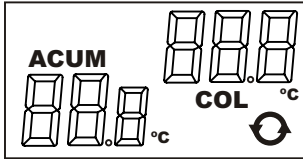


Differential thermostat with 2 probes and 1 relay

USER MANUAL

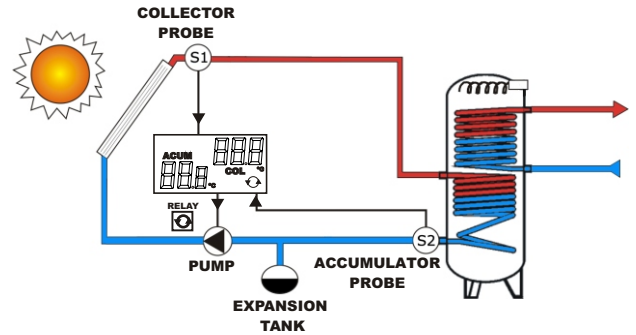
This device is used to control solar installations. It has 2 temperature probes (S1 solar collector and S2 water tank accumulator) and 1 relay.
The relay output turns on / off following the temperature difference between S1 and S2 and manages the water pump of the collector-accumulator circuit.

- The screen shows water tank accumulator temperature (ACUM) and solar collector temperature (COL).
- To programme parameters, press key during the time set in parameter "tEP".
- To manually turn ON the relay , press key during the time set in parameter "tEP"+3 seconds. Message "on" will appear. To turn OFF, press any key.



SCREEN MESSAGES

ErA: Accumulator probe error (S2).
ErC: Collector probe error (S1).
ErP: Programming error. "don" must be greater than "doF".
E2P: Internal memory error.
Symbol : Shows relay ON.
Symbol : Accumulator temperature is higher than "ALA" parameter temperature.



INSTALLATION MANUAL

PARAMETERS PROGRAMMING

To view or modify default values, press key during the time set in "tEP" parameter. Release key.

The first parameter name "CCo" and his value appears. with the arrows the value can be changed. After 5 seconds without pressing, next parameter appears. Proceed as with the other parameters. After last parameter "tEP", exits programming.

CCo Solar collector probe calibration (S1): S1 probe temperature displayed adjustment depending on location or wire length.

CAC Tank accumulator probe calibration (S2): S2 probe temperature displayed adjustment depending on location or wire length.

don Differential temperature turning ON the fluid pump(): if S1 plus "don" is higher than S2, the fluid pump relay turns ON.

doF Differential temperature turning OFF the fluid pump(): if S1 plus "doF" is lower than S2, the fluid pump relay turns OFF.

ALA Tank accumulator probe temperature (S2) alarm: if S2 temperature is higher than this value, the relay will work following "diS".

diS Alarm function:

- If its value is ON --> Relay turns ON on reaching "ALA" temperature.
- If its value is oFF--> Relay turns OFF on reaching "ALA" temperature.

Ant Freezing protection: if S1 is lower than "Ant" temperature value, the relay will turn ON to move fluid to avoid freezing.

Pin Programming password entry: Password to view or modify parameters. By default it is set to zero (disabled). If this value isn't 0, "Pin" is viewed on entry. Enter a number using the arrows keys and wait 5 seconds. If right password, entry to programming is allowed.

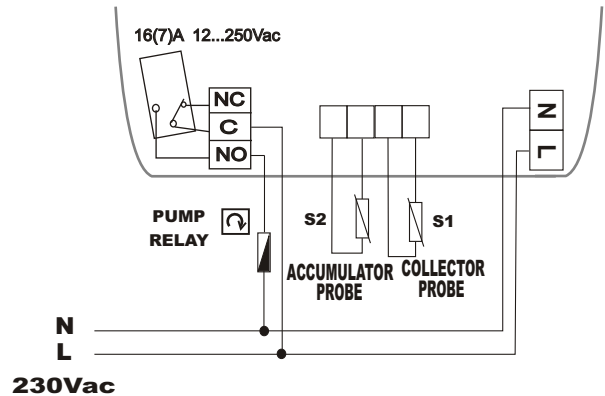
tEP Programming time entry: Time to keep key pressed to enter or modify parameters programming.

ATTENTION: before connecting the thermostat, make sure you have turned off the general electricity supply.
The installer has the responsibility to provide the proper electrical protection devices.
The probe wire mustn't be installed near other electrical wires.

To install, take the front cover with a screwdriver, as shown in Fig. Make connections 230V, relay and sensors. Fit the front cover on top flanges and push until you hear the click of the bottom flange.



WIRING DIAGRAM



TECHNICAL FEATURES



Parameter	Values	Default
CCo	-9.0 to 9.0 °C	0.0 °C
CAC	-9.0 to 9.0 °C	0.0 °C
don	2 to 15°C	8°C
doF	1 to 11°C	4°C
ALA	15 to 90°C	55°C
diS	on/oFF	oFF
Ant	-9 to 10°C	5°C
Pin	0 to 99	0
tEP	3 to 40 sec.	5 sec.

Accuracy	+/- 1°C
Resolution	0.1°C
Temperature probes	PTC 2000Ohm IP67
Wiring diameter	1,5mm ²
Temperature display	-40 to 140
Max resistive load	16 A 250VAC
Max inductive load	7 A 250VAC
Working temperature	-5°C to 45°C
Storage temperature	-10°C to 50°C
Ingress protection	IP30
Power supply	230Vac +10% -15% 50/60hz

This thermostat has 2 year guarantee. The manufacturer will only repair the thermostat itself, not other parts of installation. The guarantee will be lost onto wrong managing, wrong electrical wiring, contact with fluids or gas, hits, deformation, wrong storage.