

## PRODUCT-DETAILS

# CM-MSS.41S

CM-MSS.41S Therm. motor protec. relay 2c/o,  
24-240VAC/DC



## General Information

|                       |                                                          |
|-----------------------|----------------------------------------------------------|
| Extended Product Type | CM-MSS.41S                                               |
| Product ID            | 1SVR730712R1200                                          |
| EAN                   | 4013614496677                                            |
| Catalog Description   | CM-MSS.41S Therm. motor protec. relay 2c/o, 24-240VAC/DC |

### Long Description

The CM-MSS.41S belongs to the CM-MSS thermistor motor protection relay range. It operates with a rated control supply voltage of 24 - 240 V AC / DC and has a 2 c/o (SPDT) output with contacts rated at 250 V / 4 A. It features one sensor circuit to monitor PTC temperature sensors and works according to the closed-circuit principle. The sensor circuit of this CM-MSS.41S is short-circuit (configurable), as well as interrupted-wire monitored and can be reset automatically, manually or remotely after the failure has been removed. This protection relay is certified according to the ATEX directive 94/9/EC and is equipped with a reset / test button. The non-volatile fault storage and the short circuit detection can be enabled/disabled via DIP switches. 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                    | 4013614496677 |
| Minimum Order Quantity | 1 piece       |
| Customs Tariff Number  | 85364900      |

## Dimensions

|                   |         |
|-------------------|---------|
| Product Net Width | 22.5 mm |
|-------------------|---------|

|                            |          |
|----------------------------|----------|
| Product Net Height         | 85.6 mm  |
| Product Net Depth / Length | 103.7 mm |
| Product Net Weight         | 0.141 kg |

## Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 97 mm         |
| Package Level 1 Height         | 109 mm        |
| Package Level 1 Depth / Length | 30 mm         |
| Package Level 1 Gross Weight   | 0.167 kg      |
| Package Level 1 EAN            | 4013614496677 |

## Technical

|                                                     |                                                                                                                                                                                              |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function                                            | 1 sensor circuit<br>Short-circuit detection, configurable<br>Non-volatile fault storage, configurable<br>Dynamic interrupted wire detection<br>Auto, manual or remote reset<br>ATEX approved |
| Rated Control Supply Voltage (U <sub>s</sub> )      | 24 ... 240 V AC/DC                                                                                                                                                                           |
| Output                                              | 2 c/o (SPDT) contacts                                                                                                                                                                        |
| Terminal Type                                       | Screw Terminals                                                                                                                                                                              |
| Rated Operational Current AC-12 (I <sub>e</sub> )   | (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 300 V<br>Output Circuit 1 / Output Circuit 2 300 V<br>Supply Circuit / Measuring Circuit 300 V<br>Supply Circuit / Output Circuit 300 V                   |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ) | Output Circuit 1 / Output Circuit 2 4 kV<br>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 10 A<br>Output Circuit NO - F Type Fuses 10 A                                                                                                               |
| Electrical Durability                               | AC-12 100000 cycle                                                                                                                                                                           |
| Mechanical Durability                               | 30000000 cycle                                                                                                                                                                               |
| Connecting Capacity                                 | 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                            | Pozidriv 1<br>4.5<br>0.8 x 4                                                                                                                                                                 |

|                      |                                                                                                                   |
|----------------------|-------------------------------------------------------------------------------------------------------------------|
| Mounting Position    | 1 ... 6                                                                                                           |
| 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            | CAN/CSA C22.2 No.14<br>EN 50495<br>IEC/EN 63000<br>IEC/EN 60079-7<br>IEC/EN 60947-5-1<br>IEC/EN 60947-8<br>UL 508 |

## Environmental

|                         |                                                    |
|-------------------------|----------------------------------------------------|
| Ambient Air Temperature | Operation -25 ... +60 °C<br>Storage -40 ... +85 °C |
| RoHS Status             | Following EU Directive 2011/65/EU                  |

## 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 1x 20-12 AWG<br>Rigid 2x 20-14 AWG |
| Tightening Torque UL/CSA         | 7.08 in-lb                                                                                 |

## Certificates and Declarations (Document Number)

|                                   |                                                           |
|-----------------------------------|-----------------------------------------------------------|
| ATEX Certificate                  | EU Type Examination Certificate_TPS_18_ATEX_044254_0018_X |
| CB Certificate                    | CB_DK-40837-UL                                            |
| CCC Certificate                   | CCC_2005010303165479                                      |
| CQC Certificate                   | CQC2005010303165479                                       |
| cULus Certificate                 | cULus508_20140912-E140448                                 |
| Data Sheet, Technical Information | 2CDC112216D0201                                           |
| Declaration of Conformity - CCC   | 2020980303000194                                          |
| Declaration of Conformity - CE    | 1SVD981007                                                |
| DNV GL Certificate                | DNVGL_TAE00003W4                                          |
| EAC Certificate                   | EAC_RU_C-DE.ME77.B.01825                                  |
| Instructions and Manuals          | 1SVC730650M0000                                           |
| Instructions and Manuals (Part 2) | 1SVC730640M9000                                           |
| RMRS Certificate                  | RMRS_1740020250                                           |
| RoHS Information                  | 1SVD981007                                                |

## Classifications

|                            |                  |
|----------------------------|------------------|
| Object Classification Code | B                |
| eClass                     | V11.0 : 27371503 |
| E-Number (Finland)         | 2712512          |
| E-Number (Sweden)          | 3860738          |

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## Categories

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Low Voltage Products and Systems → Control Products → Electronic Relays and Controls → Thermistor Motor Protection Relays

