

TK GUIDES

***TK
THERMOSTAT***

MODELS :

TK150 - TK500 - TK1000 - TK2000

FRONT PANEL COMMANDS



SET	To display target set point, in programming mode it selects a parameter or confirm an operation
	In programming mode it browses the parameter codes or increases the displayed value
	In programming mode it browses the parameter codes or decreases the displayed value. Keep it pressed more than 3 sec to power ON and OFF the device.
AUX	Empty button (possible auxiliary function)

	To lock or unlock the keyboard
SET +	To enter in programming mode
SET +	To return to room temperature display

LED	MODE	MEANING
	On	Compressor enabled
	Flashing	Anti-short cycle delay enabled (AC parameter)
	On	Heating relay active (if o1=on)
	on	Alarm/error
°C	On	Measurement unit
	Flashing	Programming mode
°F	On	Measurement unit
	Flashing	Programming mode

SET POINT

HOW TO SEE THE SET POINT

1. Push and immediately release the **SET** key, the set point will be showed;
2. Push and immediately release the **SET** key or wait about 5s to return to normal visualisation.

HOW TO CHANGE THE SETPOINT

1. Push the SET key for more than 2 sec to change the Set point value;
2. The value of the set point will be displayed and the “°C” or “°F” LED starts blinking;
3. To change the Set value push the \blacktriangle or \blacktriangledown arrows within 10 sec.
4. To memorise the new set point value push the SET key again or wait for 10 sec.

PARAMETERS L1

Parameter	Description	Regulation range
Hy	This parameter sets the hysteresis, that is the differential of the unit	0,5÷10°C 1,0÷45,0°F
Ot	This parameter adjusts the probe calibration: it allows to compensate for the difference in the temperature reading on the display compared to the actual water temperature	-12,0÷12,0°C -20,0÷20,0°F
o1	Activation/deactivation of heating function: -Set ON to activate the heating function -Set OFF to deactivate the heating function	On-OFF
rL	Thermostat version (only reading value)	10.2 - 11.3 - 11.6 – 19.4



PARAMETERS L1

5.4 HOW TO CHANGE A PARAMETER VALUE

To change any parameter's value, operate as follows:

1. Enter the Programming mode by pressing the **SET+▽** keys for 3 sec (“°C” or “°F” LED starts blinking).
2. Select the required parameter. Press the “**SET**” key to display its value
3. Use ▲ or ▼ to change its value.
4. Press “**SET**” to store the new value and move to the following parameter.

To exit: Press **SET+▲** or wait for 15 sec without pressing a key.

NOTE: the set value is stored even when the procedure is exited by waiting the time-out to expire.

TECHNICAL DATA

Housing: self extinguishing ABS

Case: frontal 32x74 mm; depth 50mm

Mounting: panel mounting in a 71x29mm panel cut-out

Protection: IP20; **Frontal protection:** IP65

Connections: Screw terminal block $\leq 2,5 \text{ mm}^2$ wiring

Power supply: according to the model 110Vac $\pm 10\%$, 50/60Hz --- 230Vac $\pm 10\%$, 50/60Hz

Power absorption: 3.5 VA max

Display: 2 digits, red LED, 14,2 mm high; **Inputs:** Up to 2 NTC probes

Digital input: free voltage contact (if present)

Relay outputs: **compressor** SPST 20(8)A 250Vac or 8(3) A 250Vac

Aux: SPDT 8(3) A 250Vac

Data storing: on the non-volatile memory (EEPROM)

Kind of action: 1B; **Pollution degree:** 2; **Software class:** A

Rated impulsive voltage: 2500V; **Overvoltage Category:** II

Operating temperature: 0 to 60 °C; **Storage temperature:** -25 to 60°C

Relative humidity: 20 to 85% (no condensing)

Measuring and regulation range: **NTC probe:** -40 to 110°C

Resolution: 0,1 °C or 1°C or 1 °F (selectable); **Accuracy (ambient temp. 25°C):** $\pm 0,1 \text{ °C} \pm 1 \text{ digit}$

