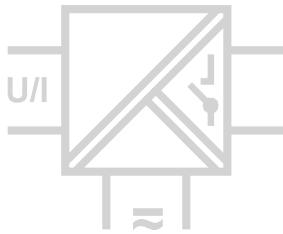




# Alarm Unit DG 3200

## Control And Monitor Standard Signals



With the Alarm Unit DG 3200 DRAGO is extending its offer on high-functional and high-reliable components of the interface technique.

The Alarm Unit DG 3200 is used to monitor limit values and regulate simple automation processes in 0(4) ... 20 mA and 0 ... 10 V standard signal 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.

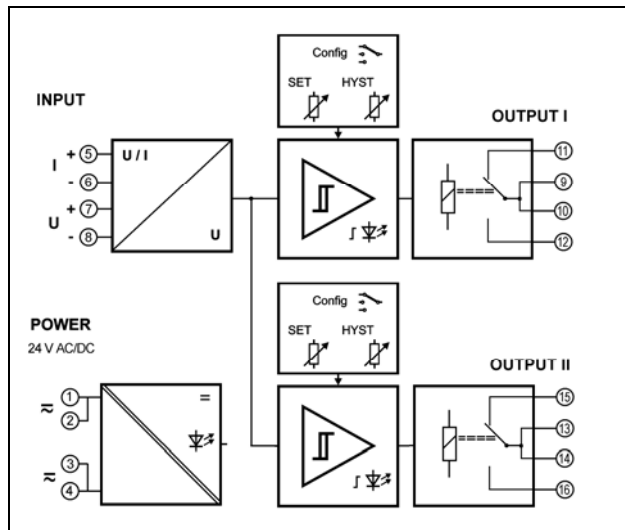
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

Protective Separation and the 24 V AC/DC power supply make the DG 3200 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 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**  
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**

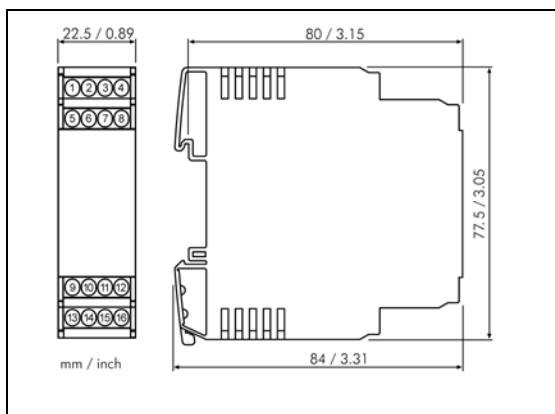
Input	
Input signal	0(4) ... 20 mA ± 20 mA 0 ... 10 V ± 10 V
Input resistance	Current input ca. 5 Ω Voltage input ca. 1 MΩ
Overload	Current input ≤ 200 mA Voltage input ≤ 250 V
Set point range	0 ... 100 % of input range with 12-turn potentiometer , MIN/MAX-Alarm switchable
Hysteresis	0 ... 60 % of final value with 12-turn potentiometer
Output	
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	Approx. 20 ms
General Data	
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, ± 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

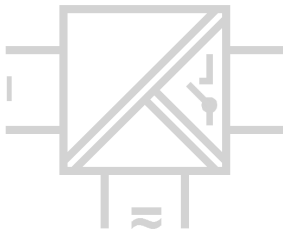
**Dimensions**



**Product line**

Devices	Order No.
Alarm Unit	DG 3200

Subject to change!



# Current Measuring Contactor DG 3300

Monitoring of 1/5 A AC/DC Current

With the Current Measuring Contactor DG 3300 DRAGO is extending its offer on high-functional and high-reliable components of the interface technique.

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.

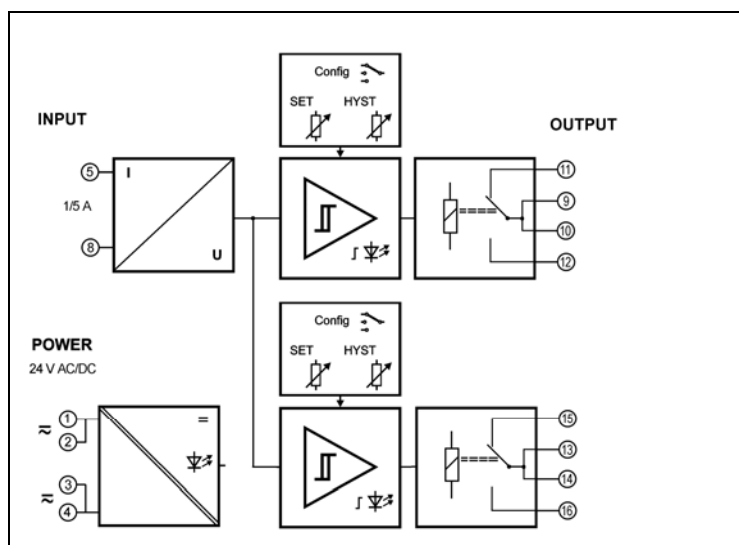
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

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**  
SPDT relay with 6 A current switching capability
- **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**

**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

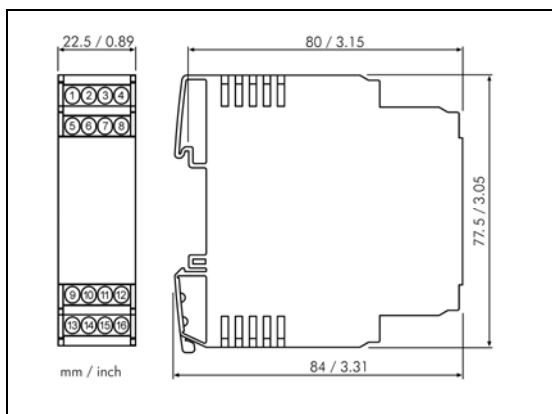
<b>Input</b>	
Input signal	DC: 0 ... 1 A ± 1 A    0 ... 5 A ± 5 A AC: 0 ... 1 A    0 ... 5 A    sinusoidal alternating currents, f = 10 ... 500 Hz
Input resistance	< 10 mΩ
Overload	2 x I <sub>N</sub> continuous, surge current: 100 A for 1 s
Set point range	0 ... 100 % of input range with 12-turn potentiometer , MIN/MAX-Alarm switchable
Hysteresis	0 ... 60 % of final value with 12-turn potentiometer
<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 both relays 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, ± 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.
Current Measuring Contactor	DG 3300

Subject to change!



# 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.

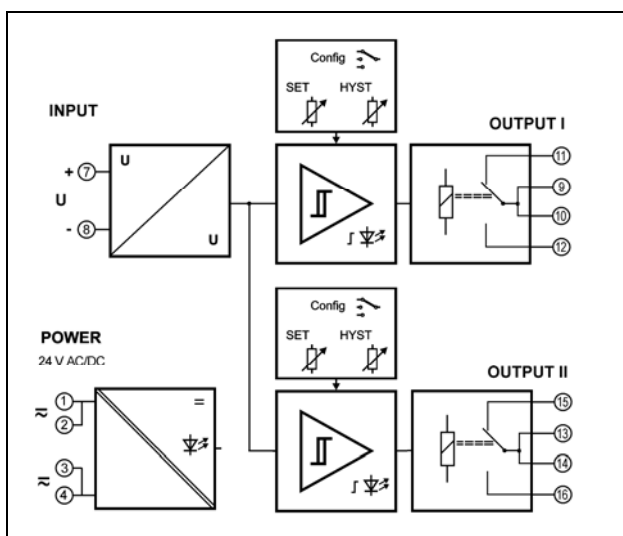
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

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 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**  
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

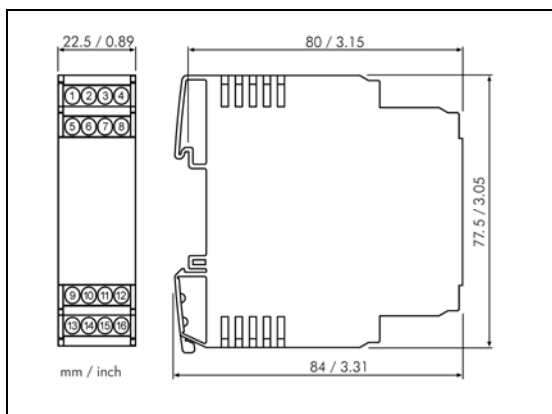


**Technical Data**

<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 ... 500 Hz
Input resistance	1 MΩ
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, ± 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.

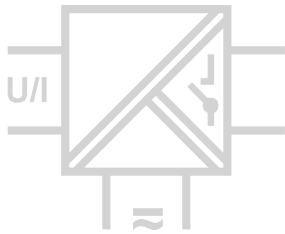
**Dimensions**



**Product line**

Devices	Order No.
Voltage Measuring Contactor	DG 3400

Subject to change!



# Temperature Alarm Unit DG 3600

Control And Monitor Pt-Temperature Signals

With the Alarm Unit DG 3600 DRAGO is extending its offer on high-functional and high-reliable components of the interface technique.

The Alarm Unit DG 3600 is used to monitor limit values and regulate simple automation processes in temperature measuring applications with Pt-Sensors. 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.

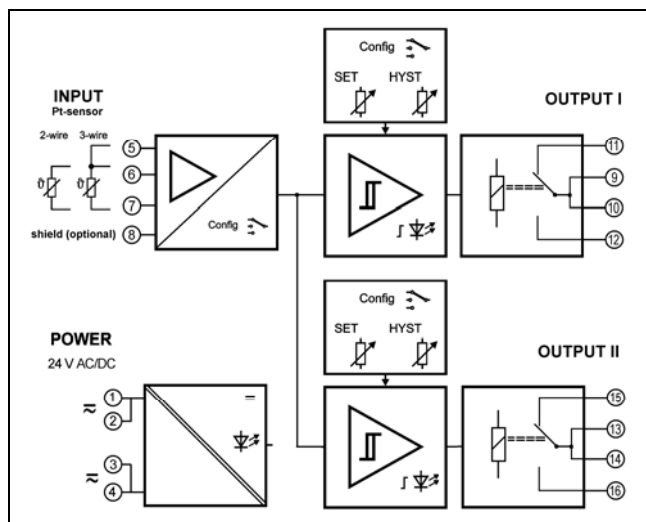
The direction of effect and the mode of operation can be switched by means of DIP switch settings. Both switch outputs can be set up as either MIN or MAX alarms. The relay contacts switch high power loads either as N.O. or N.C. contacts.

Protective Separation and the 24 V AC/DC power supply make the DG 3600 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 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**  
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

Input						
Sensor Input		Pt100	Pt200	Pt500	Pt1000	switchable
Sensor current		1 mA	0,5 mA	0,2 mA	0,1 mA	
Sensor connection		3-wire connection / 2-wire connection, switchable				
Wire resistor		< 10 Ω per wire				
Temperature measuring range	Zero	-100 °C	-50 °C	0 °C	+50 °C	switchable
	Span	100 K	200 K	300 K	400 K	switchable
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	
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	Approx. 20 ms

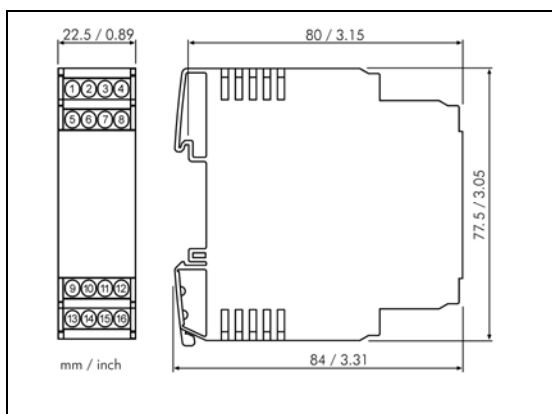
General Data		
Set point error	0.2 % of final value	
Temperature coefficient <sup>1)</sup>	150 ppm/K of final value	
Test voltage	4 kV, 50 Hz, input against power supply against relay 2.5 kV, 50 Hz, relay I against relay II	
Working voltage (Basic Insulation) <sup>2)</sup>	Up to 600 V AC/DC for overvoltage category III and pollution degree 2 acc. to EN 50178 between input, power supply and relay outputs. Up to 300 V AC/DC 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, ± 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.
Temperature Alarm Unit	DG 3600

Subject to change!