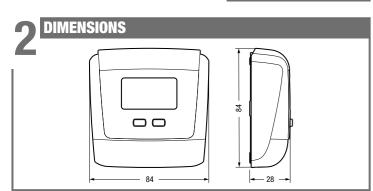
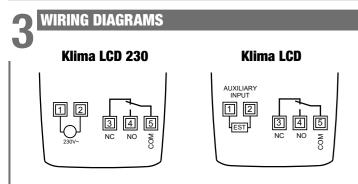
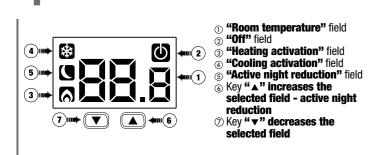
I - 32032 Feltre (BL) • Via Camp Lonc. 16 e-mail: info@vemer.it - web site: www.vemer.it









## INSTALLATION

LEGEND

- 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.
- Remove the front shell acting in accordance with the picture below.
- Make the connections by respecting the diagrams described in this manual.
- Insert the batteries in the compartment (for Klima LCD only)
- Fix the instrument to the wall.
- Reposition the front shell, by mating first the teeth on the upper side.

# **Remove the front shell** $\Box \Box$

# View wheelbase hole 4 0

#### **User Manual** Mod. KLIMA LCD WALL-MOUNTING ELECTRONIC THERMOSTATS $\triangle$ Read all instructions carefully

Wall-mounting electronic thermostats for temperature control both in heating and cooling. They perform actions of type 1B and are intended for operating in rooms with Pollution Degree 2 and Overvoltage Category III (EN60730-1).

- Klima LCD, with battery power supply and has an auxiliary input for a temperature probe configuration or of an external contact to reduce setpoint of 3 °C.
- Klima LCD 230 with mains power supply.

Code	Model	Description
VE729000	Klima LCD	Battery thermostat with auxiliary input
VE730800	Klima LCD 230	230V Thermostat

#### **SAFETY WARNINGS**

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

- The instrument must be installed by a qualified person, in strict compliance with the connection diagrams.
- Do not power or connect the instrument if any part appears to be damaged.
- 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.
- 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 protection device from the overcurrents must be present (for Klima LCD 230 model only).

#### **TECHNICAL SPECIFICATIONS**

- Power supply Klima LCD: 2 alkaline batteries 1.5 V (AAA type)
  - battery life: 12 months
  - depleted batteries indication
- Power supply Klima LCD 230: − 230 Vac (-15% ÷ +10%) 50/60 Hz
  - max absorption: 2.5 VA / 230 Vac
- Terminals Klima I CD:
- 3 terminals for 1.5 mm<sup>2</sup> cables for output relay 5 A / 250 Vac
- 2 terminals for 1.5 mm<sup>2</sup> cables for auxiliary input (to connect a temperature probe or an external contact to reduce setpoint of 3 °C)
- Terminals Klima LCD 230:
- 3 terminals for 1.5 mm<sup>2</sup> cables for output relay 5 A / 250 Vac
- 2 terminals for 1.5 mm<sup>2</sup> cables for power supply
- Operating mode: summer/winter/off (with antifreeze)
- Password protected lock keypad
- Type of command:
- on/off with settable differential (0.1  $\div$  1 °C)
- P8 proportional with 0.8 °C band (-0.3  $\div$  0.5 °C) and period 8 minutes
- P15 proportional with 1.5 °C band (-0.7  $\div$  0.8 °C) and period 15 minutes
- Measurement precision: ± 0.5 °C
- Measurement temperature resolution: 0.1 °C
- Setpoint range: 2 °C ÷ 50 °C
- Operating temperature: 0 °C ÷ 50 °C
- Storage temperature: -10 °C ÷ 65 °C
- Operating humidity: 20 ÷ 90% non condensing Protection degree: IP40
- Insulation: reinforced among accessible parts (frontal) and all other terminals

information to users pursuant to art. 14 of the directive 2012/19 / EU of the european parliament and of the council of 4 july 2012 on waste electrical and electronic equipment (WEEE)



If the crossed-out bin symbol appears on the equipment or packaging this means the product must not be included with other general waste at the end of its working life.

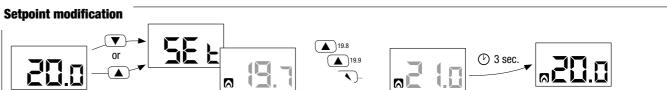
The user must take the worn product to a sorted waste center. or return it to the retailer when purchasing a new one.

Products for disposal can be consigned free of charge (without any new purchase obligation) to retailers with a sales area of at least  $400\ m^2$ , if they measure less than  $25\ cm$ .

An efficient sorted waste collection for the environmentally friendly disposal of the used device, or its subsequent recycling, helps avoid the potential negative effects on the environment and people's health, and encourages the re-use and/or recycling of the construction materials.

## **OPERATION**

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

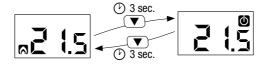


Modification of the desired temperature (setpoint),

▲ to increase ▼ to decrease

#### Switch off

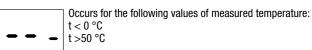
Normal operation



Note: in heating mode (winter), if the instrument is off, it adjusts according to the antifreeze temperature **Toff** in order to prevent the system freezing.

**Toff** can have values from 1 to 50 °C or be excluded; in this case any minimum temperature is guaranteed.

#### **Error messages**



Normal operation

heating on ( )



Occurs in case of probe failure.

In this case the adjustment is inhibited and the relay contacts remain in NC-COM position.

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

- 1 remove power from the instrument (Klima LCD 230) or remove the batteries (Klima LCD).
- Wait until the display goes off.
- 2 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





#### **Default values** Heating cotnoint

loating ootpoint (n)	
Cooling setpoint 😣	25 °C
Minimum settable setpoint - LD	2°C
Maximum settable setpoint - H I	50 °C
Operating mode	(heating)
Antifreeze temperature	6 °C
Type of command	On /Off
Differential	0.3 °C
Auxiliary input	DIG
Password	(desabled)

## **Night reduction**

"Night reduction" function reduces the programmed setpoint by 3 °C. Press for 3 seconds the key ( ) to activate (or deactivate, if already active) the night reduction. When the night reduction is active, the display shows the symbol .



## **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



Minimum settable setpoint - L 0 It's the minimum value settable as setpoint. Settable values: 2 ÷ H 1

Maximum settable setpoint - H : It's the maximum value settable as setpoint.

if connected to the boiler (heating)

Settable values: L D ÷ 50 °C Operating mode - E - 1

rEG

dD.3

if connected to a cooling system Antifreeze temperature - Toff - (only in heating) Minimum temperature maintained with instrument off (see box «Switch off»)

Settable values: 1 ÷ 50 °C or --- (excluded function) **Type of command -**  $r \in \mathcal{L}$  - (only in heating)

= on/off with settable differential PB = proportional with band 0.8 °C and period 8 minutes

P 15 = proportional with band 1.5 °C and period 15 minutes **Differential** - dū.∃ - (only on/off regulation) Differential (or hysteresis) for temperature regulation.



Input configuration - E5E - (only Klima LCD battery model) - °C for one temperature probe connection

- d 15 for connection of an external contact to reduce setpoint (see "Auxiliary input configuration")

#### Password for keypad lock - PR5

Settable values: 0.1 ÷ 1° C

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 Loc appears and the password is required. If it's properly inserted the keyboard is unlocked for the next 30 seconds.

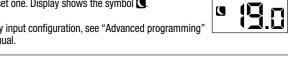
#### **Auxiliary input configuration** (only Klima LCD battery model)

Klima LCD has an auxiliary input that can be configured for connection instead of: - an auxiliary temperature probe. In this case the temperature value measured by the external probe is showing on the display and used for regulation.

- an external contact for the set-point temperature reduction. Closed external contact allows setpoint reduction of 3 °C than the set one. Display shows the symbol (

21 °C

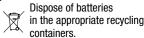
For auxiliary input configuration, see "Advanced programming" on this manual



#### **Depleted batteries signal** (only Klima LCD battery model)

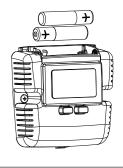


Replace the batteries as soon as possible!



#### **Batteries replacement**

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



11-2023

### **REFERENCE STANDARDS**

Compliance with Community Directives: 2014/35/UE (LVD) 2014/30/UE (EMCD)

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