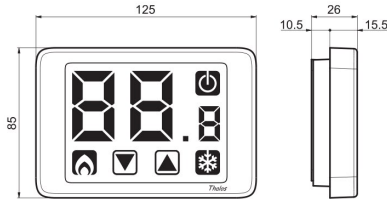
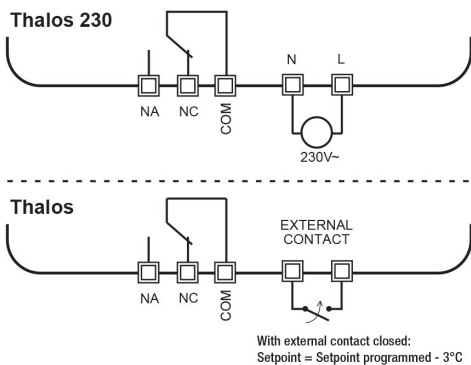


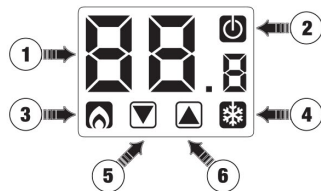
2 DIMENSIONS



3 WIRING DIAGRAMS



4 LEGEND



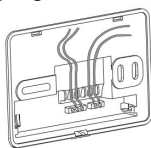
- ① "Environment temperature" Field
- ② "Off" Field
- ③ "Heating activation" Field
- ④ "Cooling activation" Field
- ⑤ Key "▼" decreases the selected field
- ⑥ Key "▲" increases the selected field

Attention: the keys are active only if the instrument is installed on wall-mounted base.

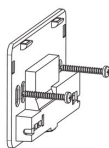
5 INSTALLATION

- Thalos series thermostats are designed for wall mounting installation. Alternatively, they can be installed to cover the three-module in built box.
- Install the thermostat at a height of about 1.5 m above the floor, away from direct sunlight, away from doors, windows, heat sources, locations with excess or total lack of ventilation.

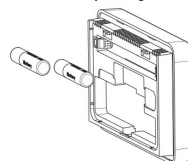
① Connect the wires to the terminal block on back of the base, as shown in the "wiring diagrams".



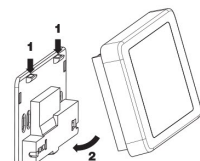
② Fix the base on the wall using the screws supplied.



③ For battery power supply model only: insert the batteries into the battery compartment on the back of the thermostat, respecting the indicated polarity.



④ Attach the thermostat to the base, at first mating teeth on the higher side.



1 User Manual

ELECTRONIC TOUCH SCREEN THERMOSTATS

⚠ Read all instructions carefully

Serie di wall mounting touch screen thermostats for temperature control both in heating and cooling.

They perform actions of type 1B and are intended for operating in environments Pollution Degree 2 and Overvoltage Category III (EN60730-1).

- **Thalos** battery powered models have a monochrome backlit display and an input where it is possible to connect an external contact suitable to reduce the setpoint of 3°C.
- **Thalos 230** AC-powered models have a multicolour backlit display: red, green and blue. The colour changes according to the gap between the measured temperature and the programmed setpoint.

Code	Model	Description
VE432100	Thalos Bianco	Touchscreen thermostat batteries with digital input
VE433900	Thalos Nero	Touchscreen thermostat batteries with digital input
VE432100	Thalos 230 Bianco	Touchscreen thermostat 230V with multicolor display
VE433900	Thalos 230 Nero	Touchscreen thermostat 230V with multicolor display

SAFETY WARNINGS



During product installation and operation it is necessary to observe the following instructions:

- 1) The instrument must be installed by a qualified person, in strict compliance with the connection diagrams.
- 2) Do not power or connect the instrument if any part of it is damaged.
- 3) After installation, inaccessibility to the connection terminals without appropriate tools must be guaranteed.
- 4) The instrument must be installed and activated in compliance with current electric systems standards.
- 5) Before accessing the connection terminals, verify that the leads are not live.
- 6) In the electrical system of the building where the instrument must be installed, a switch and a protection device from the overcurrents must be present (for Thalos 230 models only).

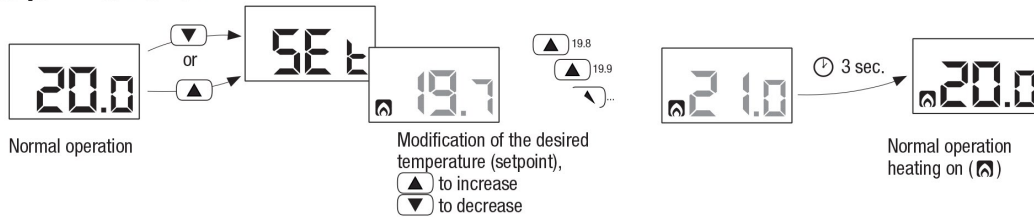
TECHNICAL SPECIFICATIONS

- Power supply Thalos:
 - 2 alkaline batteries 1.5V (AAA type)
 - battery life: 12 months
 - battery charge level indication
- Power supply Thalos 230:
 - 230Vac (-15% ÷ +10%) 50/60Hz
 - max absorption: 6 VA / 230Vac
- Wall mounting (or to coverage three-module in built box)
- Terminals Thalos:
 - 3 terminals for 1.5 mm² cable section for bistable output relay 5A / 250Vac
 - 2 terminals for 1.5 mm² cable section for digital input (3°C setpoint reduction)
- Terminals Thalos 230:
 - 3 terminals for 1.5 mm² cable section for monostable output relay 5A / 250Vac
 - 2 terminals for 1.5 mm² cable section for power supply
- Operating mode: summer/winter/off (with antifreeze operating mode)
- Password protected lock keypad
- Regulation type:
 - on/off with settable differential (0.1 ÷ 1°C)
 - P8 proportional with 0.8°C band (-0.3 ÷ +0.5°C) and period 8 minutes
 - P15 proportional with 1.5°C band (-0.7 ÷ +0.8°C) and period 15 minutes
- Measurement precision: ± 0.5 °C
- Measurement temperature resolution: 0.1 °C
- Settable setpoint range: 2°C ÷ +35°C
- Operating temperature: 0 °C ÷ +50 °C
- Storage temperature: -10 °C ÷ +65 °C
- Operating humidity: 20÷90% non-condensing
- Degree of protection: IP40
- Insulation: reinforced among accessible parts (frontal) and all other terminals

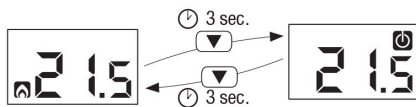
6 OPERATION

During the normal operation the thermostat displays the detected temperature value and the relay status is identified by the symbol  (heating) or the symbol  (cooling).

Setpoint modification

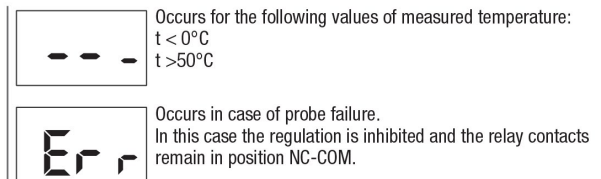


Switch off



Note: in heating mode (winter), the instrument if off, it regulates according to the antifreeze temperature **Toff** in order to prevent freezing of the system. **Toff** can have values from 1 to 10° C or be excluded; in this case any minimum temperature is guaranteed.



Error messages

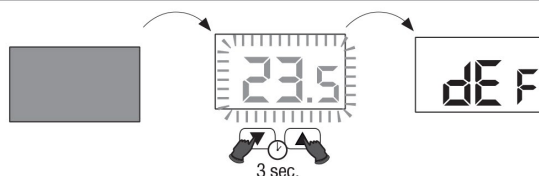


Reset




Reset to delete the settings you made and reload the default values. To reset:

- remove power from the instrument (Klima LCD 230) or remove the batteries (Klima LCD). Wait until the display goes off.



- Restore power to the instrument (Klima LCD 230) or insert the batteries (Klima LCD). During the flashing press the keys  and  until the display shows **dEF**.





Default values

Heating setpoint 	21°C
Cooling setpoint 	25°C
Minimum settable setpoint - L0	2°C
Maximum settable setpoint - H1	35°C
Operating mode	 (heating)
Antifreeze temperature	6°C
Regulation type	On /Off
Differential	0.3°C
Password	--- (disabled)



Advanced programming

To enter menu Advanced programming keep simultaneously pressed for 3 seconds the keys  and  until **Pr** will appear.

The items of the menu are displayed in succession. For each item is displayed an identification abbreviation and its relative blinking value. Use the keys  and  to modify the value. The passage to the next parameter occurs after 3 seconds without pressing any key. Once all parameters are set the writing **End** is displayed and the thermostat returns to normal operation saving the effected modifications.

L0 Minimum settable setpoint - **L0**
 It's the minimum value settable as setpoint.
 Settable values: $2 \div h$

H1 Maximum settable setpoint - **H1**
 It's the maximum value settable as setpoint.
 Settable values: $L0 \div 35^{\circ}\text{C}$

E-1 Operating mode - **E-1**
 if connected to the boiler (heating)
 if connected to a cooling system

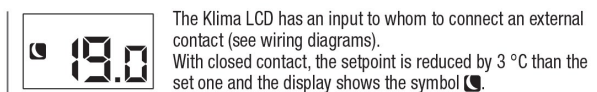
06.0 Antifreeze temperature - **Toff** - (only in heating)
 Minimum temperature maintained with instrument off (see box «Switch off».)
 Settable values: $1 \div 10^{\circ}\text{C}$ or --- (excluded function)

rEG Regulation type - **rEG** - (only in heating)
0 = on/off with settable differential
PB = proportional with band 0.8°C and period 8 minutes
P15 = proportional with band 1.5°C and period 15 minutes

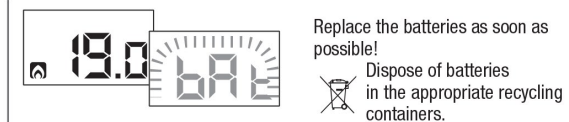
d0.3 Differential - **d0.3** - (only for on/off regulation)
 Differential (or hysteresis) for temperature regulation.
 Settable values: $0.1 \div 1^{\circ}\text{C}$

PR5 Password for keypad lock - **PR5**
 Set a value between 001 and 999 to activate the keypad lock.
 Set "---" to disable the lock.
 If the keypad lock is active, pressing one key **L0c** appears and the password is required. If it's properly inserted the keyboard is unlocked for the next 30 seconds.

Night reduction (for Klima LCD only)

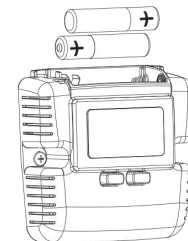


Depleted batteries signal (for Klima LCD only)



Batteries replacement

- Remove the front shell.
- Insert the batteries in the appropriate compartment (attention to the polarity).
- Reposition the front shell.



REFERENCE STANDARDS

Compliance with Community Directives
 2006/95/EC (Low voltage)
 2004/108/EC (E.M.C.)

is declared with reference to the following harmonized standards:
 • EN 60730-2-9