



OM4/E

Surface temperature transducer with magnet

Measuring size: temperature

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

Highlights: magnetic adhesive force 90 N



Description

The magnetic OM4/E surface transducer registers the temperature on metal surfaces 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.

Using the especially powerful 90 N holding magnet it is attached directly to the surface and thus ensures a clear measurement signal, even during strong vibrations.



Technical Specifications

Measurement range temp.	-40...+250°C
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
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
Cable	2 m silicone cable (max. +180°C)
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, Magnet: L 40 x W 25 x H 25 mm
Protection type	IP65 (housing), IP54 (probe)
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	Probe: -40...+400°C, Electronic: -20...+70°C
Storage temperature	-20...+70°C
Installation	remove metal plate of the magnet and put on chosen measuring point straight tighten on
Approvals	CE, EAC, RoHS



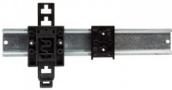
Variants

Article Number			
MR temp. preset	Output temperature	Cable	Version
OM4/E-I			
0...+100°C	4-20 mA	2 m silicone (2x0,22 mm ²)	without display
OM4/E-I2R			
0...+100°C	4-20 mA, 2 changer	2 m silicone (2x0,22 mm ²)	without display
OM4/E-I2RD			
0...+100°C	4-20 mA, 2 changer	2 m silicone (2x0,22 mm ²)	with display
OM4/E-ID			
0...+100°C	4-20 mA	2 m silicone (2x0,22 mm ²)	with display
OM4/E-U			
0...+100°C	0-10 V	2 m silicone (2x0,22 mm ²)	without display
OM4/E-U2R			
0...+100°C	0-10 V, 2 changer	2 m silicone (2x0,22 mm ²)	without display
OM4/E-U2RD			
0...+100°C	0-10 V, 2 changer	2 m silicone (2x0,22 mm ²)	with display
OM4/E-UD			
0...+100°C	0-10 V	2 m silicone (2x0,22 mm ²)	with display

Accessories

SB/E

Snap-on mounting for DIN rails



motrona AX350

AX350: touchMATRIX® Process Indicator with two 16 bit Analog Inputs



motrona AX020

AX020: Process Indicator for Analog Signals





Dimensional Drawing

