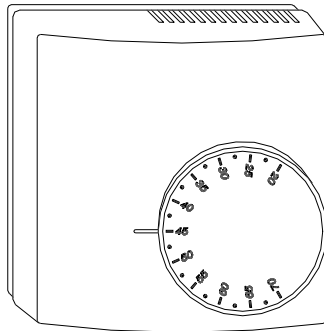


TAE KW0 2D



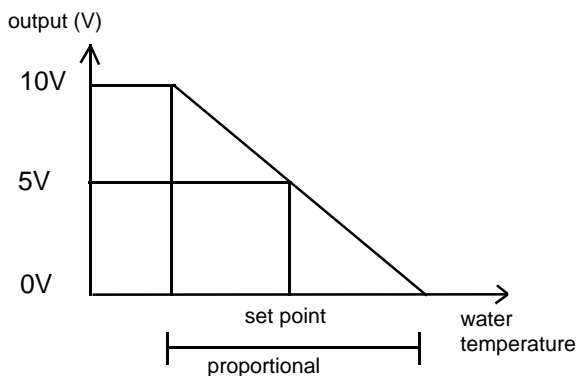
PROPORTIONAL-INTEGRAL REGULATOR

- o PI regulation
- o 0 .. 10V voltage output
- o 24V~/= power supply
- o Night reduction facility
- o Selectable integration time
- o Adjustable proportional band



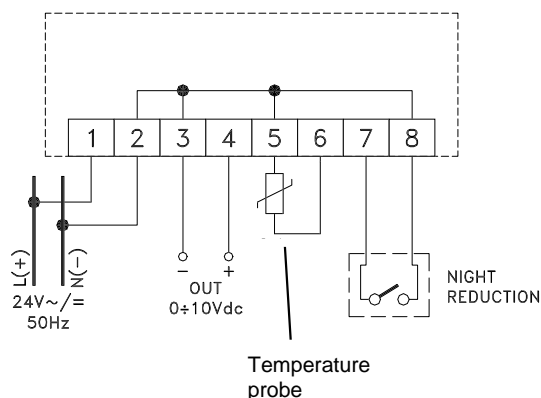
Pic.1: TAEKW02D

TAEKW02D is a proportional-integral regulator for supply water pipes. The output voltage (0 .. 10V) is obtained through the sum of a proportional part and an integral part. The proportional part is obtained as shown in the graphic below.

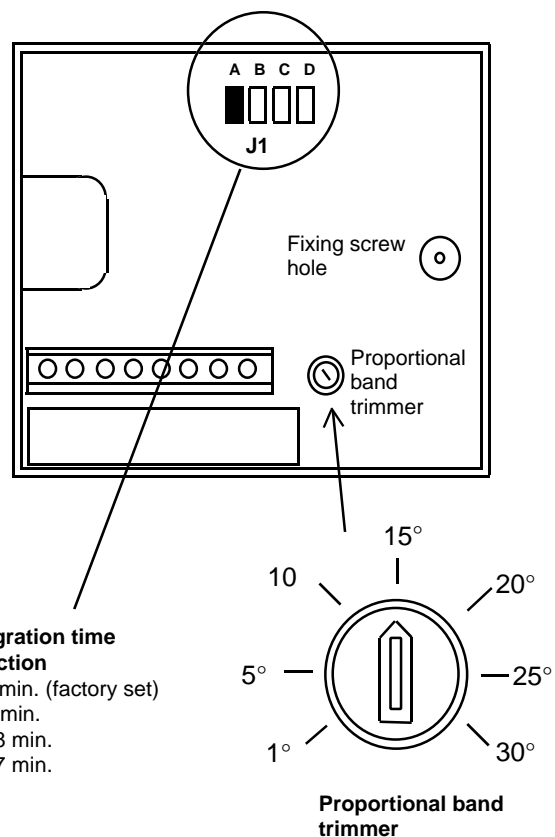


When the temperature equals the set point, the output voltage is 5V and decrease if the temperature is greater. The proportional band is adjustable through an internal trimmer from 1 to 30°C (see picture 2). The integral part is time-dependant: when the error between the temperature and the set point is fixed, it reaches the value of the proportional part in a time interval wich equals the integration time. The integration time is selectable by setting the jumper J1 (see picture 2).

WIRING DIAGRAM



A fixed 4° night reduction is obtained connecting an external switch on terminals 7 & 8 (the reduction is active when the switch is closed). Several regulators can be connected in parallel to the same night reduction external switch (for centralized operation), but the **polarity of the wires must mandatorily be respected**.



Integration time selection

- A: 3 min. (factory set)
- B: 9 min.
- C: 18 min.
- D: 27 min.

Proportional band trimmer

Pic.2: Integration time jumper, and proportional band trimmer

TECHNICAL FEATURES:

Power supply:	24V~/=, ±10%, 50Hz
Power consumption:	0.7VA
Regulation ranges:	Set point: 20 .. 70°C
	Proportional band: 1 .. 30°C
	Night reduction: 4°C
	Integration time: 3, 9, 18, 27 minutes
Probe type:	External, STLPTS150 PTC 2026 Ohm @25°C
Precision:	±1°C.
Resolution:	±2.5°C
Output:	Voltage output (0 .. 10V=)
	Maximum output current: 10mA
Protection grade:	IP30
Temperature limits:	storage: -25°C .. +65°C
	work: 0°C .. +50°C
Humidity limits:	10%RH .. 90%RH non condensing
Overall size:	85 X 85 X 31 mm (L X H X P)