

## Limit Monitor $\pm 10\text{mV}$ to 200VDC

**GW1**

Characteristics:

- Relay output 1 changeover contact
- Optocoupler output 100mA/24VDC, short-circuit proof
- High accuracy < 0,05%
- Input polarity selectable
- Switching hysteresis 2 - 40% with vernier adjustment
- Display when the limit value has been reached
- Supply 24VDC
- Mountable on 35mm cap rail TS35
- Clear terminal labeling
- Narrow design
- Shape 17,5mm
- PB - Power-Bus compatible
- High reliability, 5 years warranty



Description:

The devices of the series GW1 limit monitor have been developed for monitoring of DC voltages. Voltages of max.  $\pm 200\text{VDC}$  can be recorded. Via jumper or clamping point the to be recorded voltage value can be preselected. The fine adjustment ensues with a 20-turn spindle-operated potentiometer. The switch point of the hysteresis is adjustable with a spindle-operated potentiometer. The cut-in point stays unnoticed from this. A potential free relay output as changeover contact is also available for further analyses. Series GW1 has a short-circuit proof 24V optocoupler output for signal analyses or processing that is loadable with 100mA. A LED indicates that the preset limit value has been reached.

Application:

Monitoring of DC voltages

**Order-No.:**

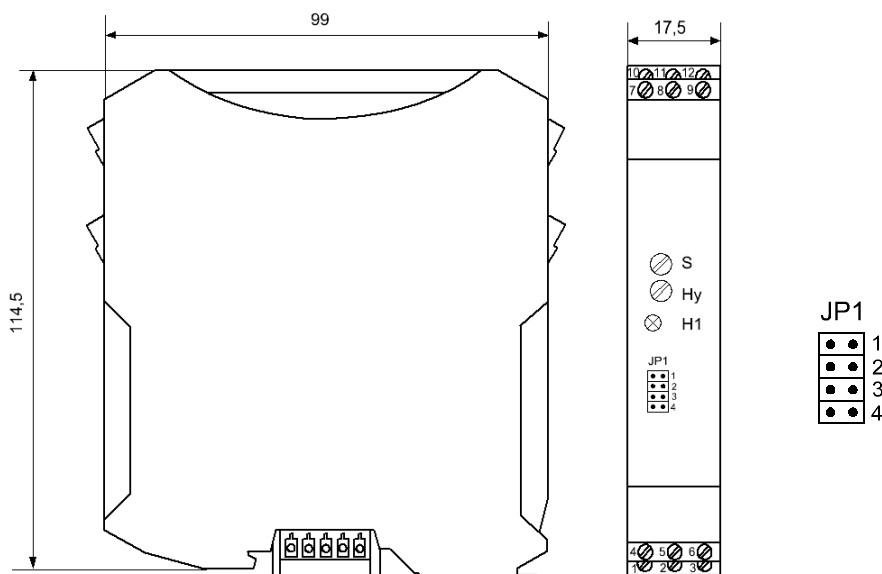
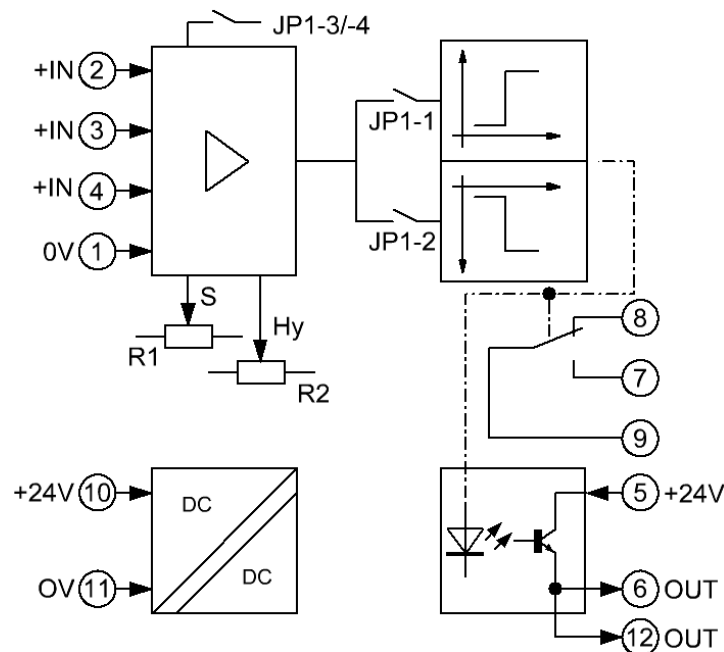
**GW1**

**Input: Jumper JP1:**

**Measuring range:**

Kl. 4	-4	10...60mV
Kl. 3	-4	60...300mV
Kl. 2	-4	0, 3...2V
Kl. 4	-3	2...6V
Kl. 3	-3	6...30V
Kl. 2	-3	30...200V
	-1	plus switching
	-2	minus switching
	-1 & -2	bipolar

The fine adjustment is effected via spindle-operated potentiometer S.



## Technical Data

### Auxiliary power:

---

Supply voltage : 19, 2...30VDC  
Current consumption : < 1,5VA

### Inputs:

---

Voltage input	:	10mV...-60mV / max. -60V /	+10mV...+60mV / max.60V
		-60mV...-300mV/ max. -200V /	+60mV...+300mV / max. 60V
		-0,3V...-2V / max. -60V /	+0,3V...+2V / max. 60V
		-2V...-6V / max. -60V /	+2V...+6V / max. 60V
		-6V...-30V / max. -200V /	+6V...+30V / max. 200V
		-30V...-200V / max. -300V /	+30V...+200V / max. 300V
Adjustment aid	:	20-turn potentiometer	

### Outputs:

---

Hysteresis : 2...40%, with spindle-operated potentiometer Hy  
Optocoupler : 24VDC / 100mA, short- circuit proof  
Relay : 1 changeover, 230VAC / 3A / 24VDC / 1,5A  
Delay < 20ms

### Accuracy:

---

Symmetry error : < 0, 05%  
Temperature coefficient: < 0,001 % / K

### General data:

---

Operating temperature : 0...50°C  
Storage temperature : -25...+85°C, condensation before putting into operation is not allowed  
CE conformity : EN 61326-1, EN 61000-4-2/3\*/5/6\*, EN 61000-6-4  
\* during measurements small deviations are possible

### Body:

---

Dimension : Cf. drawing, 17,5mm adjoin body, 17,5x114,5x104,5mm (with terminals)  
Material : PA / V0  
Protection category : IP20  
Connection : M3-screw-type terminal 0, 14 - 2,5mm<sup>2</sup>, flexible or inflexible  
Fixing : Snap-on mounting for norm rail TS35  
Weight : 122g

**Note on safety:**

---



Disconnect the power supply before attempting to open the unit.

During the operation of this module it is possible that parts of the module, even there is extra-low voltage, (for example shunt measurement) are under dangerous voltage! Therefore a non-observance of this caution may cause damage of property or physical injury.

Only trained qualified personnel should install or operate the unit. Before installation the qualified personnel should read the documentation and should familiarize themselves with the unit.

If there is visible damage to the body of the unit it should be immediately replaced and not put into operation.



Please ensure that there is a sufficient prevention against electrostatic discharge during installation of the unit.

**Installation Information:**

---

Pay attention and make sure the unit is far away from mounted sources that may disturb the device such as magnetic coils, transformers, frequency converters etc.

**Wiring advice:**

---

Use only shielded cables. The shield is to be connected extensively to ground. Do not mix power- and signal-wires/cables in the same cable tray.

**Limited warranty:**

---

The LEG Industrie-Elektronik GmbH warranted that the product does not have any material or processing defects in a period of 5 years after date of delivery.

It is up to the choice of LEG to repair or to exchange an inoperative unit.

Subsequent damages or any claim for indemnification above the functionality of the unit are excluded.

This limited warranty is only valid if ...

1. the product was installed and put into operation according to the LEG operation documentation;
2. the technical configuration of the power supply was abided;
3. the product was not used for unintended purposes;
4. there were no unauthorized modifications or manipulations, misuse or repairs without previous agreement from LEG .

Our Terms of Trade are based on the "General Conditions for the supply of products and services of the Electrical and Electronics Industry" including the "Complementary Clause: Extended Reservation of Property" of the ZVEI e.V. (German Association of Electrical Manufacturers).

**Miscellaneous:**

---

We expressly reserve the right, without previous notice, to correct errors contained in any data of this information brochure, and to make alterations to the program and technical modifications.