# 600-TTR-100

### TEMPERATURE TRIP RELAY

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#### **GENERAL DESCRIPTION**

The Dual channels DIN-Rail Temperature trip relay converts a low level dc signal from thermocouple with automatic (internal) cold junction compensation.

Two Alarm trip are provided for one single sensor; each alarm energizes, or de-energize, an SPDT relay when the threshold is exceeded. Setpoint will be configured from our factory during production, according to client request.

The Temperature trip relay can be connected with LXS LAN system to handle and transmit all the information remotely.

#### **KEY FEATURES**

- Internal cold junction compensation
- Removable terminal block

#### **MECHANICAL FEATURES**

- Dimensions (w x h x d): 18x114x110mm
- Weight: 125gr
- Housing Material: PA 6.6
- Protection Class: IP20
- Field Installation: Rail TS 35 (EN 50022)
- Termination: Screw terminal block to accommodate termination up to 2,5mm<sup>2</sup>

#### **LOAD SIDE**

- Contact Rating: 2A, 250V, 100VA or 2A, 250V, 80W (resistive load)
- Output \*1 Note [see diagram]: Voltage free 2 for one sensor SPDT
- Threshold \*1 Note (set point): step 1°C
- Hysteresis \*1 Note: step 1°C
- ON-OFF delay time \*1 Note: step 100ms

#### **ELECTRICAL FEATURES**

- Nominal input voltage 10-56VDC
- Rated current: 90-20 mA
- Rated current @ 24 V: 50 mA
- Input Channels: 1
- Sensor type: thermocouple K type
- Temperature range: -200°C to +1370°C
- Resolution: 24bit
- Linearity error: +/- 0,1 % FSR
- Operation temperature: -20°C to +60°C
- Storage temperature: -20°C to +85°C
- Galvanic Insulation I/O [see diagram]: 2-way insulation
- Insulation (test voltage) sensor vs supply input [see diagram]: 1kV
- Insulation (test voltage) sensor vs output (relay contacts) [see diagram]: 2,5kV

#### SIGNALLING LED'S

- Supply connected: Green PWR [see wiring diagram]
- Alarm A sensor CH 1: Red AL A [see wiring diagram]
- Alarm B sensor CH 1: Red AL B [see wiring diagram]
- System running / LXS LAN connected: Green SR [see wiring diagram]

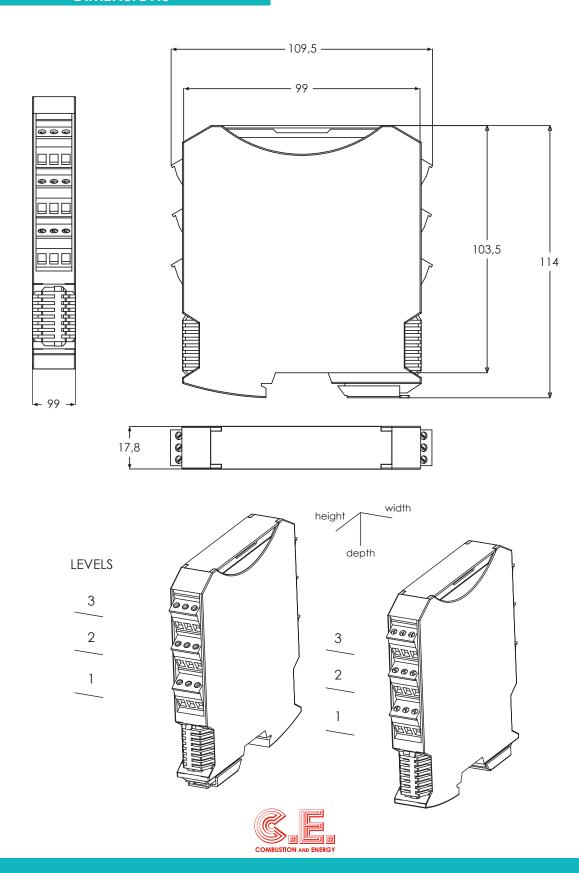


Note 1: programmable via serial interface



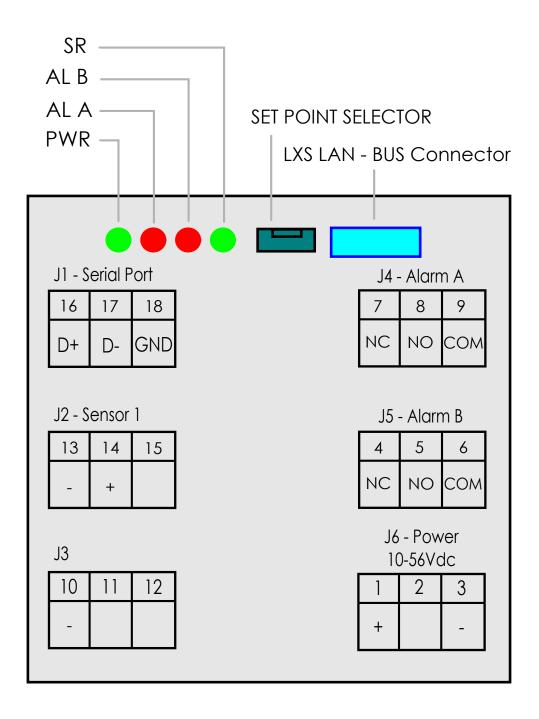
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#### **DIMENSIONS**



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#### **WIRING DIAGRAM**



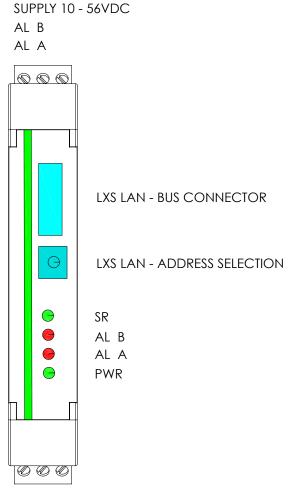
#### Warning:

For model 600-TTR-100 Pin 10 and 13 should be connected together in order to have the same reference for Port J2 and Port J3 because J3 is not used.

If the customer do not pay attention to this procedure, the correct operation of the device is not ensured.



## TEMPERATURE TRIP RELAY 600-TTR-100



RS485 PORT SENSOR - CH 1 NOT USED - CH 2

