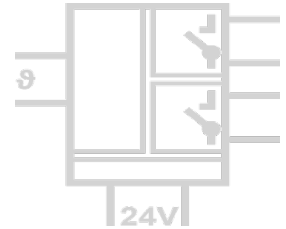


RTD Temperature Monitor DG 3602 / DG 3632

Limit Monitoring with
Pt, Ni, KTY and NTC Sensors



The Temperature Monitors DG 3602 and DG 3632 are used for temperature control with RTD sensors in 2-wire connection.

The sensor signal will be compared with the set limit values. In case of overshooting or undershooting, the output relays react according to the set configuration.

Two relay outputs (synchronous switching) can be configured as MIN or MAX alarm in open-circuit or closed-circuit operation with the analog control electronics.

All setting elements are located behind the openable front cover and can also be operated when the unit is mounted. The switching points and the switching hysteresis can be adjusted with potentiometers. The monitoring states are indicated by yellow LEDs.

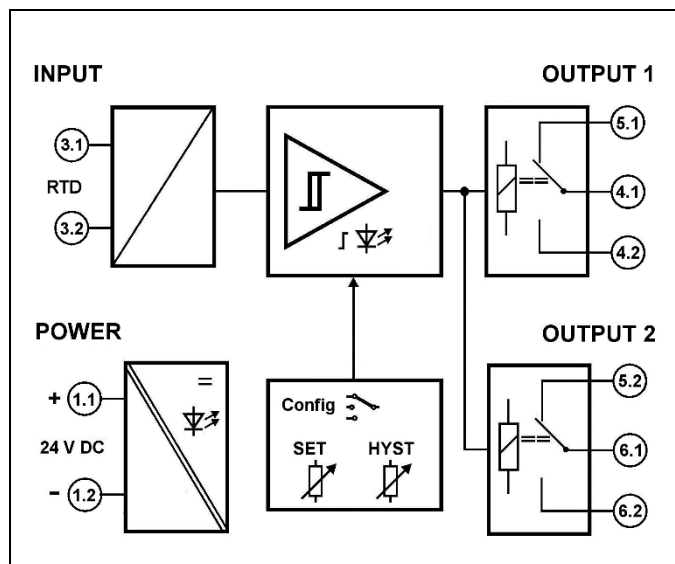
The relay changeover contacts switch high power loads up to 6 A. Input, power supply and the outputs are safely galvanically isolated from each other.

The Protective Separation and the 24 V DC power supply make the DG 3602 and DG 3632 universally applicable for all measurement and industrial applications, as well as for building automation.

- **Easy configuration on front panel**
Measuring range and operating mode switchable, switch point and hysteresis adjustable with potentiometer
- **Status indication by LED**
Easy monitoring and switching point adjustment
- **Relay contacts with high power handling**
2 fully isolated changeover contacts
- **True 4-port separation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Protective Separation acc. to EN 61010**
Protects service personnel and downstream devices against impermissibly high voltage
- **High reliability and noise immunity**
No microprocessor, no integrated software
- **Extremely slim design**
12.5 mm slim housing for a simple and space saving DIN rail mounting
- **5 Years Warranty**
Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant



Block diagram



Technical Data

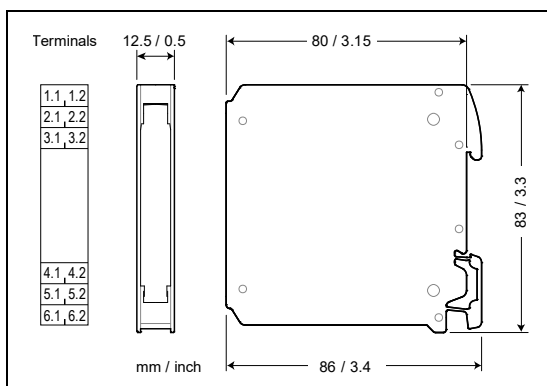
Input	DG 3602	DG3632	
Input ranges (switchable)	0 ... 300 Ω / 0 ... 3 kΩ	0 ... 30 kΩ / 0 ... 300 kΩ	
Monitoring sensors	Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni500, Ni1000, KTY and further RTD	NTC Further high impedance RTD	
Sensor current	≤ 1.5 mA / 0.15 mA	≤ 0.2 mA / 0.02 mA	
Sensor connection	2-wire sensor connection, manual compensation of line resistances required		
Switch point setting	0 to 110 % with 12-turn potentiometer		
Hysteresis setting	0 to 6 % or 0 to 60 % of measuring range switchable, adjustable with potentiometer		
Output			
Contact type	2 isolated changeover relays (SPDT), synchronous switching		
Switching capability AC max.	250 V / 6 A	1500 VA	
Switching capability DC max.	250 V / 0.2 A	115 V / 0.3 A	30 V / 6 A
Recommended minimum load	300 mW / 5 V / 5 mA		
Status indication	yellow LED		
Response time	< 50 ms		
General Data			
Switch error	< 0.2 % full scale		
Temperature coefficient ¹⁾	< 150 ppm/K		
Test voltage	4 kV AC, 50 Hz, 1 min. input against power supply against both switching outputs 3 kV AC, 50 Hz, 1 min. switching output 1 against switching output 2		
Working voltage (Basic Insulation) ²⁾	1000 V AC/DC for overvoltage category II and 600 V AC/DC for overvoltage category III according to DIN EN 61010 with pollution degree 2 between input, power supply and both switching outputs. Furthermore 300 V AC/DC between output 1 and output 2.		
Protection against electrical shock ²⁾	Protective separation according to DIN EN 61140 by reinforced insulation according to DIN EN 61010 up to 600 V AC/DC at overvoltage category II and 300 V AC/DC at overvoltage category III at pollution degree 2 between input, power supply and both switching outputs. Furthermore 300 V AC/DC between output 1 and output 2.		
Power supply	24 V DC, ± 15 %, approx. 0.7 W		
Ambient temperature	Operation	- 20 °C to + 60 °C (-4 to + 140 °F)	
	Transport and storage	- 35 °C to + 85 °C (-31 to + 185 °F)	
EMC ³⁾	EN 61326-1		
MTBF (acc. to EN 61709 / SN 29500)	297.1 years (T _{amb.} 40 °C, FIT 383.9)		

1) Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C

2) For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.

3) Minor deviations possible during interference

Dimensions



Subject to change!

Construction
12.5 mm (0.5") housing, protection class IP 20 mounting on 35 mm DIN rail acc. to EN 60715 Weight 70 g
Connection
Captive plus-minus clamp screws Wire cross-section max. 2.5 mm ² / AWG 14 Stripped length 6 ... 8 mm / 0.28 in Screw terminal torque 0.8 Nm / 7 lbf in

Product line

Device	Order No.
Temperature Monitor for low impedance sensors	DG 3602
Temperature Monitor for high impedance sensors	DG 3632