



MUD/E

Pt100 temperature transformer 0-10 V / 4-20 mA with double-PG housing

Measuring size: temperature

Output: 0-10 V, 4-20 mA, 2 Relay

Highlights: tightened rod with copper core, easy to install with included mounting flange



Description

The MUD/E transducer measures the temperature by the Pt100-Sensor-Input and converts this measured value into a linear output signal 0-10 V respectively 4-20 mA.

As an option the temperature transducer has two potential-free changeover contacts and a backlit display. The display content can be rotated in 90° steps using a menu and the measured value, the switching threshold set, the state of the respective relay, the MIN/MAX measured values for the selected intervals(1 h / 6 h / 12 h / 24 h) etc. can be read out.

On the display version the user can, via the menu, specify an individual temperature range.



Technical Specifications

Scales	-50...0°C, -50...+50°C, -50...+150°C, -30...+20°C, -30...+70°C, -20...+50°C, -20...+80°C, -20...+120°C, -20...+150°C, -10...+15°C, 0...+50°C, 0...+100°C, 0...+150°C, 0...+200°C, 0...+250°C, +10...+35°C
Measurement range configuration	1 freely programmable measuring range via the menu input in the display (span min. 25K)
Accuracy	±0,2 K + max. ±1,5% Span
Sensor	Pt100 DIN EN 60751 Kl. B (not in scope of delivery)
Supply voltage analog 0-10 V	24 V AC/DC (±5%)
Supply voltage analog 4-20 mA	15...36 V DC, depends on liability (U _{bmin} = 15 V + R _{load} *0,02A)
Current consumption at 0-10 V	typ. 10 mA, 30 mA peak current consumption for 50 ms at switching moment at option relay
Current consumption at 4-20 mA	max. 20 mA / output, 40 mA peak current consumption for 50 ms at switching moment at option relay
Analogue output 0-10 V	3-wire connection, min. load resistance 100 kOhm
Analogue output 4-20 mA	2-wire connection (transmitter), max. R _{load} (Ohm) = (+U _b - 15 V) / 0,02 A
Alarm output	2 x potential-free change-over contact, 48 V, 1 A
Switching Hysteresis Relay	Temperature: 2K (without display), 0,5...5K adjustable (with display)
Electrical connection	screw terminals max. 1,5 mm ²
Housing	Polycarbonate PC UL 94 V0 with hinge locks, color signal white similar to RAL 9003
Cable gland	PG11 high-strength cable gland with strain relief
Display	optional LCD display with backlight on/off/auto
Dimensions	Housing: L 89 x W 80 x H 47 mm
Protection type	IP65
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	Electronic: -20...+70°C
Storage temperature	-20...+70°C
Installation	screw fastening
Approvals	CE, EAC, RoHS



Variants

Article Number			
Supply voltage	MR temp. preset	Output temperature	Version
MUD/E-I			
10...30 V DC	0...+100°C	4-20 mA	without display
MUD/E-I2R			
10...30 V DC	0...+100°C	4-20 mA, 2 changer	without display
MUD/E-I2RD			
10...30 V DC	0...+100°C	4-20 mA, 2 changer	with display
MUD/E-ID			
10...30 V DC	0...+100°C	4-20 mA	with display
MUD/E-U			
24 V AC/DC	0...+100°C	0-10 V	without display
MUD/E-U2R			
24 V AC/DC	0...+100°C	0-10 V, 2 changer	without display
MUD/E-U2RD			
24 V AC/DC	0...+100°C	0-10 V, 2 changer	with display
MUD/E-UD			
24 V AC/DC	0...+100°C	0-10 V	with display

Accessories



BF1/E

Bayonet temperature probe with 120° measuring peak



HET/E

Hand infeed temperature probe with PTFE-hand grip and PFA-cable



KS/E

Cable Temperature Sensor with Silicone Cable



Accessories



KS1/E

Cable Temperature Sensor with Glass Fibre/Stainless Steel Netting



KT/E

Cable Temperature Sensor with PFA Cable



LF1/E

Contacting Temperature Sensor with Silicone Cable and Clamping Band



OF1/E

Surface Temperature Sensor - Self-adhesive



OF2/E

Surface Temperature Sensor - Stainless Steel Block with PVC Cable



OF3/E

Surface Temperature Sensor - Stainless Steel Block with Glass Fibre/Stainless Steel Netting



OF4/E

Surface Temperature Sensor - Magnetic



Accessories



MWT/E
Mantle Resistance Thermometer



Dimensional Drawing

