2-level digital temperature controller Pt 100



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In accordance with EN50081-1 and EN50082-2 for unrestricted use in residential and industrial areas





Microprocessor-2-level controller, Pt 100, 4-wire, cpl. incl. sensor

GIR 200 Pt100 cpl. with probe GIR 200 Pt100 OF without probe

Specification:

Measuring range: -50,0 ... +199,9 °C Resolution: 0,1 °C (standard)

Accuracy: $\pm 0.03 \% \text{ FS } \pm 1 \text{ digit}$ (at nominal temperature = 25°C)

Linearisation: parameter memorized digitally

Sensor: Pt 100, 4-wire (any probe or cable length possible wihout recalibration). Probes fully interchangeable (any Pt 100 sensors in 2 or 3-wire design existing at customers' can also be connected, as GIR200Pt100 is equipped with a digital zero-offset adjustment)

Temperature probe GTF200 Pt100: (included) -50 +200° C, Pt 100 4-wire, DIN standard class B (+/-0.3 °C at 0 °C), stainless steel (V4A) tube, Ø 5 mm, length 50 mm. Silicone cable 4-wire, length 1 m (p.r.t. page 94) **Fault indication:** probe damage, probe short-circuit, values no longer within measuring range.

Self-diagnosis: permanent self-diagnosis of device to ensure troublefree operation by means of integrated precision reference resistor Setting of set-point value: via front-sided buttons

Hysteresis: digital, any value can be set. (depending by switch on /

switch off values set) Minimum hysteresis: 0.1°C **Relay:** 1 volt-free change over relay 10 A (ohmic load) 250 V 50/60 Hz. Preferred state of relay in case of fault (e.g. sensor damaged) relay contact broken.

Display: 4 digit red LED, 13 mm high **Front:** membrane keyboard IP65. Additional sealing for panel-mounting (optional) **Housing:** standard rack type housing 48 x 96 x 100 mm (H x W x D)

Panel cutout: 43 x 90.5 mm (H x W)

Clamping terminals: screw-type/plug-in terminals

Working temperature: 0 to 50 °C (permissible ambient temperature)

Power supply: standard 230 V AC 50/60 Hz, approx. 3 VA

Options - against upcharge
12VDC: Power supply: 12VDC
24VDC: Power supply: 24VDC
24VAC: Power supply: 24VAC

115VAC: Power supply: 115VAC

Accessories:

GGD 4896 additional sealing for panel-mounting IP65

2-level controller for standard signal and scale freely adjustable

GIR 600 NS

Specification:

Display range: -1999 ... +9999 digit

first and last value freely adjustable

Resolution: any decimal point possible

Accuracy: $\pm 0.1\%$ FS ± 1 digit (at nominal temperature = 25°C)

Standard signal input: (freely selectable)

0 to 20 mA (Ri=50 Ohm) 0 to 1 V (Ri=30 kOhm) 4 to 20 mA (Ri=50 Ohm) 0 to 10 V (Ri=300 kOhm)

2-, 3- or 4-wire, Other input values or extra high Ri upon request. **Power supply for sensor:** integrated, electrically isolated power supply unit for measuring transducer: 18 V DC +/-5 %, 20 mA.

Fault indication: probe damage, probe short-circuit, values no longer within measuring range.

Self-diagnosis: permanent self-diagnosis of device to ensure trouble-free operation by means of integrated precision reference resistor

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EAK 36 Unit stickers (black with white text) for 36 different

units for lettering of display devices.



picture without power supply device

GRS 485

Interface converter RS232 / RS485

When using the RS 485 2-wire interface (e.g. connected to GIA10N) distances of approx. 1 km or more can be bridged. By means of the GRS485 up to 16 GIA10N's can be connected to the serial interface (25 pol. Dsub) of your PC. (Please order Dsub25 -> Dsub9 adapter if required - GSA 25S-9B) The GRS 485 scope of supply includes a power supply.

GRS 485 ISO

optically isolated interface converter RS232 to RS485

This converter is equipped with an automatic data direction detection. Therefore it is not necessary to set the direction by RS232 handshake lines. Power supply is integrated: 230V/50Hz.

Housing: approx. 112x80x45mm (plus connectors a. cables) (9 pole DSUB cable included in scope of supply) (if needed order adapter DSUB9 - DSUB25: GSA9S-25B)



EAK 36

Unit stickers

Sheet with 36 stickers with different units for lettering of display devices. There are following black stickers with white text contained:

°C,°F, %, pH, bar, mbar, bar abs, Pa, kPa, MPa, psi, mmHg, mmWS, % RH, µs/cm, ms/cm, mm, cm, m, inch, kg, t, l, m³/h, l/s, l/min, l/h, rpm, gal, N, Nm, 1/min, 1/sec., m/s, mV

The white sticker are for own lettering, in case the wanted unit are not included.