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PRODUCT-DETAILS

## **CM-TCN.012S**

## CM-TCN.012S Temp. monitoring relays LCD+NFC+RTU, -200..+850°C, 24-240VAC/DC



General Information	
Extended Product Type	CM-TCN.012S
Product ID	1SVR750740R0120
EAN	4013614553035
Catalog Description	CM-TCN.012S Temp. monitoring relays LCD+NFC+RTU, -200+850°C, 24-240VAC/DC
Long Description	The CM-TCN.012S is an innovative temperature monitoring relay from the CM temperature monitors range. This monitoring relay operates with a rated control supply voltage of 24 - 240 V AC / DC and has a 3 c/o (SPDT) output with contacts rated at 250 V / 4 A. The CM-TCN.012S is able to measure temperatures with up to three sensor circuits using different type of sensors PT100, PT1000, PTC or NTC and it has embedded Modbus RTU communication interface. The LCD at the front of the relay shows the currently measured values and maintenance data. The CM-TCN.012S can be configured exactly as you need either via a black-lit LCD or smartphone app. Parametrization and configuration are just one touch away with the ABB EPiC app even in a non-powered state – reducing installation time by 80%. The device offers screw connection technology with double-chamber cage connection terminals.

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EAN 4013614553035
Minimum Order Quantity 1 piece

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Customs Tariff Number 85364900

Popular Downloads	
Data Sheet, Technical Information	2CDC112286C0201
Instructions and Manuals	15VC750040M0000 2CDC112285M0201
CAD Dimensional Drawing	2CDC001079B0201

Dimensions	
Product Net Width	45 mm
Product Net Height	85.6 mm
Product Net Depth / Length	103.7 mm
Product Net Weight	0.27 kg

Technical		
Function		Overtemperature monitoring Undertemperature monitoring Over- and undertemperature monitoring
Measuring Range		-200 +850 °C
Sensor Type		PT100; PT1000; PTC; NTC; bimetal switch
Rated Control Supply Voltage (U <sub>s</sub> )		24 240 V AC/DC
Rated Frequency (f)		Supply Circuit 50 Hz Supply Circuit 60 Hz Supply Circuit DC Hz
Output		3 x 1 c/o contacts, configurable
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		12 V 100 mA
Rated Impulse Withstand Voltage (U <sub>imp</sub> )		Measuring Circuit / Output Circuit 6 kV Output Circuit 1 / Output Circuit 2 4 kV Supply Circuit / Measuring Circuit 6 kV Supply Circuit / Output Circuit 6 kV
Rated Insulation Voltage (U <sub>i</sub> )		Measuring Circuit / Output Circuit 600 V Output Circuit 1 / Output Circuit 2 300 V Supply Circuit / Measuring Circuit 600 V Supply Circuit / Output Circuit 600 V
Degree of Protection		Housing IP50 Terminals IP20
Overvoltage Category		III
Pollution Degree		2
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
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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
Recommended Screw	0.8 x 4
Driver	4.5
	Pozidriv 1
Mounting Position	16
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

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
Pilot Duty UL/CSA	B300

Environmental	
Ambient Air	Operation -25 +60 °C
Temperature	Storage -40 +85 °C
Maximum Operating	Without Derating 2000 m
Altitude Permissible	

Material Compliance	
Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	1SVD981001-4501
RoHS Information	1SVD981001-4401
RoHS Status	Following EU Directive 2011/65/EU
Toxic Substances Control Act - TSCA	2CMT2023-006536

Circular Value	
Environmental Information	1SAC200220H0001
Information	

## **Certificates and Declarations**

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CQC Certificate	CQC2018010303056014
CSA Certificate	UL-CA-L140448-41-22600202-1
Declaration of Conformity - CCC	2020980303000208
Declaration of Conformity - CE	1SVD981067-00
Declaration of Conformity - UKCA	1SVD981067-10
UL Certificate	UL-US-L140448-11-22600202-1

Container Information		
Package Level 1 Units	box 1 piece	
Package Level 1 Width	97 mm	
Package Level 1 Depth / Length	52.5 mm	
Package Level 1 Height	109 mm	
Package Level 1 Gross Weight	0.299 kg	
Package Level 1 EAN	4013614553035	

Classifications	
Object Classification Code	В
ETIM 7	EC001446 - Temperature monitoring relay
ETIM 8	EC001446 - Temperature monitoring relay
ETIM 9	EC001446 - Temperature monitoring relay
eClass	V11.0 : 27371810
UNSPSC	39122331

## Categories

 $Low\ Voltage\ Products\ \rightarrow\ Electronic\ Relays\ and\ Controls\ \rightarrow\ Temperature\ Monitors$ 

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