

Universal display for standard signals

**GIA 2448**

Art. no. 600090 (standard model)

Display for Standard Signals (for self-adjustment)

GIA 2448 WE ¹⁾

Display for Standard Signals (settings and calibrations by our works)

1) Please specify as follows upon order: Input signal, scaling (lower and upper limits), decimal point and supply voltage. (Order to read e.g. GIA 2448 WE: 4-20 mA, 4 mA=50.0, 20 mA=100.0, 12 VDC)

| Specifications: | |
|-----------------------------|--|
| Measuring input: | 0 ... 20 V, 0 ... 10 V, 0 ... 2 V, 0 ... 1 V, 0 ... 200 mV, 0 ... 20 mA and 4 ... 20 mA (select via soldering jumpers) |
| Display range: | -1999 ... +1999 digit (adjustable via soldering jumpers and potentiometer) |
| Decimal point: | any position by means of soldering jumpers (soldering jumpers accessible after removal of front panel) |
| Accuracy: | ±0.2 % ±1 digit (at nominal temperature = 25 °C) |
| Scan rate: | approx. 3 measurements / s |
| Display: | 3½-digit, red 10 mm high LED display |
| Working temperature: | 0 ... 50 °C (permissible ambient temperature) |
| Relative humidity: | 5 ... 95 % RH (non-condensing) |
| Storage temperature: | -20 ... +70 °C |
| Voltage supply: | 8 ... 20 V DC or 18 ... 29 V DC (standard) (set via soldering jumper) |
| Current supply: | max. 20 mA |
| Panel mounting: | with VA-spring clamp. allowed panel thicknesses from 1 ... approx. 10 mm |
| Connection terminal: | 4-pin screw-type/plug-in terminal for wire cross sections from 0.14 ... 1.5 mm ² |
| Protection class: | front side IP54 |
| Housing: | glass fibre reinforced Noryl, front panel PC |
| Dimensions: | 48 x 24 mm (W x H) (front frame) |
| Mounting depth: | approx. 65 mm (incl. screw-type/plug-in terminal) |
| Panel cut-out: | 45 ^{+0.5} x 21,7 ^{+0.5} mm (W x H). |
| Scope of supply: | Device, manual |

Option:

VAC
voltage supply 8 ... 20 V AC or 18 ... 29 V AC set via soldering jumper

G12
11 ... 13 V DC, electrically isolated

G24
22 ... 27 V DC, electrically isolated

Accessories and spare parts:

GNG 220/2-12V
Art. no. 600305
power supply for GIA 2448 and GTH 2448
(Input: 230 VAC; output: 2 x 12 VDC regulated, 30 mA each)

GNG 12 / 24
Art. no. 600276
DC/DC-converter to electrically isolate 12 V DC-supply voltages

GNG 24 / 24
Art. no. 600277
DC/DC-converter to electrically isolate 24 V DC-supply voltages

for additional accessories, transmitter, probes p.r.t. chapters transmitter and temperature probe

Universal Display for Temperature

**GTH 2448/1**

Art. no. 600083

Display for temperature (NiCr-Ni)

GTH 2448/2

Art. no. 600084

Display for temperature (Pt100)

GTH 2448/3

Art. no. 600085

Display for temperature (Pt100)

GTH 2448/4

Art. no. 600086

Display for temperature (Pt1000)

GTH 2448/5

Art. no. 600087

Display for temperature (Pt1000)

| Specifications: | |
|---|---|
| Measuring input, Resolution: | |
| GTH 2448/1: | -50 ... +1150 °C (NiCr-Ni) |
| GTH 2448/2: | -200 ... +650 °C (Pt100, 2-wire), 1 °C |
| GTH 2448/3: | -60,0 ... +199,9 °C (Pt100, 2-wire), 0.1 °C |
| GTH 2448/4: | -200 ... +650 °C (Pt1000, 2-wire), 1 °C |
| GTH 2448/5: | -60,0 ... +199,9 °C (Pt1000, 2-wire), 0.1 °C |
| Accuracy: (at nominal temperature = 25 °C) | |
| NiCr-Ni: | ±1 % ±1 digit (from -20 ... +550 °C and 920 ... 1150 °C) ±1.5 % ±1 digit (from 550 ... 920 °C) |
| Pt100, Pt1000: | ±0.5 °C ±1 digit or ±1 °C ±1 digit |
| Offset compensation: (only for Pt100 and Pt1000) | The zero point offset of the sensor (e.g. due to long cables) can be compensated for by means of the spindle trimmer on the backside of the device. |
| Display: | 3½-digit, red 10 mm high LED display |
| Scan rate: | approx. 3 measurements / s |
| Working temperature: | 0 ... 50 °C (permissible ambient temperature) |
| Relative humidity: | 5 ... 95 % RH (non-condensing) |
| Storage temperature: | -20 ... +70 °C |
| Voltage supply: | 8 ... 20 V DC or 18 ... 29 V DC (standard) (set via soldering jumper) |
| Current supply: | max. 20 mA |
| Panel mounting: | with VA-spring clamp. allowed panel thicknesses from 1 ... approx. 10 mm |
| Connection terminal: | 4-pin screw-type/plug-in terminal for wire cross sections from 0.14 ... 1.5 mm ² |
| Protection rating: | front side IP54 |
| Housing: | glass fibre reinforced Noryl, front panel PC |
| Dimensions: | 48 x 24 mm (W x H) (front frame) |
| Mounting depth: | approx. 65 mm (incl. screw-type/plug-in terminal) |
| Panel cut-out: | 45 ^{+0.5} x 21,7 ^{+0.5} mm (W x H) |
| Scope of supply: | Device, manual |

System solution - complete packages:**KFZ 2000**

Art. no. 603241

Exhaust gas temperature set for measurement of exhaust gas temperatures up to 1000 °C in motor vehicles (e.g. motorsports). The set consists of:

GTH 2448/1 12 V DC:

Art. no. 601017

NiCr-Ni thermometer with additional over-voltage protection.

GTF 101-5-30-0150-L03-S:

Art. no. 601317

temperature probe with jacket material: Nimonic 75 (view p.r.t. page 187)
cable length = 3 m (extended cable against upcharge available)

GKV 4:

Art. no. 602891

clamping ring screw connection (p.r.t. p. 199)