

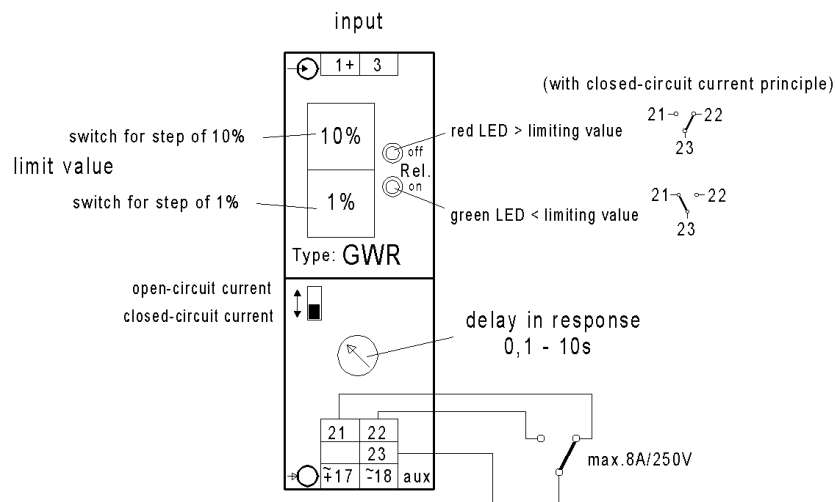
LIMIT VALUE RELAY, TYPE GWR

**for direct current and alternating current as well as
for direct voltage and altering voltage**

Application The electronic limit value relay type GWR serves to control direct current or alternating current as well as direct voltage or alternating voltage. The a. c. variables of any curve shape are measured as root mean square.

Function The limiting values are adjustable in steps of 1 % by means of coding switches. The delay in response as well as closed-circuit and open-circuit current principles can be selected. The instantaneous switching condition of the output relay is indicated by means of light-emitting diodes. The limit value relays are installed in a housing of 22,5 mm of breadth and can be attached to a top hat rail in snapping them on. They are extremely solid and do not dispose of any mechanically movable parts except the output relay. Thus they are very suitable for hard operating conditions.

Connection



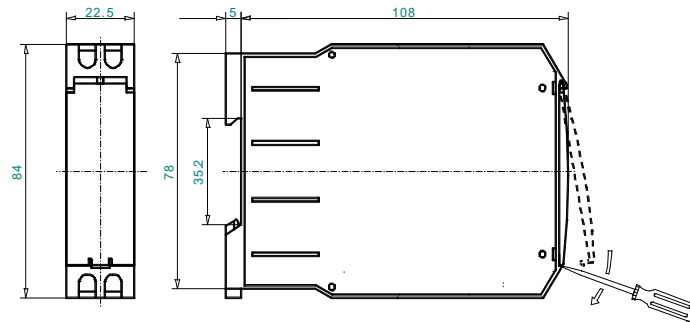
Technical data

Input	Input quantity	direct current or direct voltage, alternating current or alternating voltage; the a. c. variables of any curve shape are measured as root mean square in the range of DC and AC 40 to 1000 Hz
	Setting of the limit value	0-99 % in steps of 1 %
	Relay point	1 change-over contact
	Functional display	red LED lights up in case of relay drop-out green LED lights up in case of relay pick up
	Testing voltage	4 kV between measurement input and relay point as well as auxiliary voltage



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Switching operation	Switching accuracy	+/- 1 % of the final value of the measurement range
	Hysteresis	approx. 4 % of the limit value
	Delay in response	adjustable between 0,1 and 10 sec.
	Switching condition	closed-circuit or open-circuit current principle, optional
Regulations	Temperature range	-15 bis +20 up to +30 up to +55 °C
	Temperature effect	< 0,1 % at 10 K
	Overload capability	voltage input: fivefold (750 V max.) current input: twofold, permanent, 20-fold 1 sec. (50 A max.)
	Switching capacity	max. 8 A, 250 V, 2000 VA
	EMC	DIN EN 61326
Auxiliary voltage	Mechanical strength	DIN EN 61010 part 1
	Electrical security	DIN EN 61010 part 1, housing all insulated, protection class II, at a working voltage up to 300V (network to neutral conductor) degree of pollution 2, overvoltage category CAT III, at a working voltage up to 600V (network to neutral conductor) degree of pollution 2, overvoltage category CAT II
	Option	230 V AC ± 15 %, 45-65 Hz, 2,5 VA
Weight Dimensions	Option	<ul style="list-style-type: none"> • 110 V AC ± 15 %, 45-65 Hz, 3 VA • 24 V DC, -15 % up to +25 %, 2,5 W, (EMC DIN EN 61326 class A) • 6-30 V AC + DC or 36-265 V AC + DC, 2 VA, (EMC DIN EN 61326 class A)
		200 g



Installation	Attachement	snap-on mounting according to DIN EN 50 022
	Electrical connection	threaded terminal end 4 mm ² max.



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