



# **Electric Automation**

Automation specialists

Reference: CM-ESS.1P Code: 1SVR740831R0300

CM-ESS.1P Voltage monitoring relay 1c/o, B-C=3-600VRMS, 110-130VAC

Buy it at Electric Automation Network



The CM-ESS.1P is a single-functional voltage monitoring relay from the CM singlephase monitors range. This monitoring relay operates with a rated control supply voltage of 110 - 130 V AC and has a 1 c/o (SPDT) output contact rated at 250 V / 4 A. It provides a RMS measuring principle for DC and AC voltages with 4 measuring ranges: 3-30 V, 3-60 A, 30-300 V and 60-600 V and works according to the opencircuit principle. The CM-ESS.1P is configurable for over- or undervoltage monitoring, the hysteresis is adjustable within a range of 3 to 30 % of the threshold value. A sealable transparent cover for protection against unauthorized changes is available as accessory. The device offers maintenance free Easy Connect Technology with push-in terminals.

#### Ordering

| EAN:                    | 4016779852425 |
|-------------------------|---------------|
| Minimum Order Quantity: | 1 piece       |
| Customs Tariff Number:  | 85364900      |

#### **Container Information**

| Package Level 1 Units:        | 1 piece  |
|-------------------------------|----------|
| Package Level 1 Width:        | 97 mm    |
| Package Level 1 Height:       | 109 mm   |
| Package Level 1 Length:       | 30 mm    |
| Package Level 1 Gross Weight: | 0.178 kg |

## Dimensions

| Product Net Width:  | 22.5 mm  |
|---------------------|----------|
| Product Net Depth:  | 103.7 mm |
| Product Net Height: | 85.6 mm  |
| Product Net Weight: | 0.155 kg |

#### Technical

| Function:  | Over- or undervoltage monitoring  |
|--|---|
| Measuring Range:                                     | 3 30 V<br>6 60 V<br>30 300 V<br>60 600 V  |
| Rated Control Supply Voltage ( $U_s$ ):              | 110 130 V AC  |
| Output:  | 1 c/o (SPDT) contact  |
| Terminal Type:                                       | Screwless Terminals   |
| Rated Operational Current AC-12 $(I_e)$ :            | (230 V) 4 A   |
| Rated Operational Current AC-15 (I <sub>e</sub> ):   | (230 V) 3 A   |
| Rated Operational Current DC-12 (I <sub>e</sub> ):   | (24 V) 4 A  |
| Rated Operational Current DC-13 (I <sub>e</sub> ):   | (24 V) 2 A  |
| Minimum Switching Capacity:                          | 24 V<br>10 mA   |
| Rated Insulation Voltage (U <sub>i</sub> ):          | Measuring Circuit / Output Circuit 600 V<br>Output Circuit 1 / Output Circuit 2 250 V<br>Supply Circuit / Measuring Circuit 600 V<br>Supply Circuit / Output Circuit 250 V                |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ): | Measuring Circuit / Output Circuit 6 kV<br>Output Circuit 1 / Output Circuit 2 4 kV<br>Supply Circuit / Measuring Circuit 6 kV<br>Supply Circuit / Output Circuit 4 kV                    |
| Degree of Protection:                                | Housing IP50<br>Terminals IP20  |
| Overvoltage Category:                                | III   |
| Pollution Degree:                                    | 3   |
| Short-Circuit Protective Devices:                    | Output Circuit NC - F Type Fuses 6 A<br>Output Circuit NO - F Type Fuses 10 A   |
| Electrical Durability:                               | AC-12 100000 cycle  |
| Mechanical Durability:                               | 30000000 cycle  |
| Connecting Capacity:                                 | Flexible with Ferrule 2x 0.5 1.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.5 1.5 mm <sup>2</sup><br>Flexible 2x 0.5 1.5 mm <sup>2</sup><br>Rigid 2x 0.5 1.5 mm <sup>2</sup> |
| Wire Stripping Length:                               | 8 mm  |
| Mounting Position:                                   | Any   |

| Mounting on DIN Rail: | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 |
|-----------------------|--|
| Standards:            | IEC/EN 60255-1<br>IEC/EN 60255-27<br>EN 50178  |

#### Environmental

| Ambient Air Temperature: | Operation -20 +60 °C<br>Storage -40 +85 °C                      |
|--------------------------|---|
| RoHS Status:             | Following EU Directive 2002/95/EC August 18, 2005 and amendment |

### Technical UL/CSA

| Maximum Operating Voltage UL/CSA: | Output Circuit 300 V AC                     |
|-----------------------------------|---|
| Contact Rating UL/CSA:            | B300  |
| Connecting Capacity UL/CSA:       | Flexible 2x 18 16 AWG<br>Rigid 2x 20 16 AWG |

## Certificates and Declarations (Document Number)

| CB Certificate:                 | CB_DK-28255-UL            |
|---------------------------------|---------------------------|
| CCC Certificate:                | CCC_2007010303243843.pdf  |
| cULus Certificate:              | cULus508_20120203-E140448 |
| Declaration of Conformity - CE: | 1SAD938500-0202           |
| EAC Certificate:                | EAC_RU_C-DE.ME77.B.01012  |
| GL Certificate:                 | GL_61765-14HH             |
| RMRS Certificate:               | RMRS_12.04009.250         |
| RoHS Information:               | 1SAA981056-4401           |

## Classifications

| Object Classification Code: | В                                   |
|-----------------------------|-------------------------------------|
| E-nummer:                   | 3860644                             |
| ETIM 4:                     | EC001438 - Voltage monitoring relay |
| ETIM 5:                     | EC001438 - Voltage monitoring relay |
| eClass:                     | 7.0 27371801                        |