



Dry-type Power Transformers Temperature Monitoring

The TR42 is a digital device designed to monitor the temperature of cast resin (dry-type) transformers, motors, and generators. It also features integrated fan control to manage ventilation and maintain optimal operating temperatures.

Dual Fan Control



5x Output Relays



4-20mA Signal Output

* Option

FEATURES

- Display of the actual temperature of the 4 PT100 sensors
- Display & storage of the highest temperature of each PT100 sensor
- 5 programmable outputs:
 - 2 for FAN control
 - 2 for temperature alarm
 - 1 for fault
- Dual FAN control, Advanced mode and FAN weekly function (bearing anti-lock)
- Alarm of device failure or PT100 disconnection or short circuit
- Acoustic signalization on L1 or L2 level
- Automatic and "Always ON" fan mode
- Insulated **RS-485 communication port**.
- Insulated 4-20mA output (Optional).

FUNCTIONS AND SIGNALS

The TR42 is equipped with seven-segment displays, programming and function keys along with signalling LEDs.

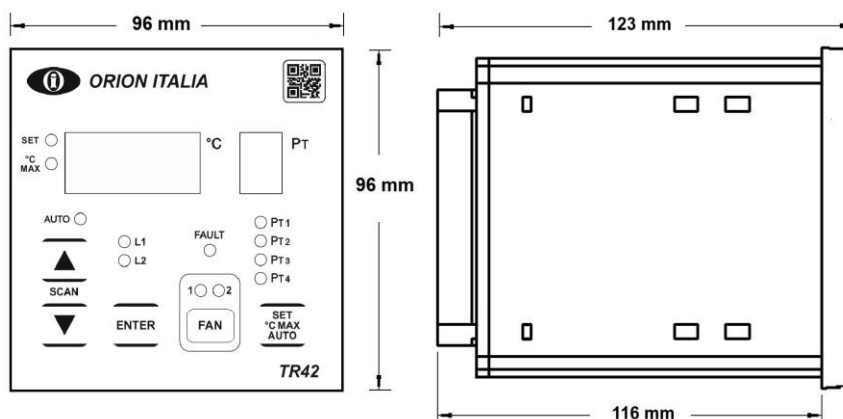
COMMUNICATION

Communication capabilities are available in the TR42, connecting the RS-485 port to a network controlled by a supervisor device (PC). The protocol used is Modbus RTU. The connections have to be made with shielded twisted wires.

4-20mA OUTPUT (Optional)

This model version is capable of supplying a 4-20mA current loop for an external gauge or a supervisor device (PLC).

DIMENSIONS



SPECIFICATIONS

Scale: -10 ÷ +240 °C Accuracy: ±0,5% F.S. ± 1 digit Settings: L1, L2, FAN1, FAN2: 0 ÷ 220 °C Inputs: 4 platinum sensors PT100 with 3 wires. 5 Ohm max wire impedance. Outputs (5): FAN1,FAN2: normally open, I _{max} 16A (6A continuous) 240Vac/24Vdc resistive load - 1/3 HP 240 Vac L1, L2: normally open, 8A (5A continuous) 250 Vac/24Vdc resistive load FAULT: changeover, 8A (5A continuous) 250 Vac/24Vdc resistive load	Supply voltage: Model W: 85V (110V) ÷ 264V (300V) Vac (Vdc) Model B: 24Vdc -15%, +10% Isolation: 3kVac Model W, 3kVdc Model B Max. power consumption: 4W, 6VA Operational Temperature: 0 ÷ 50 °C Storage Temperature: -20 ÷ 70 °C Relative Humidity: 90% (non-condensing) Test Run in: 48 hours Dielectric Withstand Voltage: 2 kVac, 60s Directives: Low voltage (2014/35/EU) EMC (2014/30/UE) RoHS (2011/65/EU and 2015/863/EU)	Terminal block: draw-out terminals for 2,5 mm ² cables (12 AWG). Frame: plastic self-extinguish UL94V-0. Assembly: to be fixed in the structure through stirrups and screws. Dimensions: 96x96x123 (116) mm Cutout: 91mm (-0,5mm) x 91mm (-0,5 mm) Weight: 500 grams Com. port: RS485, insulation 1500 Vdc. Com. protocol: MODBUS RTU, functions: 03h, 04h, 06h, 10h.
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OPTIONAL FEATURES

- 4-20mA Analog Output
- Acoustic signalization on L1 or L2 level

ACCESSORIES (Optional)

PT100:

- Inox sensor Class B EN60751 PTFE insulated
- Runner insulation FFP
- Cable in rubber silicon shielded
- Cables length: standard 2 mt or 5 mt

BOXPT00:

- Plastic Box ABS Protection degree IP65
- 3 Temperature Sensors PT100 Class B
- Cables length: 2 mt
- Terminal block to connect to the TR42

ORDER CODE

Part number	Power Supply	RS-485	4-20 mA	FAN1/FAN2 contacts
TR42CMW5	85÷264Vac (110÷300Vdc)	✓	-	✓
TR42CMB5	24Vdc (-15%, +10%)	✓	-	✓
TR42ADW5	85÷264Vac (110÷300Vdc)	✓	✓	✓
TR42ADB5	24Vdc (-15%, +10%)	✓	✓	✓