

- **3 digits, green Led display for measure**
- **Temperature input**
Pt100 2 / 3 wires mount
- **Threshold setting on front face**
by push buttons
- **2 output relays**
- **THL101** : Cast aluminium box
- **THL101i**: 316 stainless steel box
- **THL101ADF**: ATEX Ex-proof version
- **Pipe mounting or temperature probe assemblies**



THL101 is a field mount thermostat designed for temperature control in industrial process monitoring or protection.

It is made in a case resistant to harsh environment (>IP 65) .

DESCRIPTION:

Temperature input:

- Pt100 2 or 3 wires mounting
Measure range : -99°C / +650 °C
Resolution : 0.1 °C from -9.9°C to +99.9 °C
Resolution : 1°C with automatic positioning of decimal point if beyond.
- Sensor failure or scale overrun
(display : LO, HI or Err)

Front face:

- Measure display :7 segments, 3 digits,
10 mm green LED (1100 pts)
- 2 x red LED : alarm states
- 2 x push button on front face for
device configuration

Relays

- 2 potential free contact outputs. N.O contacts
(alarm, digital regulation, thermostat, ...)
- Threshold, direction adjustable by push button
on front face

Characteristics:

- Long-term stability 0.1 % / year.
- Operating temperature up to 80 °C
- Excellent EMC performances
- Impact and vibration resistant

Feature:

- Pipe mounting or temperature probe assemblies
- Connection on spring terminal blocks, 1.5mm² max
- Wide power supply range : 8.....35Vdc
- Reverse polarity protection
- Input / relays isolation
- Protection rating IP67 + electronic conformal coating.

Version and order codes:

THL101 : - Thermostat in a cast aluminium box with
glass windows, IP 67, epoxy coating,
2 output relays

option

THL101ADF : Ex-proof box design,
THL101i : 316L stainless steel box, IP68
options are cumulative

option

/S : copy of temperature sensor : Pt100,
Pt1000, Ni1000, ...
Sensor type to be define.

INPUT

TYPE	RANGE	ACCURACY
Pt100 (2 or 3 wires)	-99 / +650 °C	+/- 0.3 °C +/- 1 digit
Measure current	< 500 µA	

RELAYS

N.O contact insulation	1500 Vac
Breaking capacity	1 A / 250 V
Operations	5.10 ⁷ at 100 mA 1.10 ⁶ at 1 A

Threshold outputs typical response time (5 measure cycles filtering)	500 mS
Triggering accuracy	± 0.3 °C
Triggering repeatability	± 0.2 °C

POWER SUPPLY

8Vdc.....to.....35Vdc.
consumption < 1 VA
Reverse polarity protected

ENVIRONMENT

Operating temperature	-25 to 85 °C
Storage temperature	-40 to +85 °C
Thermal drift (% of full scale)	< 0.02 % / °C
Humidity	100%
Protection rating	IP67 min according to EN 60529
Weight	> 1Kg

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for
industrial environments
EN 61000-6-2

Emission standard for
industrial environments
EN 61000-6-4

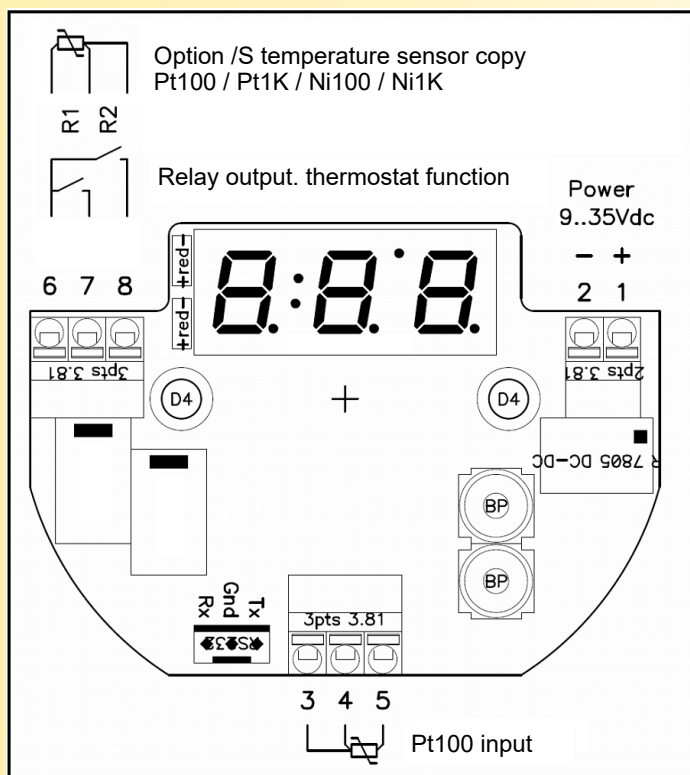
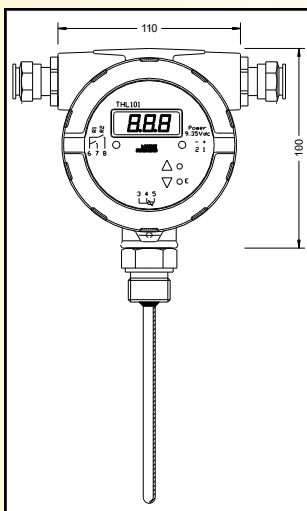
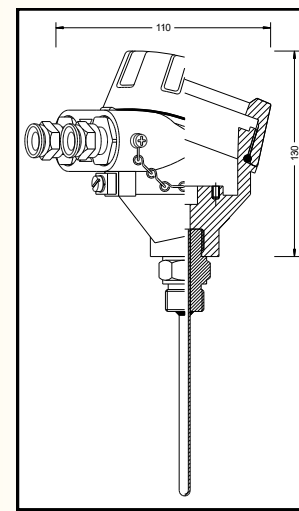
EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

EN 55011
group 1
class A



WIRING AND OUTLINE DIMENSIONS:

Internal wiring

THL101inox
(sensor head mounting)THL101
(sensor head mounting)

THL101inox (pipe mounting)

