

AVANSA 110-Z

Electronic on-surface thermostat



1. Description

1. 230V 2. Pump control for heating 3. Pump control TUV 4. TUV temperature sensor 5. Boiler temperature sensor 6. ON/OFF 7. Plus button 8. MENU button 9. Minus button



- power indicator
- operation indicator for the heating pump
- TUV pump operation indicator

2. Use Thermostat AVANSA 110-Z is designed for controlling the heating pump and the TUV tank pump. The heating pump turns on when the boiler temperature exceeds the user-set boiler on temperature for heating. The TUV tank pump operates based on temperature difference. The tank pump turns on when the boiler temperature exceeds the tank temperature by the set hysteresis. The pump operates until the boiler and tank temperatures equalize or until the set tank temperature is reached.

Function P (priority) – if this function is active, the TUV tank pump operates with priority. First, the TUV tank pump turns on, and after the set tank temperature is reached, the heating pump also starts. If this function is off, the pumps operate independently, without priority for the TUV tank pump. To activate the priority function, press the MENU button and hold it until the letter P appears on the display. Then use the arrows to select ON (for activation) or OFF (for deactivation) of the function.

Function L (summer mode) – turns off the heating pump, only the TUV tank pump operates. The heating pump turns on only if the boiler temperature exceeds 90°C – to protect the boiler from overheating.

Continuous pump operation Press and hold the MENU and PLUS buttons – the heating pump switches to continuous operation. The pump will operate until the user manually turns it off – by pressing the MENU and PLUS buttons again. Press and hold the MENU and MINUS buttons – the TUV tank pump switches to continuous operation. The pump will operate until the user manually turns it off – by pressing the MENU and MINUS buttons again. To display the tank temperature, press the MINUS button – after a few seconds, the temperature will appear on the display. The thermostat is also equipped with a frost protection function – if the temperature drops below 5°C, the pump automatically turns on.

3. Operation The heating pump on temperature (), the TUV tank temperature (), and hysteresis (h) can

be changed as follows:

- press the MENU button until the letter appears on the display

or h.

- set the desired temperature using the Plus and Minus buttons - after a few seconds, the thermostat automatically switches to operating mode and displays the current boiler temperature.

Hysteresis Used to set the temperature difference (boiler and tank) at which the pump turns on.

Alarm The thermostat is equipped with an acoustic alarm indicating high boiler temperature (90°C).
Thermostat function



– heating pump on temperature
– maximum tank temperature

h – hysteresis (for turning on the TUV tank pump)

P – priority of TUV tank pump L – summer mode

4. Installation The device may be installed only by a qualified person. Mount the temperature sensor on the boiler outlet using a strap and secure the thermal insulation. The sensor must not be placed in liquids.
Connection to the pump:

1. terminal  - yellow-green wire
2. terminal N – blue wire 3.
terminal L – brown wire

4. Technical information Type

Supply voltage

Ambient temperature

Switching current

Temperature measurement range

Temperature setting range

Adjustable tank hysteresis

Maximum sensor temperature

AVANSA 110-Z

230V 50Hz $\pm 10\%$

-10...+50°C

6A

0...90°C

Heating 5...80°C TUV

20...80°C

10...30°C

-10...120°C