

- › HUL
- › Monitoring Relays
- › Voltage Monitoring Relays
- › DIN Rail Mount 35 mm

- › Control of AC and DC voltages
- › Automatic recognition of AC/DC
- › Measurement ranges from 0.2 V to 600 V
- › Choice between under and overvoltage
- › True RMS measurement
- › Selectable latching (memory) function



| Specifications    |                   |                     |          |
|-------------------|-------------------|---------------------|----------|
| Functions         | Measurement range | Nominal voltage (V) | Code     |
| Under/Overvoltage | 0,2 V →60 V       | 24 →240 V AC/DC     | 84872120 |

| 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                 | 10 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                         |
| Hysteresis                                   | Adjustable from 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                                  |                     |
|--|---------------------|
| 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                             | < 600 ms            |

| Outputs          |                           |
|------------------|---------------------------|
| Type of output   | 1 double changeover relay |
| Type of contacts | No cadmium                |

| Outputs   |   |
|---|---|
| Maximum breaking voltage                              | 250 V AC/ DC  |
| Max. breaking current                                 | 5 A AC/DC   |
| Min. breaking current                                 | 10 mA / 5 VDC   |
| Electrical life (number of operations)                | 1 x 10 <sup>5</sup>   |
| 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 <sup>6</sup>  |
| 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 IEC/EN 60695-2-11   |
| Protection (IEC/EN 60529)                             | Terminal block : IP 20<br>Casing : IP 30  |
| Weight  | 130 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><br>1 x 11 AWG - 2 x 14 AWG<br>Flexible with ferrules : 1 x 2.5 <sup>2</sup> - 2 x 1.5 <sup>2</sup> mm <sup>2</sup><br>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/EN60068-2-6               | 10 →150 Hz, A = 0.035 mm  |
| Shocks IEC/EN 60068-2-6                               | 5 g   |
| Standards   |   |
| Product standard                                      | IEC/EN 60255-1  |
| Electromagnetic compatibility (EMC)                   | IEC/EN 61000-6-1, IEC/EN 61000-6-2, 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  |