



Limit value relay with indicator for installations up to 1000 V (CAT III)

for direct and alternating current as well as for direct and alternating voltage
2 limit values

Type:
GMAT-2



Application

The electronic limit value relay with indication GMAT-2 is used for monitoring the alternating or direct current and voltage. The alternating current parameters are measured as TrueRMS value with arbitrary waveform. The measured value or the limit values are indicated in a 2-digit LED display.

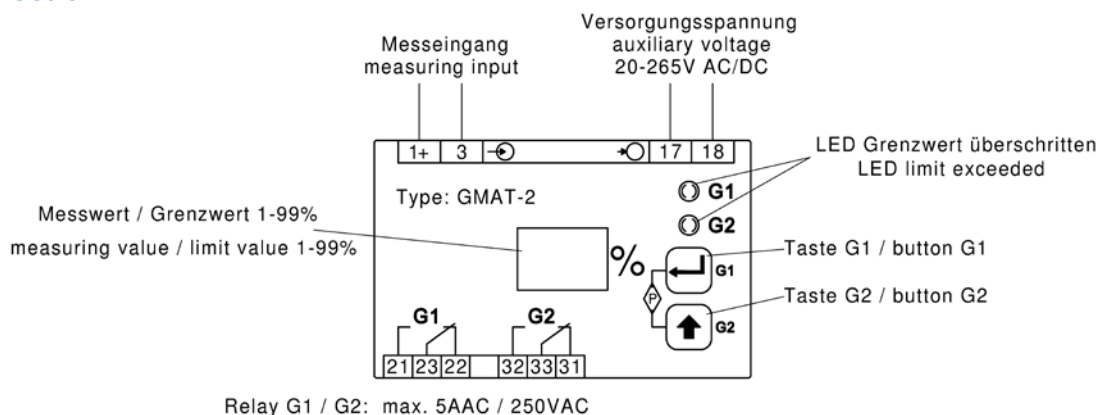


Function

The limit values are adjustable in 1% intervals using pushbuttons on the front panel. Hysteresis, switch on and switch off delay, closed circuit / open-circuit principle and min/max principle may also be set via the pushbuttons. If limit values are exceeded, this is indicated by LEDs. The limit value relay has a housing width of 71 mm and is designed for snap-on fastening on top hat rail.



Connection



Price

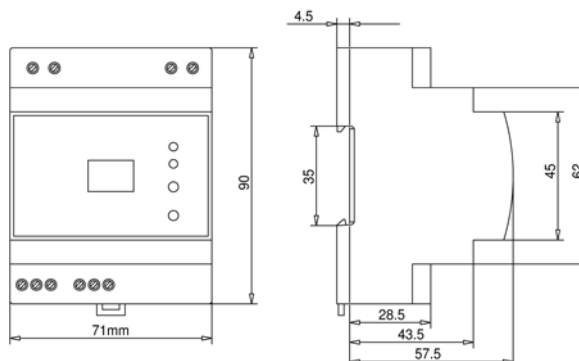
Input		€
DC		€ 274,50
AC + DC True RMS		€ 282,00



Technical data

Input	Input variables	direct current or direct voltage, alternating current or alternating voltage, the quantities are measured as true RMS value (up to crest factor 4) with arbitrary waveform in the range of DC and AC 40 - 1000 Hz			
	Limit value adjustment	0-99 %, adjustable in 1 % intervalls			
	Indicators	2 digit LED display for measuring values 0-99 % of full scale 2 red LEDs for limit value violation			
	Overflow	LED indicator shows dd			
	Accuracy	± 1 % of full scale			
	Test voltage	7,4 kV between measuring input and relay contact and auxiliary voltage, 4kV between relay G1 and relay G2			
	Switching characteristic	Switching accuracy	± 1 % of full scale		
Hysteresis		adjustable from 0-10 % of full scale			
Circuit time		< 400 ms for 10 % limit value exceedance			
Switching delay		adjustable range 0-99 s			
Switching state		selectable between close-circuit and open-circuit principle			
Relay contact		2 changeover contact			
Temperature range		-15 °C to +20 °C to +30 °C to +55 °C			
Temperature influence		< 0,1 % at 10 K			
Overload capacity		voltage 10-fold, max. 2000V, current 10-fold up to 20 mA, 2-fold for above			
Contact rating		max. 5 AAC, 250 VAC, 1250 VA			
Standards	EMC	DIN EN 61326			
	Mechanical strength	DIN EN 61 010 part 1			
	Electrical safety	DIN EN 61010 part 1 and DIN EN 61010 part 2-030 Housing insulated, protection calls II, for working voltages up to 1000V (phase to neutral), pollution level 2, measuring category CAT III			
Auxiliary voltage	20-265 VAC+DC, 2 VA				
Weight	200 g				
Measuring ranges	Alternating current	adjustable	from	to	internal resistance
	AC+DC True RMS	10 A	0,1 A	9,9 A	0,006 Ω
		5 A	0,05 A	4,95 A	0,012 Ω
		1 A	0,01 A	0,99 A	0,06 Ω
		100 mA	1 mA	99 mA	0,6 Ω
		10 mA	0,1 mA	9,9 mA	6 Ω
	Alternating voltage	1000 V	10 V	990 V	2 M Ω
	AC+DC True RMS				
	Direct current DC	10 A	0,1 A	9,9 A	0,006 Ω
		1 A	0,01 A	0,99 A	0,06 Ω
		100 mA	1 mA	99 mA	0,6 Ω
		10 mA	0,1 mA	9,9 mA	6 Ω
		20 mA	0,2 mA	19,8 mA	3 Ω
4-20 mA		4 mA	19,84 mA	3 Ω	
Direct voltage DC	1000 V	10 V	990 V	2 M Ω	

Dimensions



Installation	Fastening	Snap-on fastening on top hat rail 35 mm acc. to DIN EN 60 715
	Electrical connection	Screw terminal max. 4 mm ²