

# CM-MSS.31S



CM-MSS.31S Therm. motor protec. relay 1n/o+1n/c, 24-240VAC/DC

## General Information

Extended Product Type	CM-MSS.31S
Product ID	1SVR730712R1400
EAN	4013614496653
Catalog Description	CM-MSS.31S Therm. motor protec. relay 1n/o+1n/c, 24-240VAC/DC
Long Description	The CM-MSS.31S 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 1 n/c + 1 n/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 the CM-MSS.31S is short-circuit, as well as interrupted-wire monitored and the relay 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. 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	4013614496653
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	0.128 kg

## Container Information

Package Level 1 Units	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	0.154 kg
Package Level 1 EAN	4013614496653

## Technical

Function	1 sensor circuit
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	Short-circuit detection Non-volatile fault storage Dynamic interrupted wire detection Auto, manual or remote reset ATEX approved
Rated Control Supply Voltage ( $U_s$ )	24 ... 240 V AC/DC
Output	1 n/o + 1 n/c contact
Terminal Type	Screw Terminals
Rated Operational Current AC-12 ( $I_{\theta}$ )	(230 V) 4 A
Rated Operational Current AC-15 ( $I_{\theta}$ )	(230 V) 3 A
Rated Operational Current DC-12 ( $I_{\theta}$ )	(24 V) 4 A
Rated Operational Current DC-13 ( $I_{\theta}$ )	(24 V) 2 A
Minimum Switching Capacity	24 V 10 mA
Rated Insulation Voltage ( $U_i$ )	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 10 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	CAN/CSA C22.2 No.14 EN 50495 EN 50581 IEC/EN 60079-7 IEC/EN 60947-5-1 IEC/EN 60947-8 UL 508

## Environmental

Ambient Air Temperature	Operation -25 ... +60 °C 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

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	EU Type Examination Certificate_TPS_18_ATEX_044254_0018_X
CB Certificate	CB_DK-40837-UL
CCC Certificate	CCC_2005010303165479
cULus Certificate	cULus508_20140912-E140448
Data Sheet, Technical Information	2CDC112217D0201
Declaration of Conformity - CE	1SVD981007-0002
EAC Certificate	EAC_RU_C-DE.ME77.B.01825
Environmental Information	1SAA981024-2401
GL Certificate	GL_13759-14HH
Instructions and Manuals	1SVC730660M0000
Instructions and Manuals (Part 2)	1SVC730640M9000
RMRS Certificate	RMRS_1740020250
RoHS Information	1SVD981007-0002

## Classifications

Object Classification Code	B
ETIM 5	EC002568 - Temperature monitor (motor protection)
ETIM 6	EC002568 - Relay for thermistor protection (PTC)
ETIM 7	EC002568 - Relay for thermistor protection (PTC)
eClass	7.0 27371503
E-Number (Sweden)	3860728

## Categories

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

