

PRODUCT-DETAILS

# CM-MPS.23S

## CM-MPS.23S Three-phase monitoring relay 2c/o, 0,0.1-30s, L1-L2-L3-N=3x180-280VAC



### General Information

|                       |  |
|-----------------------|--|
| Extended Product Type | CM-MPS.23S   |
| Product ID            | 1SVR730885R4300  |
| EAN                   | 4016779851909  |
| Catalog Description   | CM-MPS.23S Three-phase monitoring relay 2c/o, 0,0.1-30s, L1-L2-L3-N=3x180-280VAC |

### Long Description

The CM-MPN.23S is a multifunctional relay from the CM three-phase monitors range. It operates with a rated control supply voltage / three-phase measuring voltage of 180-280 V AC 50/60/400 Hz and has a 2 c/o (SPDT) output with contacts rated at 250 V / 4 A. This relay is also suitable to monitor single-phase mains. It monitors all phase parameters such as over/undervoltage, phase unbalance, phase failure as well as an interrupted neutral. The corresponding threshold values are adjustable. The CM-MPN.23S also offers selection of phase sequence monitoring, automatic phase sequence correction as well as an ON or OFF tripping delay. The output contacts can be configured as 1x2 c/o (SPDT) contacts (common signal) or 2x1 c/o (SPDT) contact (separate signal for over- and undervoltage thresholds) operation. The tripping delay is adjustable over a range of instantaneous to 30 s (0, 0.1-30 s). A sealable transparent cover for protection against unauthorized changes is available as accessory. The device offers screw connection technology with double-chamber cage connection terminals.

### Ordering

|                        |               |
|------------------------|---------------|
| EAN                    | 4016779851909 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85364900      |

### Popular Downloads

|                       |                 |
|-----------------------|-----------------|
| Data Sheet, Technical | 2CDC112203D0201 |
|-----------------------|-----------------|

Information

|                          |                                    |
|--------------------------|------------------------------------|
| Instructions and Manuals | 1SVC730730M1000<br>1SVC730730M0000 |
| CAD Dimensional Drawing  | 2CDC001079B0201                    |

**Dimensions**

|                            |          |
|----------------------------|----------|
| Product Net Width          | 22.5 mm  |
| Product Net Height         | 85.6 mm  |
| Product Net Depth / Length | 103.7 mm |
| Product Net Weight         | 0.149 kg |

**Technical**

|   |  |
|---|--|
| Function  | Automatic phase sequence correction<br>Over- and undervoltage monitoring<br>Phase failure detection<br>Phase unbalance detection<br>Phase sequence monitoring<br>Interrupted neutral monitoring  |
| Measuring Range                                     | (L-N) 180 ... 280 V AC   |
| Time Range  | 0 s or 0.1 ... 30 s tripping delay (ON or OFF)<br>200 ms start-up delay  |
| Rated Control Supply Voltage (U <sub>s</sub> )      | (L-N) 180 ... 280 V AC   |
| Rated Frequency (f)                                 | Supply Circuit 50/60/400 Hz  |
| Output  | 2 x 1 c/o or 1 x 2 c/o contacts, configurable  |
| Terminal Type                                       | Screw Terminals  |
| Rated Operational Current AC-12 (I <sub>θ</sub> )   | (230 V) 4 A  |
| Rated Operational Current AC-15 (I <sub>θ</sub> )   | (230 V) 3 A  |
| Rated Operational Current DC-12 (I <sub>θ</sub> )   | (24 V) 4 A   |
| Rated Operational Current DC-13 (I <sub>θ</sub> )   | (24 V) 2 A   |
| Minimum Switching Capacity                          | 24 V<br>10 mA  |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ) | Input Circuit 6 kV<br>Output Circuit 4 kV  |
| Rated Insulation Voltage (U <sub>i</sub> )          | Input Circuit / Output Circuit 600 V<br>Output Circuit 1 / Output Circuit 2 300 V  |
| 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 1x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible with Ferrule 2x 0.5 ... 1.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.5 ... 1.5 mm <sup>2</sup><br>Flexible 1x 0.5 ... 2.5 mm <sup>2</sup><br>Flexible 2x 0.5 ... 1.5 mm <sup>2</sup><br>Rigid 1x 0.5 ... 4 mm <sup>2</sup><br>Rigid 2x 0.5 ... 2.5 mm <sup>2</sup> |
| Tightening Torque                                   | 0.6 ... 0.8 N·m  |
| Wire Stripping Length                               | 8 mm   |
| Recommended Screw Driver                            | 4.5<br>0.8 x 4<br>Pozidriv 1   |
| Mounting Position                                   | 1 ... 6  |

|                      |  |
|----------------------|--|
| Mounting on DIN Rail | TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715<br>TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 |
| Standards            | CAN/CSA C22.2 No.14<br>IEC/EN 63000<br>IEC/EN 60255-27<br>IEC/EN 61000-6-2<br>IEC/EN 61000-6-3<br>UL 508       |

### Technical UL/CSA

|                                  |  |
|----------------------------------|--|
| Maximum Operating Voltage UL/CSA | Output Circuit 300 V AC  |
| Contact Rating UL/CSA            | B300   |
| Connecting Capacity UL/CSA       | Flexible 1x 18-14 AWG<br>Flexible 2x 18-16 AWG<br>Rigid 2x 20-14 AWG<br>Rigid 1x 20-12 AWG |
| Tightening Torque UL/CSA         | 7.08 in-lb   |
| Pilot Duty UL/CSA                | B300   |
| Flammability According to UL94   | V-0  |

### Environmental

|  |  |
|--|--|
| Ambient Air Temperature                | Operation -25 ... +60 °C<br>Storage -40 ... +85 °C |
| Maximum Operating Altitude Permissible | Without Derating 2000 m                            |
| RoHS Status                            | Following EU Directive 2011/65/EU                  |

### Circular Value

|                          |                 |
|--------------------------|-----------------|
| End of Life Instructions | 1SAC200290H0001 |
|--------------------------|-----------------|

### Certificates and Declarations

|                                  |                           |
|----------------------------------|---------------------------|
| CB Certificate                   | CB_DK-27947-UL            |
| CQC Certificate                  | CQC2009010303326655       |
| cULus Certificate                | cULus508_20120829-E140448 |
| Declaration of Conformity - CCC  | 2020980303000197          |
| Declaration of Conformity - CE   | 1SVD981014-00             |
| Declaration of Conformity - UKCA | 1SVD981014-10             |
| DNV GL Certificate               | DNV_GL_TAA000017D         |
| EAC Certificate                  | EAC RU C-DE.ME77.B.03424  |

### Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 97 mm         |
| Package Level 1 Depth / Length | 30 mm         |
| Package Level 1 Height         | 109 mm        |
| Package Level 1 Gross Weight   | 0.174 kg      |
| Package Level 1 EAN            | 4016779851909 |

---

## Classifications

---

|                            |                                   |
|----------------------------|-----------------------------------|
| Object Classification Code | B                                 |
| ETIM 7                     | EC001441 - Phase monitoring relay |
| ETIM 8                     | EC001441 - Phase monitoring relay |
| ETIM 9                     | EC001441 - Phase monitoring relay |
| eClass                     | V11.0 : 27371803                  |
| UNSPSC                     | 39122332                          |
| E-Number (Finland)         | 2712274                           |
| E-Number (Sweden)          | 3860591                           |

---

## Categories

---

Low Voltage Products and Systems → Control Products → Electronic Relays and Controls → Three Phase Monitors

