SIEMENS

Data sheet

3RN2010-1CA30



Thermistor motor protection relay Compact evaluation unit 17.5 mm enclosure Screw terminal 1 NO contact, 1 NC contact US = 24 V AC/DC Auto RESET suitable for bimetallic switch 2 LEDs (Ready/Tripped) galvanic isolation

product brand name	SIRIUS
product category	SIRIUS 3RN2 thermistor motor protection
product designation	Thermistor motor protection relay
design of the product	Compact evaluation unit, suitable for bimetallic switch
product type designation	3RN2
General technical data	
product function	thermistor motor protection
display version LED	Yes
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
degree of pollution	3
surge voltage resistance rated value	4 kV
protection class IP	IP20
shock resistance according to IEC 60068-2-27	11g / 15 ms
mechanical service life (operating cycles) typical	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
thermal current of the switching element with contacts maximum	5 A
reference code according to IEC 81346-2	К
Substance Prohibitance (Date)	05/28/2009
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Product Function	
product function	
error memory	No
 dynamic open-circuit detection 	No
external reset	No
• auto-RESET	Yes
manual RESET	No
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
• at 50 Hz rated value	24 24 V
• at 60 Hz rated value	24 24 V
control supply voltage at DC rated value	
•	24 24 V
operating range factor control supply voltage rated value at DC	
initial value	0.85
● full-scale value	1.1
operating range factor control supply voltage rated value at	

AC at 6 Hz indiv Value indin Value indiv Value indiv Value indiv Value indiv Value indiv V		
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	• full-scale value	1.1
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• due to conductor-earth surge according to IEC 61000-4-5 2 kV (line to ground) • due to conductor-conductor surge according to IEC 61000-4-2 6 kV contact discharge / 8 kV air discharge • design of the electrical isolation galvanic isolation • design of the electrical isolation galvanic isolation • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits No Connections/ Terminals Free Section product component removable terminal for auxillary and control circuit screw terminal screw-type terminals type of electrical connection screw terminal • solid 1 x (0.5 4.0 mm²), 2x (0.5 1.5 mm²) • for AWG cables solid 1x (20 12), 2x (20 14) connectable conductor cross-section 0.5 4 mm² • solid 0.5 4 mm²	conducted interference	
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61000-4-5 electrostatic discharge according to IEC 61000-4-2 6 kV contact discharge / 8 kV air discharge Galvanic isolation galvanic isolation galvanic isolation galvanic isolation • between input and output Yes • between the voltage supply and other circuits No Connections/ Terminals Yes product component removable terminal for auxiliary and control circuit Screw terminal • for auxiliary and control circuit screw terminals type of electrical connection screw-type terminals • solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • finely stranded with core end processing 1x (20 12), 2x (20 14) connectable conductor cross-section 0.5 4 mm² • solid 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm² • solid 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm² • solid 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm²	• due to conductor-earth surge according to IEC 61000-4-5	2 kV (line to ground)
electrostatic discharge according to IEC 61000-4-2 6 kV contact discharge / 8 kV air discharge Galvanic isolation galvanic isolation galvanic isolation galvanic isolation • between input and output Yes • between the outputs Yes • between the voltage supply and other circuits No Connections/Terminals Yes product component removable terminal for auxiliary and control circuit Screw terminal • for auxiliary and control circuit screw terminal • for auxiliary and control circuit screw-type terminals type of electrical connection screw-type terminals • for auxiliary and control circuit screw-type terminals type of connectable conductor cross-sections 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • finely stranded with core end processing 1x (20 12), 2x (20 14) connectable conductor cross-section 0.5 4 mm² • Solid 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm²<		1 kV (line to line)
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type of connectable conductor cross-sections• solid1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)• finely stranded with core end processing1x (0.5 4 mm²), 2x (0.5 1.5 mm²)• for AWG cables solid1x (20 12), 2x (20 14)connectable conductor cross-section0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• finely stranded with core end processing0.5 4 mm²• solid0.5 4 mm²• finely stranded with core end processing0.5 4 mm²	••	
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• for AWG cables solid 1x (20 12), 2x (20 14) connectable conductor cross-section 0.5 4 mm² • solid 0.5 4 mm² • finely stranded with core end processing 0.5 4 mm² AWG number as coded connectable conductor cross section 0.5 4 mm²		
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• solid • finely stranded with core end processing • finely stranded connectable conductor cross section • Solid • So		
finely stranded with core end processing 0.5 4 mm ² AWG number as coded connectable conductor cross section		0.5 4 mm ²
AWG number as coded connectable conductor cross section		
section		0.0
• solid 20 12		
	• solid	20 12
• stranded 20 12		20 12
tightening torque with screw-type terminals 0.6 0.8 N·m	• stranded	20 12

stanation/ mount	ing/ dimensions				
mounting position		ar			
fastening method		sc	screw and snap-on mounting onto 35 mm DIN rail		
height			00 mm		
width			7.5 mm		
depth		90) mm		
equired spacing					
	-side mounting				
— forward			mm		
— backwa			mm		
— upward			mm		
— downw			mm		
— at the s		0	mm		
 for grounded 	•	0			
— forward			mm		
— backwa			mm		
— upward — at the s			mm mm		
— downw			mm		
 for live parts 		0			
 for live parts forward 		0	mm		
— loi ward — backwa			mm		
— upward			mm		
— downw			mm		
— at the s			mm		
nbient conditions					
	e at height above sea level max	ximum 2	000 m		
ambient temperat					
during opera		-2	5 +60 °C		
 during storage 			0 +85 °C		
 during trans 			0 +85 °C		
	uring operation maximum	70) %		
oprovals Certifica					
General Product	Approval				
Confirmation	UK	(m)	()	Ē	гпг
	ĒÔ	(uii)		Q.	L H I
	CH	ccc	EG-Konf.	UL	
	Test Certificates	Marine / Shipping			other
MV					ounor
EMV					
	Type Test Certific-	<u>ئ</u> ٹ	Hoyds		<u>Confirmation</u>
			Llovds Register	6	Confirmation
	Type Test Certific-		Lloyd's Register	PRS	<u>Confirmation</u>
	Type Test Certific-		Lloyd's Kegister urs	PRS	<u>Confirmation</u>
RCM	Type Test Certific-		Lloyd's Register urs	PRS	Confirmation
RCM	Type Test Certific-		Hoyd's Kegister uis	PRS	<u>Confirmation</u>
RCM	Type Test Certific- ates/Test Report		Lloyd's Register urs	PRS	<u>Confirmation</u>
EMV RCM Environment Environmental Co firmations	Type Test Certific- ates/Test Report		Lloyd's Register LRS	PRS	Confirmation
RCM Environment	Type Test Certific- ates/Test Report		Lloyd's Register uis	PRS	Confirmation
RCM RCM	Type Test Certific- ates/Test Report		Lloyd's Register uis	PRS	Confirmation
RCM	Type Test Certific- ates/Test Report		Llovd's Register urs	PRS	Confirmation
RCM	<u>Type Test Certific-</u> ates/Test Report		Lloyd's Register LRS	PRS	Confirmation

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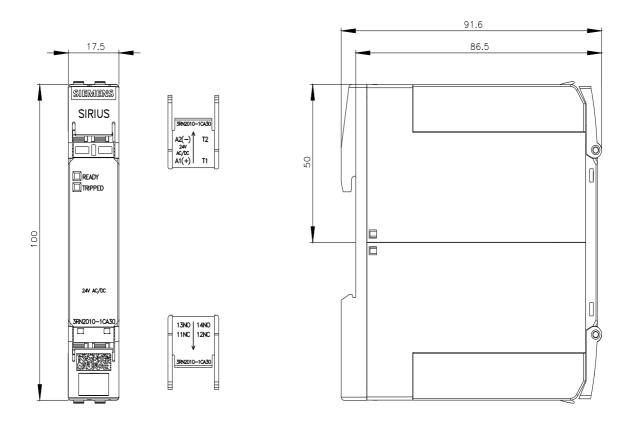
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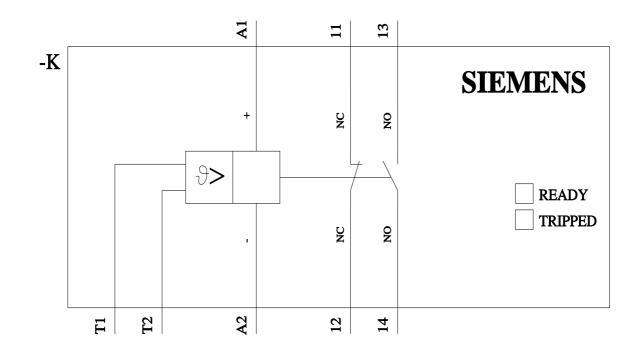
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