



**Electric Automation**  
Automation specialists

Reference: CM-MSS.51S  
Code: 1SVR730712R1300

CM-MSS.51S Therm. motor protec. relay  
2x1c/o, 24-240VAC/DC

Buy it at [Electric Automation Network](#)



The CM-MSS.51S belongs to the CM 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 two sensor circuit to monitor PTC temperature sensors (single or accumulative evaluation, configurable) and works according to the closed-circuit principle. The sensor circuits of this CM-MSS.51S are 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 49/9/EC and is equipped with a reset / test button. The non-volatile fault storage, the short circuit detection and the accumulative evaluation 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:	4013614496660
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:	103.7 mm
Product Net Weight:	0.145 kg

## 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:	0.172 kg

## Technical

Function:	2 sensor circuits Short-circuit detection, configurable Non-volatile fault storage, configurable Single or accumulative evaluation, configurable Dynamic interrupted wire detection Auto, manual or remote reset ATEX approved
Rated Control Supply Voltage ( $U_s$ ):	24 ... 240 V AC/DC
Output:	2 x 1 c/o or 1 x 2 c/o contacts, configurable
Terminal Type:	Screw Terminals
Rated Operational Current AC-12 ( $I_e$ ):	(230 V) 4 A
Rated Operational Current AC-15 ( $I_e$ ):	(230 V) 3 A
Rated Operational Current DC-12 ( $I_e$ ):	(24 V) 4 A
Rated Operational Current DC-13 ( $I_e$ ):	(24 V) 2 A
Minimum Switching Capacity:	24 V 10 mA
Rated Insulation Voltage ( $U_i$ ):	300 V Measuring Circuit / Output Circuit 300 V Output Circuit 1 / Output Circuit 2 300 V Supply Circuit / Measuring Circuit 300 V Supply Circuit / Output Circuit 300 V
Rated Impulse Withstand Voltage ( $U_{imp}$ ):	Output Circuit 1 / Output Circuit 2 4 kV Output Circuit 4 kV
Degree of Protection:	Housing IP50 Terminals IP20
Overvoltage Category:	III
Pollution Degree:	3
Short-Circuit Protective Devices:	Output Circuit NC - F Type Fuses 6 A 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> Flexible 2x 0.5 ... 1.5 mm <sup>2</sup> Rigid 1x 0.5 ... 4 mm <sup>2</sup> Rigid 2x 0.5 ... 2.5 mm <sup>2</sup>
Tightening Torque:	0.6 ... 0.8 N·m
Wire Stripping Length:	8 mm
Mounting Position:	Any
Mounting on DIN Rail:	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Standards:	IEC/EN 60947-8 UL 508 CSA 22.2 No. 14

## Environmental

Ambient Air Temperature:	Operation -25 ... +60 °C Storage -40 ... +85 °C
RoHS Status:	Following EU Directive 2011/65/EC

## 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 Flexible 2x 18 ... 16 AWG Rigid 1x 20 ... 12 AWG Rigid 2x 20 ... 14 AWG
Tightening Torque UL/CSA:	7.08 in·lb

## Certificates and Declarations (Document Number)

ATEX Certificate:	EC Type Examination Certificate_TPS_14_ATEX_44254_005_X
CB Certificate:	CB_DK-40837-UL
CCC Certificate:	CCC_2005010303165479
cULus Certificate:	cULus508_20140912-E140448
Declaration of Conformity - CE:	1SAD938500-0220
EAC Certificate:	EAC_RU_C-DE.ME77.B.01825
GL Certificate:	GL_13759-14HH
RoHS Information:	1SAA981070-4401

## Classifications

Object Classification Code:	B
ETIM 5:	EC001446 - Temperature monitoring relay

eClass:

7.0 27371810