

- › **HIL**
- › **Monitoring Relays**
- › **Current Monitoring Relays**
- › **Modular Carril DIN 35 mm**

- › Control of AC and DC currents
- › Automatic recognition of AC/DC
- › Measurement ranges from 2 mA to 10 A
- › Choice between over and undercurrent
- › True RMS measurement
- › Selectable latching (memory) function



Specifications			
Functions	Measurement range	Nominal voltage (V)	Code
Over or undercurrent	2 mA → 500 mA	24 → 240 V AC/DC	84871120

Power supply	
Supply voltage Un	24 V → 240 V AC/DC
Voltage supply tolerance	-15 % / +10 %
Operating range	20,4 V → 264 V AC/DC
Polarity with DC voltage	No
AC supply voltage frequency	50 / 60 Hz ± 10 %
Galvanic isolation of power supply/measurement	No
Power consumption at Un	3.5 VA in AC/0.6 W in DC
Immunity from micro power cuts	50 ms

Inputs and measuring circuit	
Frequency of measured signal	0 Hz, 40 → 70 Hz
Max. measuring cycle time	30 ms/True RMS measurement
Threshold adjustment	10 → 100 % of the range
Maximum 3-phase voltage	277 / 480 V (3-phase mains with earth)
Adjustable hysteresis	5 → 50 % of displayed threshold
Display precision	±10 % of full scale
Repetition accuracy with constant parameters	± 0,5 %
Measuring error with voltage drift	± 1 % across the whole range
Measuring error with temperature drift	± 0,05 % / °C

Time delays	
Delays on power up (Ti)	1 → 20 s (0, +10 %)
Delay on threshold crossing Tt	0,1 → 3 s (0, +10 %)
Repetition accuracy with constant parameters	± 2 %
Reset time	1500 ms
Delay on pick-up	< 300 ms

Outputs	
Type of output	1 double changeover relay
Type of contacts	No cadmium
Maximum breaking voltage	250 V AC/DC
Max. breaking current	5 A AC/DC
Min. breaking current	10 mA / 5 V DC
Electrical life (number of operations)	1 x 10 ⁵
Breaking capacity (resistive)	1250 VA AC
Maximum rate	360 operations/hour at full load
Operating categories acc. to IEC/EN 60947-5-1	AC12, AC13, AC14, AC15, DC12, DC13, DC14
Mechanical life (operations)	30 x 10 ⁶

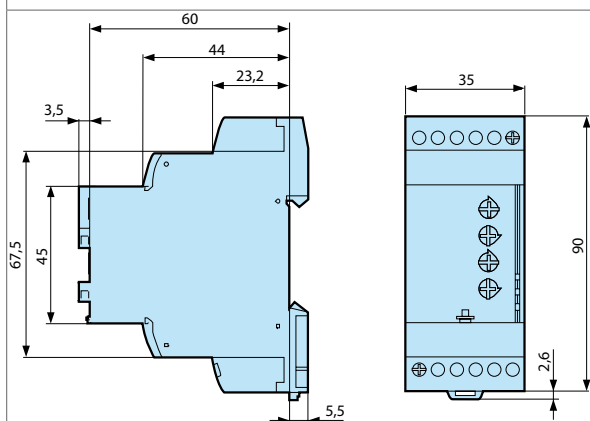
Insulation	
Nominal insulation voltage IEC/EN 60664-1	250 V
Insulation coordination (IEC/EN 60664-1)	Overvoltage category III : degree of pollution 3
Rated impulse withstand voltage (IEC/EN 60664-1)	4 kV (1,2 / 50 µs)
Dielectric strength (IEC/EN 60664-1)	2 kV AC 50 Hz 1 min.
Insulation resistance (IEC/EN 60664-1)	> 500 MOhm(s) / 500 V DC

General characteristics	
Display power supply	Green LED
Display relay	Yellow LED
Casing	35 mm
Mounting	On 35 mm symmetrical DIN rail, IEC/EN 60715
Mounting position	All positions
Material : enclosure plastic type VO to UL94 standard	Incandescent wire test according to CEI/EN 60695-2-11
Protection (IEC/EN 60529)	Terminal block : IP 20 Casing : IP 30
Weight	130 g
Connecting capacity IEC/EN 60947-1	Rigid : 1 x 4 ² - 2 x 2.5 ² mm ² 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules : 1 x 2.5 ² - 2 x 1.5 ² mm ² 1 x 14 AWG - 2 x 16 AWG
Max. tightening torques IEC/EN 60947-1	0,6 → 1 Nm / 5,3 → 8,8 Lbf.in
Operating temperature IEC/EN 60068-2	-20 → +50 °C
Storage temperature IEC/EN 60068-2	-40 → +70 °C
Humidity IEC/EN 60068-2-30	2 x 24 hr cycle 95 % RH max. without condensation 55 °C
Vibrations according to IEC/EN 60068-2-6	10 → 150 Hz, A = 0.035 mm
Shocks IEC/EN 60068-2-6	5 g

Standards	
Product standard	CEI/EN 50178
Electromagnetic compatibility (EMC)	IEC/EN 61000-6-1, IEC/EN 61000-6-1, IEC/EN 61000-6-3, IEC/EN 61000-6-4
Certifications	UL, CSA
Marking	CE (DBT) 2006/95/EC - EMC 2004/108/EC
Conformity with environmental directives	RoHS

Dimensions

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Curves

Connections

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