

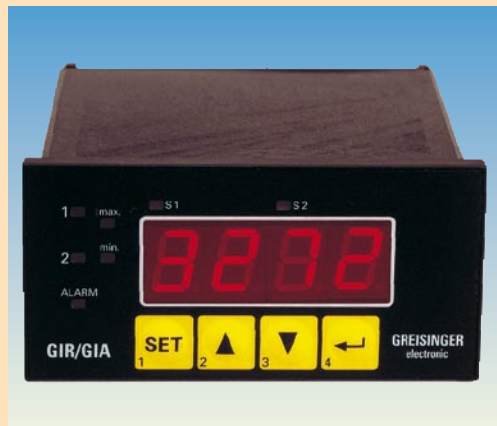
Universal Measuring and Regulating Device

GIR 2002

On/Off - control mode

GIR 2002 PID with PID - control mode

easy operability - high accuracy - economic price



Highlights

- universal input for normalized signals, frequency, Pt100, Pt1000, thermocouple
- 2 relay switching outputs
- 1 analog output (0(4)-20mA or 0-10V) (optional)
- 5 programmable switching modes
- electrical isolated power supply for a transmitter (24V / 22mA)
- serial interface, bus operation

Additional at GIR 2002 PID

- P, I, PI, PD or PID control mode
- motorised valve control
- continuous regulating output (optional)

Applications

- process regulating
- temperature controller
- Pressure monitoring
- rotation speed display
- flow counter
- etc.

General

The universal controller **GIR 2002** is the ideal device for simple control systems (on/off switching, relay outputs, ...), because of its compact construction and its high ease of use.

The **GIR 2002 PID** (basic version) supplies one control output for a 2-point-control the types of control **P, I, PI, PD** or **PID** and a second control output for on/off switching.

The device can also be configured as a **3-point motorized valve controller** or as controller with **continuous output** (optionally).

Specification:

Measuring input	Measuring / display ranges	Accuracy (at nominal temperature)	Measuring rate
Thermocouples			
FeCu-Ni type J IEC 584	-70,0 ... +300,0°C or -170 ... 950°C	< 0,3 % FS ±1 digit *	approx. 4 meas. / sec.
NiCr-Ni type K IEC 584	-70,0 ... +250,0°C or -270 ... 1372°C	< 0,3 % FS ±1 digit *	
NiCrSi-NiSi type N IEC 584	-100,0 ... +300,0°C or -270 ... 1350°C	< 0,3 % FS ±1 digit *	
Pt10Rh-Pt type S IEC 584	-50 ... 1750°C	< 0,5 % FS ±1 digit *	
Cu-CuNi type T IEC 584	-70,0 ... +200,0°C or -270 ... 400°C	< 0,3 % FS ±1 digit *	
Resistance thermometer			
Pt100 3-wire DIN EN 60751	-50,0 ... +200,0°C or -200 ... 850°C	< 0,3 % FS ±1 digit	approx. 4 meas. / sec.
Pt1000 2-wire DIN EN 60751	-200 ... 850°C	< 0,3 % FS ±1 digit	
Action signals / normalized signal			
0 ... 1 V, 0 ... 2 V, 0 ... 10 V	-1999 ... +9999 Digit, scale freely adjustable	< 0,2 % FS ±1 digit	approx. 100 meas. / sec.
0 ... 20 mA, 4 ... 20 mA		< 0,2 % FS ±1 digit	
0 ... 50 mV		< 0,3 % FS ±1 digit	
Frequency			
TTL-signal	0,000 Hz ... 10 kHz, scale freely adjustable	< 0,1 % FS ±1 digit	approx. 100 meas. / sec.
Switching contact NPN	0,000 Hz ... 3 kHz, scale freely adjustable		
Switching contact PNP	0,000 Hz ... 1 kHz, scale freely adjustable		
Rotational speed	0,000 ... 9999 U/min.	selectable prescaler: 1-1000, pulse frequency: max. 600 000 Imp./min. at TTL	
Flow	0 ... 9999 l/s, 0 ... 9999 l/min. or 0 ... 9999 l/h		
Counter up / down			
TTL-signal, switching contact (NPN, PNP)	0 ... 9999 or 0 ... 999 000 (with prescaler) <i>selectable prescaler: 1-1000, pulse frequency: max. 10 000 Imp./sec. at TTL</i>	< 0,1 % FS ±1 digit	approx. 100 meas. / sec.
Serial interface: displaying and controlling from values coming via the serial interface			

* = Point of comparison: ± 1 °C