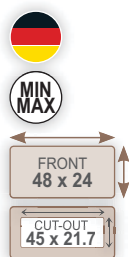


The displaying and regulating device for 230 V

**GIR 230 NS**

Art. no. 600972

GIR 230 Pt

Art. no. 600976

GIR 230 TC

Art. no. 600978

GIR 230 FR

Art. no. 600970

GIR 230 NT

Art. no. 600974

Version GIR 230 NS (normalized signal):

Measuring input:	4 ... 20 mA, 0 ... 20 mA, 0 ... 10 V
Display range:	-1999 ... 9999 digit, initial value, final value and DP freely adjustable
Recommended range:	≤2000 digit
Accuracy:	<0.2 % FS ±1 digit (at nominal temperature = 25 °C)
Measuring rate:	approx. 100 measurings / s

Version GIR 230 Pt (resistor):

Measuring input:	Pt100 (3-wire), Pt1000 (2-wire)
Measuring ranges, resolution:	Pt100: -200 ... +850 °C (1°) or -50.0 ... +200.0 °C (0.1°) Pt1000: -200 ... +850 °C
Accuracy:	<0.5 % FS ±1 digit (at nominal temperature = 25 °C)
Measuring rate:	approx. 4 measurings / s

Version GIR 230 TC (thermo couple):

Measuring input:	types J, K, N, S, T and 0 ... 50 mV
Measuring ranges, resolution:	Type J: -170 ... +950 °C, Type K: -270 ... +1350 °C, Type N: -270 ... +1300 °C, Type S: -50 ... +1750 °C, Type T: -270 ... +400 °C
Accuracy:	<0.3 % FS ±1 digit (type S: <0.5 % FS ±1 digit) (at 25 °C)
Point of comparison:	±1 °C
Measuring rate:	approx. 4 measurings / s

Version GIR 230 FR (frequency):

Measuring input:	frequency
Display range:	-1999 ... 9999 digit, freely scaleable
Accuracy:	<0.2 % FS ±1 digit (at nominal temperature = 25 °C)
Frequency measuring:	0.000 Hz ... 10 kHz
Rotational speed:	0.000 U/min ... 9999 U/min, selectable prescaler (1-1000)
Counter up/down:	0 ... 9999 (10 mio with prescaler)

Version GIR 230 NT (NTC and only 1 relay output):

Measuring input:	NTC (2-wire)
Measuring ranges:	-40.0 ... +120.0 °C
Accuracy:	<0.5 % FS ±1 digit (at nominal temperature = 25 °C)
Measuring rate:	approx. 4 measurings / s

Accessories and spare parts:**GTF 230 S**

Art. no. 603014

NTC-temperature probe, -40 ... +120 °C, sensor sleeve made of stainless steel, Ø 5 x 50 mm, approx. 1 m silicone-cable

GTF 230 S-L03

Art. no. 605910

see above, approx. 3 m silicone cable

GTF 230 S-L05

Art. no. 604620

see above, approx. 5 m silicone cable

HIGHLIGHTS:

- 5 input executions for choice:
- 2 integrated switching outputs
- Display or controller
- Comprehensive self-monitoring
- Limit function

GIR 230 DIF-PT...

Art. no. 600982

Difference controller with 2 measuring inputs for Pt1000

GIR 230 DIF-NT...

Art. no. 600984

Difference controller with 2 measuring inputs for NTC

GIR 230 DIF-NS...

Art. no. 600980

Difference controller with 2 measuring inputs for 4 ... 20 mA, 0 ... 20 mA or 0 ... 10 V

Version GIR 230 DIF-PT1000, GIR 230 DIF-NT:

Measuring inputs:	2 x Pt1000 (2-wire) or 2 x NTC
Measuring ranges, resolution:	Pt1000: -200 ... +850 °C, 1 °C NTC: -40.0 ... +120.0 °C, 0.1 °C
Display:	difference temperature sensor 1 - sensor 2
Accuracy:	<0.5 % FS ±1 digit (at nominal temperature = 25 °C)
Measuring rate:	approx. 4 measurings / s

Version GIR 230 DIF-NS - 420 mA, ... - 020 mA, ... - 010 V:

Measuring inputs:	(2 x) 4 ... 20 mA, (2 x) 0 ... 20 mA or (2 x) 0 ... 10 V specify required input signals by order!
Display range:	-1999 ... 9999 digit, start and end value and DP freely adjustable
Recommended range:	≤2000 digit
Accuracy:	<0.2 % FS ±1 digit (at nominal temperature = 25 °C)
Measuring rate:	approx. 100 measurings / s

Specifications:

Relay output:	2 (1) closing contacts (GIR 230 NTC: 1 relay output), 230 V~ switching, switching power: 5 A, 230 V AC
Alarm output:	NPN, open collector, switching power: 30 mA, max. 28 V
Controller states:	2-point, 3-point*, 2-point with alarm, min/max alarm to 1 output, min/max alarm to 2 outputs* (* = not available at GIR 230 NT)
Switching points, hysteresis, alarm points:	freely selectable
Display:	approx. 10 mm high, 4-digit red LED-display
Operating conditions:	-20 ... +50 °C, 0 ... 80 % RH (non condensing)
Power supply:	230 V, 50/60 Hz, approx. 2 VA
Panel mounting:	with VA-spring clamp
Allowed panel thicknesses:	from 1 ... approx. 10 mm
Connection terminal via screw-type/plug-in terminal:	
4-pin (...NTC: 3-pin)	for power supply and relay outputs
4-pin (...NTC: 3-pin)	for measuring input and alarm output
For wire cross selections:	from 0.14 ... 1.5 mm ² .
Protection rating:	front side IP54
Housing:	glass fibre reinforced Noryl, front panel polycarbonate
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

Options:

SA1	power supply 12 ... 28 V DC, Outputs: 2 (1) relay outputs, +Ub switching
SA2	power supply 12 ... 24 V DC
SA3	power supply 12 V DC, electrically isolated
SA4	power supply 24 V DC, electrically isolated