



Instructions for operation and assembly of the electric water heater

Basic series:

Uhlan (AsPC-S)

Corporal (AsP)

Sergeant (AsBN)

Major (AsZN) / **Brigadier** (AsD)

Ensign (AsC)

Industrial series:

Hussar (AsHZ)

Battalion (AsB III)



Please watch the instructional video before installation



2. General recommendations for safety and proper use:

-  2.1. These operating instructions are intended for the operator of the heating system. To avoid danger to life and health and damage of material, read all enclosed instructions and strictly observe the information contained therein.
-  2.2 Follow the safety instructions. Failure to follow this information may cause harm to your health, including death. **Never put yourself in danger. Your own safety is always the most important thing.** Furthermore, non-compliance with the safety instructions can lead to material and environmental damage.
-  2.3. It must be ensured that only persons who are capable of operating the equipment properly have access to it.
-  2.4. The electrical and hydraulic assembly, start-up of the device and maintenance should only be carried out by qualified persons with the legally required authorisations. The manufacturer is not responsible for improper connection of the unit to the central heating or electrical system. The warranty and service does not cover work resulting from improper operation of the central heating system.
-  2.5. For safe operation of the boiler, it is absolutely necessary to provide adequate overcurrent and differential current protection. The installation of the protection must be carried out by a qualified electrician.
-  2.6. The boiler is always operated at the correct recommended operating pressure. A safety valve is fitted to the device to prevent it from operating at excessive pressure. Therefore, it should not be dismantled or closed.
-  2.6.1. If thermostatic valves are present, a bypass giving the minimum working flow rate must be provided on all terminals or zone valves. The system must also be equipped with vent valves and properly vented before starting up.
-  2.7. The unit should not be exposed to ambient temperatures below zero or above 35°C. The installation location of the unit must protect it from the above-mentioned microclimatic conditions.
-  2.8. The installation of the boiler must be carried out in such a way that it is accessible from all sides at a later date. Mounting the appliance too close to other surfaces (e.g. wall, ceiling), may reduce its operational safety and cause difficulties in its operation.
-  2.9. When assembling the boiler, shut-off valves must be provided in the system at the inlet and outlet of the boiler in such a way that the boiler can be removed if necessary.
-  2.10. Do not store any flammable materials or liquids within the unit.
-  2.11. The quality of the water used in the central heating system can affect the operation of the boiler. If the water is too hard, it causes limescale to build up on the heating elements of the boiler. This reduces efficiency and increases energy consumption.
-  2.12. Once a year, especially before the heating season, the entire heating installation should be cleaned and maintained. The system must be prepared for proper operation, including being checked. Any faults found must be rectified immediately.
-  2.13. Before starting up the device, check that the type of boiler is correctly matched to the installation and will perform its function.
-  2.14. After unpacking the heating boiler, check its physical condition and the completeness of the equipment.
-  2.15. Some of the boiler components are made by hand. Because of this, slight deviations may occur with regard to their mutual fit.
-  2.15. Before starting any work including the removal of the boiler housing, the device must be completely disconnected from the electrical supply and protected against unintentional restarting.
-  2.16. Incorrect connection of the heating boiler can lead to damage for which the manufacturer is not responsible.
-  2.17. The manufacturer is not responsible for damage resulting from the use of non-original parts. Use only original manufacturer's spare parts and accessories.

3. Technical data of Elterm electric water boilers

Uhlan – SHE (AsPC-S)



Corporal (AsP)



Sergeant (AsBN)



Major (AsZN)



Ensign (AsC)



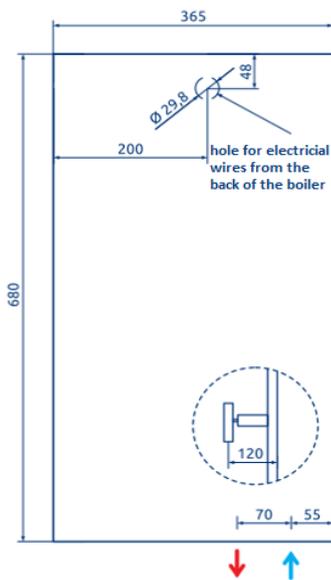
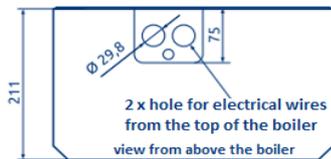
Hussar (AsHZ)



Battalion (AsB III)

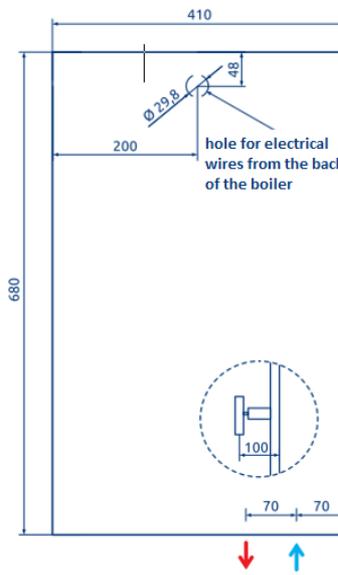
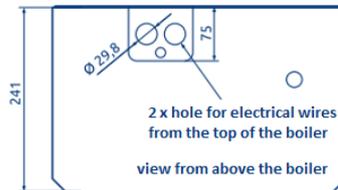


**Corporal, Sergeant, Major,
Hussar - power to 4-12kW**



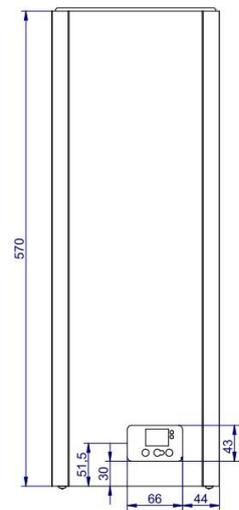
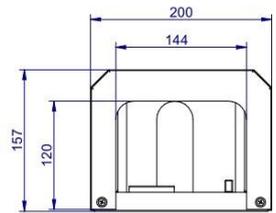
Ensign
power 4-12kW (C.H.) / 12-21kW (D.H.W.)

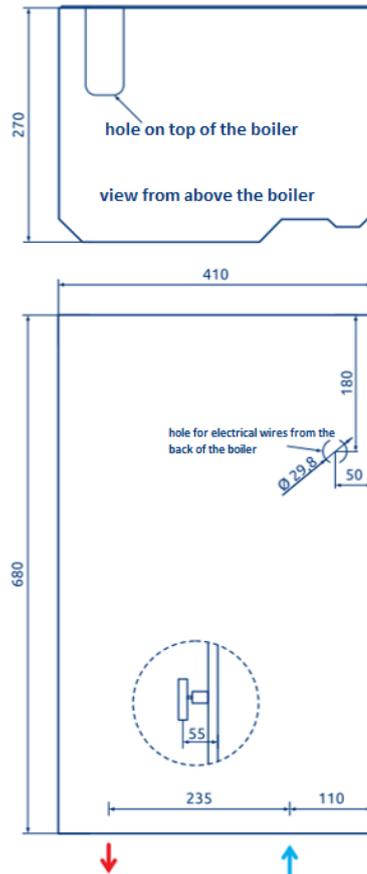
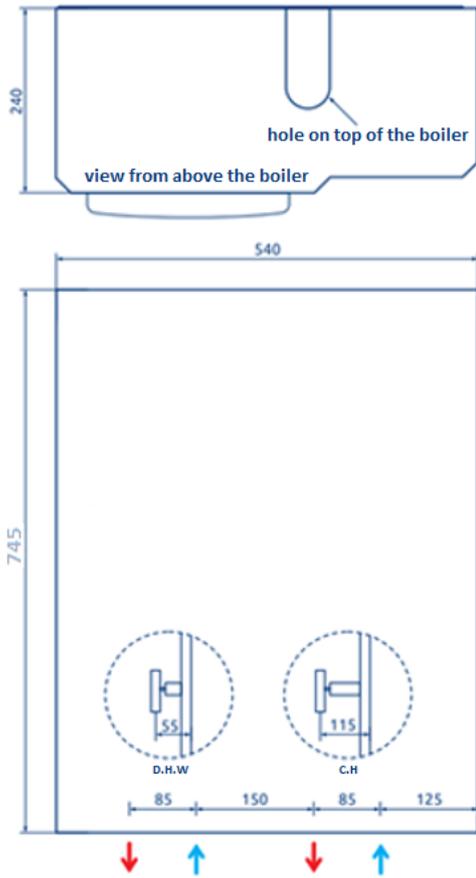
**Corporal, Sergeant, Major,
Hussar - power to 15-24kW**



Battalion
power 30-48kW

**Uhlan
Power to 4-12kW**





Electric water boilers - other models - accessories



Electric water boilers - basic automation LED

	D.H.W.	Electric Flow Heater	Tank 100L	Internet app	Air Vent	Manometer	Electronic pump	Electronic pump x2	Safety valve	Expansion vessel	Room temp. controller	Weather compensation	Radio boiler control	Max. temperature 70°C	Max. temperature 95°C
Corporal	●	○	○	○	●	●	○	○	●	○	○	○	○	●	○
Sergeant	●	○	○	○	●	●	●	○	●	○	○	○	○	●	○
Major	●	○	○	○	●	●	●	○	●	●	○	○	○	●	○
Ensign	○	●	○	○	●	●	●	○	●	●	○	○	○	●	○

Electric water boiler with low loss header function

Uhlen SHE	○	○	○	○	●	○	○	○	○	○	○	○	○	●	○
Hussar	●	○	○	○	●	●	●	○	●	●	○	○	○	○	●
Battalion	●	○	○	○	●	●	●	○	●	○	○	○	○	○	●

PV ready

- Our electric boilers optimise the use of energy from photovoltaic installations :
 - due to the built-in energy consumption counter, they can use the excess energy and then switch off (the excess will not be lost)
 - during the transitional heating period can increase the level of energy self-consumption (limited 20-30% energy storage loss)
 - by using them for C.H. or D.H.W. heating, they increase the payback period on photovoltaic investments
- can be combined with existing heat sources
- have an investment cost that is approximately 10 times lower than that of a heat pump

Boiler power selection table		50m ²	75m ²	100m ²	125m ²	150m ²	200m ²	250m ²	300m ²
A+	Energy efficient building <i>20-25cm insulation</i>								
A	<i>TEUI abt.50kWh/m²/year</i> <i>Abt. 40W/m²</i>	4 kW	4 kW	6 kW	6 kW	9 kW	9 kW	12 kW	15 kW
B	Standard building <i>10-15cm insulation</i>								
C	<i>TEUI abt.90kWh/m²/year</i> <i>Abt. 70W/m²</i>	4 kW	6 kW	9 kW	9 kW	12 kW	15 kW	18 kW	24 kW
D	Energy efficient building <i>0-5cm insulation</i>								
E	<i>TEUI abt.150kWh/m²/year</i> <i>Abt. 120W/m²</i>	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW	30 kW	36 kW

Security selection	4 kW	4 kW	6 kW	6 kW	9 kW	9 kW	12 kW	12 kW	15 kW	18 kW	24 kW
	1	2	1	3	1	3	1	3	3	3	3
	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase
Fuses (A)	1 x 20	2 x 10	1 x 32	3 x 10	1 x 40	3 x 16	1 x 63	3 x 20	3 x 25	3 x 32	3 x 40
Power cord (mm ²)	3 x 2.5	2 x 4	3 x 4	5 x 2.5	3 x 10	5 x 2.5	3 x 10	5 x 4	5 x 4	5 x 6	5 x 10
Security selection	27 kW	30 kW	33 kW	36 kW	39 kW	42 kW	45 kW	48 kW	66 kW	96 kW	144 kW
	3	3	3	3	3	3	3	3	3	3	3
	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase	Phase
Fuses (A)	3 x 50	3 x 50	3 x 50	3 x 63	3 x 80	3 x 80	3 x 80	3 x 80	3 x 125	3 x 160	3 x 240
Power cord (mm ²)	5 x 16	5 x 16	5 x 16	5 x 16	5 x 25	5 x 25	5 x 25	5 x 25	5 x 50	5 x 70	5 x 120

* The accurate diameter of the power cord is selected by the electrician on the basis of an analysis of the local conditions.

4. DESTINATION

4.1 All boilers in the basic/industrial series are designed for heating small and medium-sized buildings equipped with low-temperature (T<100°C) closed or open central heating systems.

4.2. Uhlan (AsPC-S) in a closed central heating system - the central heating system must be equipped with a safety group and an expansion vessel. Regardless of the type of system (closed or open) - the boiler must work with a circulating pump. The safety group, expansion vessel and circulating pump are not supplied with the boiler. They must be provided by the installation.

4.3. Corporal (AsP), Sergeant (AsBN) and Battalion (AsBIII) boilers in a closed central heating system - the central heating system must be equipped with an expansion vessel. The expansion vessel is not supplied with the boiler.

4.4. Major (AsZN), Brigade (AsD), Ensign (AsC), Hussar (AsHZ) in a closed central heating system. - The boiler is adapted for independent operation in a closed and open central heating system. The boiler is equipped with a safety group, a 5/8l expansion vessel (4l for AsC) and a circulation pump.

4.5. The Ensign boiler (AsC) is a dual-function unit. A central heating body and an Admiral instantaneous hot water heater are installed in one housing. These devices operate independently of each other. Instructions for the heater are included separately. In the case of this type of boiler, the safety devices are matched to the unit with a higher power output.

The figure below shows the parameters for selecting a water heater. Select the appropriate water heater power for the draw-off points in the installation which the device is intended to serve.



Drip

12kW power capacity at $\Delta T=30^{\circ}\text{C}$
5,8l/min.



Shower

15kW power capacity at $\Delta T=30^{\circ}\text{C}$
7,2l/min.



Bath

18kW power capacity at $\Delta T=30^{\circ}\text{C}$
8.7l/min.



Rainshower max 10L/min.

21kW power capacity at $\Delta T=30^{\circ}\text{C}$
10.1l/min.

Select the power of the Admiral electric water heater:

12kW



15kW



18kW



21kW



D.H.W. package (option for AsP, AsBN, AsZN, AsD, AsHZ and AsBIII boilers) - includes an electro-valve (DHW priority), a pipe with sensor to the cylinder and an activation code. An additional cylinder with coil (min. 12kW) is necessary for proper operation of the device.

Remember! Every time you spot this QR code, scan it and you will be able to visit a playlist with instructional videos linked to the instructions. Follow the names of the individual videos in the playlist.



5. Hydraulic assembly:

Before assembling, read the hydraulic and electrical diagrams (see data sheet).

- 5.1. All electric boilers, are wall-mounted units that should be hung on the wall when the metal housing is removed.
- 5.2. The boiler must be mounted so that it is accessible from all sides at a later date. Mounting the device too close to other surfaces (e.g. walls, ceilings, buildings), may reduce its operational safety and cause difficulties in its operation. The minimum distance to any surface is 50cm.
- 5.3. When assembling the boiler, shut-off valves must be installed at the boiler inlet and outlet in such a way that they can be removed if necessary.
- 5.4. The electric boilers must be connected to the system using the appropriate size of screw connections (3/4", 1" or 5/4"- depending on the model) according to the direction of water flow (see corresponding arrows). The connection should be made in accordance with PN-91/B-02413 (open central heating systems) or PN-91/B-02414 (closed).
- 5.5. The heating system must be flushed before start-up and the system must be filled with water or antifreeze (pressure - 1.5 bar). When mounting a new boiler in a previously used system, especially if the heat source was a solid fuel boiler, the system must be flushed. Failure to do so can significantly affect the efficiency of the appliance..

6. Electric assembly:

6.1. The connection to the electrical system must be made in accordance with the valid regulations of the country in which the boiler is installed and must only be carried out by a qualified electrician (documentation of this fact with the corresponding stamp in the guarantee).

6.2. The boilers are suitable for 3-phase AC power (400V 3N~50Hz). The 4, 6 and 9kW models are also available in 1-phase (230V1N~50Hz),

6.3. Single-phase connection:

If the boiler is connected to a single-phase installation, all supply lines - L1L2L3 - must be connected (bridged); a comb junction rail can be used (rail not supplied).

6.4. Three-phase connection:

a) The electrical supply to the boiler is connected to a terminal strip (marked L1L2L3N) or to an isolating switch.

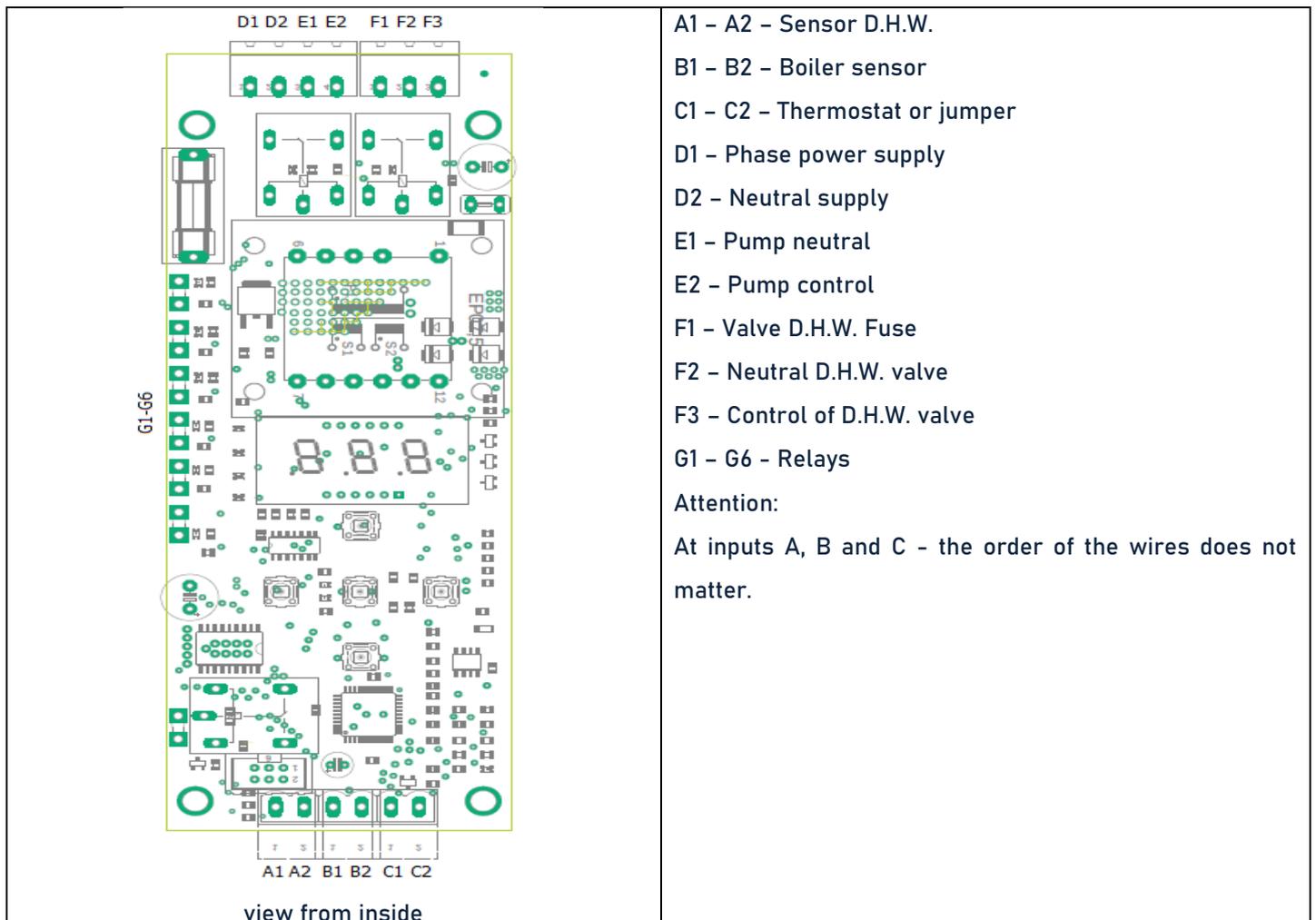
b) The PE wire must be connected to the housing of the boiler by M8 screw.

c) The boiler must be connected to the permanent electrical installation via a device which allows disconnection from the power supply at all poles where the distance between contacts is not less than 3 mm.

6.4. Residual current circuit breaker required (if the domestic electrical installation is not already equipped with one), and the corresponding cross-sections of the supply lines and the required fuses for the installation can be found in the technical data table (page 5).

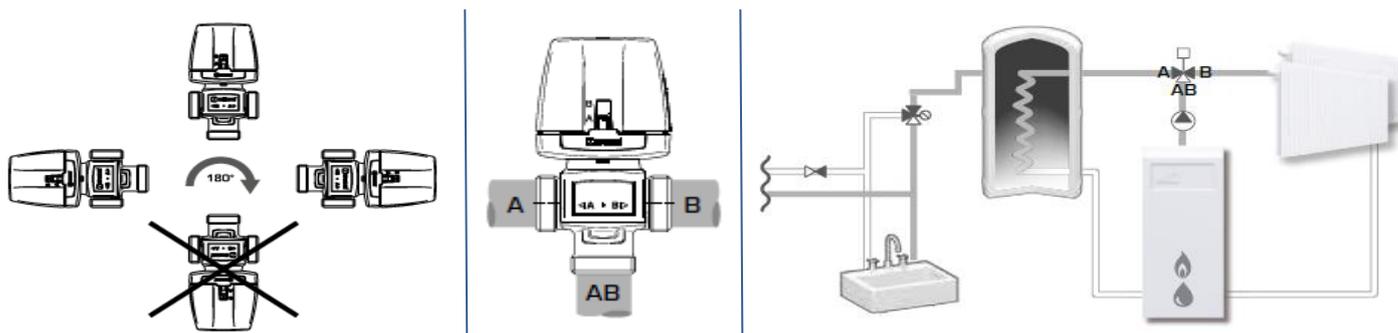
6.5. Once the unit is properly connected to the electrical system, switch the isolating switch to the ON position. The diode on the control panel should light up red, which indicates that the boiler is ready for operation.

7. Connection strips - control board overall diagram:

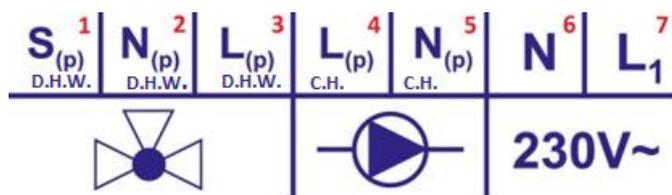


8. CONNECTING THE DHW PACKAGE (optional)

Before connecting, please also read the attached manual for the electro valve.



Electrical connection of electro-valve and D.H.W. sensor.



PIN 1 – black, steering; PIN 2 – blue, neutral; PIN 3 – brown, line; Connection of the D.H.W. sensor – PIN E I F

Activation

The boiler sold from the factory with the DHW package has the DHW function activated. - no change to the settings is required.

When purchasing the package separately, while in parameter P11, hold down the right button until parameter P20 is activated. Then select the value 7 from the options. Any other value deactivates the DHW pack even if the sensor is connected.



9. BOILER START-UP

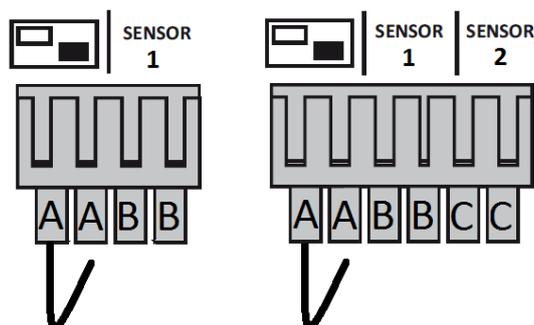
9.1. Activation of the heaters - jumper.

The boiler is not equipped with a room thermoregulator, so a cable is connected to terminals A. The unit will only start the heaters when the circuit is closed (jumper).

The jumper is used for temporary boiler operation mode - operation in this mode causes faster wear of components and unnecessarily increases heating costs. It is therefore recommended to use an external 0V (voltage-free) thermoregulator for the boiler.

Input A - jumper plug-in location or voltage-free room thermoregulator.

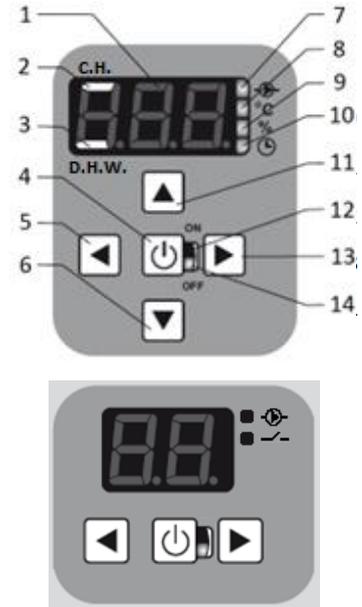
Input B - place of connection of measuring sensor (No. 1) to the boiler body - central heating function.



Input C - place for connecting the measurement sensor (No. 2) to the D.H.W cylinder - D.H.W heating function (in D.H.W pack)

LED display, indicator diodes and control panel

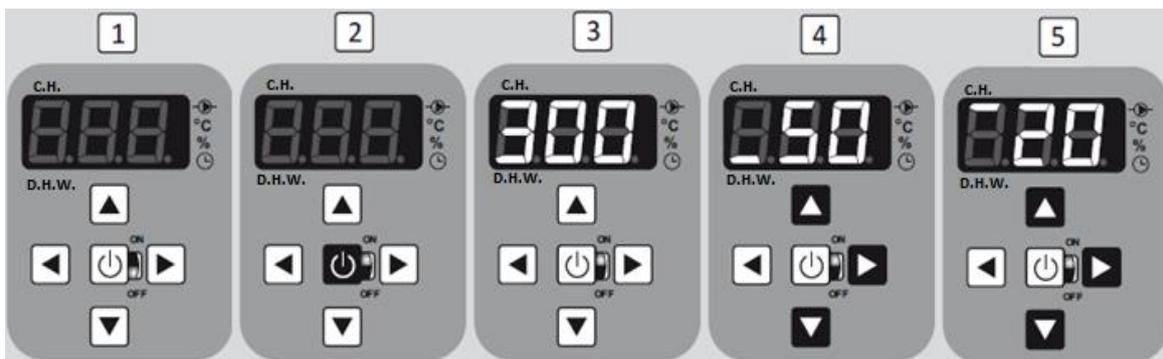
1. LED display
2. C.H. operation indication(AsC, D.H.W package)
3. D.H.W operation indication(AsC, D.H.W package)
4. Function button OK/ON/OFF
5. Function button LEFT
6. Function button DOWN
7. Diode - work of C.H. pump
8. Diode - °C
9. Diode - boiler power split
10. Diode - work time
11. Function button TOP
12. Green diode - boiler activated
13. Function button RIGHT
14. Red diode - boiler disabled
15. Thermoregulator connection indication



9.2. Boiler power modulation.

The boilers Colonel AsP, Sergeant AsBN, Major AsZN, General AsD and Hussar AsHZ are equipped with a modulating heating power function: a 15kW boiler can be reduced to 4/6/9kW, an 18kW boiler to 4/6/12kW and a 24kW boiler to 12kW. The selection can be made at the first boiler activation stage or the operation parameter can be changed at a later stage (P11 - Maximum kW output).

9.3. First boiler activation:



The boiler should be connected in accordance with the sections Hydraulic assembly and Electrical assembly and the valves on the radiators must be fully open during start-up.

1) When the boiler is correctly electrically connected, the red diode should light up. This indicates that it is switched OFF, in standby mode - a recommended state outside the heating season.

2. After 5 seconds of pressing the button  the green diode lights up.

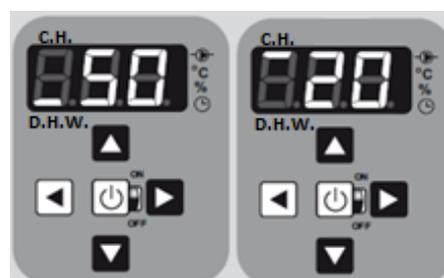
3. The LED display shows the number 300 starting the countdown - this function cannot be skipped. At this stage only the central heating pump is switched ON, it is not possible to switch ON the heaters. The 300 seconds should be used to thoroughly vent the boiler, pump and central heating system. This does not take place automatically; each user must go through all the venting points himself. Should this not be the case, the whole procedure should be repeated by switching the electric boiler OFF and ON again.

10. PROGRAMMING (Uhlan AsPC-S model see page 10)

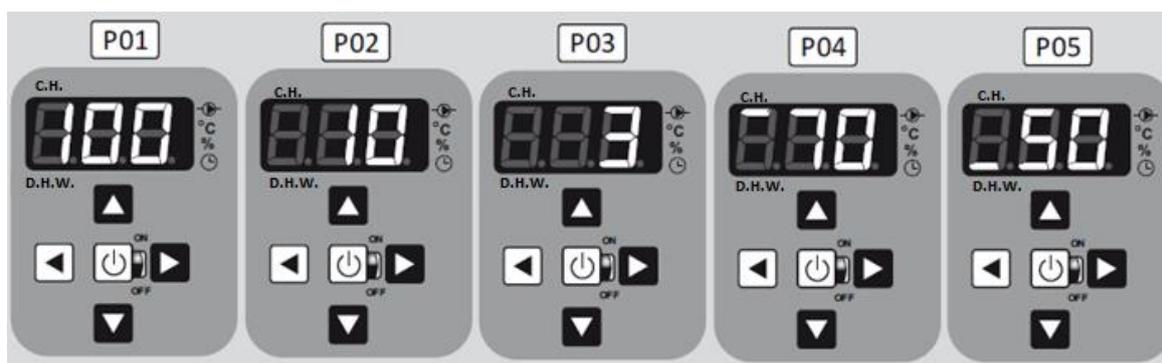
10.1. Temperature setting.

There are four temperature modes in Elterm's basic boilers:

- temperature readout mode, which indicates the current water temperature in the central heating system
- D.H.W. temperature reading mode (only in boilers with the D.H.W. package installed), which indicates the current temperature in the D.H.W. tank.
- the central heating temperature setting mode, which allows you to set the temperature to which the boiler should heat the water in the central heating system.
- D.H.W. temperature setting mode (only on boilers with the D.H.W. package installed), which allows you to set the temperature to which the boiler should heat the domestic hot water.



The left-right arrows are used to move between modes. In temperature reading modes the digits are displayed constantly, while in setting modes the digits flash. Changing the temperature value in setting modes is done with the up - down arrows. The horizontal bar indicates what the temperature relates to: if it is central heating, it is on top, and if it is D.H.W, it is on the bottom, as shown in the diagram opposite.



P01 – Boiler power – manual split

This parameter can be used to reduce the output of the boiler by one-third, by pressing the  display shows the current boiler output in %,  power increase (67%, 100%),  power reduction (67%, 33%),  approval of settings (recommended - 100%),  transition to function P02.

This parameter is closely related to parameter P11 - maximum boiler output. Parameter P01 refers to the value set in parameter P11. If a change is made in both parameters, the power will be changed twice. **The manufacturer recommends limiting the power in one parameter - P01 or P11.**

P02 – C.H. pump operation

When the boiler is finished, the heaters are still warm and continue to heat by their inertia. In order to avoid local overheating of the boiler, the pump continues to run after the last heater has finished heating. This ensures that the heaters cool down.

☰ The display shows the current operating time of the pump, ▲ extension of working time, ▼ reduction in working time, ☰ approval of settings **10:10** (recommended - 10), - indication of constant pump operation, independent of the operation of the boiler heaters, ▶ move to function P03.

P03 – function PID – proportional-integral-differential regulator

PID is the heating dynamics. Thanks to this parameter, it is possible to regulate the heating intensity: if the boiler takes a very long time to reach the set temperature - set the parameter to 4 or 5, otherwise select 1 or 2. Factory setting 3.

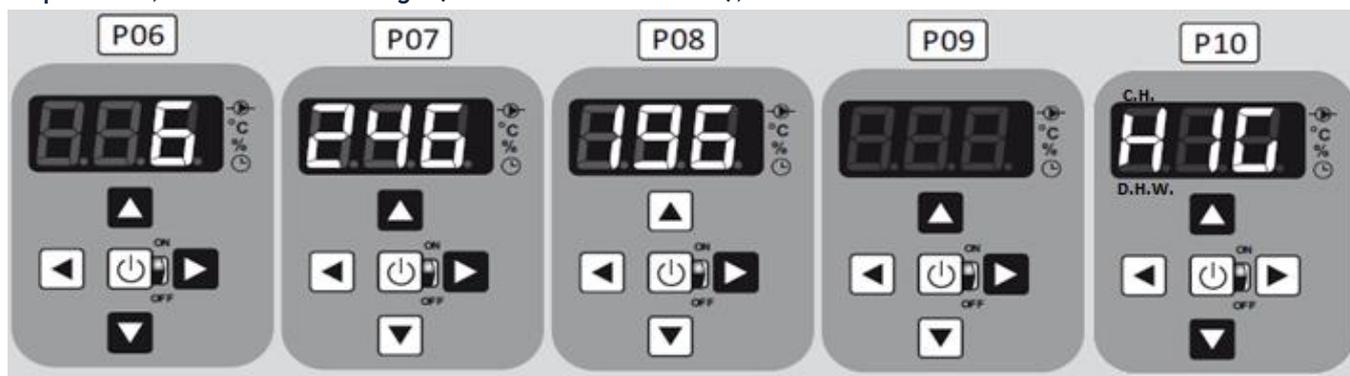
☰ Display shows the current PID setting, ▲ increase the ratio ▼ reduction the ratio, ☰ approve the settings (recommended - 3), ▶ move to function P04.

P04 – Maximum operating temperature of the boiler – C.H.

This parameter allows you to set the maximum temperature of water or other media used in the central heating system - C.H.. By pressing ☰ display shows the currently set temperature, ▲ increase temperature to 70°C for basic boilers - 95°C for industrial boilers type Hussar **AsHZ**, Battalion **AsBIII**, ▼ decrease temp., ☰ approval setting (recommended - 70°C), ▶ move to function P05.

P05 – Maximum operating temperature of the boiler - D.H.W. (for connected domestic hot water package)

This parameter allows you to set the maximum temperature of the domestic hot water - D.H.W. By pressing ☰ the display shows currently setted temperature ▲ increase temp. to 65°C, ▼ decrease temp. to 5°C, ☰ confirm settings (recommended - 50°C), ▶ move to function P06.



P06 – Boiler operation hysteresis

The hysteresis is the difference at which the boiler switches from the maintenance cycle to the operation cycle after reaching the set temperature.

Example:

...When the preset boiler temperature is 60°C and the hysteresis is set to 3°C, the boiler will operate until the actual temperature of 60°C is reached. Once this is reached, the boiler will enter a holding cycle. The boiler will return to the operation cycle after the actual boiler temperature drops by 3°C, i.e. to 57°C..

⏻ The display shows the currently set hysteresis, ▲ increase, ▼ decrease, ⏻ confirmation of settings (recommended - 6°C), ▶ move to function P07. *Attention: range 1-2-3°C available for boiler temperature settings up to 40°C; range 4-5-6°C available for higher temperature settings.*

P07 – Energy consumed in kWh

The boiler counts energy consumption in kWh from the start of measurement for a maximum of 24 hours.

By press ⏻ display shows kWh consumed, ▲ counter reset, consumption indicator starts from zero with 1 second update, ▶ move to function P08.

P08 – STOP heating - adjustable energy consumption meter

This parameter allows an energy limit to be set after which the boiler will switch OFF. Pressing ⏻ display shows 0 kWh, ▲ increasing the operating limit by 10kWh, ⏻ choose confirmation. When the set kWh has been consumed, the meter stops at 1kW and this is indicated by a flashing diode on the display. **In order to keep the boiler running, regardless of the kWh consumed, the parameter must be manually reduced to 0 kWh thus deactivating the STOP heating function.** ▶ move to function P09.

P09 – Boiler factory settings

This parameter allows you to restore the factory settings. It is recommended to use this function when the boiler does not operate or operates incorrectly.

By pressed ⏻ the display shows the currently selected parameter, ▲ restore factory settings to:

- 1 – power 100%,
 - 2 – pump running time 10min.,
 - 3 – PID 3,
 - 4 – temperature C.H. 70°C,
 - 5 – hysteresis 6°C,
 - 6 – temperature D.H.W. 50°C (for connected D.H.W. package),
- ▶ move to function P10.

By activating function P09, the boiler venting function is automatically activated. After 5 minutes, the boiler will start to operate according to the factory settings.

P10 – Hygienization (for connected D.H.W. package)

This parameter allows the DHW system to be heated to the maximum temperature. Thanks to this procedure, microorganisms harmful to humans, including Legionella - are killed.

By pressing  the display shows HIG,  launch,  finish. *Attention: during hygienization, a temperature of 70°C is automatically maintained in the D.H.W. circuit - the lower segment of the display flashes.*

It is recommended that the D.H.W. system be hygienized every 2 to 3 weeks.

P11 – Max. Power (kW).

This parameter can be used to set the boiler power within the range available for the model:

- 4kW to 2kW
- 6kW to 2/4kW
- 9kW to 3/6kW
- 12kW to 4/8 kW
- 15kW to 4/6/9kW,
- 18kW to 4/6/12kW,
- 24kW to 12kW

By pressing  the display shows the currently set boiler power,  increase  decrease  settings confirmation.

This parameter is closely related to parameter P01 - boiler power - manual split. Parameter P01 refers to the value set in parameter P11. If a change is made in both parameters, the power will be changed twice. **The manufacturer recommends limiting the power in one parameter - P01 or P11.**

11. Programming of the model AsPC-S



The boiler should be connected in accordance with the sections Hydraulic assembly and Electrical assembly and the valves on the radiators must be fully open during start-up.

1) When the boiler is correctly electrically connected, the red diode should light up. This indicates that it is switched OFF, in standby mode - **a recommended state during the off-season.**

2. After 5 seconds of pressing the button  the green diode lights up.

3. The LED display shows the number 29 and a flashing dot starts the countdown - this function cannot be skipped. At this stage only the central heating pump is switched ON, it is not possible to switch ON the heaters. This time should be used to thoroughly vent the boiler, pump and central heating system. This

does not take place automatically; each user must go through all the venting points himself. Should this not be the case, the whole procedure should be repeated by switching the boiler OFF and ON again.



P1 – Boiler power – manual split

This parameter can be used to reduce the boiler power by 1/3. By pressing the the display shows the current boiler power in % (99 means 100%), power increase (67%, 100%), reduction in power (67%, 33%), confirmation of settings (recommended - 100%), move to function P02.

P2 – C.H. pump work.

When the boiler is finished, the heaters are still warm and continue to heat by their inertia. In order to avoid local overheating of the boiler, the pump continues to run after the last heater has finished heating. This results in a cooling down of the heaters.

The display shows the current operating time of the pump, Extension of the pump operating time (3, 5, 10, ON), reducing working time (1, 3, 5, 10), confirmation of settings (recommended - 10), - indication of continuous operation of the pump, independent of the operation of the heaters in the boiler, move to function P3.

P3 – boiler operation hysteresis

The hysteresis is the difference at which the boiler switches from the holding cycle to the operating cycle after reaching the set temperature.

Example:

When the boiler set temperature is 60°C and the hysteresis is set at 3°C, the boiler will operate until the actual temperature of 60°C is reached. Once this is reached, the boiler will enter a holding cycle. The boiler will return to the operating cycle when the actual boiler temperature drops by 3°C, i.e. to 57°C.

Display shows the currently set hysteresis, increase, decrease, confirmation of settings (recommended - 6°C), move to function P07. *Attention: range 1-2-3°C available for boiler temperature settings up to 40°C; range 4-5-6°C available for higher temperature settings.*

P4 – Boiler power – factory parameter.

Factory parameter for setting the boiler power. It is necessary to leave the factory set actual boiler power

12. The most common errors and their resolution

Indications	Reason	What to do?
1. When the boiler is connected to the mains (main power supply), not a single diode lights up.	Boiler electrical power supply failure Tripping of the thermal protection – limit (100°C) Activation of automatic boiler protection Damage or mechanical interruption of control wires in the boiler	Check mains supply Check condition and continuity of wires Wait until the water in the boiler has cooled down and check the cause of the overheating: - check the pressure in the central heating system. Check the pressure in the central heating system (aeration) - vent the system and the central heating pump.
	2. Tripping of the residual current circuit breaker (external).	The electronic protection of the boiler triggers the circuit breaker
3. There was a rapid increase in temperature (in the display) when the boiler was switched ON.	Lack of central heating circuit Boiler power too high for the power of the radiators	Wait for the boiler to cool down and activate the 100°C thermal protection switch
	4. When the main switch is turned ON, the diodes light up, the pump has completed the venting cycle, but the boiler does not switch ON the heating section after 300 seconds.	Room thermoregulator terminals not screwed on properly (jumper) or jumper terminals broken (bridge) Defective thermoregulator or cable connecting it to the boiler
5. The following message appears on the display: E01 – sensor fault - short circuit (resistance too low, e.g. sensor wire crushed) E02 – sensor fault - resistance too high (sensor not connected, broken sensor wire, terminals on sensor strip not tightened)	Temperature reached, no need to heat	Wait for the need to heat
	No temperature measurement, defective sensor (temperature measurement sensor in the boiler)	Check that the sensor wires are screwed correctly to the terminal strip, replace the sensor if necessary. Check for damage on the cable.
6. The following message appears on the display: E03 – no room thermoregulator	No room controller connected - constant boiler operation for 96h	A jumper is connected under the connection strip of the room thermoregulator - any voltage-free thermoregulator should be connected instead..
7. The following message appears on the display: E04 – temperature rising too quickly	See point 3	See point 3
8. When the main switch is turned ON, the diodes light up, but the buttons cannot be controlled	Unscrewing of the electronic board from the main board (break occurs)	Tighten the retaining nuts (from below)
9. Tripping of the main fuse supplying the boiler	Fuse amperage too small	Replace fuses with larger ones Disconnect some heaters
	Possible short circuit of one of the heaters	Find the faulty heater, disconnect it and replace it after the heating season



Elterm boilers are equipped with an Anti-Stop function. The automatics switches the pump ON for 1 minute every 14 days to prevent the pump rotor from seizing. The Anti-Stop function operates independently of the ON/OFF status. Outside the heating season, it is recommended to leave the boiler in the OFF mode (red diode visible) - energy consumption in this mode is only 0.5W!

Do not remove the boiler housing while the boiler is under power. If the boiler is switched ON without water, wait until it has cooled down, fill it with water and switch it ON again. Under no circumstances should cold water be poured over hot heaters! Vent the central heating system, in particular the central heating pump, before the next heating season.

EC Declaration of Conformity 2020/11a

Manufacturer: Elterm M.M.Kaszuba Sp.J, ul. Przemysłowa 5, 86-200 Chetmno

Product: Electric central heating boiler

The object of the declaration: Electric central heating boiler

Model: Uhlán (AsPC), Uhlán-SHE (AsPC-S), Corporal (AsP), Sergeant (AsBN), Major (AsZN), Brigadier (AsD), Ensign (AsC), Captain (AsBN-W), Colonel (AsZN-W), General (AsD-W), Marshal (AsDC-W), Lieutenant (AsC-W), Hussar (AsHZ), Commander (AsHN), Bateria (AsBII), Battalion (AsBIII), Division (AsBIV), Mobilny (AsMB), Mobilny PRO (AsMB PRO)

Power: 4kW, 6kW, 9kW, 12kW, 15kW, 18kW, 21kW, 24kW, 27kW, 30kW, 33kW, 36kW, 39kW, 42kW, 45kW, 48kW

The designated products comply with the regulations of the following directives:

2009/125/UE – Ecodesign directive

2011/65/UE – RoHS directive

2014/30/UE – EMC directive

2014/35/UE – Low voltage directive

Harmonized standards and regulations used to which conformity is declared:

PN EN 60335-1:2012+A1:2019+A2:2019+A11:2014+A13:2017+A14:2020

PN EN 60335-2-35:2016+A1:2020

PN EN 62233:2008

PN EN 61000-3-2:2019

PN EN 61000-3-3:2013+A1:2019

PN EN IEC 61000-3-11:2020

PN EN 61000-3-12:2012

PN EN 55014-1:2017+A11:2020

PN EN 55014-2:2015

(UE) 811/2013

I hereby declare that products mentioned in this declaration comply with the requirements of EU legislation.

Chetmno, 2020.10.01

place and date



Tomasz Jeziorski

owner

Guarantee card

Boiler EWB:	
Serial number:	
Date of production:	
Date of sale:	
Seller's stamp and signature	

Stamp of the hydraulic firm assembling the boiler	Stamp of the electrical firm assembling the boiler	I declare that I have read and understood with the conditions of guarantee and assembly. I accept.
Without the above stamps and signatures, the guarantee is invalid		

Warranty conditions:

1. The guarantee for the efficient operation of the device is provided for a period of 24 months.
2. The guarantee expires if modifications are made to the product without the manufacturer's consent, or if the assembly or operation of the product does not comply with the operating instructions and guarantee conditions..
3. Repairs under warranty shall be carried out by the manufacturer or his authorised service centres..
4. A guarantee filled in incompletely is invalid.
5. If the service technician discovers that the device is not working due to the user's fault (e.g. poorly made electrical installation, vented central heating system, etc.) or the warranty is invalid, the cost of repair and travel expenses will be borne by the customer.
6. Failure by the user to comply with the service technician's recommendations stated in the warranty repair protocol will result in the suspension of the warranty until the recommendations have been carried out.

Service technician's stamp, brief description of the fault and recommendations for the user.

After the service technician has carried out the warranty repair, the coupon below should be cut out and given to the service technician.

Warranty coupon I

.....
Details and address of the device owner

.....
Contact number

.....
Date of production of the device.

Warranty coupon II

.....
Details and address of the device owner

.....
Contact number

.....
Date of production of the device.

Environmental protection and disposal

Environmental issues are very important to Elterm. We carry out tasks resulting from the Environmental Protection Act and other relevant legislation.

Packaging

The materials used as packaging are all recyclable. When disposing of them, comply with current local regulations. Plastic bags, cardboard or polystyrene and other materials used should be kept away from children, as they may present a danger to them.

Waste electric and electronic equipment



The symbol shown means that this product must not be disposed of, placed with other waste, but must be taken to your local separate waste collection point for take-back, recycling or disposal. This is free of charge. This applies to countries with legal regulations related to electronic waste management, e.g. the "European Directive 2012/19/EC on waste electrical and electronic equipment". The regulations set the framework conditions applicable to the return and recycling of waste electronic equipment in each country. All electrical and electronic equipment may contain hazardous substances, and care must be taken to recycle them in a sustainable manner. These measures are intended to minimise the risk of potential harm to the environment and human health and contribute to the conservation of natural resources. They also make it possible to recover valuable resources. Incorrect disposal of waste is subject to penalties under the relevant legislation. For further information about recycling and disposal of waste electrical and electronic equipment, please contact the relevant local authority, waste disposal facility or the retailer from whom you purchased the



product.

(BDO registration number – 000010881)