

## Current and Voltage Monitoring Relay



**HIGHLIGHTS:**

- Arithmetic average value measuring RMS calibrated (AC) or DC
- Contact function min/max selectable
- Hysteresis and time delay adjustable

### CVG 500

Current and Voltage Monitoring Relay

**General:**

CVG 500 monitoring relays can be used for monitoring current or voltage levels. The standard model is designed for input 0 ... 1/5 A and 0 ... 125/250 V AC/DC. Models with inputs in range of 0 ... 1 mA/ 5 AAC/DC or 0 ... 50 mV/400 V AC/DC are available.

**Specifications:**

**Power supply**

- Supply voltage:** 230 V AC ±10 % (47 ... 63 Hz) or 24 V DC -30/+40 %
- Working temperature:** -10 ... +50 °C (-25 °C ... +70 °C on request)
- CE-conformity:** EN 55022, EN 60555, IEC 61000-4-3/4/5/11/13

**Inputs**

- Scale error:** ≤2 %

**Standard ranges**

- Current:** 0 ... 1 A and 0 ... 5 AAC (sinusoidal) or DC
- R<sub>i</sub>:** 20 mΩ (5 A input) or 100 mΩ (1 A input)
- Overload:** 2-times, 4-times for max. 5 s
- Voltage:** 0 ... 125 V and 0 ... 250 V sinusoidal or DC
- R<sub>i</sub>:** 600 kΩ (125 V input) or 1.2 MΩ (250 V input)
- Overload:** max. 300 V AC/DC

**Custom ranges**

- Voltage:** end value in the range 0.05 ... 400 VAC/DC
- R<sub>i</sub>:** 4.8 kΩ/V
- Overload:** 5-times nominal voltage, max. 500 V AC / DC
- Current:** end value in the range 0.001 ... 5 AAC/DC
- R<sub>i</sub>:** = 100 mΩ ÷ (measuring range [A])
- Overload:** 2-times, 4-times for max. 5 s

**Output**

- Relay SPDT:** 250 V AC <250 VA <2 A; 100 V= <50 W <1 A
- Switching function:** min. / max. selectable
- Hysteresis:** 1 ... 25 %
- Time delay:** 0.1 ... 8 s

**Housing**

- Protection class:** Housing IP30, terminals IP20, (BGV A3)
- Connection:** screw terminals, max. 2.5 mm<sup>2</sup>

CVG500- 1 - 2 - 3

Greisinger	
<b>1.</b>	<b>Current measuring ranges</b>
0	not installed (at custom range voltage)
1/5	standard range 0 ... 1 A and 0 ... 5 AAC/DC
X	custom range state in clear text
<b>2.</b>	<b>Voltage measuring ranges</b>
0	not installed (at custom range current)
125/250	standard range 0 ... 125 V and 0 ... 250 V AC/DC
X	custom range state in clear text
<b>3.</b>	<b>Supply voltage</b>
0	230 V AC ±10 %
5	24 V DC -30 ... +40 %

## Battery Voltage Guard



**HIGHLIGHTS:**

- Monitoring of battery voltages 12 V, 24 V, 48 V or 60 V
- Alarm function under-voltage / over-voltage selectable
- Time delay adjustable
- Measuring voltage and supply voltage are identical

### BW 500

Battery Voltage Guard

**General:**

The BW500 is designed for monitoring of battery voltages. Undervoltage or over-voltage can be selected.

**Under-voltage:**

The relay switches off, if the voltage falls under the limit value and if the delay time ran off. If the voltage exceeds the limit value + hysteresis, the relay will be activated.

**Over-voltage:**

The relay switches on, if the voltage exceeds the limit value and if the delay time ran off. If the voltage falls under the limit value - hysteresis, the relay will be deactivated.

**Specifications:**

**Power supply**

- Battery voltage:** 12 V, 24 V, 48 V or 60 V DC, -30 ... +40 %
- Current consumption:** 14 mA (24 mA at 12 V type) with activated relay
- Working temperature:** -10 ... +60 °C
- CE-conformity:** EN 50022, EN 60555, IEC 61000-4-4/5/11/13 vibration, - shock- and jolt-inspection acc. to IEC 68-2-6/27/29

**Measuring input/measuring range**

- 12 V:** 11 ... 14 V
- 24 V:** 22 ... 28 V
- 48 V:** 44 ... 56 V
- 60 V:** 55 ... 70 V
- Scale error:** ≤2 %

**Output**

- Relay SPDT:** 250 V AC <250 VA <2 A; 300 V= <50 W <2 A
- Alarm function:** under-voltage/over-voltage selectable
- Hysteresis:** 2 ... 16 % adjustable (related to the nominal battery voltage)
- Time delay:** in 2-steps switch selectable 1 ... 60 s or 5 ... 300 s adjustable
- Housing:** standard case polycarbonate 8020 UL 94 V-1 acc. to DIN EN 60715:2001-09
- Weight:** approx. 100 g
- Protection class:** Housing IP30, terminal IP20, (BGV A3)
- Connection:** screw terminals, max. 2.5 mm<sup>2</sup>

BW500- 1 - 2 - 3

Greisinger	
<b>1.</b>	<b>Measuring input</b>
1	1 input
<b>2.</b>	<b>Battery voltage / measuring scale</b>
12V	11 ... 14 V
24V	22 ... 28 V
48V	44 ... 56 V
60V	55 ... 70 V
<b>3.</b>	<b>Option</b>
00	without option

Handheld instrument  
Display / Controller  
Logger- / Bus systems  
Transmitter  
Temperature probe  
Simulators  
Alarm / Protection, Level