is sufficient fresh air in the boiler room will enable efficient fuel combustion.

**ATTENTION!**
The formation of excessive amounts of carbon dioxide in the room should be prevented.

**ATTENTION!**
More detailed information regarding the requirements for the construction of boiler rooms can be found in the Regulation of the Minister of Infrastructure of March 12, 2009.

**TIP!**
The above-mentioned provisions are guidelines that need to be verified as the regulation is subject to amendment.

## Boiler installation

**(User | Installer)**

An important element of installation is the correct positioning and leveling of the SLIM PELLET or SLIM PELLET MINI boiler. These boilers do not require special foundations. Adjustable feet facilitate boiler leveling. The boiler must be placed vertically.

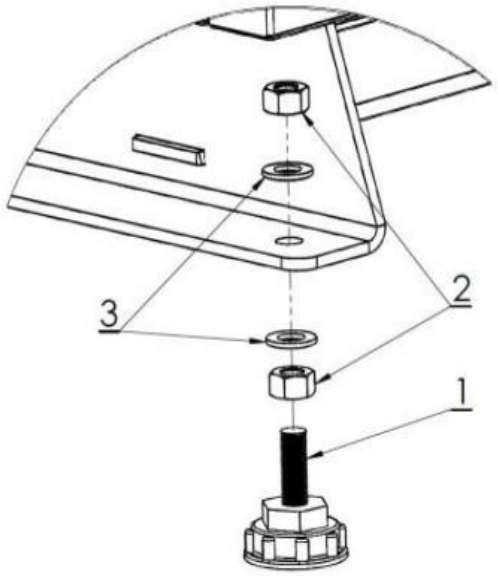
1. Check if the set includes four feet.
2. Using a spirit level, level the boiler relative to the ground. If the boiler is horizontal, installing the feet is not required.
3. Screw the four feet into the designated holes.
4. Use a spirit level to level the boiler.

**ATTENTION!**
An incorrectly leveled boiler may be damaged.

**ATTENTION!**
It is unacceptable to place the boiler in a damp or wet room, as this accelerates corrosion, quickly leading to the destruction of the boiler.

## Method of installing the boiler leveling feet

1. Adjusting foot, 4 pcs.
2. M10 nut, 8 pcs.
3. Washer Ø10, pcs. 8




The boiler should be placed on a heat-insulating, non-flammable base, which should extend 2 cm beyond the boiler base on all sides. If the boiler is located in a basement, it is recommended that it be placed on at least 5 cm of foundation. The strength of the subfloor, as well as fire protection requirements, are key considerations when positioning the boiler in the right location. These include:

- 20 cm safe distance from flammable materials,
- 40 cm for flammable materials with a flammability class of C3,
- 40 cm if the flammability level is unknown.

| Flammability degree of building materials and products | Building materials and products |
|---|---|
| A - Non-flammable | Sandstone, concrete, bricks, fire-resistant plaster, mortar, ceramic tiles, granite |
| B - Difficult to burn | Wood-cement boards, glass fibers, mineral insulation |
| C1 - Difficult to burn | Beech wood, oak wood, plywood |
| C2 - Medium Burning | Pine, larch and spruce cork, sawn wood boards, rubber floor coverings |
| C3 - Easily combustible | Asphalt plywood, celluloid masses, polyurethane, polystyrene, polyethylene, plastic, PVC |

# Connecting the boiler to the heating system

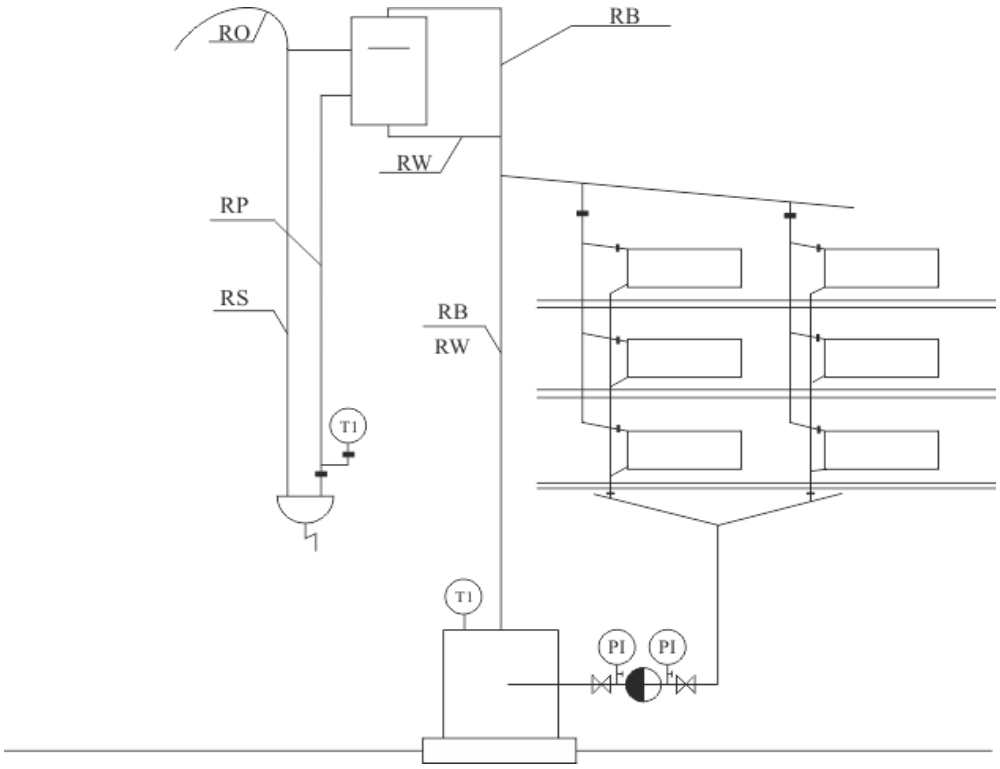
**(Installer)**

The boiler should be connected to the central heating system by a company authorized by the manufacturer, and proper connection should be confirmed on the warranty card attached to this manual. The boiler should be connected according to the manufacturer's recommendations, in accordance with this manual.

**ATTENTION!**
It is recommended that the first start-up of the boiler be performed in accordance with the guidelines contained in the Operation and Maintenance Manual by a person with valid authorizations.
Information on persons authorized to start up the boiler is available from the Manufacturer at +48 85 711 94 54 ext. 17.

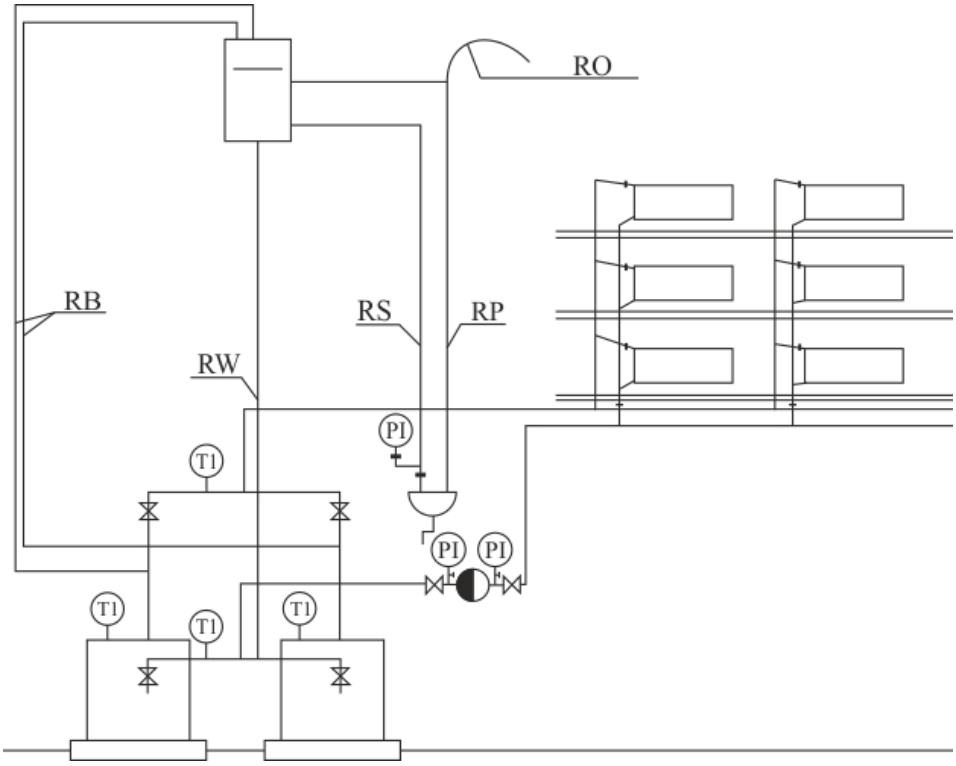
**ATTENTION!**
The temperature of the water returning from the installation to the central heating boiler should not be lower than 45ºC.

**Connection diagrams for boilers to the heating system in accordance with the PN - 91/B - 02420 standard**




| Designation | Description |
|---|---|
| RO | Vent pipe |
| RW | Expansion pipe |
| RS | Signal pipe |
| RP | Overflow pipe |
| RB | Safety pipe |
| T1 | Temperature |
| P1 | Pressure |

## Connection diagrams for boilers to the heating system in accordance with the PN - 91/B - 02420 standard




| Designation | Description |
|---|---|
| RO | Vent pipe |
| RW | Expansion pipe |
| RS | Signal pipe |
| RP | Overflow pipe |
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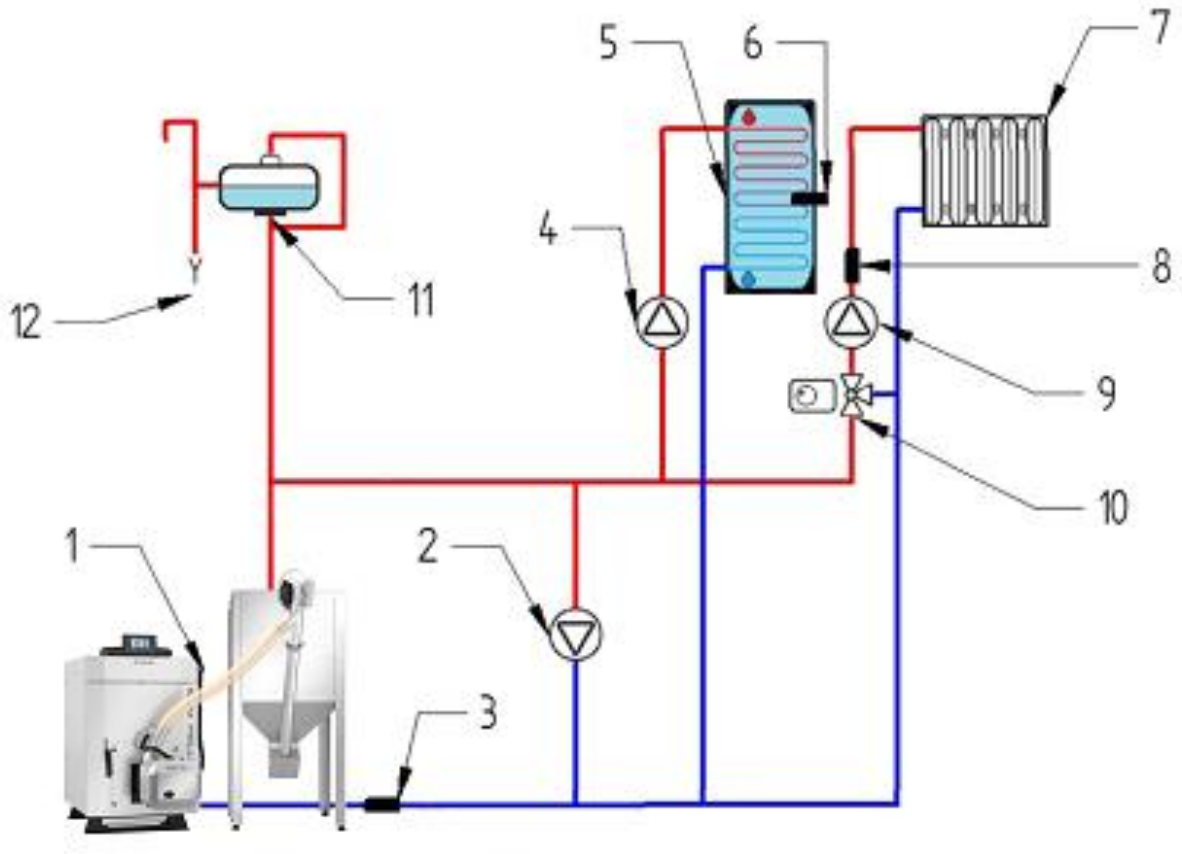
| T1 | Temperature |
| P1 | Pressure |

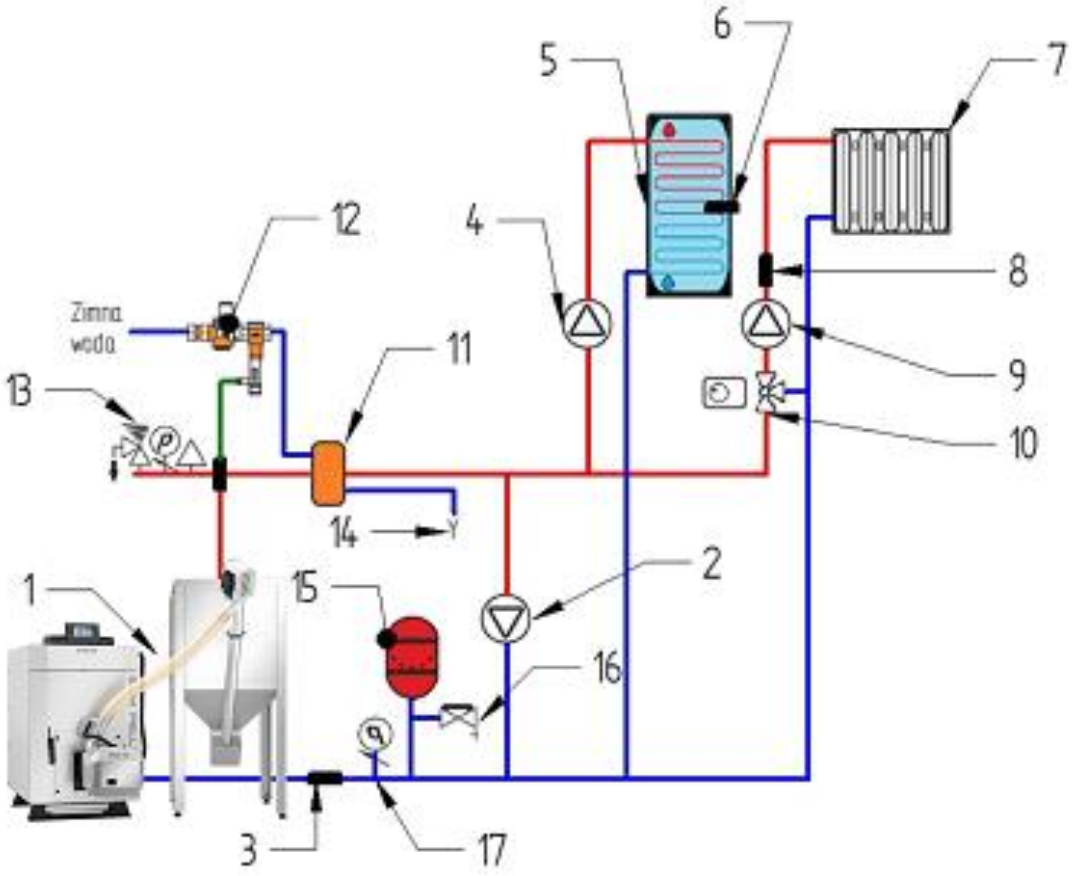
## Connecting the boiler to the heating system with a shunt pump – open system




## Legend

1. Cauldron
2. Shunt pump
3. Return sensor
4. DHW pump
5. DHW tank
6. DHW sensor
7. Radiators
8. Mixer sensor
9. Mixer pump
10. 3D valve with actuator
11. Open vessel
12. Outflow

## Connecting the boiler to the heating system with a shunt pump – closed system




## Legend

1. Cauldron
2. Shunt pump
3. Return sensor
4. DHW pump
5. DHW tank
6. DHW sensor
7. Radiators
8. Mixer sensor
9. Mixer pump
10. 3D valve with actuator
11. External cooling coil
12. Thermal valve
13. Security group
14. Outflow
15. Expansion vessel
16. Cap valve

## Connecting the boiler to the heating system in a closed system

**(Installer)**

It is important to use elements that protect the installation against overheating and excessive pressure increase when installing the boiler in a closed heating system, and to use a controller that regulates the temperature during the combustion process.

**ATTENTION!**
The central heating installation in a closed system must meet the requirements of PN-EN 12828:2006 - Heating installations in buildings and PN-EN 303-5:2021 - Heating boilers for solid fuels with manual and automatic fuel loading.

| Part | Description |
|---|---|
| STB | Safety temperature limiter with manual return to the initial position |
| External cooling coil with VST 112 valve or DBV-2 valve | A device for removing excess heat from the boiler |
| Pressure expansion vessel | Preventing excessive pressure build-up |
| Safety fittings | It consists of a safety valve, a pressure gauge, and a vent. |

**ATTENTION!**
Boilers installed in a closed system must be equipped with all safety devices.

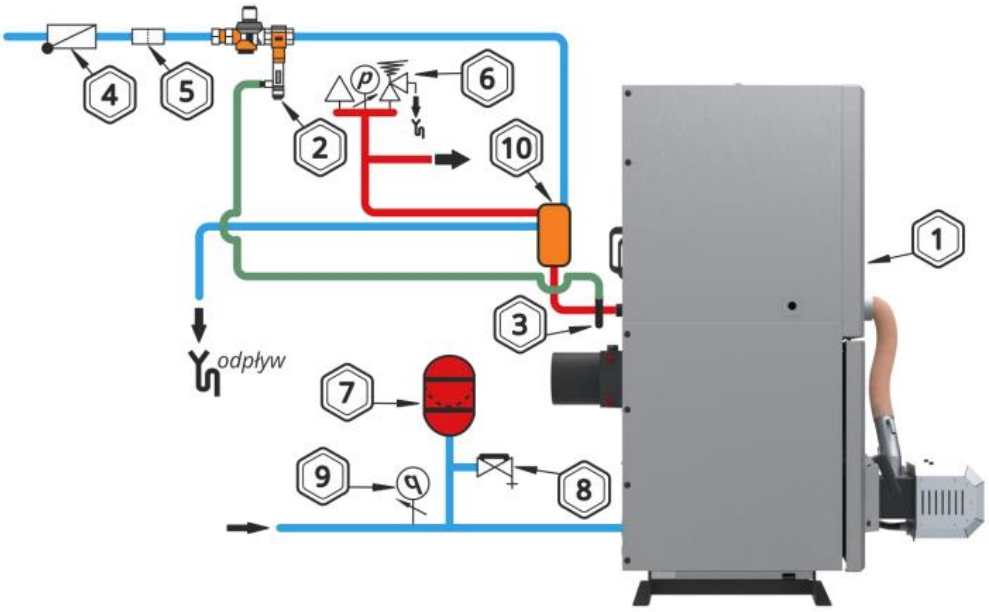
**ATTENTION!**
The cooling coil or cooling valve must be connected to the water supply. A water heater cannot be used as a power source, as it requires electricity to operate properly.

# Securing the installation with an external cooling coil

**(Installer)**

The coil, mounted on the system's supply line, is connected to a cold water line, which flows through it only when a thermal valve with a sensor immersed in the boiler supply line opens and a set temperature is exceeded. The water passes through the coil, absorbing heat from the boiler's water jacket, and is then discharged into a cooling sump, as directing hot water directly into the sewer lines could damage them.
The coil can lower the water temperature in the boiler shell by several degrees within a matter of seconds. If the water temperature in the boiler shell drops below the set point, the valve shuts off the water flow to the coil. In this solution, the high quality of the exchanger and valve is crucial, allowing for even multiple consecutive activation and deactivation of the safety devices.

**Schematic diagram of boiler protection using an external cooling coil with thermal protection**



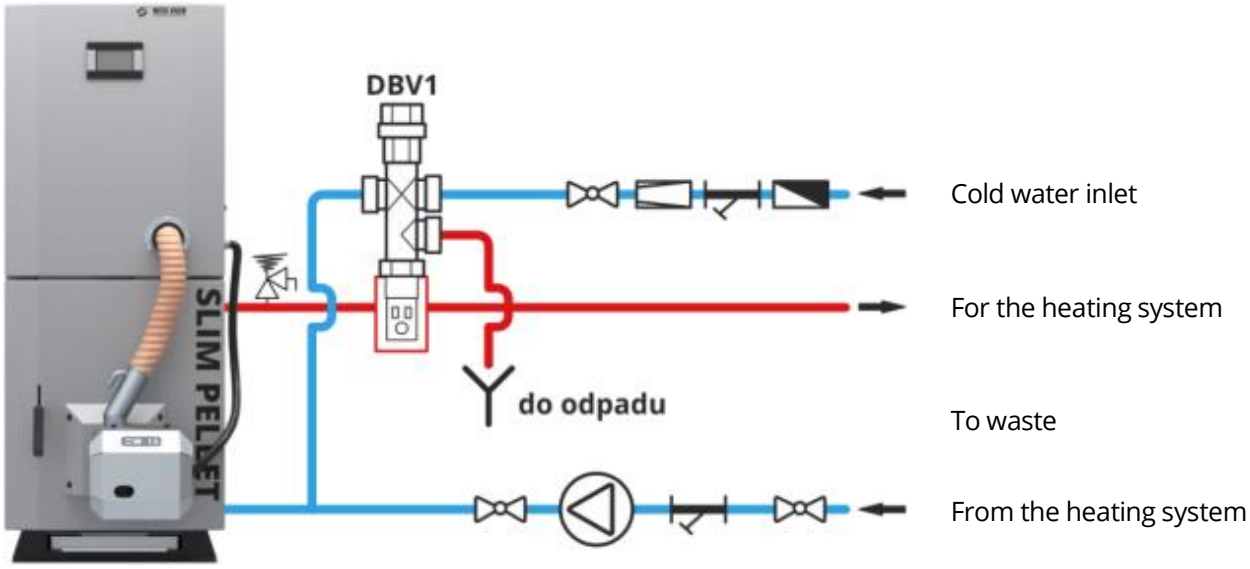

**Legend**

1. Cauldron
2. Valve. Vst 11
3. Temperature sensor with capillary
4. Check valve
5. Domestic water filter
6. Safety fittings
7. Expansion vessel
8. Cap valve
9. Manometer
10. External cooling coil

## Securing the installation with a dual-function cooling valve (Installer)

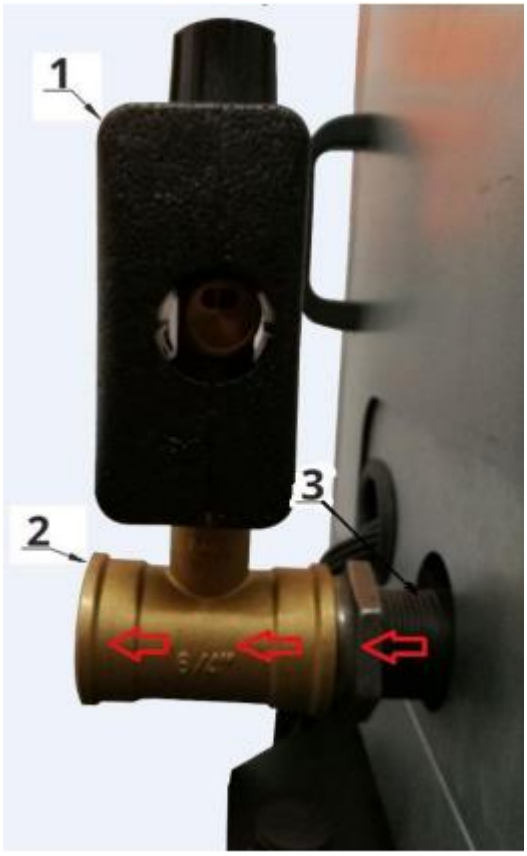
Thermal protection with a cooling valve (e.g. DBV-2) is used to lower the temperature of the water in the heating system if its temperature is exceeded.
Once the safety temperature is exceeded, the valve opens. When the discharge valve opens, hot water flows out of the heating system, and cold water can flow in from the supply line (mains water), cooling the boiler and system.

**Schematic diagram of boiler protection using the DBV-2 cooling valve**



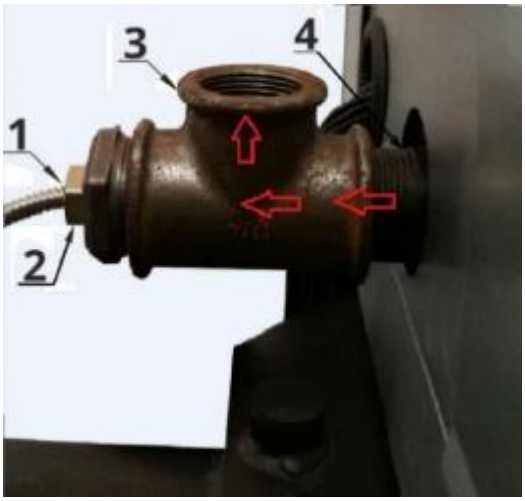

| Legend | |
|---|---|
|  | Ball valve |
|  | Pressure reducing valve |
|  | Filter |
|  | Check valve |
|  | Safety valve |
|  | Pump |

## Example of how to connect the DBV2 valve to the boiler supply




1. DBV-2 valve
2. Tee
3. Power supply connector

## Example of how to connect a capillary with a temperature sensor of the VST 112 valve to the boiler power supply




1. Temperature sensor
2. Temperature sensor capillary
3. Tee
4. Power supply connector

Solid fuel boilers with automatic fuel feeding do not pose a significant risk of uncontrolled temperature increases in the central heating system, as the amount of fuel fed to the burner is small. Furthermore, in the event of a temperature increase, the safety and operational functions are automatically activated without user intervention.
However, if something malfunctions, the controller will shut down the feeder for 30 seconds to remove the embers. If the feeder temperature has not decreased within two minutes of attempting to remove the embers, the controller will make another attempt. If, after four such attempts and after reaching 85°C, the controller fails to lower the feeder temperature, the boiler will shut down and shut down automatically.
Thanks to the appropriate design of the SLIM PELLET and SLIM PELLET MINI series boilers, the risk of fire spreading into the fuel tank is small, which is prevented by:

- Using a rising screw (using natural draft)
- A device for equalizing the pressure of the combustion chamber and the fuel supply pipe

**ATTENTION!**
The gas pressure in the expansion vessel should be checked and adjusted appropriately before using the boiler. The operation of the expansion vessel should be checked annually.

**ATTENTION!**
The safety valve should be installed on the heat source or in its vicinity, e.g. on the installation's power supply pipe, in an easily accessible place.

**ATTENTION!**
The safety valve should prevent the maximum operating pressure from being exceeded by no more than 10%.

## Expansion vessel requirements

**(Installer)**

Every open-circuit heating system should be equipped with an expansion vessel , which is designed to absorb the increase in water volume and to vent air. This vessel should be installed at the highest point of the system, vertically above the boiler(s), if possible.
expansion vessel can be estimated by assuming that the unit capacity in relation to one kW of thermal output is 1-2 $dm^3$.
expansion vessel is equipped with a connector for connecting a rising safety pipe, a falling safety pipe, and an overflow pipe with a connected vent. The diameter of the vent pipe and overflow pipe is at least:

$$d = 15 + 1{,}39\sqrt{\dot{Q}} \quad \text{[mm]}$$

$\dot{Q}$ - boiler efficiency [kW]

The most important requirements for safety devices are as follows:

- expansion tank should have a volume of approximately 3.5% of the volume of water in the heating system, including the boiler,
- each boiler must have a safety pipe and an overflow pipe,
- the installation should be equipped with a signal and expansion pipe as well as a venting connector for the expansion vessel .

If multiple boilers are installed, each should be equipped with a safety pipe in accordance with the guidelines outlined in PN-91/B02413 – Protection of Open-Vent Water Heating Systems. No shut-off valves should be installed on safety and overflow pipes, and the pipes and vessel should be protected from freezing.

## Connecting the boiler to the electrical installation

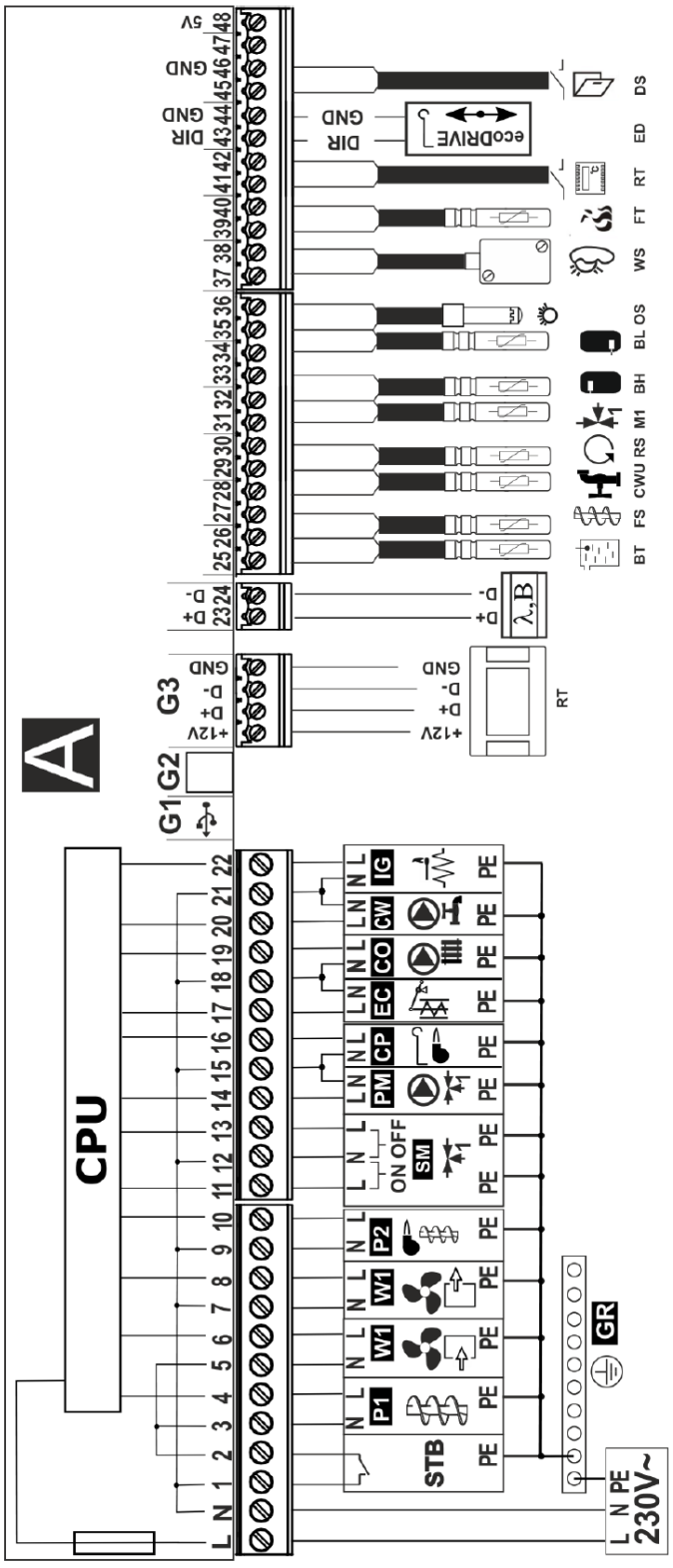
**(Installer)**

The boiler is designed for a 230V/50Hz connection. Installation should be performed by a qualified technician. The 230V/10A grounded connection socket should be easily accessible. The boiler power supply and the boiler room lighting should be on a separate circuit.
Completion of installation and the heating test must be recorded on the Warranty Card. The completed Warranty Card should be sent to the manufacturer's address by the user to register the user in the company's system.

**ATTENTION!**
The first start-up of the boiler must be carried out only by a service technician trained by the manufacturer, with a valid certificate of an Authorised Service Technician, Distributor of METAL-FACH Technika Grzewcza or a person with SEP qualifications up to 1.5kW.

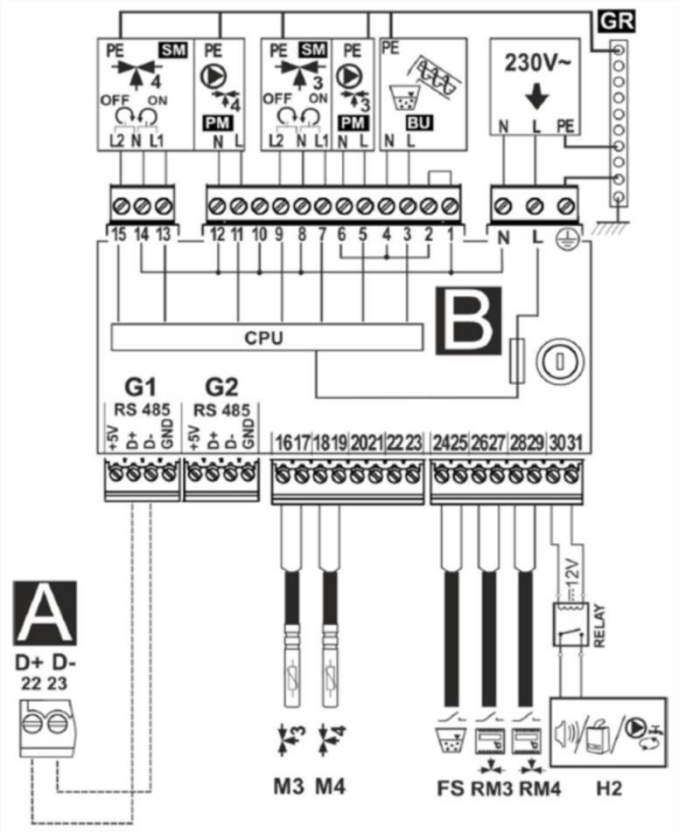
**ATTENTION!**
All pumps, mixer, relay, igniter, etc. are not included in the controller equipment.

## Boiler connection wiring diagram - PLATINUM controller




Electrical connection diagram of the regulator:
RT – control panel and additionally ecoSTER TOUCH room panel,
λ – Lambda probe module,
B - module for handling additional heating circuits,
BT – CT4 type boiler temperature sensor,
FS – CT4 type fuel feeder temperature sensor,
DHW – CT4 type domestic hot water temperature sensor,
RS – temperature sensor of water returning to the CT4 boiler,
M1 – temperature sensor of the regulated mixer circuit type CT4,
BH – upper buffer temperature sensor type CT4,
BL – lower buffer temperature sensor type CT4,
OS – optical flame brightness sensor,
WS – weather temperature sensor type CT6-P,
FT - exhaust gas temperature sensor type CT2S,
RT – universal mixing thermostat (No- Nc ),
ED – ecoDRIVE module (grid actuator control module),
DS – input to the fuel tank flap or door opening sensor,
LN PE - mains power supply 230V~,
GR – grounding strip,
STB – input to the safety temperature limiter,
P1 – main feeder,
W1 – blower fan,
W2 – exhaust fan,
P2 – feeder 2 of the fuel,
SM – mixer actuator 1,
PM – mixer pump 1,
CP – grate cleaning actuator,
EC – exchanger cleaning motor,
CO – boiler or buffer loading pump,
CW – DHW pump,
IG – igniter,
CPU – control

**Boiler connection wiring diagram - PLATINUM controller**




Electrical connection diagram - additional module B, where:
M3 - temperature sensor of the regulated circuit (mixer 3) CT4,
M4 temperature sensor of the regulated circuit (mixer 4) CT4,
RM3 - Mixer room thermostat 3,
RM4 - room thermostat of mixer 4,
FS - fuel level sensor for operating the BU feeder,
H2 - voltage input for controlling the reserve boiler or for signaling alarms or for the domestic hot water circulation pump,
RELAY - relay,
LN PE - mains power supply 230V~,
PM 3/4 - 3/4 mixer pump,
SM 3/4 - 3/4 mixer actuator,
BU - fuel feeder from the bunker to the boiler tank,
CPU - control,
A - ecoMAX 860P2-T controller module A.

## Connecting the boiler to the chimney

**(Installer)**

**Smoke pipes**

The purpose of flue gas ducts is to reliably discharge exhaust gases and draw in air for fuel combustion. The chimney draft required for this depends on:

- temperature difference between hot exhaust gases and cold air,
- effective chimney height,
- chimney cross-section not less than 20 x 20 cm,
- construction of the chimney (internal surfaces as smooth as possible) and tightness of the joints.

The effective chimney height is the difference in height between the highest combustion chamber and the chimney outlet. Individual chimneys must have an effective height of at least 4 m, and shared chimneys for solid and liquid fuels must have a minimum height of 5 m. The height difference between two combustion chambers must not exceed 6.5 m. In the case of sloping roofs, chimneys should terminate at the ridge (the highest edge of the roof), in an area where the wind can freely flow. This avoids draft disruptions. Always consider the building's location relative to other buildings.

**Selecting a chimney**

In most cases, an approximate method or selection according to the chimney manufacturer's diagrams is sufficient for chimney selection. In special cases (unfavorable pressure and temperature dependencies, large exhaust gas volume), chimneys are calculated according to the applicable standard. Low exhaust gas temperature at the boiler's nominal output can result in the emission of damp exhaust gases, soot buildup, and insufficient chimney draft. This can lead to moisture and corrosion in brick chimneys. The use of a chimney liner is recommended:

- in new buildings, a ceramic flue gas discharge system resistant to condensate, thermally insulated and with a condenser is recommended ,

- In existing buildings, it is recommended to modernise the brick chimney by using a single- or double-walled stainless steel chimney system (designed for solid fuel boilers).

**The flue**

The boiler is connected to the chimney via a flue and a flue pipe. The flue pipe consists of pipes and fittings installed in the rooms. Flues meet fire protection requirements for chimneys and are often made of the same material as the main chimney. Flues should be made of non-flammable materials. Flues or the casing of flues should meet the requirements specified in the Polish Standard for Fire Testing of Small Chimneys. A casing made of 12 cm thick solid brick, built with cement-lime mortar, with external plaster or pointing, is acceptable. Connectors should be as short as possible and run uphill to the chimney to avoid heat loss and additional resistance. They should not be routed to other floors. Flue pipes should not be installed in rooms where fireplaces are not permitted, and they should not be located in walls or ceilings. Due to the low exhaust gas temperature, acid-resistant or ceramic chimney liners should be used to protect the chimney from moisture and draft restriction, with condensate draining to a drain grate. A distance of at least 6 meters should be maintained between the chimney and the nearest tree canopy.

## Starting the boiler

**(User | Installer)**

**ATTENTION!**

Controller settings are subject to flexibility and adjustment based on the variety of existing central heating systems, building heating requirements, and fuel calorific value. The user sets the boiler's operating parameters independently. This is not subject to service.

Before lighting the fire in the boiler, check whether the central heating installation has been installed correctly and whether it is properly filled with water - until it overflows through the overflow pipe from the expansion vessel .
To fill the entire installation or replenish losses, the most suitable water would be softened/chemically treated water, distilled water or rainwater.
In addition, check whether the self-cleaning pellet burner is cleaned of any unburned fuel, ash and slag from the previous burning and whether the ash has been removed from the ash pan.
During the lighting period, close all doors. Once a stable flame is achieved, switch the controller to automatic operation, which will activate the automatic fuel feeder and fan.
Set the desired boiler operating temperature, usually 70-80 °C. From this point on, the boiler will operate automatically, according to the settings the user sets on the controller by following the controller's operating instructions, intended for the user and included with this manual.
Periodically check the combustion process through the inspection door. Ash and slag from the burned fuel gradually fall into the ash pan container, causing the burner to self-clean. If a piece of slag becomes stuck between the boiler wall and the burner, remove it with a rake or hook.
The regulator protects the boiler against: exceeding the permissible water temperature in the boiler, embers flowing back into the fuel feeder and switches off the entire system in the event of a fuel shortage.
There is a sensor placed on the feeder pipe that responds in the event of a flame flashback from the burner to the feeder.
In such a case, the fan is immediately switched on and the feeder (located in the burner) starts working continuously and the feeder in the feed pipe from the hopper is stopped.
The boiler user should carefully read the operating instructions for the microprocessor controller intended for the user.
When starting the boiler when cold or for the first time, the "boiler sweating" phenomenon may occur. This gives the impression of a leak. In such a case, an intensive burning process (70-80°C) should be carried out to dry and heat the boiler and the chimney for up to 2-3 days.

To increase the life of the boiler, it is recommended to maintain the water temperature in the boiler at no lower than 60 ºC. Maintaining a suitably low temperature in radiators during the autumn and spring season can be achieved by, among other things:

- correct selection of the boiler for the size of the heated rooms,
- using three- or four-way mixing valves between the water supply and return, manually or automatically controlled.

Maintaining the continuity of the combustion process requires periodic refilling of the tank with fuel. The frequency of refilling depends on the intensity of the combustion process and should be determined individually based on experience.
On average, refilling occurs every 1-3 days. Empty the ash pan at the same frequency.
Lack of fuel causes the combustion process to stop permanently and requires re-ignition of the boiler.
To save fuel, keep the boiler's combustion chamber and convection channels clean. In the combustion chamber, clean the walls and combustion tubes through the combustion and ash pan doors and the cleanout.

**ATTENTION!**
When opening the door, do not stand in front of the boiler, as burns may occur.

## When using the boiler, please remember

**(User)**

- the boiler may only be operated by adults who are familiar with the operating instructions;
- It is forbidden for children to stay near the boiler without the presence of adults;
- if flammable gases or vapours enter the boiler room or during work during which there is an increased risk of fire or explosion (gluing, painting, etc.), the boiler must be switched off before starting the work;
- when cleaning the carbon deposits in the burner or gutter, the boiler should be turned off ("STOP" position);
- when adding fuel to the tank, the boiler must be turned off ("STOP" position);
- flammable liquids must not be used to light the boiler, the boiler should be ignited automatically (using an igniter);
- before cleaning the boiler, the device must be turned off ("STOP" position) and cooled down;
- During operation, the boiler must not be overheated in any way;
- no flammable objects may be placed on the boiler or in its immediate vicinity;
- when removing ash, flammable materials must not be located at a distance of less than 150 cm from the boiler;
- the ash should be placed in ovenproof containers with a lid;
- when the boiler operates at a temperature lower than 60°C, condensation may occur on the steel heat exchanger and thus lead to corrosion due to the low temperature, which shortens the life of the heat exchanger; therefore, the temperature during boiler operation must be at least 60°C;
- After the heating season, the boiler and the smoke pipe should be thoroughly cleaned;
- the boiler room should be kept clean and dry.

**ATTENTION!**
The product is not intended for use by persons with reduced physical/mental abilities or lacking experience and knowledge, unless they are supervised or instructed by a person responsible for their safety.

**ATTENTION!**
Any independent interference with the electronics or construction of the boiler is prohibited.

## Boiler cleaning and maintenance

**(User)**

**ATTENTION!**
Cleaning the boiler may only be performed when the device is disconnected from the mains.

To save fuel, keep the boiler's combustion chamber and convection channels clean. The combustion chamber walls and shelves should be cleaned through the cleaning and inspection doors. The boiler heat exchanger and ash pan should also be cleaned regularly.
Cleaning should be performed using wire brushes with extension cords. This should be done during the boiler's periodic shutdown, ideally every 100 hours of operation. A thorough cleaning of the boiler should be performed once a month.

## Instructions for disposing of the boiler after its service life has expired

**(User)**

Before scrapping the boiler, all electronic components must be disconnected. They must be disposed of in accordance with European Directive 2002/96/EC on the disposal of electronic and electrical equipment. For proper disposal, contact the manufacturer of the electronic components in accordance with the aforementioned European Directive.
The steel elements from which the boiler is made should be scrapped in designated places (scrap yards).

**ATTENTION!**
A used boiler intended for scrapping and its components should not be disposed of with general waste.

# Spare parts list

**(User | Installer)**

| Spare parts | Article |
|---|---|
| Sensors | Boiler sensor,<br>Feeder sensor,<br>DHW sensor |
| Drivers | PLUM regulator |
| Fans | WPA 097 fan,<br>RMS-108 fan |
| Igniter | 300W lighter |
| Probe | Lambda Sensor Kit,<br>Sleeve for Lambda Sensor |
| Feeder | Burner feed screw,<br>Tray feeder |
| Instrumentation | Rubber grommet,<br>Tank gasket<br>Revision seal<br>Flap seal<br>Seal for the feeder,<br>Door handle |

## Examples of failures and devices

**(User)**

Before you call for service, read the most frequently asked questions.

**ATTENTION!**
In the event of an unjustified service call, the customer covers the costs of labor and travel; the price list is available at www.metalfachtg.com.pl/kontakt-z-serwisem

**TIP!**
**Online reporting:** www.metalfachtg.com.pl/zglos-problem-online
**Hotline:** +48 85 711 94 54 ext. 17
**FAQ:** www.metalfachtg.com.pl/kontakt-z-serwisem
**Instructional videos:** https://www.youtube.com/@mf.metalfachtg

# Terms and conditions of warranty

**User Declaration:**
I hereby declare that the boiler (hereinafter also referred to as the "device") was delivered to me in accordance with the order, new and complete. The seller has familiarized me with the operation of the device and provided me with all necessary documentation (including, in particular, the Operation and Maintenance Manual containing, among other things, the installation and operating instructions for the device, and warranty terms). I acknowledge the manufacturer's recommendation to have the device undergo regular annual technical inspections, which must be confirmed in the warranty card.

Date and legible signature of the User

**Scope of warranty:**
1. Liability under the warranty covers only defects resulting from causes inherent in the device at the time of its delivery to the User.
2. The warranty for the device is provided by the manufacturer (also referred to as the "Guarantor"): Jacek Kucharewicz, conducting business activity under the name METAL-FACH Technika Grzewcza Sp. z o. o., 16-100 Sokółka, ul. Sikorskiego 66, TAX: 545-182-60-12, REGON 050073833, telephone +48 85 711 94 54 ext. 17.
3. Under the warranty, the User is entitled to free repair of the device if defects are discovered during the warranty period. If the Guarantor determines that the device or its parts cannot be repaired, the Guarantor reserves the right to replace the device or its parts with new ones.

**Warranty period:**
For the device (boiler) – 2 years from the date of sale, but no longer than 36 months from the date of its production except:
a) exchanger – for which the warranty is 5 years from the date of sale;
b) moving, cast iron, mechanical elements, worm – for which the warranty is 1 year from the date of sale;
c) consumables (including sealing cord, gaskets, vermiculite , fireclay), electrical components, screw securing the worm clutch, cotter pins – which are not covered by the warranty.

**Terms of use of the guarantee:**
1. Installing the device in accordance with the Operation and Maintenance Manual (in particular, connecting the boiler to a properly installed system, performing the first start-up in accordance with the device manufacturer’s guidelines, using devices protecting the boiler against cold water returning (four-way valve with actuator, loddomat , etc.).
2. Returning a copy of the properly completed warranty card, signed and stamped by the seller, to the Manufacturer's address within 30 days from the date of sale of the device.
3. When submitting a complaint, please present a properly completed warranty card (signed and stamped by the seller) and provide supporting information regarding the purchase of the device (e.g., receipt, invoice). If the User loses the warranty card, a duplicate will not be issued.
4. The User must comply with the recommendations contained in the Technical and Operational Documentation of the device.
5. The first commissioning of the boiler must be carried out within 6 months of the date of installation by the installer in accordance with the guidelines contained in the Operation and Maintenance Manual, by a person with valid authorization (information on persons authorized to commission the boiler is available from the Guarantor at +48 85 711 94 54 ext. 17), confirmation of this fact in the warranty card, and sending a commissioning report to the Guarantor. The first commissioning of the boiler is a paid service and its cost is covered by the User.
6. Annual inspections of the device, in accordance with the guidelines contained in the Technical and Operational Documentation, carried out by specialist companies with appropriate authorizations (a sample list of specialist

companies is available from the Manufacturer - call +48 85 711 94 54 ext. 17) and recording their performance in the warranty card. Device inspection is a paid service.
7. Service on the device (e.g., device adjustment, cleaning, measurements, exhaust gas analysis) must be performed by specialist companies with appropriate authorizations (a sample list of specialist companies is available from the Manufacturer – call +48 85 711 94 54 ext. 17), in accordance with the guidelines contained in the Operation and Maintenance Manual, and service activities must be recorded in the warranty card. The User may report the need for service interventions to the Guarantor (Hotline +48 85 711 94 54 ext. 17, www.metalfachtg.pl/zglos-problem-online). This service is subject to a fee.
8. Warranty repairs must be carried out only by specialist companies with appropriate authorisations (a list of specialist companies is available from the Guarantor - +48 85 711 94 54 ext. 17), and recorded in the warranty card.
9. Use of spare parts and consumables that meet the parameters specified by the manufacturer. The use of original parts is recommended.
10. The warranty covers the territory of the Republic of Poland.

**The warranty does not cover device defects resulting from:**
1. Failure by the User to comply with the conditions contained in the Technical and Operational Documentation and, among others, the instructions contained therein regarding the transport, assembly, operation, use and maintenance of the device;
2. Improper storage and transport by the User;
3. Damage to device components caused by the User applying inappropriate voltage. If the device is powered directly or indirectly by generators, UPS systems, or devices, the User should consult the power supply device parameters with the manufacturer;
4. Device defects caused by a faulty heating system connected to the device;
5. Overheating of the boiler by the User;
6. The User connects the boiler to a closed system without using an appropriate cooling device;
7. The User uses inappropriate, poor quality fuel;
8. Unauthorized modifications to the device by the User

**Complaints procedure:**
1. If you notice that the device is not working properly, before filing a complaint, please make sure that everything has been done in accordance with the Technical and Operational Documentation.
2. The User should report the need for warranty repair immediately, preferably within 7 days of noticing the defect. Reports can be made directly to the Seller or the Guarantor (www.metalfachtg.pl/zglos-problem-online or by calling the hotline at +48 85 711 94 54 ext. 17).
3. It is recommended to refrain from using the faulty device.
4. The user is obliged to ensure free access to the device (in particular, enabling the removal of the device housing and access to the valves).
5. Warranty repairs will be performed by the Guarantor or a specialist company indicated by the Guarantor.
6. The obligations arising from the warranty will be fulfilled within 14 working days, counting from the date the device is made available (at the place of its installation) by the User.
7. The date of making the device available is agreed between the User and the Guarantor.
8. Depending on the scope of the repair, it may be performed at the User's premises, at the place of installation of the device, or at the Guarantor's facility or at the premises of a specialist company performing the work on behalf of the Guarantor.
9. The repair performed under warranty must be confirmed in the warranty card.
10. The warranty is extended by the period during which the user was unable to use the device due to a defect in the device covered by the warranty.
11. The warranty does not exclude, limit or suspend the buyer's rights arising from the provisions on warranty for defects in the sold item.

# Confirmation of inspection, warranty repair, and service

| | Date of execution | Description of activities performed | Signature and stamp of the contractor |
|---|---|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| 4. | | | |
| 5. | | | |
| 6. | | | |

| | Date of execution | Description of activities performed | Signature and stamp of the contractor |
|---|---|---|---|
| 7. | | | |
| 8. | | | |
| 9. | | | |
| 10. | | | |
| 11. | | | |
| 12. | | | |

# EC/EU Declaration of Conformity

| **Producer:** | **Product name and purpose:** |
|---|---|
| | Steel central heating boiler for solid fuel with automatic fuel charging. |
| METAL-FACH Technika Grzewcza Sp. z o. o.<br>Sikorskiego Street 66<br>16-100 Sokółka<br>TAX 545-182-60-12 | **Type:** SLIM PELLET / SLIM PELLET MINI |
| | **Serial number:** |
| | **Year of production:** |

The above-mentioned subject of this EU declaration of conformity complies with the applicable requirements of Union harmonisation legislation .

**Reference documents:**

1. Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery
2. Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility
3. Directive 2014/68/EU of the European Parliament and of the Council of 15 May 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of pressure equipment.
4. Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits
5. Commission Regulation (EU) 2015/1189
   Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products
6. Commission Regulation (EU) 2015/1187
   Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products
7. Commission Regulation (EU) 2015/863 (ROSHIII)
   Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
8. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006

**Technical documentation :**

1. Standard PN-EN 303-5:2021-09 Heating boilers for solid fuels with manual and automatic fuel charging with a nominal power up to 500 kW.
2. PN EN 1708-1:2020 Welding Basic solutions for welded steel joints Part 1. Pressure-bearing components.
3. PN EN 60335-1 2012 Household and similar electrical appliances Safety Part 1: General requirements.
4. PN EN 60335-2-102 2006/A1:2010 - Household and similar electrical appliances - Safety - Part 2-102: Particular requirements for gas, oil and solid fuel burning appliances having electrical connections.
5. PN EN 61000-6-2:2008 Electromagnetic compatibility (EMC) -- Part 6-2: Generic standards -- Immunity for industrial environments.
6. PN EN 61000-6-3:2008/A1:2012 Electromagnetic compatibility (EMC) -- Part 6-3. Generic standards -- Emission standard for residential, commercial and light-industrial environments.
7. PN-EN IEC 63000:2019-01 Technical documentation for the assessment of electrical and electronic products with regard to the restriction of hazardous substances.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

| **The product is marked with the following marks:** | **Place and date:** |
|---|---|
| CE | Sokółka, 02.2024 |

**Approving Persons:**

President of the Management Board:
Jacek Kucharewicz


Production Director:
(The person authorized to prepare technical documentation)
Eliasz Kasperuk

# Warranty card

Central heating boiler with power [kW]: Type:

Number:

Production date of the boiler: Boiler sale date:

Buyer's name and surname:

Buyer's address

Date of purchase and stamp Customer's signature

I accept the warranty terms: ✓

Personal data provided in this form are processed by Jacek Kucharewicz, conducting business activity under the name METAL-FACH Technika Grzewcza Sp. z o.o., 16-100 Sokółka, ul. Sikorskiego 66, TAX: 545-182-60-12, telephone +48 85 711 94 54 ext. 17 in order to implement the provisions contained in the warranty terms and conditions – in accordance with the Act of 29 August 1997 on Personal Data Protection (consolidated text: Journal of Laws of 2014, item 1182). The user has the right to access their personal data, to correct it, to request cessation of data processing, and to object to data processing in cases indicated by law. All correspondence concerning the processing of personal data should be sent to the following address: METAL-FACH Technika Grzewcza Sp. z o.o., 16-100 Sokółka, ul. Sikorskiego 66. Providing personal data is voluntary. In accordance with the Personal Data Protection Act of 29 August 1997 (consolidated text: Journal of Laws of 2014, item 1182), we hereby inform you that the personal data provided in this form will be protected against unauthorized access.

# Complaint submission

| Customer data | Central heating boiler data |
|---|---|
| Name and surname | Product name: |
| Residential address | Model: |
| Phone | Serial number |
| Purchase document number: | Warranty period Includes \| Does not include |
| Payment settlement document number: | |
| | Detailed description of the fault: |

Seller's signature

Conditions for initiating the complaint repair procedure:

1. Confirmation by the point of sale that the amount due for the product being complained about has been paid constitutes the basis for initiating the complaint procedure.
2. The warranty card is the only basis for free repair.
3. The complainant undertakes to reimburse the costs incurred by METAL-FACH Technika Grzewcza Sp. z o. o. in the event of an unjustified call for a service team or failure to comply with points 1 or 2 (each commenced hour of the service technician's work PLN 70 net, travel PLN 1 net/km in both directions).
4. The legible signature of the person submitting the complaint confirms that he or she has read the basic terms and conditions of the complaint procedure.

Date of purchase and stamp Customer's signature

I declare that I have read the warranty terms and conditions under which I am making a complaint and I consent to the processing of my personal data for the purposes of the complaint process in accordance with the Personal Data Protection Act of 29 August 1997 ( Journal of Laws No. 133, item 833).

Legible signature of the person submitting the complaint

The manufacturer undertakes to carry out warranty repairs within 14 days from the date of receipt of the user's written notification of damage on the manufacturer's complaint form.

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# Report on the first start-up of the boiler

**(Copy of the company METAL-FACH Heating Technology)**

To verify your purchase and validate your warranty, you must submit a report within 30 days of first use. This can be done by:

1. E-mail - where a scan or photo of the report will be posted.
2. A letter containing a copy of the report will be sent to METAL-FACH Technika Grzewcza Sp. z o. o. The company's address can be found at the end of the Technical and Operational Document.

| **Boiler** | | **Comment** |
|---|---|---|
| The conditions contained in the Operation and Maintenance Manual in the chapter "Requirements for the boiler room and boiler installation" are met. | ☐ | |
| The conditions specified in the Operation and Maintenance Manual in the chapter "Connecting the boiler to the chimney" are met. | ☐ | |
| **Central heating system** | | **Comment** |
| The conditions included in the Operation and Maintenance Manual in the chapter "Connecting the boiler to the heating system" are met. | ☐ | |
| Expansion vessel " are met. | ☐ | |
| There is no other heating source. If so, how does it affect the boiler's operation? | ☐ | |
| Protecting the system against freezing. | ☐ | |
| **Connecting elements to the electrical installation** | | **Comment** |
| The conditions contained in the Operation and Maintenance Manual in the chapter "Connecting the boiler to the electrical installation" are met. | ☐ | |
| **Equipment test** | | **Comment** |
| The sensors are located in the right place. | ☐ | |
| Sensor readings are consistent with the actual condition. | ☐ | |
| The direction of fan rotation is correct. | ☐ | |
| Opening the fan flap using the force of the blower. | ☐ | |
| The direction of rotation of the screw is correct. | ☐ | |
| **Boiler start-up** | | **Comment** |
| The tightness of the hydraulic connection of the boiler to the installation is maintained. | ☐ | |
| FIREMAN system test (if installed). | ☐ | |
| Checking the connection of the fuel feeder to the boiler. | ☐ | |
| Filling the fuel tank with fuel. | ☐ | |
| Checking the fuel supply through the feeder. | ☐ | |
| Firing up the boiler according to the section "Starting the boiler". | ☐ | |
| Initial adjustment of boiler operating parameter settings. | ☐ | |
| Final adjustment of boiler operating parameter settings. | ☐ | |

| Confirmation of user training in the field | | Comment |
|---|---|---|
| Instructions for the user on how to safely operate the boiler are included in the chapter "When using the boiler, remember to do the following." | ☐ | |
| Instruction in the operation of the boiler regulator and regulation of the combustion process. | ☐ | |
| Fan speed settings. | ☐ | |
| Boiler maintenance chapter "Cleaning and maintenance of the boiler" | ☐ | |
| Required fuel quality chapter "Fuel" | ☐ | |
| Procedure in case of emergency, chapter "Examples of device failure" | ☐ | |

| Launch date | Boiler name | Boiler power [kW] | Serial number |
|---|---|---|---|
| | | | |

| Name and surname of the service technician | Name and surname of the owner |
|---|---|
| | |
| Address | Address |
| | |
| Company seal | Contact number |
| | |
| Signature | Signature |

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# Report on the first start-up of the boiler

**(Copy of the boiler owner)**

To verify your purchase and validate your warranty, you must submit a report within 30 days of first use. This can be done by:

1. E-mail - where a scan or photo of the report will be posted.
2. A letter containing a copy of the report will be sent to METAL-FACH Technika Grzewcza Sp. z o. o. The company's address can be found at the end of the Technical and Operational Document.

| **Boiler** | | **Comment** |
|---|---|---|
| The conditions contained in the Operation and Maintenance Manual in the chapter "Requirements for the boiler room and boiler installation" are met. | ☐ | |
| The conditions specified in the Operation and Maintenance Manual in the chapter "Connecting the boiler to the chimney" are met. | ☐ | |
| **Central heating system** | | **Comment** |
| The conditions included in the Operation and Maintenance Manual in the chapter "Connecting the boiler to the heating system" are met. | ☐ | |
| Expansion vessel " are met. | ☐ | |
| There is no other heating source. If so, how does it affect the boiler's operation? | ☐ | |
| Protecting the system against freezing. | ☐ | |
| **Connecting elements to the electrical installation** | | **Comment** |
| The conditions contained in the Operation and Maintenance Manual in the chapter "Connecting the boiler to the electrical installation" are met. | ☐ | |
| **Equipment test** | | **Comment** |
| The sensors are located in the right place. | ☐ | |
| Sensor readings are consistent with the actual condition. | ☐ | |
| The direction of fan rotation is correct. | ☐ | |
| Opening the fan flap using the force of the blower. | ☐ | |
| The direction of rotation of the screw is correct. | ☐ | |
| **Boiler start-up** | | **Comment** |
| The tightness of the hydraulic connection of the boiler to the installation is maintained. | ☐ | |
| FIREMAN system test (if installed). | ☐ | |
| Checking the connection of the fuel feeder to the boiler. | ☐ | |
| Filling the fuel tank with fuel. | ☐ | |
| Checking the fuel supply through the feeder. | ☐ | |
| Firing up the boiler according to the section "Starting the boiler". | ☐ | |
| Initial adjustment of boiler operating parameter settings. | ☐ | |
| Final adjustment of boiler operating parameter settings. | ☐ | |

| Confirmation of user training in the field | | Comment |
|---|---|---|
| Instructions for the user on how to safely operate the boiler are included in the chapter "When using the boiler, remember to do the following." | ☐ | |
| Instruction in the operation of the boiler regulator and regulation of the combustion process. | ☐ | |
| Fan speed settings. | ☐ | |
| Boiler maintenance chapter "Cleaning and maintenance of the boiler" | ☐ | |
| Required fuel quality chapter "Fuel" | ☐ | |
| Procedure in case of emergency, chapter "Examples of device failure" | ☐ | |

| Launch date | Boiler name | Boiler power [kW] | Serial number |
|---|---|---|---|
| | | | |

| Name and surname of the service technician | Name and surname of the owner |
|---|---|
| | |

| Address | Address |
|---|---|
| | |

| Company seal | Contact number |
|---|---|
| | |

| Signature | Signature |
|---|---|
| | |

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METAL-FACH
HEATING TECHNOLOGY

**Online form**

**Video instructions**

**Website**

**Contact with service:**
Sikorskiego Street 66, 16-100 Sokółka
+48 85 711 94 54 ext. 17
e-mail: p.czepiel@metalfach.com.pl

**Producer:**
METAL-FACH Technika Grzewcza Sp. z o. o.
Sikorskiego Street 66, 16-100 Sokółka
TAX: 545-182-60-12, REGON: 523566030
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