

PLUG-IN CONNECTOR

Guarantee conditions

This equipment has a 2 years guarantee, which means it only replaces the faulty part.

VERY IMPORTANT !:

We do not take any responsibility for deteriorated equipment, which are a result of bad handling.

The probe cable has to be kept as far away as possible from other electrical conductors.

The guarantee does not include:

- Equipment with deteriorated, worn or modified serial number.

The maximum lenght recommended under actual standard must be less than 3 M.

- Equipment whose connection or use has not been carried out in accordance with the indications attached to equipment.

It is the installer's responsibility to fit electrical protection suitable for the installation (STANDARDIZED).

- Equipment modified without prior agreement from manufacturer.

All installation of the electrical wirings that enters or that leaves must be made under tube and with maxim section of 2.5 mm².

- Equipment whose deterioration is due to bangs or emanations of liquids or gases.

Reserved the right of modify without prior notice.

ALLEGRO 400 Triac

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Cód.5570 ESP.V0-09/2007

DESCRIPTION

It is a control differential that has 1 triac to regulate the revolutions of a pump depending on the temperature difference between the probes.

Example of operation for an installation of solar paddles:

When the temperature difference between the two soundings is greater than the defined one in **dFA** will activate triac and wrth regulating the revolutions to maintain the difference defined in **dFA** the most constant possible.

When activating triac will regulate to the 100% during 20 seconds and soon it will regulate to the revolutions specified by the **Min** parameter. The regulation will go between **Min** and the 100% depending on the difference defined in **dFA**, being of a 100% when reaching value of **2xdFA**.

When the temperature difference between the two probes is inferior to the value defined by **dFd** the regulation will be stopped.

When the temperature of the collector is minor who the defined one in **Ant** will activate triac to the 100% of revolutions so that circulates the thermal liquid until reaching the temperature defined in **Ant+2°C** (differential).

TABLE OF PARAMETERS

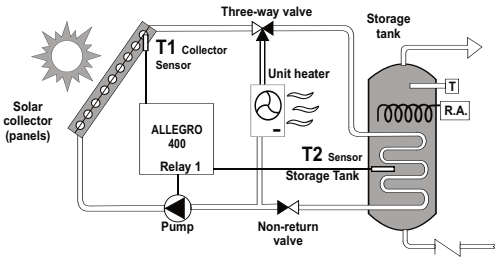
Code	FUNCTION	FACTORY SETTING	RANGE
CAAd	Tank sensor calibration adjustment	0	-9.0 to + 9.0°C
CAC	Collector sensor calibration adjustment	0	-9.0 to + 9.0°C
dFA	DActivation differential	8	2 to 15°C
dFd	Deactivation differential	4	11 to 11°C
Ant	Anti-freeze option (fixed differential 2°C)	5	-20 to 10°C
Ar2	Second-relay alarm mode	AAC	AAC or APL
tAL	Second-relay alarm temp. (Fixed diff. at 1°C)	60	15 to 110°C
Pnt	Selecting the display temperature	tPL	tPL or tAC
Min	Minimum revolutions of the pump*	30	30% to 100%
tPP	Parameter-programming access time	5	3 to 40 secs.
PAS	Password	0 desactivated	0 to 99

* In case of using pumps of circulation with electronic control of revolutions integrated, to put Min parameter to 100%

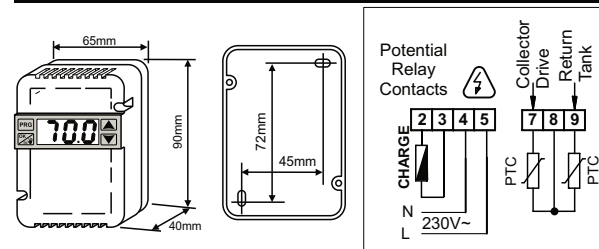
Note: the Ar2 and tAL parameters are not configurables for this model

APPLICATIONS

Solar circuit



ELECTRICAL WIRING AND SURFACE/ RAIL SET-UP



OPERATION

- The screen displays the sensor temp. selected in the parameter **Pnt**:
tAC = Storage-Tank Temperature.
tPL = Collector-Panel Temperature (factory-set)
 - If **OK** is pressed, the second temp. of parameter **tPL** is displayed.
 - Pressing **OK** for 5 seconds takes you into and out of forced operation of the relay 1. The screen displays **on1**.
 - Pressing **▲** for 5 seconds takes you into and out of forced operation of the relay 2. The screen displays **on2**.
 - Pressing **▼** for 5 seconds takes you into and out of forced stoppage. The screen displays **OFF**.
 - Press **TEST** to ascertain the preset values for the parameters **dFA**, **dFd**, **tAL** and **Ant** (the screen will display the parameter and its value); and finally "888" appears in the screen (check on the proper working of all the segments)
- Note: go through steps 3 and 4 to check that your installation is properly set up.**

PARAMETER PROGRAMMING

- On powering up, the display shows "---", "RL L", "---" and the collector temp.
- If you wish to change the values set in the parameters, press **PRG** and hold it down for the time specified in **tPP** (the factory setting is 5 seconds), and then "CAAd" is displayed.
- Press **OK** to access the parameter value.
- Press **▲** or **▼** to set the desired value. Press **OK** and the value is memorized.
- Press **▲** to view the next parameter. Go back to step 3.
- Press **PRG** or wait for 40 secs. without pressing any key to exit parameter-setting. The screen shows "---" and then the sensor temp. set in **Pnt**.

Note: the values are stored in a non-volatile memory so that they remain stored even when the equipment is not powered.

WARNING SYMBOLS

- LOAD/CARGA:** A fixed light point below this symbol means "ON".
- Sensor error:** warns that the sensor or its cables are cut or disconnected. Deactivates the triac.
- 888** Parameter-table memorization error. Deactivates the triac.
- Programming error:** dFA must be greater than "dFd". Deactivates the triac.

TECHNICAL SPECIFICATIONS

- Power supply 230V~ ^{+10%} -15% 50/60Hz. (Transformer fitted)
- Independent Control system for assembly in surface.
- Type of action 1Y / Degree of contamination: 2
- Current commutation Maximum triac: 1A resistive
- Contacts with potential.
- Without internal protection (fuse)
- Temperature: Storage -20°C to 50°C / Working +5°C to 45°C.
- Probes of temp.: IP 67, PTC 2000W, of -40°C to +140°C, accuracy 1.5%. contacts without polarity.
- Essay → Temperature during test ball of pressure: accessible pieces of plastic.....75°C. pieces that supports the drivers of current.....100°C. → Assigned impulse tension:.....2500V.