# Limit Value Monitor DG 3202 / DG 3282

Monitoring of Standard Signals with 2 Switching Outputs

The Limit Value Monitors DG 3202 und DG 3282 are used to monitor measured values in 0(4) ... 20 mA and 0 ... 10 V standard signal circuits. A transmitter supply +Us is provided for the operation of 2-wire transmitters.

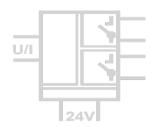
Two switching outputs can be configured simultaneously or independently of each other with the analog control electronics as MIN or MAX alarm in open-circuit or closed-circuit operation.

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.

Two relay changeover contacts are available on the DG 3202. The DG 3282 is equipped with two isolated transistor switching contacts (open-collector), which can optionally work with pull-up resistors. 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 3202 and DG 3282 universally applicable for all measurement and industrial applications, as well as for building automation.





# Easy configuration on front panel

Operating mode switchable via DIP switch, switch point and hysteresis adjustable with potentiometer

# • Status indication by LED

Easy monitoring and switching point adjustment

• Relay changeover contacts with high power handling or fully isolated transistor switching outputs

# • 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

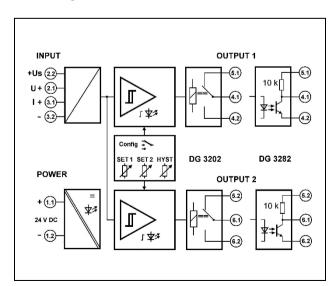
# • Extremely slim design

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

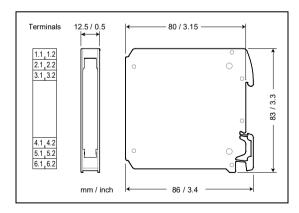
#### **Block diagram**



# **Technical Data**

	0 1 11
	nA Voltage input 300 V
Transmitter supply +Us $16 \text{ V at } U_{Power} = 24$	<u> </u>
	V (13 V 22 V depending on the supply voltage)
current limited ≤ 30	
Switch point setting 0 to 110 % with 12-	-turn potentiometer, independently adjustable for each switching output
	% of measuring range switchable, adjustable with potentiometer
Output	, , , , , , , , , , , , , , , , , , , ,
DG 3202 Contact type 2 changeover relays	s (SPDT)
Relay 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 mini	mum load 300 mW / 5 V / 5 mA
DG 3282 Contact type 2 transistor switches	, fully isolated, optional 10 kΩ Pull-up resistor
Transistor Switching capability 30 V DC, max. 50 r	mA, residual voltage < 1.5 V, not current limited
Status indication one yellow LED per	switching output
Response time approx. 20 ms	
General Data	
Switch error < 0.2 % full scale	
Temperature coefficient <sup>1)</sup> < 150 ppm/K	
	min. input against power supply against both switching outputs min. switching output 1 against switching output 2
according to DIN EI	overvoltage category II and 600 V AC/DC for overvoltage category III N 61010 with pollution degree 2 between input, power supply and both urthermore 300 V AC/DC between output 1 and output 2.
61010 up to 600 V III at pollution degre	n according to DIN EN 61140 by reinforced insulation according to DIN EN AC/DC at overvoltage category II and 300 V AC/DC at overvoltage category see 2 between input, power supply and both switching outputs. Furthermore een output 1 and output 2.
Power supply 24 V DC, $\pm$ 15 %,	
Ambient temperature Operation	- 20 °C to + 60 °C (-4 to + 140 °F)
Transport and stora	ge - 35 °C to + 85 °C (-31 to + 185 °F)
EMC <sup>3)</sup> EN 61326-1	
MTBF (acc. to EN 61709 / SN 29500) 575.4 years (T <sub>amb.</sub> 40	) °C, FIT 198)

### **Dimensions**



Subject to change!

# Construction

12.5~mm (0.5") housing, protection class IP 20mounting 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<sup>2</sup> / AWG 14 Stripped length  $6 \dots 8 \text{ mm} / 0.28 \text{ in}$ Screw terminal torque 0.8 Nm / 7 lbf in

# **Product line**

Device	Order No.
Limit Value Monitor with relay contacts	DG 3202
Limit Value Monitor with transistor switches	DG 3282

<sup>1)</sup> 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