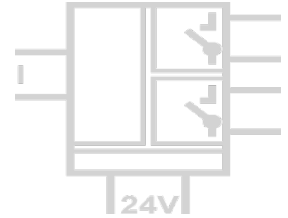


Current Measuring Contactor DG 3300

Monitoring of 1/5 A AC/DC Current



The Current Measuring Contactor DG 3300 is used to monitor limit values of 0 ... 1/5 A AC/DC current circuits.

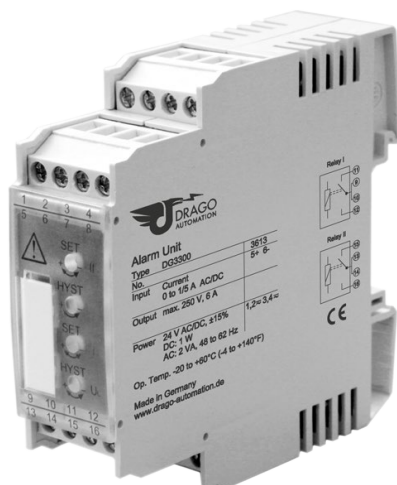
High reliability and Protective Separation are essential characteristics that contribute to fault-free equipment operation.

Two switch channels can be separately configured. The switch point and the switch hysteresis can each be adjusted by means of their own 12-turn potentiometer located on the unit's front panel. The switch state is indicated by a yellow LED.

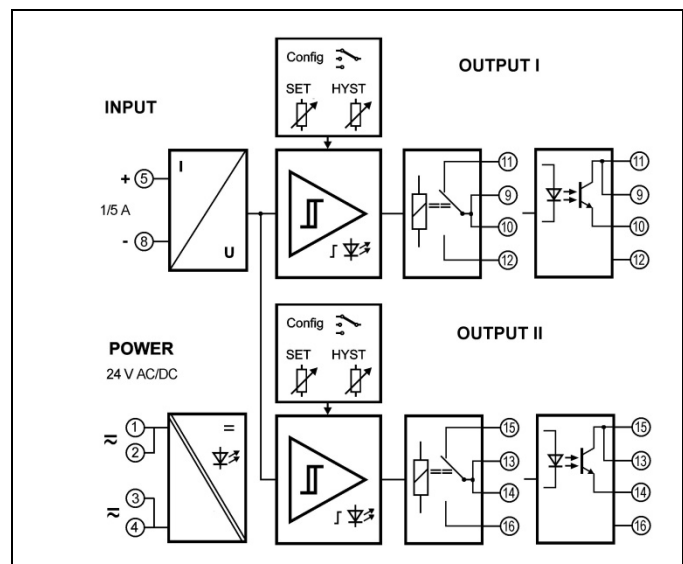
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

Protective Separation and the 24 V AC/DC power supply make the DG 3300 universally applicable for all measurement and industrial applications, as well as for building automation.

- **Easy selection of operating mode**
MIN / MAX alarm and N.O. / N.C. contact can be easily set by using DIP switch
- **Relay with high power handling**
or wearless optocoupler switching output
- **True 4-port separation**
Protection against erroneous measurements due to parasitic voltages or ground loops
- **Switch state indicated by LED**
Easy to adjust the set point and hysteresis
- **Protective Separation acc. to EN 50178**
Protects service personnel and downstream devices against impermissibly high voltage
- **High reliability and long-term stability**
New APT technology, no maintenance costs
- **Unlimited use with 24 V AC/DC power supply**
Universally applicable for all measurement and industrial applications
- **5 Years Warranty**
Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)



Block diagram



Technical Data

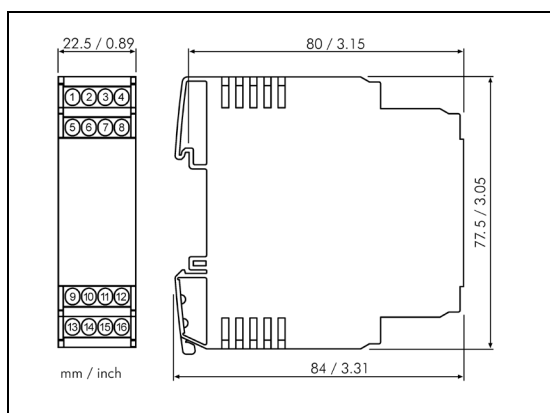
Input		
Input signal	DC: 0 ... 1 A ± 1 A 0 ... 5 A ± 5 A AC: 0 ... 1 A 0 ... 5 A sinusoidal alternating currents, f = 10 ... 500 Hz	
Input resistance	< 10 mΩ	
Overload	2 x I _N continuous, surge current: 100 A for 1 s	
Set point range	0 ... 100 % of input range with 12-turn potentiometer , MIN/MAX-Alarm switchable	
Hysteresis	0 ... 60 % of final value with 12-turn potentiometer	
Output		
DG 3300:	Contact type	2 SPDT relays, mode of operation switchable
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 minimum load 300 mW / 5 V / 5 mA	
DG 3380:	Contact type	2 optocoupler transistor switches, mode of operation switchable
Optocoupler	Switching capability	30 V DC, max. 50 mA
Switch state indicator	Yellow LED	
Response time	DC Input: approx. 20 ms AC Input: approx. 500 ms	
General Data		
Set point 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 2.5 kV AC, 50 Hz, 1 min. switching output I against switching output II	
Working voltage (Basic Insulation) ²⁾	600 V AC/DC for overvoltage category III and pollution degree 2 acc. to EN 50178 between input, power supply and switching outputs. Up to 300 V AC/D between both switching outputs	
Protection against electrical shock ²⁾	Protective separation according to EN 50178 by reinforced insulation up to 300 V AC/DC for overvoltage category II and pollution degree 2 between input, power supply and switching outputs	
Power supply	24 V AC/DC, ± 15 % AC 48 ... 62 Hz, approx. 2 VA DC approx. 1 W	
Ambient temperature	Operation	- 20 to + 60 °C (- 4 to + 140 °F)
	Transport and storage	- 35 to + 85 °C (- 31 to + 185 °F)
EMC ³⁾	EN 61326-1	
Construction	22.5 mm (0.89") housing, protection class IP 20, mounting on 35 mm DIN rail acc. to EN 60715	
Weight	Approx. 100 g	

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!

Product line

Device	Order No.
Current Measuring Contactor with relay contacts	DG 3300
Current Measuring Contactor with transistor switches	DG 3380