MD22-TR

THERMAL RESISTANCE TRANSDUCER

Application:

The transducer is suitable to convert the thermal resistance input to an analog DC voltage/current or a digital RS485 output.

Important features:

· Full digital operation (Icom System).

· Preset delivery or connecting to external device can be set (monIcom option).

· Automatic zero calibration.

· Plug in terminal blocks with screw.

· DIN rail case.

· EMC compliance.

Illustration only.

Technical specifications:

Input:

· Thermal resistance input range: ……..……..... Pt100 -200 ºC … +850 ºC

· Measuring current: ....…..……………………………..…… 180 uA

· Measuring system: ....……………………………….…… 4 wires

· Input insulation voltage: .... Cat. III. 1 kV (Test: 4300 V_{eff} 1 min)

Output:

· Analog output range: ....   0..20 mA, ±20 mA, 4..20 mA, 0..10 V, ±10 V DC

· Output load: .... for current: max. 500 ohm, for voltage: min. 2 kohm

· Output limits: …………………………………………….... max. 20 V, or 30 mA

· Output response time: .... max. 300 ms

· Digital output: ……………….....….. RS485, Modbus-RTU, 9.6 / 19.2 kBaud

· Accuracy (EN 60688): ……………….... Class 1 (20 %..120 % input range)

· Temperature coefficient: .... max. 100 ppm/ºC

Other:

· Standards applied: .... IEC/EN 61010-1, IEC/EN 61326, IEC/EN 60688

· Consumption: .... max. 2 W

· Wire cross-section of terminals: .... max. 2.5 mm^2

· Working temperature: .... -10…+25…+60 ºC

· Storage temperature: .... -40…+80 ºC

· Humidity: .... max. 85 %

· Vibration (acceleration): .... max. 2 g

· Dimension (HxWxD): .... 101 mm x 22.5 mm x 80 mm

· Case protection: .... IP 20

· Case material: .... PC-GF

· Weight (with converter): .... approx. 0.25 kg

Typical transfer characteristics:
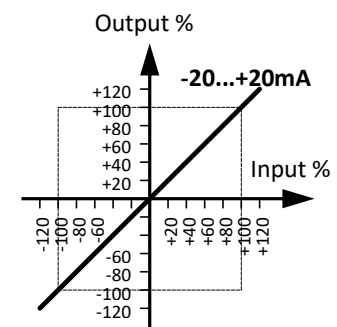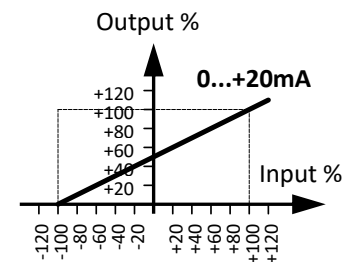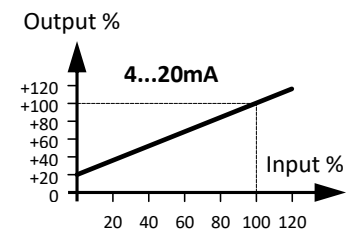
MD22-TR
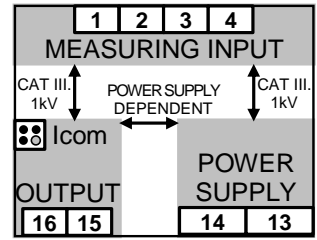
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Auxiliary Supply variations:

(Voltage / Insulation)

5 V, 12 V, 24 V, 48 V DC ±50 %, **converter** / 1 kV
55…264 V, 47…440 Hz, and **72…370 V** DC, **converter** / 3 kV

Isolation scheme:

Ordering examples:

MD22-TR _ **Input:** 0…+850 ºC _ **Output:** 4…20 mA DC, ±1 % _ **Aux:** 55..264 V AC converter
MD22-TR _ **Input:** -200…+850 ºC _ **Output:** RS485 Modbus _ **Aux:** 24 V DC converter

On request for extra charge special ranges (Input, Output, Auxiliary Supply) are possible.

Outline dimensions and connection diagrams:

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