

# › EIL

## › Monitoring Relays

### › Current Monitoring Relays

### › 24 VDC / 24 VAC / 48 VAC / 120 VAC / 220 VAC

- › Current transformer fitted by passing a cable through the front
- › AC current threshold adjustable from 1 to 20 A AC (30 Hz to 400 Hz) via button on front
- › Relay output 5 A - 250 V AC - 1 N/O contact
- › Multivoltage power supply : 100 to 230 V AC 50-60 Hz
- › 24 V AC / DC



Specifications		
Measurement range	Supply voltage	Code
2 →500 mA	24 V DC	84871020
2 →500 mA	24 V AC	84871021
2 →500 mA	48 V AC	84871022
2 →500 mA	120 V AC	84871023
2 →500 mA	230 V AC	84871024

Supply	
Supply voltage Un	24 VDC / 24 VAC / 48 VAC / 120 VAC / 220 VAC
Voltage supply tolerance	-15 % / +15 % limited to -15 % / +10 % if products are mounted without space between them
Operating range	0.85 →1.15 Un
Power consumption at Un	3 VA AC 1 W DC
Immunity from micro power cuts	10 ms

Inputs and measuring circuit	
Frequency of measured signal	40 →500 Hz
Threshold adjustment	10 →100 % of the measurement range
Adjustable hysteresis	5 →50 % of the displayed threshold
Display precision	± 10 %
Repetition accuracy with constant parameters	± 0.1 %
Measuring error with voltage drift	± 0,1 % (± 10 % Un)
Measuring error with temperature drift	± 0,02 %

Timing	
Delays on power up (Ti)	0.1 s →20 s ± 10 %
Delay on threshold crossing Tt	0.1 s →3 s ± 10 %
Repetition accuracy with constant parameters	± 0.1 %
Reset time	500 ms
Delay on pick-up	500 ms

Output	
Type of output	1 changeover AgNi, 8A AC max
Type of contacts	No cadmium
Maximum breaking voltage	250 V AC/DC
Max. breaking current	8 AAC max.
Min. breaking current	100 mA AC/DC
Electrical life (number of operations)	AC 12 : 2000 VA - 10□ AC 15 : Cos φ = 0,3 - 6000 DC 13 : L/R = 300 ms - 6000
Breaking capacity (V resistive)	2000 VA AC
Maximum rate	360 operations/hour at full load
Operating categories acc. to IEC/EN 60947-5-1	AC12, AC15, DC13
Mechanical life (operations)	5 x 10□

Insulation	
Insulation coordination (IEC/EN 60664-1)	Overvoltage category III : degree of pollution 2
Rated impulse withstand voltage (IEC/EN 60664-1)	4 kV (1,2 / 50 μs)
Dielectric strength (IEC/EN 60664-1)	2,5 kV AC 50 Hz 1 min.
Insulation resistance (IEC/EN 60664-1)	> 100 MOhm(s) / 500 VDC

General characteristics	
Display power supply	Green LED
Display relay	Yellow LED
Casing	22,5 mm
Mounting	On 35 mm symmetrical DIN rail, IEC/EN 60715
Mounting position	All positions
Material : enclosure plastic type VO to UL94 standard	Enclosure plastic type VO to UL94 standard
Protection (IEC/EN 60529)	Terminal block : IP 20 Casing : IP 50
Weight	140 g
Connecting capacity IEC/EN 60947-1	Rigid : 1 x 4 <sup>2</sup> - 2 x 2.5 <sup>2</sup> mm <sup>2</sup> 1 x 11 AWG - 2 x 14 AWG Flexible with ferrules : 1 x 2.5 <sup>2</sup> - 2 x 1.5 <sup>2</sup> mm <sup>2</sup> 1 x 14 AWG - 2 x 16 AWG
Max. tightening torques IEC/EN 60947-1	0,6 mN / 5,3 Lbf.In
Operating temperature IEC/EN 60068-2	-20 → +50
Storage temperature IEC/EN 60068-2	-30 → +70
Humidity IEC/EN 60068-2-30	93 % RH max. without condensation
Vibrations according to IEC/EN60068-2-6	10 → 55 Hz, A = 0,35 mm

Standards	
Product standard	IEC/EN 60255-1
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

EIL / EIH / EIT

### Curves

### Connections

EIL / EIH

Technical specifications and details from the diagram:

- Un: 240V~
- A1/A2: 24V~ not isolated
- I: E1/AE 2-20mA DC
- E2/AE 10-100mA DC
- E3/AE 50-500mA DC
- RA: 250V~
- 1/3HP 240V~
- 00000 yyww
- EIL 94 871 000
- 44UF IND.CONT.E.O.
- Made in France