



HEAT TECHNOLOGY MANUFACTURER



EN

**ATTACK PELLET 30
AUTOMATIC PLUS**
Instructions for use

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IMPORTANT INFORMATION:

- Boiler for wood pellet combustion.
- Installation, test heat-up and training of attendance must be performed by trained service technician, who has to fill-in the protocol about boiler installation.
- Recommended boiler operation temperature is 65 – 80 °C. Lower operation temperature may cause creation of condensate, shorter life-time of boiler and warranty expiration.
- The only fuel to use are pellets, adequate to the approved fuel specification.
- Appropriate boiler output represents very important condition of economic operation and correct boiler function. Nominal boiler output has to be adequate to thermal losses of the heated object.

Prosím prečítajte si tento návod pred uvedením kotla do prevádzky.

- Keep this manual for attendance on a suitable place in the boiler room. It is recommended to keep it in a plastic pack and to hang it on a visible place on the wall to be reached by technician, when doing service in your boiler room.
- Boiler door and connections between boiler and chimney have to be airtight.
- Overpressure in combustion chamber should be at least 5 pascal (0,5 mm of water column, resp. 0,05 hPa).
- The PEL30PLUS appliance is intended for combustion of wood pellets and it cannot be used for combustion of other fuel types.
- The PEL30PLUS appliance for pellet combustion can be installed in a boiler room only, in conformity with prescriptions of the local fire safety / construction authority.

WARRANTY FOR BOILER IS NOT VALID IF:

- **it is not operated with prescribed fuel - pellets adequate to the approved fuel specification.**
- **there is no mixing device Regumat ATTACK-OVENTROP installed in the system to ensure temperature of the boiler return water over 65°C.**

WARNING SIGN

This warning sign appears in the operating instructions whenever it is necessary to point out that personal injury and damage to property can occur if these instructions are not followed exactly.

Two types of warnings are used in this manual:



WARNING – warns about dangerous situations and situations that may cause health injury or damage by breaking the indispensable measures.



ATTENTION – warns about less dangerous procedures that may cause safety hazard or damage of property.

INTRODUCTION

Dear customer,

Thank you for your confidence, expressed by purchase of our product – the ATTACK PELLETT 30 AUTO-MATIC Plus boiler for pellet combustion. We wish it serves you well and for a long time. Proper attendance of the boiler is one of the conditions for reliable and correct operation. Therefore it is necessary to read this manual carefully. This manual is written with respect to the correct boiler function.

Main conditions of the correct boiler operation are:

- *selection of the correct boiler type and output*
- *impeccable commission*
- *correct attendance*
- *periodical technical maintenance*
- *reliable service*

GENERAL DESCRIPTION

The ATTACK PELLETT 30 AUTOMATIC Plus boiler for pellet combustion is intended for economical and ecological heating of dwelling houses, cottages, small plants and similar objects.

Wood pellets are prescribed fuel for this boiler.

Marking of the boiler:

ATTACK PELLETT 30 AUTOMATIC Plus

PELLET	– Boiler for wood pellets combustion
30	– Output of boiler
AUTOMATIC	– Automatic cleaning of ashtray
Plus	– Automatic cleaning of exchanger by movable turbulators

PURPOSE OF USAGE

The ATTACK PELLET is a modern boiler for wood pellet combustion. By its technology it saves environment and offers comfort comparable with usage of gas boiler. Boiler is intended for heating of family houses, shops, industrial objects and other similar buildings. Wood pellets are prescribed fuel for this boiler.

BOILER DESCRIPTION

The ATTACK PELLET 30 AUTOMATIC Plus boiler burns pellets with diameter of 6 – 8 mm and max. length of 35 mm. Construction of boiler is consists from combustion chamber with partition, heat exchanger and flue connection. Boiler body cooled by water is a basic part of boiler. It is welded from boiler steel plates of 3–6 mm thickness to ensure long lifetime. Tubular exchanger is equipped with turbulators, ensuring better heat transpher into heating water. They also serve for exchanger cleaning to provide uniform efficiency. Combustion takes place in the burner. Optimal conditions for burning and output regulation are ensured electronically, by controlling fuel and air supply, in dependence on the heating parameters required by user. Construction of burner, combustion chamber and exchanger ensures optimal burning of all combustibile contents. Boiler is equipped with device for automatic ash removal from the bottom of combustion chamber into the external box. The ash removal time as well as the ash removal time is set as required in the boiler control electronics. Boiler body is insulated with mineral wool. Boiler covering is treated by powder technology. Boiler can be accessorized with device for fuel supply and with pellet tank 500 l.

BOILER REGULATION

The ATTACK PELLET 30 AUTOMATIC Plus boiler for pellet combustion is regulated by touch screen on the upper covering.



Operation, parameters and settings of burner are described in the appendix of this manual.

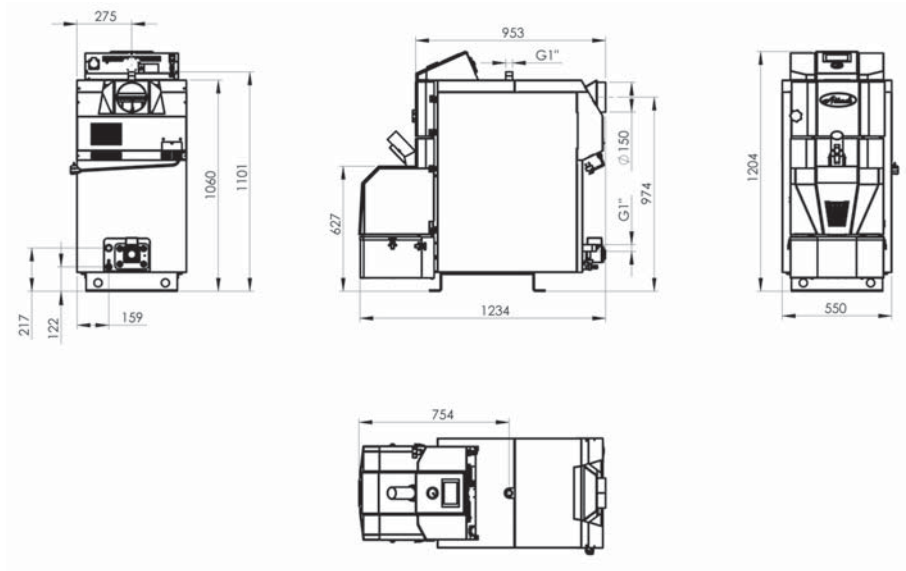
TECHNICAL PARAMETERS

Boiler type		PELLET 30 AUTOMATIC Plus
Boiler output	kW	30
Output range	kW	12–30 kW
Heat exchange area	m ²	1,9
Prescribed chimney draught	Pa	15–20
Max. operating water overpressure	kPa	250
Pressure loss of water	Pa	152(ΔT=10K); 38 (ΔT=20K)
Boiler weight	kg	355
Flue diameter	mm	150
Boiler height	mm	1204
Boiler width	mm	550
Boiler depth	mm	1 234
Dimensions of pellet tank (500 l)	mm	720×1240×830
Protection of el. parts	IP	IP40
Max.el.input (by ignition)	W	600
Operating el. input	W	90
Boiler efficiency	%	90,6
Boiler class by CO emission (under EN 303-5)		5
Flue temperature by nominal output	°C	143
Prescribed fuel		Dřevné pelety Ø6 mm, l=35 mm max.
Average consumption	kg·h ⁻¹	2,4–6,9
Volume of water in boiler	l	62
Range for setting of heat. water temperature	°C	50–80
Connection voltage	V/Hz	230/50
Mass flow of flue gases at nominal output	kg/s	0,015
Mass flow of flue gases at minimal output	kg/s	0,005

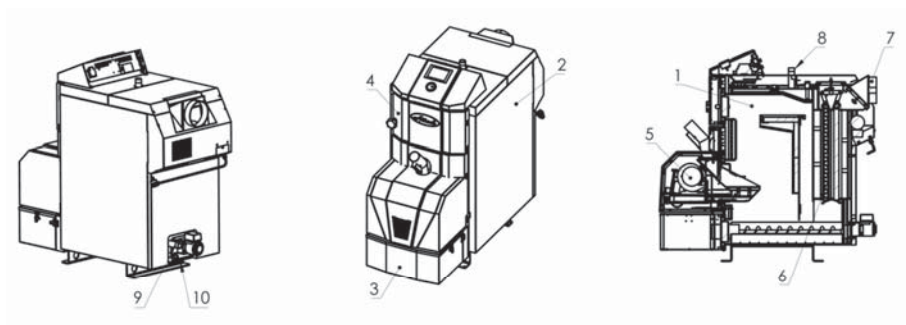
Prescribed temperature of boiler return water within operation is 65°C. Recommended operating temperature of water in boiler is 80°C.

The ATTACK, s.r.o. manufacturer reserves right for change of technical parameters and boiler dimensions without previ-ous announcement.

DIMENSIONS OF BOILER ATTACK PELLET 30 AUTOMATIC PLUS



MAIN PARTS OF BOILER ATTACK PELLET 30 AUTOMATIC PLUS



- 1 – boiler body
- 2 – covering
- 3 – detachable ash container
- 4 – door of control opening
- 5 – burner
- 6 – tubular exchanger

- 7 – flue collector with flue exhaust
- 8 – flow connection 1"
- 9 – return connection 1"
- 10 – inlet / outlet valve

ASSEMBLY AND INSTALLATION OF BOILER

Installation of boiler

Only the person with valid approval for installation and assembly of the heat technology devices can install the boiler. For installation it is necessary to elaborate a project in conformity with the valid prescriptions. Technician must check, if information on data plate comply with project and accompanying documentation, before doing the installation. Boiler must be connected in con-formity with valid prescriptions, norms, regulations and this manual. Manufacturer takes no re-sponsibility for damages caused by incorrect connection, eventually by incorrect operation.

Placing of boiler

Boiler is intended for installation and operation in premises with elementary environment (AA5/AB5) under the STN 33 2000-5-51. By boiler installation it is necessary to keep safety distance of its surface from flammable materials in dependence on the grade of flammability:

- from materials of flammability B, C1, C2 200 mm
- from materials of flammability C3 400 mm
- from materials, which grade of flammability has not been approved under the STN 73 0853 400 mm

The connection of these other elements is proposed by the designer according to the specific conditions of the heating system. The electrical installation associated with the boiler's additional equipment must be carried out by a specialist, in accordance with the applicable standards.

- **Connection to electricity mains**

- Boiler is connected to el. mains 230 V / 50 Hz by plug with fork. Plug of M type has to be replaced by service technician with the same type of plug. Appliance must be placed in the way enabling attendance to reach the connection fork (under the STN EN 60335-1+A11:1997). Connection of el. socket must be in conformity with the STN 33 2000-4-46 norm. Socket must be equipped with middle protection stick, connected to the PE conductor. It is not permitted to use different cable distributors and extensions. Due to safety, power inlet must be freely accessible, when being connected to the el. mains.

- **Flue connection**

- Flue connection must empty into chimney vent. If it is not possible to connect boiler to chimney vent directly, appropriate extension of flue should be as short as possible (not longer than 1 m), without additional heating area and it has to ascend in direction towards chimney. Extensions of flue connection must be mechanically firmly joined, tight against flue leakage and easily cleanable. Extensions of flue connection cannot lead through foreign dwelling or utility units. It is necessary to eliminate usage of elbows and horizontal parts.

- **Chimney**

Connection of appliance to chimney vent must always be done with agreement of the appropriate chimney authority. Chimney vent must create sufficient draught and reliably exhaust flue into atmosphere under all practically possible conditions. Correct size of the chimney vent ensures correct boiler function. Chimney draught directly depends on its diameter, height and roughness of its internal wall. Chimney vent must be sufficiently insulated to prevent creation of condensate. Temperature of the area of 1 m under the chimney collar cannot be lower than 60°C. Any other appliance cannot be connected to the chimney joined with the boiler. Diameter of chimney cannot be smaller than boiler outlet. Chimney draught must achieve prescribed values. However, it cannot be too high, not to decrease boiler efficiency and not affect the combustion (not to disturb the flame). In case of too strong draught it is necessary to install throttling flap between boiler and chimney.

- **Information values of chimney diameter**

- 20×20 cm min. height 7 m
- Ø20 cm min. height 8 m
- 15×15 cm min. height 11 m
- Ø16 cm min. height 12 m

- Exact chimney dimension is determined by the STN 73 42 10. Prescribed chimney draught is given in the Technical parameters.

Examples of division of constructive materials by the grade of flammability:

- grade of flammability A – inflammable (brick, block, ceramic tiles, mortar, plaster)
- grade of flammability B – very difficult to ignite (heraclith, lignos, boards from bazar felt)
- grade of flammability C1 – hard flammable (beech, oak, plywood, wersalit, hardened paper)
- grade of flammability C2 – medium flammable (pine, spruce chipboard, solodur)
- grade of flammability C3 – lightly flammable (boards from wood fibres, polyurethane, PVC, foam rubber, polystyrene)

If boiler stands on the floor from flammable materials, it must be protected by inflammable heat insulating pad, exceeding boiler edge for 150 mm at least. It is possible to use materials of the flammable grade A as inflammable and heat insulating materials. Any items from flammable materials cannot be placed on the boiler and in distance shorter than 500 mm.

When placing boiler in the boiler room, there should be free space left of at least 1 m beyond and 0,5 m from the sides and rear part of boiler. Above the boiler, there should be free space of at least 1 m. This space is necessary for ordinary operation, maintenance and eventual boiler servicing..



ATTENTION: It is inadmissible to place the ATTACK PELLET 30 AUTOMATIC Plus boiler in dwelling premises (including corridors)!

Air inlet

For correct boiler operation, it is necessary to ensure sufficient air supply for combustion. Minimum area of the air inlet is 200 cm².

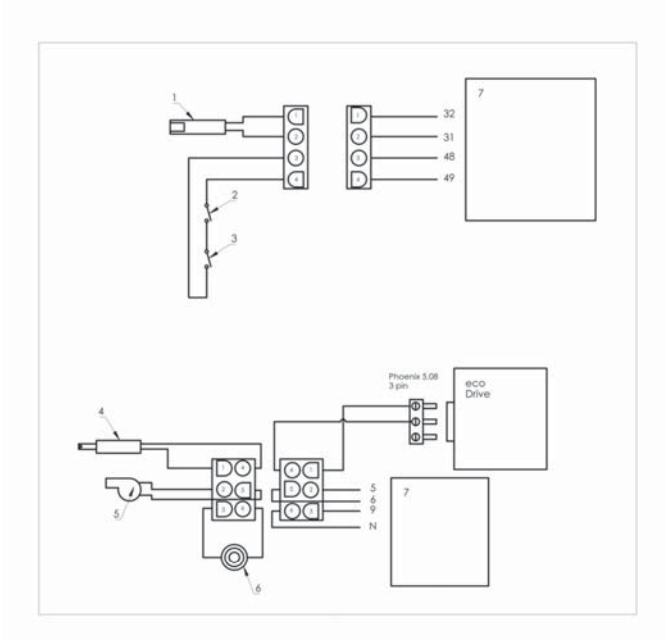
Boiler connection into heating system

Installation and service of the ATTACK PELLET 30 AUTOMATIC Plus boiler can be performed by trained service technician only. Before boiler installation into the older heating system, it is necessary to flush the whole system to clean it. Heating system must be filled with water fulfilling requirements of the STN 07 7401:1991 and its hardness cannot exceed 1 mmol/l and concentration Ca^{2+} 0,3 mmol/l. By unkeeping these conditions, warranty for boiler expires!

Selection and way of connection of regulation and control elements

Boiler is delivered with basic regulation and control equipment. Connection of these elements is given on connection scheme. It is recommended to extend boiler regulation for next regulation elements for more comfortable and economical operation.

BURNER CONNECTION SCHEME



1 – Photocell

2 – Door end-switch

3 – Flue gas backflow preventer

4 – Grate cleaning motor

5 – Fan

6 – Ignition coil

7 – Control electronics

BOILER PROTECTION AGAINST CORROSION

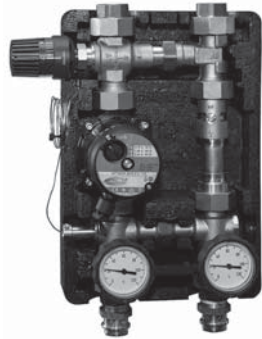
Suitable solution of this problem is usage of the mixing device Regumat Attack-Oventrop). This solution enables creation of separate boiler and heating circuit and prevention against boiler undercooling under 65°C. Thereby it comes to decrease of water steams condensation and acid and tar creation in boiler exchanger and combustion chamber.

Usage of device is a condition of the valid warranty.

Regumat serves to keep temperature of the return heating water flowing into the boiler over 65°C, when thermostatic head is set to the 5 – 6th grade. Temperature of 60°C in the return connection causes increased creation of condensate and tar and consequently, shorter lifetime of boiler.

Technical parameters:

Clearance	DN25
Max.pressure	10 bar
Max.temperature	120°C
Value kvs	3,9



The Regumat consists of three way mixing valve, circuit pump, closing valve, thermometers and isolation. This solution is advantageous due to its compactness, easy attendance and guaranteed protection of the boilers heat exchanger. Regumat for boiler ATTACK PELLET: ordering code - DPP25003

BINDING NORMS FOR BOILER PROJECTING AND ASSEMBLY:

- STN EN 303-5 Heating boilers for solid fuels
- STN 734210 Design of chimneys and flue exhausts
- STN 920300 Fire safety of local appliances and heat sources
- STN EN 60335-1+A11 safety of el. appliances for household
- STN 061000 Local appliances for solid, liquid and gaseous fuels
- STN 060310 Central heating projecting and assembly
- STN 060830 Safety device for central heating and DHW
- STN 077401 Water and steam for heat energy devices with operation pressure of steam up to 8 MPa
- STN 33 2000 4-46 Electrical installations of buildings. Part 4: Ensuring safety.
- STN 33 2000-3 Electrical installations of buildings. Part 3: Determination of basic characteristics
- STN 061008 Safety of heat devices
- STN EN ISO 11202 Acoustics
- STN EN ISO 3746 Acoustics
- STN EN 62233 Measuring methods of electromagnetic arrays of appliances for household and similar devices by the exposition of persons
- STN ISO 80000 Measurements and units

OPERATION PRESCRIPTIONS

Boiler preparation for operation

Before starting the boiler, make sure, that the system is filled with water, deaired and there is no pressure decrease of the heating water. Check tightness and construction of flue exhaust. To ensure quality function, the boiler must be attended in conformity with instructions given in this manual. Only adult person can operate the boiler.

Boiler start-up

Boiler is switched to the stand-by mode by the main switch (left button of double-switch), placed on the boiler control panel. This is signalized by red control light in the main switch. Boiler is started by switching the burner mode switch on (right button of double switch). This is signalized by control light in the switch. Knob of boiler thermostat has to be set to the required temperature of heating water. By clockwise turning the thermostat is the required temperature increased and vice versa. Fuel in the burner is ignited automatically by el. coil built inside. Boiler operation is automatic and it is controlled by boiler thermostat and other regulation elements, that can be connected into boiler terminal (e.g. room thermostat, programmable regulator, ...). Details about setting the burner parameters are described in the next chapters of this manual.



ATTENTION! Condensation and condensate leakage may occur by first heat-up. After longer heating, condensation is eliminated.

If the boiler was out of order for longer period (turned off or faulty), it is necessary to be more careful when starting it again. After longer idle period it may come to pump blockage or water leakage from system. Regular and proper cleaning is important to ensure sustainable output and boiler life-time. Poor cleaning may cause boiler damage. All boiler door have to be tightly closed during the operation.

Fuel

Approved fuel specification for burners for wood pellets combustion::

Wood pressed pellets

Measured weight:: 600–750 kg/m³

Heat value: 4,7–5,0 kWh/kg

Size/diameter: 6 mm

Size/length: Attention! Max. 35 mm

Moisture max.: 12 %

Ash content: 0,5–1 %

Dust content: max. 3 %

Ash smoulder temperature: min. 1100 °C

Fuel must be in conformity with requirements of the norm DIN 51 731

Methods of boiler regulation

Boiler regulation without room thermostat

In this case, the operating mode without room thermostat is set in the boiler electronics from the factory and boiler is regulated according to the boiler temperature set on the boiler thermostat placed on the boiler control panel.

Boiler regulation with room thermostat

In this case, the boiler will be regulated by a room thermostat, which will be connected to the contacts of the electronics terminal board. The control function according to the room thermostat must be selected in the boiler electronics. The boiler will also take into account the set boiler temperature. Instead of a room thermostat, another type of heating requirement can be installed, such as e.g. boiler control via internet.

Boiler protection

Boiler is equipped with emergency thermostat. If the boiler temperature exceeds 110°C, boiler safely gets out of order. When the boiler temperature decreases, it is possible to start the boiler again by using the reset button placed on the back panel.

Fuel refill

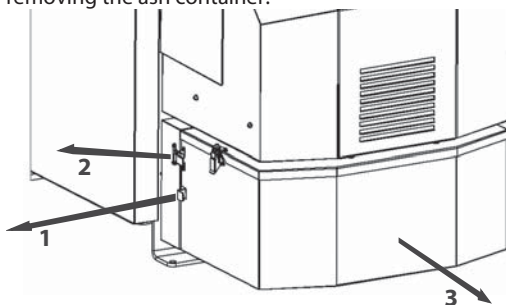
Fuel is added to the fuel tank, which can be purchased as an optional accessory to the boiler. The principle is that refueling should take place before the supply of pellets in this tank is consumed. In the electronics it is possible to set the function of checking the amount of fuel in the tank. Based on this setting, it is possible to display the current amount of pellets in the tank on the boiler display.



ATTENTION! Fuel container can be open only when fuel is being refilled, eventually by cleaning. Container has to be closed during the boiler operation.

Ash removing

The ATTACK PELLET 30 AUTOMATIC Plus boiler is equipped with device for automatic ash re-moving into the detachable box. It is necessary to check the box 2x per season and to empty it, if necessary. The space of the bottom of the combustion chamber must be cleaned after the end of the heating season. Stop the boiler for a short time, when removing the ash container.



When emptying the box (see the picture):

1. Close inlet opening into the container by pulling the lever on the container rear side fully to the left
2. Release lever catches on container sides
3. Detach container from inlet tube of door cover by pulling it to yourself
4. Remove the ash

Do the reverse procedure to fit the container back. When cleaning bottom of the combustion chamber, stop the boiler for a short time. Empty the iron ashtray, eventually – sweep the boiler bottom. Ash tray is placed in the bottom part of boiler, behind the ash tray door. Use gloves by manipulation with ash tray to prevent burning your hands. When the ash is removed, it is necessary to put the ash tray back and to close the ash tray door tightly.



WARNING – Do not operate the boiler without the ash container fixed with the closed upper cover (possible flue leakage) – life safety hazard!

Short-time boiler stop

If you wish to stop the boiler for a short time, turn the burner switch off and let the fuel burn down in the burner.

Long-time boiler stop

When stopping the boiler for a long time, firstly – turn the burner switch off and let the fuel in the burner burn down. After the boiler is cooled down to 30°C, turn the main switch off and dis-connect the plug from power socket.

MAINTENANCE OF HEATING SYSTEM WITH BOILER

At least 1x in 14 days it is necessary to check, eventually to refill water in the heating system. If the boiler is out of order during the winter, there is danger of water freezing in the system. Thereby it is reasonable to drain the water out. In other cases, drain the water out only, when it is absolutely necessary and for as short period as possible. After the heating season it is necessary to clean the boiler properly (after long idle period, the ash has to be swept out from the container / ash tray, walls and bottom of combustion chamber have to be cleaned as well) and re-place the damaged parts.

Exchange of the door sealing cord

Remove the old sealing cord by screw driver and clean the groove, where the cord is placed. Take new cord and put its leading end between the horizontal parts of the groove. Use hand, eventually hammer to fit the cord into the groove along the door edge.

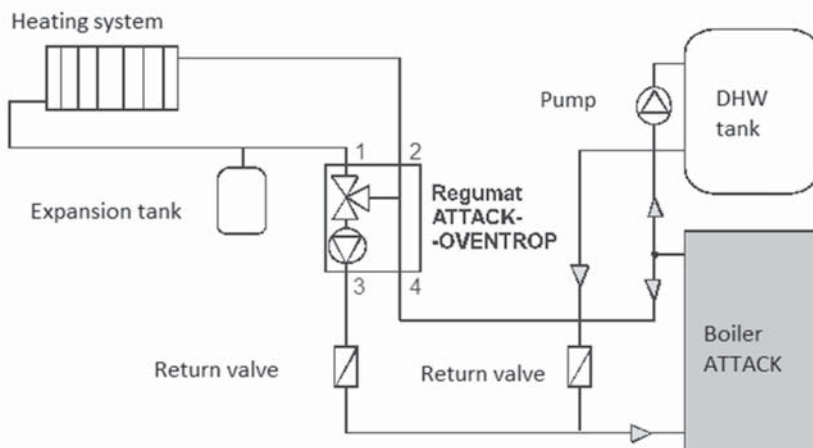
Fitting the hinges

After some time it may come to abrasion of the sealing cord. To endure tightness of door, it is necessary to change their position by screwing the hinges. Inspection door is fixed to the boiler body by a long pin. Pull the pin out and screw the hinge by turning to change its position. Fit the door and put the pin back into the hinge.

⚠ WARNING! To pull the pin of the upper door out, it is necessary to demount the upper boiler covering. To protect the health, the boiler has to be turned off and the plug has to be disconnected from electrical socket.

RECOMMENDED SCHEMES OF CONNECTION

Connection scheme with regulation system REGUMAT ATTACK-OVENTROP



TECHNICAL DESCRIPTION OF BURNER

Burner operation is based on principle of *pellets falling* from pellet feeder through *inlet hose* and *inlet pipe* on the *grate* to be *burned*. Burner is equipped with *electric ignition device*, that automatically lights pellets fallen on the grate. Ignition begins, when thermostat gives instruction to burner. *The switch-on and switch-off temperature* can be set via the boiler electronics menu. Information about the current operating data is shown on the electronics display.

Burner output is set from production for the range of 12–30 kW and is equipped with automatic grate cleaning mechanism. When thermostat achieves required temperature, the burn-down cycle is started, the grate goes out to be cleaned by scraping. Thereby, the longer usage period is ensured, with no need to dismantle burner from boiler body. Burner uses control system to regulate gear of ash removing auger and gear of exchanger cleaning by turbulators. Boiler convection parts should be cleaned periodically to keep high efficiency of heating. Burner is intended for combustion of wood pellets with diameter of 6 mm. Burner is manufactured following the industrial norms and prescriptions and it was tested and approved in conformity with directives about low voltage devices and with directives about electromagnetic disturbance.

TECHNICAL DATA OF BURNER

Model	PELH30Plus
Fuel	Wood pellets, 6 mm
Mode	12–30 kW
For boilers with heating chambers up to	3 m ²
Weight	28,5 kg

Main voltage	Main current	Hz
~230 V	10A fuse	50



WARNING! Electrical installation must be done by certified electrotechnician. Main cables can be exchanged by approved electrotechnician only.

VOLTAGE AND ENERGY CONSUMPTION OF BURNER

Component	Mains/Volt	Max. voltage	Fuse
Control electronics	230 V~		6,3A
Ventilator	230 V~	58 W	
Grate cleaning	24 V DC	48 W	
Ignition	230 V~	600 W	
External pellet feeder	230 V~	38 W	
Ash removing	230 V~	38W	

DESCRIPTION OF BURNER FUNCTION

Normal start-up

- When thermostat gives instruction to burner, ventilator is started and photocell controls flame. If there is no flame, then comes the instruction for test blow-through of burner. After-wards, pellets start falling into burner within the period stated by control system and ignition is activated. When the phase of fuel supply for ignition ends, control system awaits flame signal from photocell.
- When photocell recognizes flame, small amounts of pellets are falling within the *transition period*. Duration of this period depends on the output level set on burner. Pellet supply is being continually increased, unless it is adequate to the required output.
- This amount is further supplied into burner, until the operation thermostat gives instruction to stop.
- This signal stops pellet supply, while ventilator continues with air supply into burner.
- When photocell recognizes fuel burn-down, the burner blow-through begins.
- According to the adjusted delay, after fuel burn-down, burner cleaning begins – burner grate moves out against scraper and ash with unburnt pieces fall through front side of burner bottom into ash tray.
- After the grate moves back, the burner awaits new signal from thermostat.



ATTENTION! Grate drive unit is very strong and it may cause danger. Never put any body parts or other foreign objects into burner, when it is operating.

Normal start, when there is still flame in burner

If photocell recognizes flame during the start-up phase (e.g. after short-time power failure), control system immediately begins transition period. Pellet burner continues in operation as by normal start. (see above)



ATTENTION! Make sure, that sufficient flue gas temperature had been achieved. It has to be at least 60 °C – one meter under the chimney top. Lower temperature should be consulted with chimneyer. Flue gas temperature lower than 60°C during the combustion process increases risk of chimney damage by condensation.

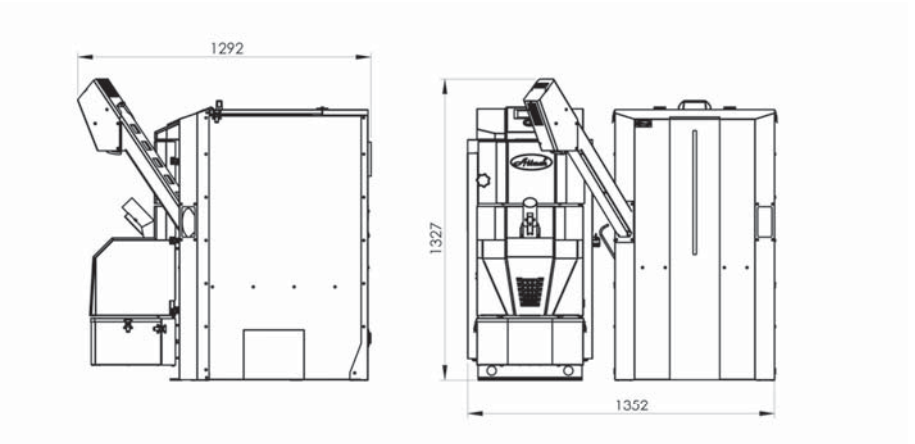
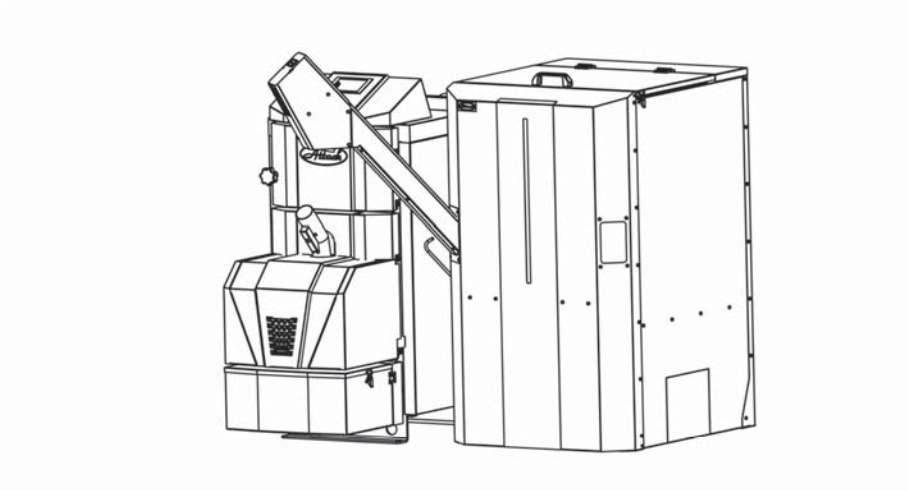
USAGE OF PELLET BURNER

Pellet burner needs air for combustion. Thereby, boiler room must have opening for air inlet of at least 200 cm². Pellet burner must not be started before it is verified, that smoke can freely flow through boiler and chimney into atmosphere. Pellets are supplied into burner from external feeder, connected to pellet container. Feeder has to be installed under the 45° angle to ensure the best function and uniform fuel supply. Feeder should be able to supply approximately 10 kg of pellets per hour of continual operation / requirement for pellet supply. Pellets must be stored in well ventilated room without moisture, or in specially designed container.



ATTENTION! Burner consists from components of high quality, that must not be replaced with less quality spare parts. If components are replaced by other than original spare parts, warranty expires.

HOW TO INSTALL PELLET FEEDER AND CONTAINER



Install pellet container and pellet feeder. There should be min. height difference of 400 mm be-tween opening of feeder and burner inlet pipe. In horizontal direction, opening of feeder and inlet pipe should be in min. distance of 150 mm (i.e. not vertically aligned). Fill container with pellets and connect feeder into power socket (230 V~). Let feeder run, unless it achieves continual pellet supply. It is recommended to fasten plastic bag to the opening of feeder to catch the falling pellets. Disconnect feeder from socket. Install inlet hose between feeder opening and inlet pipe and set length of hose.

Hose should not be straight, but not too bent – otherwise, pellets would accumulate and stuck in it. Connect feeder into socket on the rear boiler side.

BURNER START

Burner is automatically turned into standby mode by switching the main boiler switch. The burner is switched on via the touch screen. Based on the heat supply requirement, the burner ignites and burns the pellets until the boiler temperature sensor gives a switch-off signal.

BURNER SHUT DOWN

Burner is turned off by the stop signal from operating thermostat or room thermostat.

EMERGENCY SHUT DOWN



ATTENTION! In emergency case can be burner turned off by the main boiler switch and disconnection of boiler power plug from electrical socket.

CLEANING AND MAINTENANCE

Burner has to be cleaned after every consumption of 2.000 kg pellets. It is based on assumption, that boiler keeps adequate amount of ash and the quality pellets are used. It is also recommended to sweep boiler exchanger parts at least 2x a month.

- 1.Clean pellet inlet into burner by bottle brush or other suitebla kit
- 2.Scrape ignition plate a grate and clean the holes in grate
- 3.Open the lid of turbulators and remove remaining dust (e.g. by vacuum cleaner). Make sure, that dust is not hot and it cannot burn bag of vacuum cleaner.
- 4.Once in 3 months it is necessary to dismantle rotary chimney part and to remove accumu-lated dust.



ATTENTION! Keep ash in closed containers from inflammable material.

Maintenance once a year or in case of need (by a qualified person)

Turn off the boiler with the main switch, disconnect boiler plug from electrical socket. Open door with burner for approximately 90°.

1. Dismantle burner covering and clean photocell by cloth and soft abrasive detergent (tooth paste). Be careful by flat cable and buttons of display!
- 2.Clean blades of ventilator – it is the best to blow them with compressed air.
- 3.Dismantle scraper and ignition plate.
- 4.Clean space behind ignition plate
- 5.Scrape ignition plate and scraper
- 6.Brush the grate properly and clean holes in grate
- 7.Assemble all the parts back
- 8.Clean container and pellet feeder from dust and small dirt
- 9.Check state of the pellet inlet hose.
- 10.Start pellet feeder by connecting the plug into electrical socket (230 V~) to fill it with pellets.
- 11.Adjust the amount of pellets to be supplied

TROUBLESHOOTING

Burner stopped.

Check alarm indicated on display.

If the alarm "**Burner thermal protection activated**" appears on the display, the burner thermal fuse has blown. To resume boiler operation, push the small knob located under the hole in the fuse cover on the pellet feed tube into the burner. Then confirm this operation on the display.

Burner thermal fuse turns off by temperature of 93°C.

ACCESSORIES

Name	Code
Pellet tank 500 l	PEL5000
Pellet feeder 1,5 m	PED150A
Pellet feeder 2,5 m	PED250

INSTRUCTIONS TO DISPOSAL OF PRODUCT AFTER EXPIRATION OF ITS LIFETIME

Disposal of product (boiler) has to be ensured by a scrapyards, eventually by a disposal site controlled by appropriate municipal authority.

DISPOSAL OF PACKAGING

Dispose of the packaging through one of the repurchases of collected raw materials, or use a landfill.

ACCESSORIES

The ATTACK PELLET 30 AUTOMATIC Plus boiler is delivered functionally tested. As standard, the boiler is equipped with a flange for the ATTACK burner. The boiler is packed and placed on wooden pallet. Pellet feeder is packed separately.

Delivery includes the following accessories:

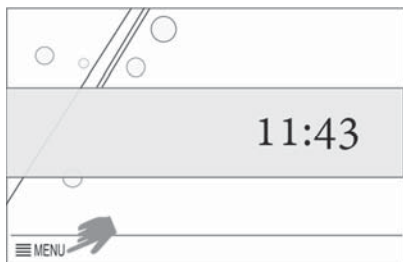
Instructions for use

Recommended fuel feeder is the standard ATTACK feeder of 1,5 m length., (on request up to 2,5 m)

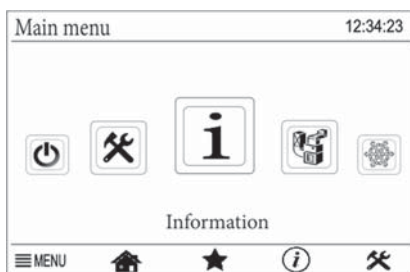
INSTRUCTIONS OF REGULATOR'S USAGE

The display is touch display. The hand in the pictures is for information only to see what to press.

After turning on the main power switch, the following screen will appear on the display.



After pressing the MENU icon, the following screen will appear. The selection of the icon (function) can be selected on the right or on the left. The icon you press appears in the center of the screen. When you need to find another one, gradually press the end button until the one you want appears.



It is now possible to make two pushes.

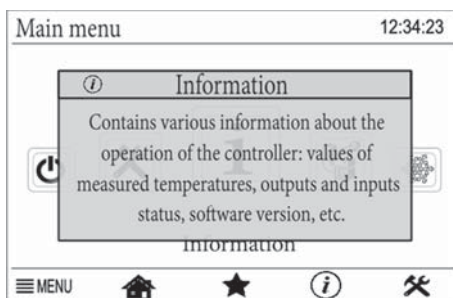


After pressing the large "i" icon in the center of the screen, the following screen will appear.

Information	1/10
Boiler temperature	22,7°C
Weather temperature	20,4°C
Emission temperature	22,1°C
HUW temperature	36,8°C
Flame	0,0%
Movables grate load	0,0mA

This screen shows the current status of the boiler.

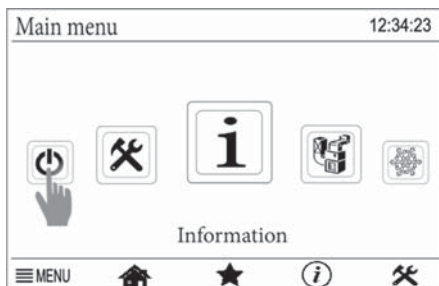
After pressing the small "i" icon in the bottom line, the following screen will appear.



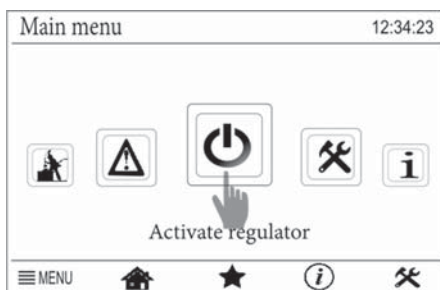
This describes what will be done by pressing the large icon in the middle of the screen. This icon can be pressed at any time, and the description will always be for the current icon.

When you need to turn on the boiler, this can be done in two ways.

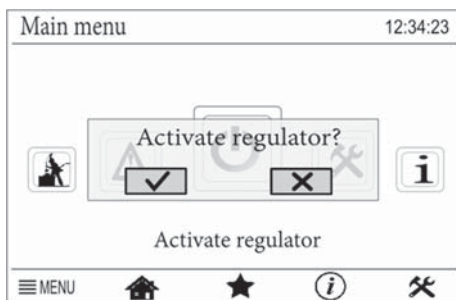
1. Way



Find the power icon and touch it. Then this icon will appear in the center of the screen.

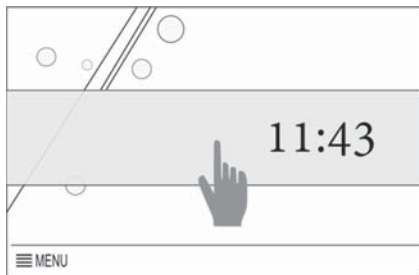


When you press this icon, the following screen will appear.



After confirmation, the boiler starts to work.

2. Way



On the screen that appears after turning on the power switch, push the line in the middle. The following screen will appear.

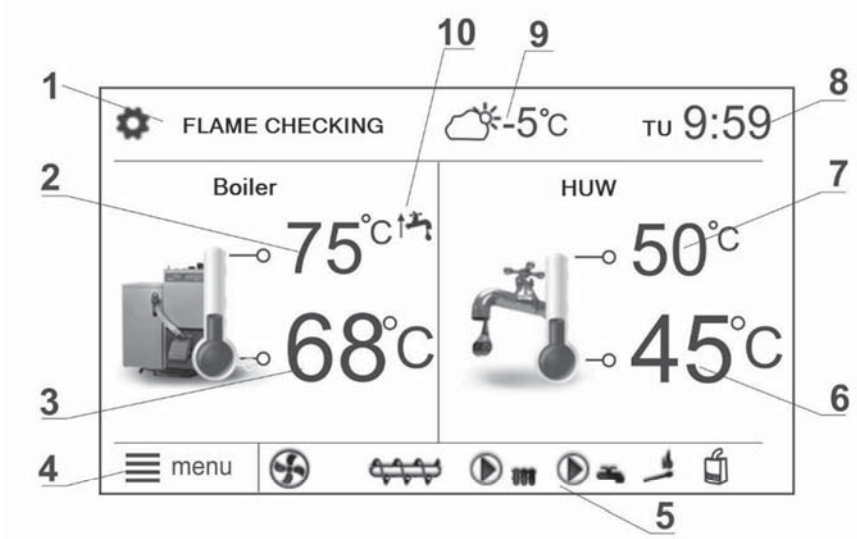


After confirmation, the boiler starts.

All the functions listed below need to be found in the MENU display, and perform actions according to the instructions. This applies to each icon. When you select any of the icons in the bottom line, the icons for working with that option will change.





INSTRUCTIONS OF USE OF CONTROL PANEL

Discription of main display






Key:


1. Operating modes of the regulator: IGNITION, STABILIZATION, FLAME CHECKING, MUTE, EXTINGUISHING, STOPPING, CHIMNEY;
2. Set boiler temperature – holding this will cause the change of the temperature;
3. Currently measured boiler temperature;
4. Main menu;
5. Graphical display of operation:


-  ventilator (fan);
-  feeder;
-  pump;
-  ignition coil .


6. Currently measured DHW temperature;
7. Set DHW temperature - holding it will cause the value to be adjusted;
8. Time and date;
9. External temperature;
10. Values affecting the set temperature, where the symbols mean:


-  - room thermostat contacts open - the set room temperature has been reached;
-  - reduction of the set temperature according to active time intervals;

 - increasing of the boiler temperature during the heating of the domestic hot water (DHW) tank;

 - increasing the set boiler temperature by the mixing circuit;

 - active return protection;

 - increasing of the preset temperature during the heating of the accumulation tank;

 - backup boiler operation.

The right and left windows on the main screen can contain different information. By touching the screen, it is possible to change the displayed information between: mixing circuits, information window, domestic hot water window, fuel level window, etc.

Tip: You can check the fuel level on both the room panel and the room thermostat..

MAIN MENU – DESCRIPTION

1 Information
1.1 Information 1.1.1 Boiler temperature 1.1.2 Weather temperature 1.1.3 Emission temperature 1.1.4 DHW temperature 1.1.5 Flame 1.1.6 Movable grate load
1.2 Information
1.2.1 Upper buffer temperature 1.2.2 Lower buffer temperature 1.2.3 Return temperature 1.2.4 Boiler thermostat
1.3 Information
1.3.1 Boiler pump 1.3.2 Fan 1.3.3 Feeder 1.3.4 Lighter 1.3.5 Poker 1.3.6 DHW pump
1.4 Information
1.4.1 Burner output 1.4.2 Burner
1.5 Information
1.5.1 Temp mixer 1 1.5.2 Preset temp.mixer 1 1.5.3 Room thermostat mixer 1, 1.5.4 Pump mixer 1 1.5.5 Valve mixer 1 1.5.6 Servo
1.6 Information
1.6.1 Temp mixer 2 1.6.2 Preset temp.mixer 2 1.6.3 Room thermostat mixer 2 1.6.4 Pump mixer 2 1.6.5 Valve mixer 2 1.6.6 Servo
1.7 Service meter of hours
1.7.1 Working time at maximum power 1.7.2 Working time at 50% power 1.7.3 Working time at minimum power 1.7.4 Number of ignitions 1.7.5 Feeder operating time
1.8 Software versions
1.8.1 Panel 1.8.2 Module A

<p>2 Boiler settings</p> <p>2.1 Preset boiler temperature</p> <p>2.2 Weather control the boiler <i>Boiler temperature calculation according to the heating curve and outdoor temperature sensor data during active equithermal operation.</i></p> <p>2.3 Boiler heating curve <i>The heating curve takes into account the thermal parameters of the building. Recommended boiler settings are: 1.8 - 4.</i></p> <p>2.4 Curve shift <i>Allows correction - increase / decrease of temperature in a regulated heating circuit with equithermal control switched on, when the heating curve does not fully correspond to the characteristics of the building.</i></p>
<p>2.5 Pellet feeder settings - Output modulation</p> <p>2.5.1 Limitation of max. boiler output Limitation of maximum boiler output.</p> <p>2.5.2 Energy density - Fuel calorific value</p> <p>2.5.3 Fuel feeder performance</p> <p>2.5.4 Feeding correction <i>Percentage of administration correction</i></p> <p>2.5.5 Fan correction</p> <p>2.5.6 Feeder efficiency test</p> <p>2.5.6.1 Performance test time <i>Length of the feeder performance test. At the end of this time, weigh the fuel fed and enter the value on the panel (net pellet weight).</i></p> <p>2.5.6.2 Efficiency test time <i>Feeder efficiency test.</i></p> <p>2.5.6.3 Fuel weight <i>Enter the weighed weight of the pellets in grams.</i></p>
<p>2.6 Fuel level</p> <p>2.6.1 Alarm level <i>Amount of fuel at which the message appears: MINIMUM FUEL!</i></p> <p>2.6.2 Fuel level calibration <i>Parameters for fuel quantity calibration. First of all, it is necessary to fill the tank and select 100% FUEL. If a minimum amount of fuel remains in the tank after a certain period of boiler operation, it is necessary to select FUEL QUANTITY 0%.</i></p> <p>2.6.2.1 Fuel level 100%</p> <p>2.6.2.2 Fuel level 0%</p>
<p>2.7 Burner cleaning - Maximum operating time</p> <p>It is the time of continuous operation of the burner, after which the automatic switch-off occurs, cleaned and again after the burner burns, if the conditions for re-operation are met.</p>
<p>2.8 Cleaning schedule - Exchanger cleaning interval</p>

2.9 Night time decrease boiler

2.9.1 ON/OFF

2.9.2 Reduction value

2.9.3 Timer

Enables to program a schedule for each day of the week. Time intervals are set to every 30 minutes.



3 DHW settings (Domestic Hot Water)

3.1 DHW preset temperature

DHW tank water temperature. Caution: very high temperatures can cause the user scalding himself!

3.2 DHW pump mode

3.2.1 ON/OFF

Enables to select the domestic hot water operating mode. NO PRIORITY - parallel operation of the DHW pump and central heating pumps, PRIORITY - priority DHW pump, SUMMER - only DHW preparation (the heating of the building is OFF).

3.2.2 Priority

3.2.3 No priority

3.3 DHW cont. Hysteresis

The parameter determines when the temperature measured by the DHW sensor drops from the set DHW temperature. The DHW pump is switched on.

3.4 DHW disinfection

After switching on this parameter once a week, on Monday at 2:00 am, the domestic hot water will be heated to 70 °C in order to disinfect the DHW tank. Caution, risk of scalding from hot water!

3.5 Nighttime decrease DHW

3.5.1 ON/OFF

3.5.2 Reduction value

3.5.3 Timer (see section 2.9.3)

4 Summer mode

4.1 SUMMER mode

SUMMER mode means switching off the central heating while leaving the DHW heating.

4.1.1 WINTER

The value of the outdoor temperature, at a drop below which the WINTER operating mode is switched on, if the automatic SUMMER mode is switched on.

4.1.2 SUMMER

The value of the outdoor temperature at which the SUMMER operating mode is switched on, if the automatic SUMMER mode is switched on.

4.1.3 Auto

The automatic activation of the mode is performed on the basis of the data of the outdoor temperature sensor.

4.2 Summer mode act.temperature

4.3 Summer mode deact.temperature

5 Mixer 1 settings

5.1 Preset mixer 1 temperature

5.2 Mixer 1 room therm.

Reduction of the set temperature in the mixer circuit after opening the thermostat contacts (the set room temperature is reached).

5.3 Mixer 1 weather control

5.4 Heating curve mixer 1

The heating curve reflects the temperature conditions of the building. Recommended settings for the mixer circuit are: 0.2 - 0.6

5.5 Curve translation

Allows correction - increase / decrease of temperature in a regulated heating circuit with equithermal control switched on, when the heating curve does not fully correspond to the characteristics of the building.

5.6 Mixer 1 night time decrease

5.6.1 ON/OFF

5.6.2 Decrease

5.6.3 Schedule (see section 2.9.3)

6 Mixer 2 settings (see point 5 ...)

6.1 Entered temperature of mixer 2

6.2 Thermostat of mixer 2

6.3 Equithermal control of the mixer 2

6.4 Heating curve of mixer 2

6.5 Parallel shift of the curve

6.6 Night reduction temperature of the mixer 2

6.6.1 OFF / ON

6.6.2 Reduction value

6.6.3 Timer (see section 2.9.3)

7 General settings

The menu contains parameters related to settings such as: time, date, screen brightness, sound, language, program update.

7.1 Clock

7.2 Date

7.3 Brightness

7.4 Sound

7.5 Language

7.6 Software update

7.6.1 Update panel

7.6.2 Update module A

8 Manual control

Allows manual control of devices: fan, feeder, pump, etc. The menu is accessible only when the controller is switched off.

8.1 Feeder

8.2 Fan

8.3 Exchanger cleaning

8.4 Lighter

8.5 Mixer 1 Open

8.6 Mixer 1 Close

8.7 Mixer 1 pump

8.8 Mixer 2 pump

8.9 Mixer 2 - open

8.10 Mixer 2 close

8.11 Boiler pump

<p>8.12 DHW pump</p> <p>8.13 H Output</p> <p>8.14 Movable grate open</p> <p>8.15 Movable grate colose</p>
<p>9 Chimney sweep mode</p>
<p>9.1 Chimney sweep mode</p> <p>9.2 Boiler output setting</p> <p>9.3 Work time</p>
<p>10 Alarms</p> <p>The menu contains information about faults that occurred during boiler operation. 100 faults are recorded and then overwritten.</p>
<p>11 Turn on / off controller</p> <p><i>Allows you to turn the controller on / off. The controller can also be switched on by touching the "Boiler off" icon on the screen.</i></p>

SERVICE SETTINGS - ENTER THE PASSWORD:

<p>12 Boiler settings</p> <p><i>The menu contains settings related to the boiler service settings.</i></p>
<p>12.1 <u>Output modulation</u></p> <p>12.1.1 Feeder cycles</p> <p>12.1.2 Maximum boiler output</p> <p>12.1.3 The intermediate boiler output</p> <p>12.1.4 Minimum boiler output</p> <p>12.1.5 Blow-in fan output 100%</p> <p>12.1.6 Blow-in fan output 50%</p> <p>12.1.7 Blow-in fan output 30%</p> <p>12.1.8 50% H2 Hysteresis</p> <p>12.1.9 30% H1 Hysteresis</p> <p>12.1.10 Boiler hysteresis</p> <p>12.1.11 Regulation mode</p> <p>12.1.12 Room thermostat</p> <p>12.2 <u>Firing-up</u></p> <p>12.2.1 Fuel dose</p> <p>12.2.2 Ignition test time</p> <p><i>Check time to see if the burner is lit. Only the fan works.</i></p> <p>12.2.3 Ignition pre-heating time</p> <p>12.2.4 Firing-up time</p> <p><i>Ignition time. After this time and the ignition fails, the controller proceeds to the next ignition attempt.</i></p> <p>12.2.5 Incandescence time</p> <p><i>Ignition time after flame detection in the ignition phase.</i></p> <p>12.2.6 Blow-in fan output INC</p> <p><i>Burner fan power in the combustion phase.</i></p> <p>12.2.7 Firing-up end flame</p> <p><i>Flame threshold at which the controller detects that the boiler is already on fire. It is also used to detect fuel shortages and burnout.</i></p> <p>12.2.8 Blow-in output fire-up</p> <p><i>Fan power during ignition. Too high a value prolongs the ignition process or causes an</i></p>

unsuccessful ignition attempt.

12.2.9 Blow-in output after fire-up

12.3 Cleaning

12.3.1 Blow-in fan output during cleaning

12.3.2 Exchanger cleaning - work

12.3.3 Blow-in time during cleaning

12.3.4 Burner cleaning

12.3.5 Poker cycles

12.4 Burning off

12.4.1 Blow-in output during burning off

12.4.2 Maximum burning off time

12.4.3 Minimum burning off time

12.5 Supervision

12.5.1 Supervision time

12.5.2 Boiler output in SUPERVISION mode

12.5.3 Cycle time Supervision

12.5.4 Blow-in fan output Supervision

12.6 Other

12.6.1 Minimum airflow output

12.6.2 Maximum airflow output

12.6.3 Minimum fan output

12.6.4 Maximum fan output

12.6.5 No fuel detection time

12.6.6 Treshhold flame no fuel

12.6.7 Enhancement fan (PI)

12.6.8 Integration time constant

12.7 Thermostat select.:

12.7.1 OFF

12.7.2 Universal

12.8 Minimum boiler temperature

12.9 Maximum boiler temperature

12.10 Boiler cooling temperature

12.11 Reserve boiler

12.12 Alarms

12.12.1 AL 1 Poker damaged

12.12.2 AL 2 Max. Temp. Of boiler exceeded

12.12.3 AL 3 Fan damaged

12.12.4 AL 4 Boiler sensor damaged

12.12.5 AL 5 Firing-up atempt failure

12.12.6 AL 6 STB activated

12.12.7 AL 7 DZT activated

12.12.8 AL 8 Minimum vacuum exceeded

12.12.9 AL 9 Maximum vacuum exceeded

12.13 Tank capacity

12.14 Parameter A FuzzyLogic

12.15 Parameter B FuzzyLogic

12.16 Parameter C FuzzyLogic

13 Central heating and DHW setting
<ul style="list-style-type: none"> 13.1 The hydraulics operate in the off mode 13.2 CH pump activation temperature - Switch-on temperature of the DHW pump 13.3 Minimum DHW temperature 13.4 Maximum DHW temperature 13.5 Boiler increase by DHW, Mixer - Boiler temperature increase 13.6 Extending DHW pump operation time 13.7 Exchanger 13.8 DHW heat source
14 Buffer settings
<ul style="list-style-type: none"> 14.1 Buffer support 14.2 Loading start temperature 14.3 Loading end temperature 14.4 Start heat instalation
15 Mixer 1 settings
<ul style="list-style-type: none"> 15.1 Thermostat select 15.2 Mixer 1 support <ul style="list-style-type: none"> 15.2.1 OFF 15.2.2 CH on - switched on Central heating 15.2.3 Floor on 15.2.4 Pump only 15.3 Heat source 15.4 Min. Mixer 1 temp 15.5 Max. Mixer 1 temp 15.6 Proportional range 15.7 Integration time constant 15.8 Valve full opening time 15.9 Off by thermostat 15.10 Mixer without reaction
16 Mixer 2 settings
<ul style="list-style-type: none"> 16.1 Thermostat select 16.2 Mixer 2 support <ul style="list-style-type: none"> 16.2.1 OFF 16.2.2 CH on - switched on Central heating 16.2.3 Floor on 16.2.4 Pump only 16.3 Heat source 16.4 Min. Mixer 2 temp 16.5 Max. Mixer 2 temp 16.6 Proportional range 16.7 Integration time constant 16.8 Valve full opening time 16. Off by thermostat 16.10 Mixer without reaction
17 Return protection
<ul style="list-style-type: none"> 17.1 Return protection 17.2 Minimum preset return temp. 17.3 Return temp hysteresis 17.4 Valve closing

18 H Output
18.1 Reserve boiler 18.2 Alarms 18.3 Circulation pump
19 Output 14-15
19.1 Pump mixer 2 19.2 Circulation pump
20 Show advanced setup
20.1 NO 20.2 YES
21 Restore default setting
22 Touch Screen Calibration

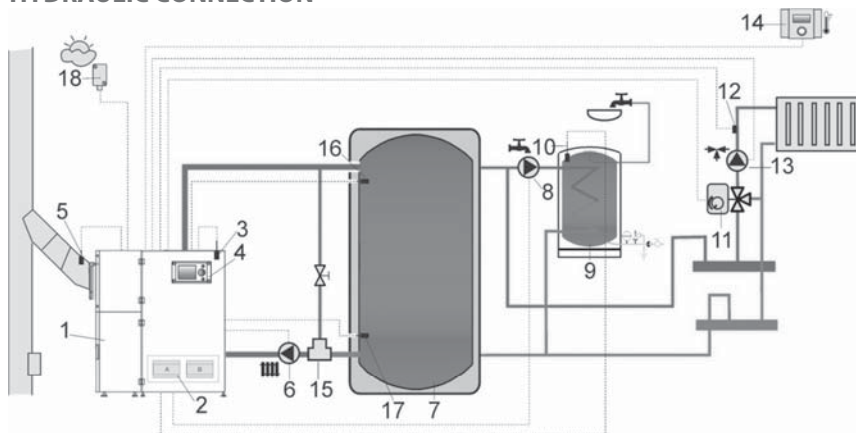
COOPERATION WITH INTERNET MODULE

The controller can work with the ecoNET300 internet module. It enables online monitoring and control of the controller via Wi-Fi or LAN using the website **www.econet24.com**, a web browser or the **mobile application ecoNET.apk**. The application can be downloaded free of charge from the website.



Attention: the item *Work according to schedule* may not be available if the manufacturer of the given boiler does not support this function.

HYDRAULIC CONNECTION



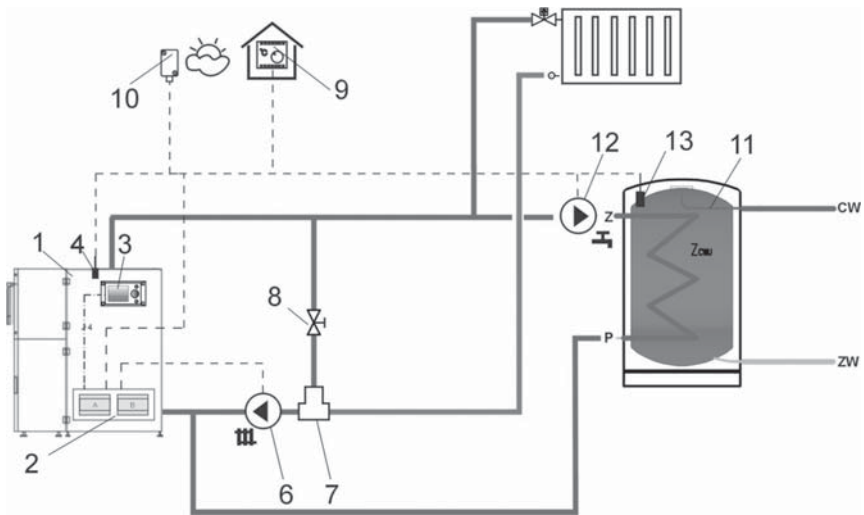
Scheme of connection with accumulation tank ¹, 1 – boiler, 2 – regulator, 3 – boiler temperature sensor, 4 – controller panel, 5 – flue gas temperature sensor (temperature preview only), 6 – boiler pump, 7 – storage tank, 8 – hot water pump, 9 – DHW tank, 10 – DHW sensor, 11 – mixing valve drive, 12 – mixing circuit temperature sensor, 13 – mixing circuit pump, 14 – room thermostat, 15 – thermostatic three-way valve for reverse protection, 16 – upper accumulation sensor, 17 – lower accumulation sensor, 18 – external temperature sensor

RECOMMENDED SETTINGS:

Parameter	Set value	MENU
Set boiler's temperature	80 °C	menu → boiler's settings
Accumulation tank	yes	Service settings → setting of accum.
Temperature of start of heat	45 °C	Service settings → setting of accum.
Temperature of end of heat	70 °C	Service settings → setting of accum.
Mixer operation 1	central heating switched on	Service settings → setting of mixer 1
Max. set temperature of mixer 1	70 °C	Service settings → setting of mixer 1
Mixer heating curve 1	0,8 – 1,4	Service settings → setting of mixer 1
Weather control – mixer 1	on	setting of mixer 1

Short description of operation: The boiler pump (6) operates after exceeding the set pump start temperature Temp. heating water on. When the temperature of the temperature sensor (17) reaches the set temp. charging is completed, the controller switches off the burner and switches to PAUSE mode. When the temperature of the sensor (16) falls below the set temp. start of charging, then the controller ignites the burner and switches to WORK mode. If the water entering the boiler is cold, the thermostatic valve (15) closes. This results in water flow in the short circuit (boiler circuit): boiler (1) - throttle valve (15) - thermostatic valve (6) - pump (6). The thermostatic valve (15) opens when the temperature of the water returning to the boiler rises and the heating water begins to flow into the heating circuit with the storage tank.

¹ The hydraulic diagram shown does not replace the central heating project! It is only an example!



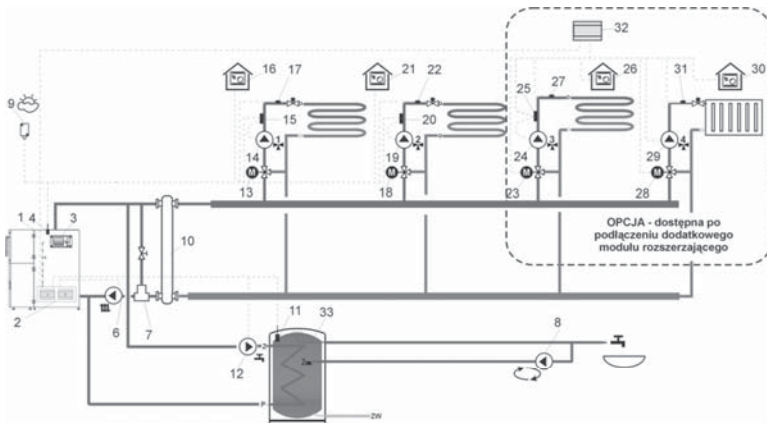
Scheme with thermostatic three-way valve,

1 – boiler, 2 – regulator, 3 – panel of regulator, 4 – boiler temperature sensor,
 6 – pump of central heating's circuit, 7 – thermostatic three-way valve, 8 – throttle valve,
 9 – room thermostat, 10 – sensor of external temperature, 11 – DHW. tank, 12 – pump of
 DHW circuit, 13 – sensor of DHW temperature

RECOMMENDED SETTINGS:

Parameter	Set value	MENU
Operation of mixer 1	off	Service settings → setting of mixer 1

Short description of operation: Pump of central heating's circuit (6) and pump of D.H.W. (12) start operating only when the switch-on temperature of the pump of central heating's circuit is exceeded in the boiler (standard 40°C). If the water entering the boiler is cold, the thermostatic valve (7) closes. The result is a water flow in the short circuit - boiler (1) - throttle valve (8) - thermostatic valve (7) - pump (6). The thermostatic valve (7) opens when the temperature of the water returning to the boiler rises and directs the boiler water to the central heating system. If the water temperature measured by the sensor (13) falls below the set DHW temperature, the DHW pump (12) is started. The DHW pump (12) is switched off after the DHW tank (11) is heated - ie. when the temperature measured by the sensor (13) is equal to the set DHW temperature.



Scheme with thermostatic three-way valve, two three-way mixing valves and two additional mixer circuits after connecting an additional module ²,

1 – boiler, 2 – regulator, 3 – control panel of regulator, 4 - boiler temperature sensor, 6 - central heating circuit pump, 7 - thermostatic three-way valve (for return water control), 8 - circulation pump, 9 - outside temperature sensor, 10 - hydraulic annulus (no need to balance pump flows), 11 - DHW temperature sensor, 12 - DHW circuit pump, 13 - mixer servomotor 1, 14 - mixer circuit pump 1, 15 - safety thermostat providing underfloor heating 55°C (disconnects the power supply of the mixer pump after exceeding the maximum temperature - thermostat no is part of the controller equipment), 16 - mixer room thermostat 1, 17 - mixer temperature sensor 1, 18 - mixer servomotor 2, 19 - mixer circuit pump 2, 20 - outdoor thermostat providing underfloor heating 55°C, 21 - mixer room thermostat 2, 22 - mixer temperature sensor 2, 23 - mixer servomotor 3, 24 - mixer circuit pump 3, 25 - outdoor thermostat providing floor heating heating 55°C, 26 - mixer room thermostat 3, 27 - mixer temperature sensor 3, 28 - mixer servomotor 4, 29 - mixer circuit pump 4, 30 - mixer room thermostat 4, 31 - mixer temperature sensor 4, 32 - mixer expansion module, 33 - DHW tank

RECOMMENDED SETTINGS:

Parameter	Set value	MENU
Mixer operation 1	Floor on	Service settings → mixer 1 setting
Max. set temperature of mixer 1	50 °C	Service settings → mixer 1 setting
Operation according to weather – mixers 1 - 4	On	menu → mixers 1-4 setting
Heating curve of mixer 1	0,2 – 0,6	Service settings → mixer 1 setting
Mixer operation 2	Floor on	Service settings → mixer 2 setting
Max. set temperature of mixer 2	50 °C	Service settings → mixer 2 setting
Heating curve of mixer 2	0,2 – 0,6	Service settings → mixer 2 setting
Mixer operation 3	Floor on	Service settings → mixer 3 setting
Max. set temperature of mixer 3	50 °C	Service settings → mixer 3 setting
Mixer operation 3	0,2 – 0,6	Service settings → mixer 3 setting
Mixer operation 4	Central heating on	Service settings → mixer 4 setting
Max. set temperature of mixer 4	80 °C	Service settings → mixer 4 setting
Heating curve of mixer 4	0,8 – 1,4	Service settings → mixer 4 setting
Operation according to weather	off	Service settings → boiler's setting

²The hydraulic diagram shown does not replace the central heating project! It is only an example!

TECHNICAL PARAMETERS

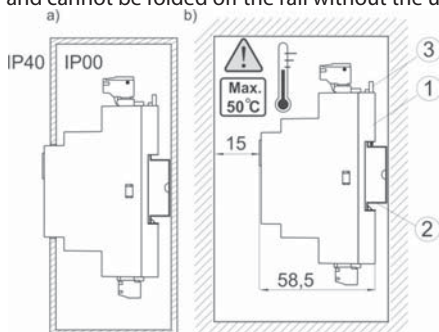
Connection voltage		230 V~, 50 Hz
Current taken by the regulator		0,04 A ³
Maximum rated current of each operating module		6 (6) A
Degree protection of the regulator		IP20, IP00 ⁴
Ambient temperature		0...50 °C
Storage temperature		0...65 °C
Relative humidity		5...85 % without condensation of water vapor
Range of temperature sensors' measuring CT4/CT5		0..100 °C/0..380 °C
Range of temperature sensors' measuring CT6-P (outdoor sensor)		-35..40 °C
Sensors measurement accuracy CT4, CT6-P		2 °C
Terminals	Network	screw, cable cross section from 0.75 mm ² to 1.5 mm ² , tightening torque 0.4 Nm, insulation length 6mm.
	Signal	screw, cable cross-section up to 0.75 mm ² , tightening torque 0.3 Nm, insulation length 6mm
Display		Graphic: 128x64pix
External dimensions		210x115x60 mm
Weight of the complete device		2 kg
Standards		PN-EN 60730-2-9 PN-FN 60730-1
Class of firmware		A
Class of protection		For incorporation into class devices I
Degree of pollution		2. degree According to PN-EN 60730-1

³ This is the current that is taken by the controller itself (when connecting 2 operating modules and a panel). The total current consumption depends on the devices that are connected to the controller.

⁴ IP20 - on the front of the operating module, IP00 - on the terminal side of the operating module.

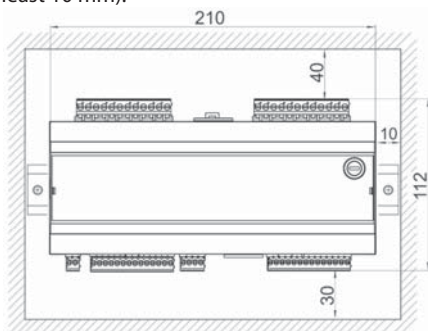
INSTALLATION OF OPERATING MODULES

The module cover is not dust and water resistant. To protect against these factors, it is necessary to install a suitable cover. The enclosure shall ensure a degree of protection corresponding to the environmental conditions in which the regulator will be used. In addition, it must allow the user access to parts under dangerous voltage - e.g. terminals. A standard cover can be used for installation. In that case, the user shall only have access to the front surface of the service module. The cover can also consist of boiler parts that surround the entire module. The operating module is designed to be mounted on DIN TS35 standard rail. Mount the rail firmly on a solid base. Before placing the module (1) on the rail (2), lift the handles (3) up with a screwdriver. After attaching the modules to the rail, push the mounts (3) to their original position. Make sure that the device is fixed steadily and cannot be folded off the rail without the use of tools.



Module installation options, a) - in a module cover with access to the front surface, b) - in a cover without access to the front surface, 1-module, 2 - DIN TS35, 3 - handles.

For safety reasons, it is necessary to maintain a safe distance between the active parts of the terminals of the operating module and the conductive (metal) parts of the cover (at least 10 mm).



The connecting cables must be protected against tearing, loosening, or must be installed in such a way that no load is transmitted to hold the cables in the terminals of the controller.

Degree of protection IP

The cover of the operating module of the controller ensures different degrees of IP protection, depending on the method of installation. After installation performed according to this figure on the front of the operating module cover, the device has a degree of protection IP20 (indicated on the rating plate). On the side of the terminals, the cover has an IP00 degree of protection, therefore the terminals of the operating module must be installed in such a way that access to this part of the housing is prevented. If it is necessary to gain access to the parts with terminals, it is necessary to disconnect the power supply, make sure that the terminals and cables are not energized, and only then remove the cover of the operating module.

Wiring connection

The controller is designed for power supply with voltage 230V ~, 50Hz.

Properties of electrical installation:

- three - core cable (with protective conductor),
- carried out in accordance with valid regulations,,
- Equipped with a residual current device with an operating current of $I_{\Delta n} \leq 30\text{mA}$, which protects against the possibility of electric shock and limits damage to the device, including fire protection.



ATTENTION: Dangerous voltages can be present at the controller terminals when the controller is switched off using the keys. Before starting installation work, it is essential to disconnect the mains voltage and make sure that the terminals and cables are not under dangerous voltage. Equipped with a residual current device with an operating current of $I_{\Delta n} \leq 30\text{mA}$, which protects against the possibility of electric shock and limits damage to the equipment, including fire protection.

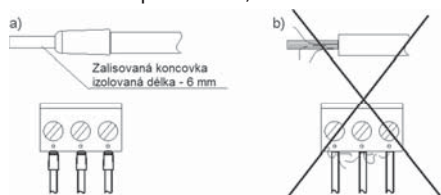
The connecting cables must not touch surfaces with a temperature exceeding their nominal operating temperature.

The terminals of each module, numbered 1-21, are intended for the connection of devices with a mains voltage of 230V ~. Terminals 22-49 are designed for cooperation with low voltage devices (below 12VDC).



Connecting the 230V ~ mains voltage to terminals 22-49 and the RS485 transmission connector will damage the controller and cause a risk of electric shock!

The ends of the connecting cables, especially the power cables, must be protected by insulated crimp terminals, as shown in the following figure:



Protection of cables' ends, a) - correct, b) - incorrect.

Feed cable must be connected to the terminals marked with an arrow .



For safety reasons, the controller must be connected to the 230V ~ mains with the correct connection of the phase (L) and neutral (N) wires. Make sure that the L and N wires are not swapped in the electrical installation of the building, e.g. in an electrical socket or in a distribution box!



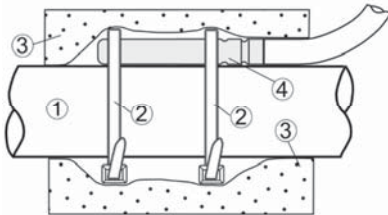
All equipment must be connected only by qualified personnel in accordance with the applicable regulations. Examples of such devices are pumps, relays marked "RE", or appliances connected to it. Follow the safety rules to avoid electric shock. The controller must be equipped with a terminal for connection to a 230V ~ socket.

Protective connections

The protective conductor of the power cord must be connected to a zero bar connected to the metal cover of the boiler. The clutch must be connected to the controller terminal marked with the symbol / and to the earthing terminals of the devices connected to the controller.

Connection of temperature sensors

The controller cooperates exclusively with SENSORS of type CT4 and CT2S. The use of other sensors is prohibited. Sensor cables can be extended using cables with a cross-sectional area of at least 0.5mm². However, the total length of the cables of each of the sensors must not exceed 15m. Install the boiler temperature sensor in the pit located in the boiler shell. Install the feeder temperature sensor on the surface of the pellet tube of the feeder. Install the TANK TEMPERATURE SENSOR IN THE TRAY. It is best to install the mixer temperature sensor in a pit located in a stream of overflowing water in the pipe, but it can also be placed by "attaching" it to the pipe, provided that thermal insulation protecting the sensor along with the pipe is used.



Sensor assembly, 1 - tube, 2 - clips, 3 - thermal insulation, 4 - temperature sensor.

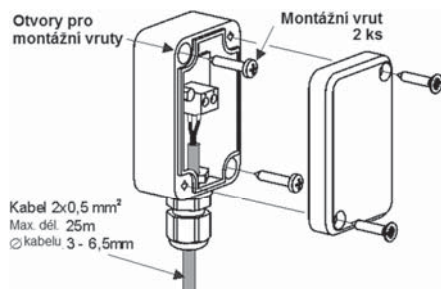


The sensors must be protected against loosening from the surfaces to which they are attached

Make sure that there is good thermal contact between the sensors and the measuring surface. Use a thermally conductive paste for this purpose. It is forbidden to fill the sensors with oil or water. The sensor cables must be separated from the mains cables. Otherwise, the temperature may be measured incorrectly. The minimum distance between these cables must be 100mm. Avoid contact of the sensor cables with the hot parts of the boiler and the heating installation. Temperature sensor cables must be able to withstand temperatures up to 100 °C.

External sensor connection

The controller cooperates with the outdoor temperature sensor type CT6-P. Install the sensor on the coldest wall of the building - usually the north wall in a covered place. The sensor must not be exposed to direct sunlight or rain. Install the sensor at a height of at least 2 m above the ground, away from windows, chimneys and other heat sources that could interfere with temperature measurement (at least 1.5 m). Use a cable with a conductor cross-section of at least 0.5 mm² and a length of max. 25m. The polarity of the wires is not important. Connect the other end of the cable to the controller terminals. Screw the sensor to the wall using the mounting screws. You can access the screw holes by unscrewing the sensor cover.



Connection of external sensor CT6-P.

Check of temperature sensors

Temperature sensors can be checked by measuring their resistance at a given temperature. If you find larger differences between the measured resistance value and the values in the following table, the sensor must be replaced.

CT4			
Temp. °C	Min. Ω	Men. Ω	Max. Ω
0	802	815	828
10	874	886	898
20	950	961	972
25	990	1000	1010
30	1029	1040	1051
40	1108	1122	1136
50	1192	1209	1225
60	1278	1299	1319
70	1369	1392	1416
80	1462	1490	1518
90	1559	1591	1623
100	1659	1696	1733

CT6-P			
Temp. °C	Min. Ω	Men. Ω	Max. Ω
-25	901,6	901,9	902,2
-20	921,3	921,6	921,9
-10	960,6	960,9	961,2
0	999,7	1000,0	1000,3
25	1096,9	1097,3	1097,7
50	1193,4	1194,0	1194,6
100	1384,2	1385,0	1385,8
125	1478,5	1479,4	1480,3
150	1572,0	1573,1	1574,2

CONNECTION OF ROOM THERMOSTAT OF MIXERS

Room thermostats affect the mixer circuit 1-4. If water is supplied to the entire heating system of the building by a mixer, all settings of the room thermostat for the boiler must be switched off. After disconnecting the contacts, the room thermostat reduces the specified temperature of the mixer circuit by the value of reducing the specified temperature of the mixer compared to the thermostat. This parameter can be found in:

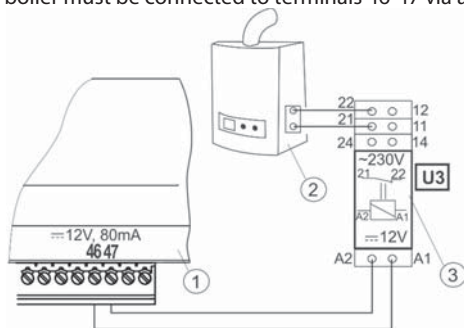
Adjusting the mixer 1 → The room thermostat of the mixer

The parameter value should be selected so that when the room temperature is reached (room thermostat - disconnects contacts) the room temperature decreases. When connecting the ecoSTER200 room panel or ecoSTER TOUCH room panel, make sure that the parameter for selecting the thermostat is correctly selected in:

Service setting → Mixer setting 1-4

BACKUP BOILER CONECTION

The controller can control the operation of the backup boiler (gas or oil). In this case, it is not necessary to switch this boiler on or off manually. The backup boiler will be switched on in case the temperature of the pellet boiler drops below the set temperature in the service menu. The backup boiler is switched off when the pellet boiler reaches the required temperature. Connection to a backup - e.g. gas boiler must be performed by a qualified technician in accordance with the technical documentation of this boiler. The backup boiler must be connected to terminals 46-47 via a relay.



Example of a system diagram for connecting a backup boiler to the controller, 1 - controller, 2 - backup boiler (gas or oil), 3 - relays RM 84-2012-35-1006 and base GZT80 RELPOL.

To enable backup boiler control, set H outputs for backup boiler control in the menu:

Service settings → **Output H** → **Backup boiler**

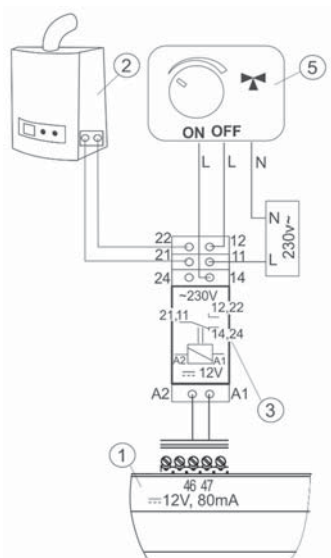
→ **Boiler settings** → **Replacement boiler**

To additionally enable backup boiler control, you must set the *Backup boiler shutdown temperature* parameter to a value other than zero. The switch-off of the backup boiler control follows the setting of the zero value of the switch-off of this parameter.



The control output for the backup boiler is also shared with the alarm output. Disabling the backup boiler control will cause the output to be controlled by the alarm module.

If the pellet boiler is in operation and its temperature exceeds the set value - e.g. 25 °C, the controller switches off the backup boiler (supply voltage 12V at terminals 46-47). This will power the relay coil and open the contacts. When the boiler temperature falls below the set value of the backup boiler switch-off, the controller stops supplying voltage to terminals 46-47, which switches on the backup boiler.



Example of electrical diagram of backup boiler control, 1 - regulator, 2 - backup boiler, 3 - relay RM 84-2012-35-1006 and base GZT80 RELPOL, 5 - switching valve drive (with end limit switches).

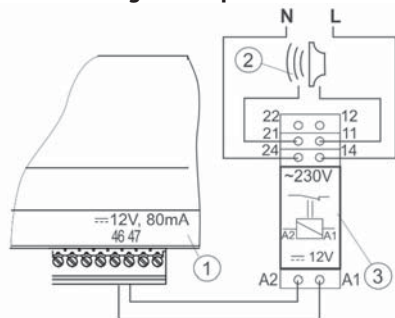
Alarm signaling connection3

The controller can report an alarm after connecting an external device, such as an audible alarm, or GSM for sending SMS. Connect the alarm reporting device to the controller as shown in the following figure. Because this extension is shared with the backup boiler control extension, you must disable this backup boiler control for the alarms to work properly. Do this as follows:

Service settings → **Output H** → **Output H1** → **Backup power supply**

Then set output H to control alarms in the menu:

Service settings → **Output H** → **Alarms**



Example of external alarm connection, 1 - controller, 2 - external alarm, 3 - relay RM 84-2012-35-1006 and base GZT80 RELPOL.

CONNECTION OF MIXERS DEVICE



During installation work on the mixer, make sure that the boiler does not overheat. This can happen due to insufficient heating water flow. We recommend setting the position of the valve to full opening before starting work. This ensures maximum heating water flow.

The controller only works with mixing drives that are equipped with end limit switches. The use of other drives is prohibited. Drives with a full time range of 30 to 255 s can be used. Description of mixer's connection:

- Connect the temperature sensor of the mixer,
- connect the electric pump of the mixer,,
- activate the controller and select the appropriate service in the service menu:
Service settings→**Setting of mixer 1**
- Set the valve opening time in the mixer settings (this should be written on the nameplate of the servomotor, i.e. 120 s)
- connect the mixer to the el. controller network and activate the circulation pump,
- choose the direction in which the servomotor closes and opens. To do this, switch the button on the manual control and find a position in which the temperature of the mixing circuit is maximum (controller in the 100% open position). Now find a position in which the temperature of the mixing circuit is minimal (controller in position 0% open). Remember this configuration to verify that the connections are correct later.
- disconnect the controller from the el. network
- connect the el. power supply of the mixer and servomotor with switch and enter the value of the servomotor specified by the manufacturer. Do not swap the opening direction of the mixing valve with the closing direction,
- connect the controller to the el. network and switch it to "STAND-BY" mode,
- check that the wires for opening and closing the mixing valve have not been interchanged. Enter **the Manual control** menu and open the mixer by selecting MIX 1 - Open = ON. After opening, the circuit temperature should increase. If not, unplug the power cord. energy and wires (Caution: another cause may be incorrectly connected mixing valve, check the correct connection with the manufacturer's documentation).

Circulation pump connection

The DHW circulation pump should be connected via a relay to terminals 46-47 of the power module.

To switch on the circulation pump control, set the H outputs for pump control in the menu: **Service settings** → **Output H** → **Output H1**

Remote control connection

It is possible to equip the controller with an ecoSTER TOUCH room panel, which has the following functions: room thermostat, boiler control panel, alarm signaling, fuel level indicator.



Caution - the cross-section of the wires for connecting the ecoSTER TOUCH panel must be at least 0.75 mm²

The maximum cable length for the panel is 30 m. The cross-section of the cables must not be less than 0.5 mm².

Three-wire connection

Connect according to the wiring diagram.

Two-wire connection

The two-wire connection requires a 5 VDC or 12 VDC supply, and a rated current of at least 400 mA. GND and VCC wires at the output of the ecoSTER TOUCH connected to an external power supply. Power supply is not part of the controller delivery. Connect the D + and D- wires as shown in the diagram.

Cooperation with web module

The controller can work with the ecoNET300 internet module. It allows the user to view and control the boiler online via WiFi or LAN using the website www.econet24.com via a web browser or a conveNOnt application for mobile devices:

ecoNET.apk(Android)



SERVICE MENU AND FACTORY SETTINGS

MENU		UNIT	FACTORY SETTING	MIN	MAX
2.1	Boiler set temperature	°C	70	60	80
2.2	Equithermal operation		OFF		
2.3	Boiler heating curve		0,8	0,1	4
2.4	Parallel shift of the curve		0		
2.5.1	Limit max. boiler output	kW	12		
2.5.2	Fuel calorific value	kW/kg	4,9		
2.5.3	Fuel feeder power	kg/h	9		
2.5.4	Correction of administration		0		
2.5.5	Air correction		0		
2.5.6.1	Performance test time	min	15		
2.5.6.3	Fuel weight	g	2250		
2.6.1	Minimum amount of fuel		0		
2.7	Maximum operating time	hours	6		
2.8.1	OFF / ON		OFF		
2.9	Night lowering of the boiler		OFF		
2.9.2	Reduction value		0		
3.1	Entered DHW temperature	°C	45	20	70
3.2	DHW pump operating mode		without priority		
3.3	DHW tank hysteresis	°C	5	1	30
3.4	DHW disinfection		OFF		
3.5	Night reduction of DHW		OFF		
3.5.2	Reduction value		0		
4.1	SUMMER mode		WINTER		
4.2	SUMMER mode switch-on temperature	°C	16	5	30
4.3	SUMMARY mode switch-off temperature	°C	10	1	15
5.1	Set temperature mix 1	°C	40	20	85
5.2	Thermostat mix 1		0		
5.3	Equithermal control mix 1		ON		
5.4	Heating curve mix 1		0,8	0,1	4
5.5	Parallel shift of the curve		0		
5.6	Night reduction mix 1		OFF		
5.6.2	Reduction value		0		
6.1	Set temperature mix 2	°C	40	20	85
6.2	Thermostat mix 2		0		
6.3	Equithermal control mix 2		ON		
6.4	Heating curve mix 2		0,8	0,1	4
6.5	Parallel shift of the curve		0		
6.6	Night reduction mix 2		OFF		
6.6.2	Reduction value		0		
7.3	Brightness	%	54		
7.4	Sound		OFF		
7.5	Language		EN		

14.1.1	Feeder cycle time	sec	10		
14.1.2	Maximum boiler output	kW	12		
14.1.3	Average boiler output	kW	6		
14.1.4	Minimum boiler output	kW	3		
14.1.5	100% fan power	ot/min	2400		
14.1.6	50% fan power	ot/min	1800		
14.1.7	30% fan power	ot/min	1100		
14.1.8	50% H2 hysteresis	°C	5		
14.1.9	30% hysteresis H1	°C	3		
14.1.10	Boiler hysteresis	°C	10		
14.1.11	Control mode		FuzzyLogic		
14.1.12	Room thermostat		0		
14.2.1	Fuel dose	g	130		
14.2.2	Ignition test time	sec	60		
14.2.3	Warm-up time	sec	60		
14.2.4	Ignition time	min	9		
14.2.5	Burning time	min	2		
14.2.6	Burner fan power at ignition	ot/min	1580		
14.2.7	Flame detection	%	10		
14.2.8	Ignition of the burner fan	ot/min	1100		
14.2.9	Burner fan power after ignition	ot/min	1450		
14.3.1	Burner fan power during cleaning	ot/min	2650		
14.3.2	Exchanger cleaning - work	sec	10		
14.3.3	Cleaning time before ignition	sec	15		
14.3.4	Cleaning the burner at night		NO		
14.3.5	Burner cleaning cycles		3		
14.4.1	Burner fan power during burnout	ot/min	1800		
14.4.2	Maximum burn-up time	min	15		
14.4.3	Minimum burn - up time	min	3		
14.5.1	Supervision time		0		
14.5.2	Boiler output in the mode - SUPERVISION	kW	2		
14.5.3	Work cycle time - SUPERVISION	sec	20		
14.5.4	Burner fan power - SUPERVISION	ot/min	900		
14.6.1	Minimum burner fan power	%	9		
14.6.2	Maximum burner fan power	%	100		
14.6.3	Minimum fan speed	ot/min	400		
14.6.4	Maximum fan speed	ot/min	2850		
14.6.5	Low fuel detection time	min	1		
14.6.6	Min. flame value in case of lack of fuel	%	5		
14.6.7	Fan factor (PID)	%	30		
14.6.8	Integer time constant		10		
14.7	Thermostat selection		OFF		
14.8	Minimum boiler temperature	°C	60		
14.9	Maximum boiler temperature	°C	80		
14.10	Boiler cooling temperature	°C	88		
14.11	Backup boiler		0		

14.12.1	Al 1 Damaged grate cleaning motor		ON		
14.12.2	Al 2 Maximum boiler temperature exceeded		ON		
14.12.3	Al 3 Damaged fan		ON		
14.12.4	Al 4 Damage to the boiler temperature sensor		ON		
14.12.5	Al 5 Ignition attempt failed		ON		
14.12.6	Al 6 STB open contact.		ON		
14.12.7	Al 7 Open DZT contact.		ON		
14.12.8	Al 8 Exceeding min. vacuum		ON		
14.12.9	Al 9 Exceeding max. vacuum		ON		
14.13	Fuel tank capacity	kg	130		
14.14	Parameter A FuzzyLogic		5		
14.15	Parameter B FuzzyLogic		80		
14.16	Parameter C FuzzyLogic		15		
15.1	CH pump start temperature	°C	45		
15.2	Minimum DHW temperature	°C	20		
15.3	Maximum DHW temperature	°C	70		
15.4	Boiler temperature increase	°C	5	2	15
15.5	Extension of DHW operation	min	3		
15.6	Heat exchanger		YES		
16.1	Storage tank operation		NO		
16.2	Battery charging start temperature	°C	40	40	80
16.3	Battery charging end temperature	°C	60	40	85
16.4	Start the heating system	°C	28		
17.1	Thermostat selection		OFF		
17.2	Mix operation 1		Floor on		
17.3	Minimum temperature mix 1	°C	20		
17.4	Maximum temperature mix 1	°C	85		
17.5	Extent of proportionality		5		
17.6	Integer time constant		130		
17.7	Valve opening time	sec	140		
17.8	Switch off the pump with the thermostat		NO		
18.1	Thermostat selection		OFF		
18.2	Operation mix 2		Floor on		
18.3	Minimum temperature mix 2	°C	20		
18.4	Maximum temperature mix 2	°C	85		
18.7	Valve opening time	sec	140		
18.8	Switch off the pump with the thermostat		NO		
19.1	Reverse protection		NO		
19.2	Minimum return temperature	°C	40		
19.3	Return temperature hysteresis	°C	5		
19.4	Valve closing	%	10		
20	Output H		Backup boiler		
21	Output 14-15		Pump mix 2		
22	Show advanced		NO		

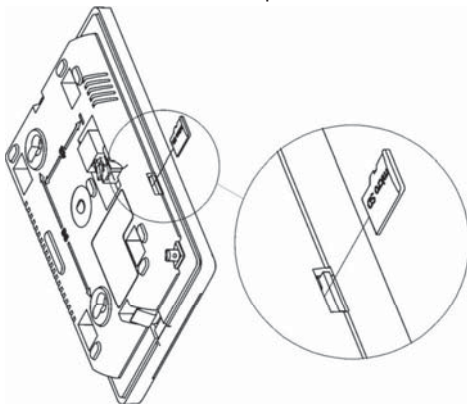
SOFTWARE CHANGE

Program change can only be performed using a microSDHC memory card.



Note: The software may only be replaced by an authorized person in compliance with all electric shock precautions!

To change the program, disconnect power to the control panel. Insert the memory card into the marked slot on the panel.



The new software should be stored on the memory card in *.pfc format in the form of two files: a program file in the control panel and a program file for driver module A. Insert the new software directly on the memory card without saving the data in a subdirectory. Then connect the mains supply to the controller and enter the menu: General settings → Program update and replace the program first in module A of the controller, then in the controller panel and other devices.

OTHER FUNCTIONS

Power failure

In case of a power failure, the controller returns to the operating mode it was in before the power failure.

Freeze protection

When the boiler temperature drops below 5 °C, the boiler pump is activated, which forces the boiler water circulation. If the water temperature does not rise, the boiler burner is switched on.



Note: This function cannot be the only frost protection during installation! Other methods should be used. The controller manufacturer is not liable for any related damages.

Pump protection function

The controller performs the function of protecting the DHW pump, DHW pump and mixers against blockage. It depends on their periodic activation (every 167 hours for a few seconds). This protects the pumps from immobilization due to limescale build-up. Therefore, when the boiler is not in use, the power supply to the controller should be connected. The function is also performed when the controller is OFF using the keypad (the controller is in the "boiler off" state).

Pellet tank feeder

After connecting add-on module B, the controller can cooperate with the low fuel level sensor in the tank (fuel supply from the additional tank). After activating the sensor, the controller activates the auxiliary feeder to refill the basic fuel tank.

Mains fuse replacement

The mains fuse is located inside the controller housing. The fuse may only be replaced by a qualified person after disconnection from the mains. Use time-lag fuses, 5 x 20 mm porcelain, with a rated current of 6.3 A.

Control panel replacement

It is not recommended to replace the control panel itself because the program in the panel must be compatible with the program in the control module.

Lambda probe

The efficiency of the burner can be increased by connecting another oxygen sensor module which should be connected according to the wiring diagram. Probe operation must be enabled in the menu:

Service settings → Boiler settings → Lambda probe

If the Lambda Sensor Operation parameter is set to ON, the controller will operate using data from the oxygen sensor. The amount of air supplied to the furnace is automatically adjusted to obtain the desired oxygen content in the flue gas. If this parameter is set to OFF, the values from the Lambda probe will not affect the operation of the controller. The required oxygen values for the individual burner outputs are entered in the menu:

Service settings → Boiler settings → Power modulation

It may be necessary to calibrate the oxygen sensor readings regularly. To calibrate the probe, the boiler must first be switched off. For the calibration to take place correctly, the fire in the boiler must be completely extinguished. The following parameter is used to start the calibration:

Boiler settings → Lambda probe calibration

The calibration process takes approximately 8 minutes.

Information about processing of personal data

Dear Customer,

You provide us your personal information by completing and sending the Boiler start-up record and our company becomes your personal data manager in relation to you.

We hereby would like to inform you why and how we process your personal information, how we collect your personal information, for what purpose we handle it and the legal basis of such processing, how we handle personal data and what your rights are in relation to processing your personal data.

Please read the following information carefully before providing us your personal details.

In case of any questions related to the processing of your personal data, please do not hesitate to contact us at tel. no. +421 43 400 3103 or gdpr@attack.sk.

Privacy Manager:

ATTACK, s. r. o., with its registered office at Dielenská Kružná 5020, 038 61 Vrútky,

Slovak Republic

Tel. : +421 43 4003 103

E-mail: exporten@attack.sk

Web: <https://www.attack.sk>

Processing of personal data

We will only process the personal information you provide to us in the Boiler start-up record, i.e.:

- Name
- Surname
- Address
- Phone
- Type and serial number of the product

Purpose and legal basis for the processing of your personal data

We will process your personal data for the following purposes and on the basis of the following legal bases.

- 1) For the purposes of direct marketing, which is a legitimate interest of our company. The legal basis here is Art. Article 6 1. Letter. (f) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

The processing based on our legitimate interest, i.e. direct marketing, is following:

Your personal data will be stored in our electronic database which is managed directly and only by us. This electronic database is stored and secured on the property of our company. Your personal data will be used by our legitimate interest only in order to be able to send you an offer of our new products, especially in the event of the end of the expected life of product which you enter your personal data in the Boiler start-up record in if our company develops a newer and more technologically superior and better product that could replace the product in which you enter your personal data into the in the Boiler start-up record.

Direct marketing is our legitimate interest and the one of two purposes of processing of

- your personal data, i. e. direct offer of our products sent to you.
- 2) The legal basis for fulfilling the extended warranty agreement on the product in which you enter the Boiler Startup Record where your personal data is Art. Article 6 1. Letter. (f) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

This processing that is required to meet the extended warranty agreement for a product you are one of the parties will be following:

Our company provides you with an extended contractual warranty (beyond the statutory warranty) in such situation that you comply with the warranty conditions (see the warranty conditions in the Instruction for use, in which there is the Boiler start-up record with your personal data). In order to provide you with this extended contractual warranty we need to know who is the other party and whether you are performing your obligations under this agreement especially the mandatory annual service inspections. Therefore we need you to send us a record of this inspection after each annual inspection (max. 5 inspections) and we will declare in our database that you fulfill the terms of the contractual guarantee.

Since each contract has at least two contracting parties we need your personal data to identify you as a party and identify a specific product for the purposes of fulfilling the extended warranty agreement. We would not be able to fulfill our obligations under the extended warranty agreement properly without these data.

Our legitimate interest and one of the two purposes of processing your personal data is therefore the fulfillment of the contract, that is, the fulfillment of the contract for extension of the contractual guarantee.

Processing of personal data for both purposes is done manually and also in electronic information systems. However these systems are subject to rigorous and constant physical and technical control. All persons who, on the basis of our instructions and our credentials, come in contact with personal data in the framework of their work or contractual obligations are bound by confidentiality.

Category of recipients of personal data

We process your personal data primarily by ourselves. However it may happen that we will have to use the services of another entity to process personal data for any of the above mentioned purposes. In this case the relationship between us and the third party will be the relationship between the administrator and the processor and we will make an agreement with this processor about the processing of the personal data in order to guarantee the security and legality of processing your personal data.

Your personal data may therefore be sold to the recipient of the following categories:

- a) A company that distributes our products in the territory of a member state of the European Union in which you have purchased a product which you enter your personal data in the Boiler start-up record in or in which such a product is put into service on your request
- b) A company providing bulk mailing services

The length of time the personal data will be stored

We will process your personal data for at least the duration of the contractual warranty (i.e. for 5 years) for the purposes of fulfilling the warranty agreement and at most for the time of assumed lifetime of the products for which the Boiler start-up record for the purposes of direct marketing.

Raising objections to processing of personal data

Whenever you have the right to object to our processing of your data for direct marketing purposes (see Purpose and legal basis for processing your personal data, item 1) above). If you have an objection to our processing of your direct marketing data, by the date of your objection will cease our processing your personal data for direct marketing purposes.

The objection to the processing of your personal data for direct marketing purposes can be sent to us by post to:

ATTACK, s. r. o., Dielenská Kružná 5020, 038 61 Vrútky, Slovak Republic. In the objection, it is sufficient to provide the name, address and the text "I hereby raise an objection to the processing of my personal data for the purposes of direct marketing" and your signature. We always inform you about the accepting your request without delay.

Please note that the right to object can not be invoked against our processing of your personal data necessary for the purpose of fulfilling the extended warranty agreement.

Your other rights related to the processing of personal data

Please note that you also have the following rights in relation to our processing of your personal information:

- to ask for information about what personal data is processed by us,
- to request access to these data and let them update or fix,
- to require the deletion of these personal data, or the limitation of their processing,
- to raise objection to the processing of your personal data,
- the right to the portability of your personal data,
- in case of doubt regarding compliance with the obligations related to the processing of your personal data, contact the Administrator or the Office for Personal Data Protection.

You may enforce these rights to our company by the same procedure as the right to raise objections to the processing of personal data.



HEAT TECHNOLOGY MANUFACTURER

ATTACK, s.r.o. • Dielenská Kružná 5020, 038 61 Vrútky • Slovakia

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