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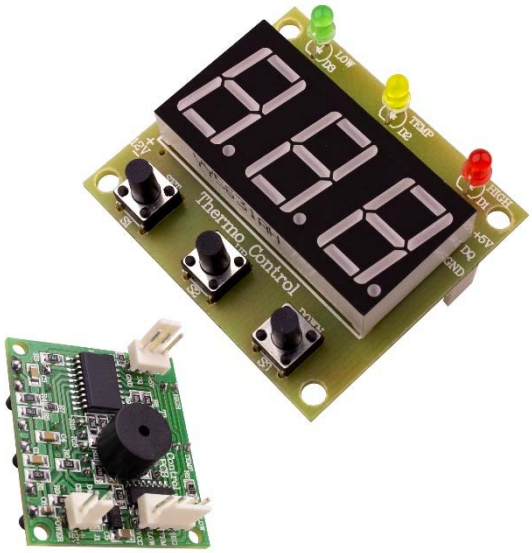
Thermo Control
№100824



The device finds its application in usage for heating and cooling installations, aquarium, terrarium, refrigerators and many more.

*Specifications of **Thermo Control:***

- *Power supply voltage 12V DC*
- *Protection from reverse powering on*
- *Output for controlling of temperature – opened collector 12V/1A max for controlling of a relay, solid state relay and many more*
- *Output for alert for low temperature – opened collector 12V/1A max for controlling of a relay, solid state relay and many more*
- *Output for alert for high temperature – opened collector 12V/1A max for controlling of a relay, solid state relay and many more*
- *Precision of measuring in range from:*
  - *0.1°C (-9.9°C to 99.9°C)*
  - *1°C (-55°C to -10°C)*
  - *1°C (100°C to 125°C)*
- *Hysteresis from 0°C to 10°C with foot 0.1°C*
- *Sensor for temperature - DS18B20 (it is not included in the set)*
- *LED indication for the state of every output*
- *Sound signalization for high and low temperature*
- *Setting buttons*
- *Seven-segment display (14.2mm)*
- *Autonomous energy free memory for determined parameters*
- *Quick test of determined parameters for low, high and determined temperature*
- *Size: 43mmx38mm*
- *Suitable for assembling in a box to a DIN runner – **Z-107***

Description

- Thermo Control with regulating hysteresis, LED and sound alerts for low and high level
- to terminal **J1** – it is powering on power supply voltage **12V DC**
- terminal **J2** – output of the device
  - **H** – output from alert for high level
  - **T** – output for controlling of temparature
  - **L** – output from alert for low level
- terminal **Q1** – sensor for temperature **DS18B20**

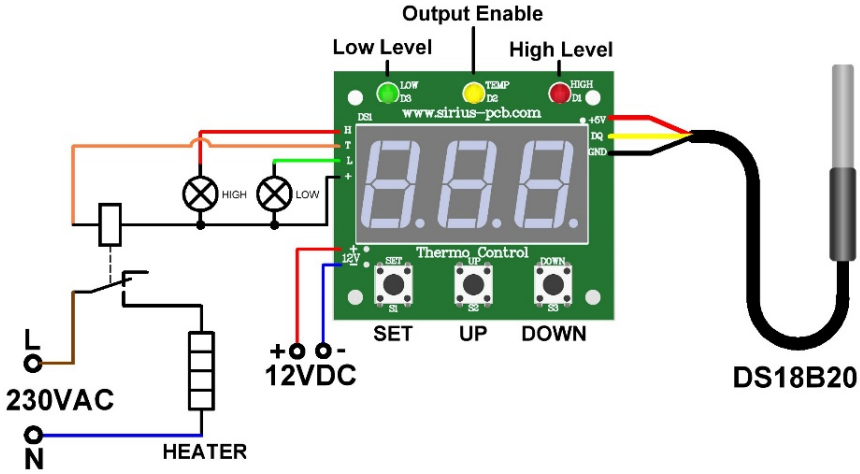
Indication:

- LED **D1 (HIGH)** – alert for high level
- LED **D3 (LOW)** – alert for low level
- LED **D2 (TEMP)** – state of output
- buzzer **LS1** – sound alert in low or high temperature

Note:

- *Pushing a button to the device it is necessary the duration to be not less than 0.5 sec.*
- *In continuous push of a button to the device the speed for transition is accelerating.*

Example Scheme of Connecting of the Device



1. Main Display

	Detected temperature

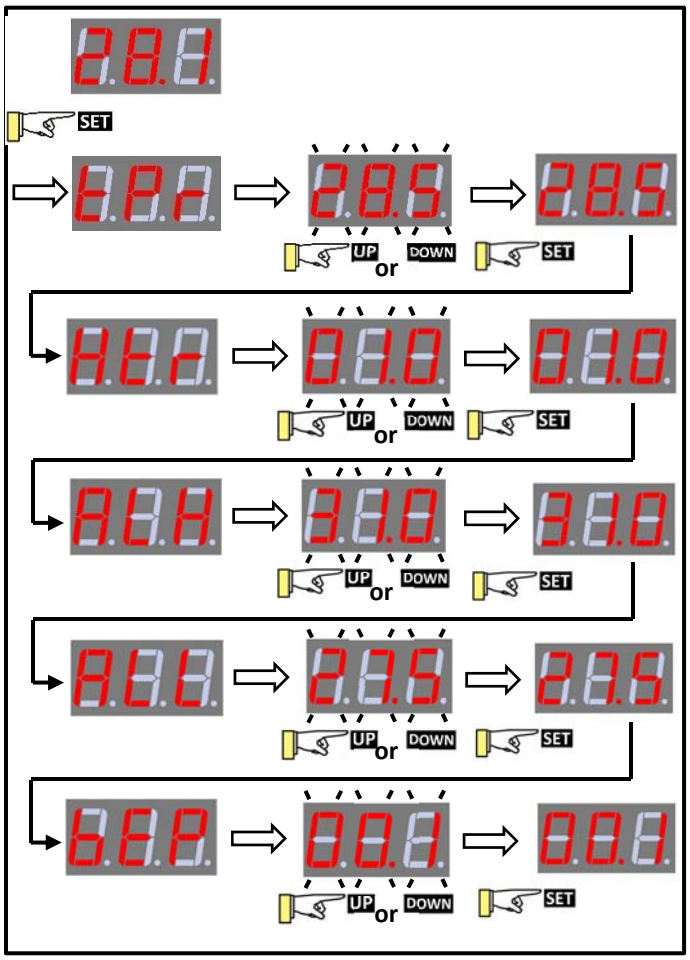
2. Problem in communication

	Disconnected cable or missing sensor of temperature

3. Test of determined parameters:

	Alert for high level of temperature
	Alert for low level of temperature
	Set temperature

4. Setting of parameters:



*At the time the device is on the main display it is pushed the button **SET***

Setting of selected temperature - **tPr (Temperature)**

Setting of hysteresis – **Htr (Hysteresis)**

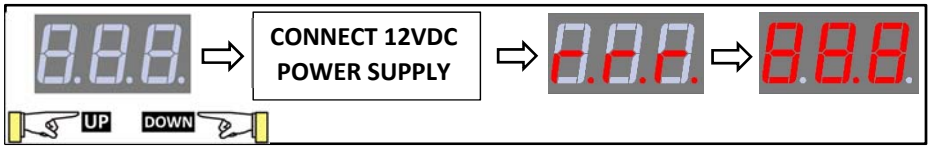
Example: set 2°C hysteresis indicate ±1°C about determined temperature

Setting of alert for high level – **ALH (Alarm High)**

Setting of alert for low level – **ALL (Alarm Low)**

Powering on/off of sound signalization – **bEp (Buzzer - Beeper)**

5. Switch back to settings per default:



1. *In powered off power supply voltage to the device, pushings of the buttons **UP** and **DOWN**.*
2. *It is powering on power supply volatage 12V DC to the device.*
3. *In powered off display the device makes five short sound signals.*
4. *On the display it is written **r.r.r**, followed by **888.***
5. *The device is switched back to settings per default.*
   - *Settings per default: tPr = 28,5°C, Htr = 1°C, ALH = 31°C, ALL = 27,5°C.*