



# Voltage Measuring Contactor DG 3400

Monitoring of AC/DC Voltage

With the Voltage Measuring Contactor DG 3400 DRAGO is extending its offer on high-functional and high-reliable components of the interface technique.

The Voltage Measuring Contactor DG 3400 is used to monitor limit values of AC/DC voltages. 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.

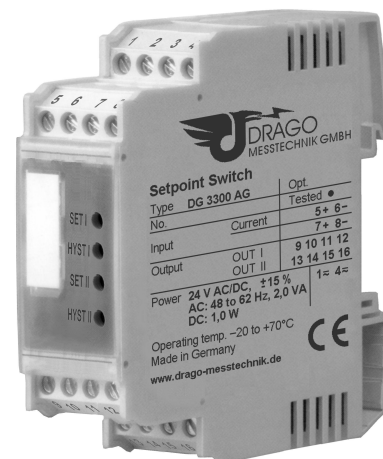
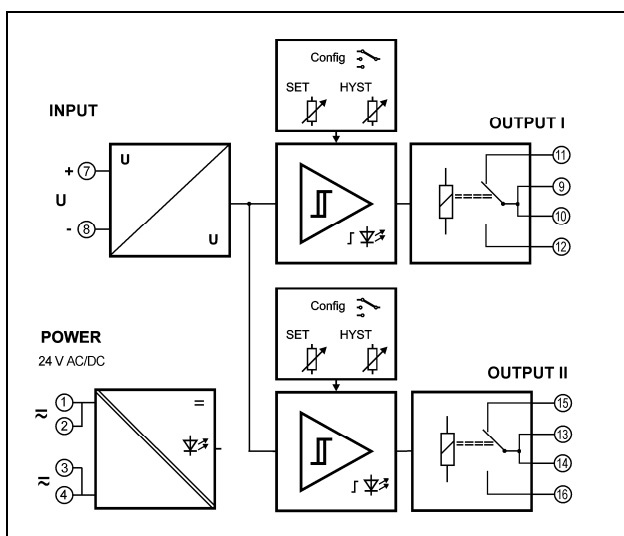
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

Protective Separation and the 24 V AC/DC power supply make the DG 3400 universally applicable for all measurement and industrial applications, as well as for building automation.

- **Easy selection of operating mode**  
MIN / MAX alarm switch selectable, switch point and hysteresis adjustable on front panel
- **Relay with high power handling**  
SPDT relay with 6 A current switch capability
- **True 3-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**  
No maintenance costs
- **Unlimited use with 24 V AC/DC power supply**  
Universally applicable for all measurement and industrial applications
- **5 Years Warranty**

**5 Years Warranty**  
Defects occurring within 5 years from delivery are remedied free of charge at our plant (carriage and insurance paid by sender).

## Block diagram



**Technical Data**

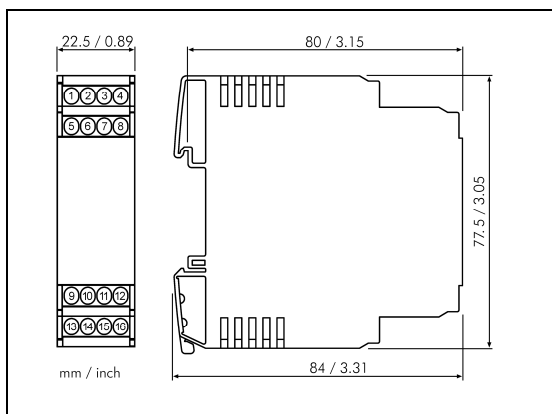
<b>Input</b>	
Input signal	Measuring ranges: 24 V, 48 V, 100 V, 120 V, 250 V, 500 V switchable Unipolar, bipolar or sinusoidal alternating current voltages, $f = 10 \dots 500$ Hz
Input resistance	1 M $\Omega$
Overload	Max. 600 V continuous
Set point range	0 ... 100 % of input range with 12-turn potentiometer, MIN/MAX-Alarm switchable
Hysteresis	0 ... 60 % of final value with 12-turn potentiometer
<b>Output</b>	
Contact type	2 SPDT relays, mode of operation switchable
Switching capability	250 V AC/DC, max. 6 A, max. 1500 VA
Switch state indicator	Yellow LED
Response time	DC Input: approx. 20 ms      AC Input: approx. 500 ms
<b>General Data</b>	
Set point error	0.2 % of final value
Temperature coefficient <sup>1)</sup>	150 ppm/K of final value
Test voltage	4 kV, 50 Hz, input against power supply against relay 2.5 kV, 50 Hz, relay I against relay II
Working voltage (Basic Insulation) <sup>2)</sup>	Up to 600 V AC/DC for overvoltage category III and pollution degree 2 acc. to EN 50178 between input, power supply and relay outputs. Up to 300 V AC/D between both relay outputs.
Protection against electrical shock <sup>2)</sup>	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 relay outputs.
Power supply	24 V AC/DC, $\pm 15$ %      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 <sup>3)</sup>	EN 61326 -1
Construction	22.5 mm housing, protection class: IP 20
Weight	Approx. 100 g

1) Average TC in specified operating temperature range.

2) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.

3) Minor deviations possible during interference.

**Dimensions**



**Product line**

Devices	Order No.
Voltage Measuring Contactor	DG 3400

Subject to change!