



**Electric Automation**  
Automation specialists

Reference: CM-MPN.52S  
Code: 1SVR750487R8300

CM-MPN.52S Three-phase monitoring  
relay 2c/o, 0,0.1-30s, L1-L2-  
L3=3x350-580VAC

Buy it at Electric Automation Network



The CM-MPN.52S is a multifunctional relay from the CM three-phase monitors range. It operates with a rated control supply voltage / three-phase measuring voltage of 350-580 V AC 50/60 Hz and has a 2 c/o (SPDT) output with contacts rated at 250 V / 4 A. This relay monitors all phase parameters such as over/undervoltage, phase unbalance and phase failure. The corresponding threshold values are adjustable. The CM-MPN.52S 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:	4016779851916
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:	52.5 mm
Package Level 1 Gross Weight:	0.255 kg

## Dimensions

Product Net Width:	45 mm
Product Net Depth:	104.8 mm
Product Net Height:	85.6 mm
Product Net Weight:	0.23 kg

## Technical

Function:	Phase failure detection Phase sequence monitoring Automatic phase sequence correction Over- and undervoltage monitoring Phase unbalance detection
Standards:	IEC/EN 60255-1 EN 50178
Measuring Range:	3x350 ... 580 V AC
Rated Control Supply Voltage ( $U_s$ ):	3 x 350 ... 580 V AC
Output:	2 x 1 c/o or 1 x 2 c/o contacts, configurable
Time Range:	200 ms start-up delay 0 s or 0.1-30 s tripping delay (ON or OFF)
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 ( $U_i$ ):	Input Circuit / Output Circuit 1000 V Output Circuit 1 / Output Circuit 2 300 V
Rated Impulse Withstand Voltage ( $U_{imp}$ ):	Input Circuit 8 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 with Ferrule 1x 0.5 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.5 ... 1.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.5 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.5 ... 1.5 mm <sup>2</sup> 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

## 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)

CB Certificate:	CB_DK-27946-UL
CCC Certificate:	CCC_2009010303326655
cULus Certificate:	cULus508_20120829-E140448
Declaration of Conformity - CE:	1SAD938500-0203
EAC Certificate:	EAC_RU_C-DE.ME77.B.01012
GL Certificate:	GL_37695-12HH
RMRS Certificate:	RMRS_12.04009.250
RoHS Information:	1SAA981057-4402

## Classifications

Object Classification Code:	B
E-nummer:	3860592
ETIM 4:	EC001441 - Phase monitoring relay

ETIM 5:	EC001441 - Phase monitoring relay
eClass:	7.0 27371803