

Thermistor motor prot. relay Standard evaluation unit 17.5 mm enclosure Screw terminals 1 NO contact, 1 NC contact US = 24-240 V AC/DC Auto RESET Suitable for bimetal switches 2 LEDs (READY/TRIPPED) Galvanic separation



Figure similar

Article number	
product brandname	SIRIUS
Product category	SIRIUS 3RN2 thermistor motor protection
Product designation	Compact evaluation unit, suitable for bimetallic switch

General technical data

Power loss [W] / for rated value of the current	
<ul style="list-style-type: none"> • at AC / in hot operating state • at DC / in hot operating state 	0.9 W 0.9 W
Insulation voltage	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-27 	11g / 15 ms
Vibration resistance	
<ul style="list-style-type: none"> • acc. to IEC 60068-2-6 	10 ... 55 Hz: 0.35 mm

Mechanical service life (switching cycles)	
• typical	10 000 000
Electrical endurance (switching cycles)	
• at AC-15 / at 230 V / typical	100 000
Thermal current / of the switching element with contacts / maximum	5 A
Equipment marking	
• acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	K
• acc. to DIN EN 61346-2	K
• acc. to DIN EN 81346-2	K

Control circuit/ Control

Type of voltage / of the control supply voltage	AC/DC
Control supply voltage / at AC	
• at 50 Hz / rated value	24 ... 240 V
• at 60 Hz / rated value	24 ... 240 V
Control supply voltage / at DC	
• rated value	24 ... 240 V
Inrush current peak	
• at 24 V	0.3 A
• at 240 V	8 A
Duration of inrush current peak	
• at 24 V	0.15 ms
• at 240 V	0.15 ms

Measuring circuit

Buffering time / in the event of power failure / minimum	40 ms
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Precision

Relative metering precision	9 %
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Auxiliary circuit

Number of NC contacts	
• for auxiliary contacts	1
Number of NO contacts	
• for auxiliary contacts	1
Number of CO contacts	
• for auxiliary contacts	0
Operating current / of auxiliary contacts / at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A

Main circuit

Operating frequency / rated value	50 ... 60 Hz
Outputs	
Ampacity / of the output relay / at AC-15 • at 250 V / at 50/60 Hz	3 A
Ampacity / of the output relay / at DC-13 • at 24 V • at 125 V	1 A 0.2 A
Continuous current / of the DIAZED fuse link of the output relay	6 A
Electromagnetic compatibility	
Conducted interference • due to burst / acc. to IEC 61000-4-4 • due to conductor-earth surge / acc. to IEC 61000-4-5 • due to conductor-conductor surge / acc. to IEC 61000-4-5	2 kV (power ports) / 1 kV (signal ports) 2 kV (line to ground) 1 kV (line to line)
Electrostatic discharge / acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Galvanic isolation	
Design of the electrical isolation	galvanic
Galvanic isolation • between entrance and outlet • between the outputs • between the voltage supply and other circuits	Yes Yes Yes
Connections/Terminals	
Product function • removable terminal for auxiliary and control circuit	Yes
Type of electrical connection	screw-type terminals
Type of connectable conductor cross-sections • solid • finely stranded / with core end processing • at AWG conductors / solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²) 1x (0.5 ... 4 mm ²), 2x (0.5 ... 1.5 mm ²) 1x (20 ... 12), 2x (20 ... 14)
AWG number / as coded connectable conductor cross section • solid • stranded	20 ... 12 20 ... 12
Tightening torque • with screw-type terminals	0.6 ... 0.8 N·m
Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail

Height	100 mm
Width	17.5 mm
Depth	90 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 0 mm — at the side 0 mm — downwards 0 mm • for live parts <ul style="list-style-type: none"> — forwards 0 mm — Backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm 	

Ambient conditions	
Installation altitude / at height above sea level / maximum	2 000 m
Ambient temperature	
<ul style="list-style-type: none"> • during operation -25 ... +60 °C • during storage -40 ... +85 °C • during transport -40 ... +85 °C 	
Relative humidity / during operation	70 %

Certificates/approvals

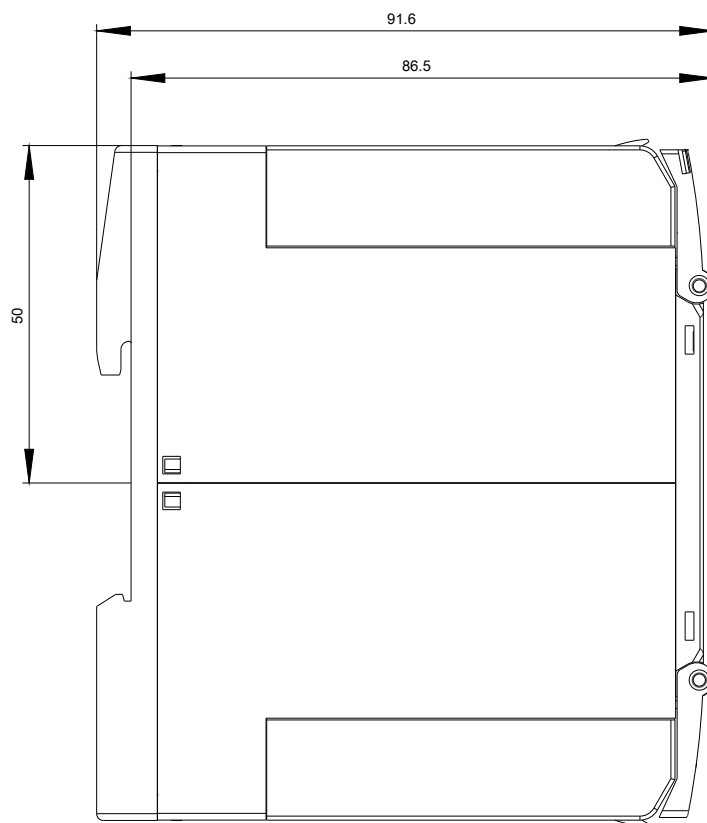
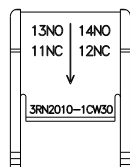
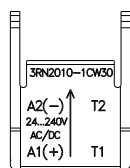
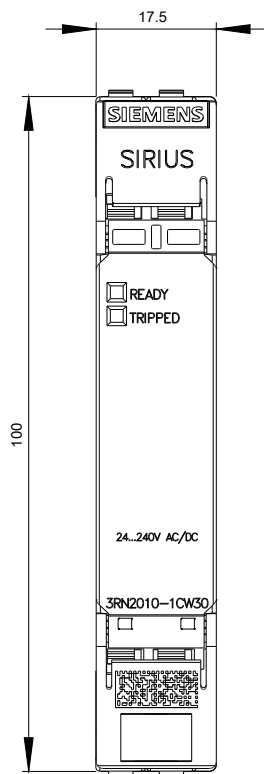
General Product Approval	For use in hazardous locations	Declaration of Conformity	Test Certificates
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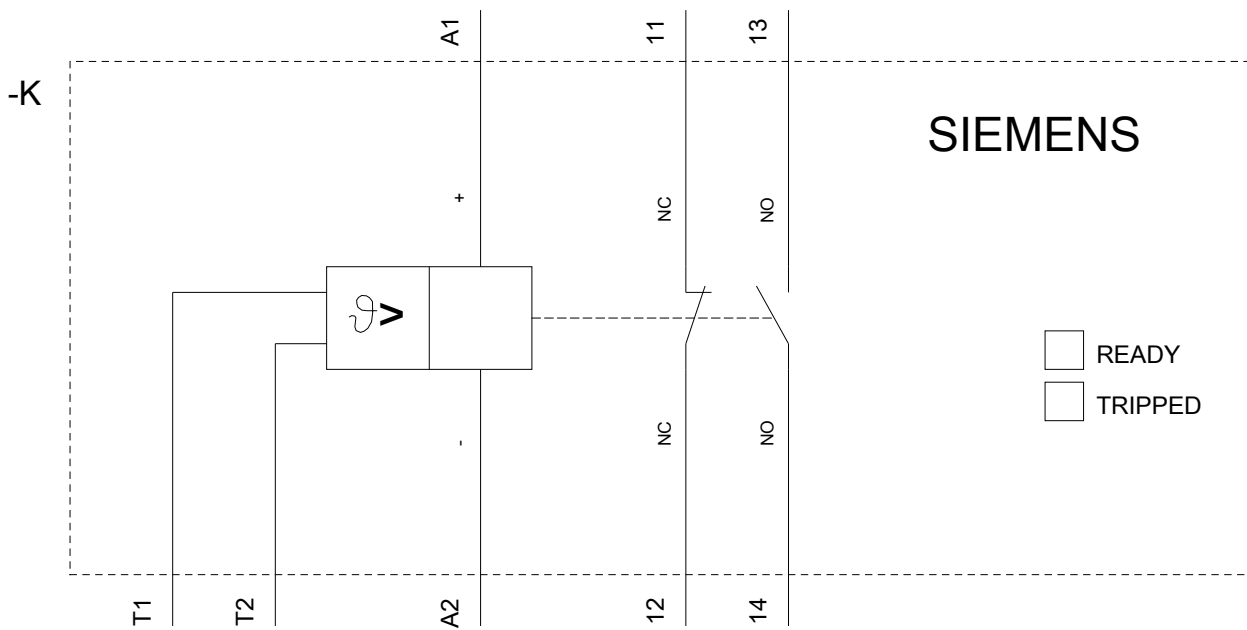


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