SIEMENS

Data sheet 3RS2500-1AA30



Temperature monitoring relay Pt100, thermocouple J, K 1 threshold value, width 22.5 mm Overshoot and undershoot 24 V AC/DC 1 change-over contact, quiescent current principle Screw terminal

Figure similar

product brand name	SIRIUS
product designation	Temperature monitoring relay
design of the product	Analog multifunction device, 1 sensor, 1 threshold value
product type designation	3RS2
General technical data	
product function	temperature monitoring
display version LED	Yes
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
test voltage for isolation test	4 kV
degree of pollution	3
protection class IP	20
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
certificate of suitability relating to ATEX	no
reference code according to IEC 81346-2	K
influence of the surrounding temperature	0.05% per K deviation from T20
measurable temperature	
• initial value	-50 °C
full-scale value	1 000 °C
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8
product function	
• error memory	No
external reset	No
design of the sensor connectable	Resistance sensors: Pt100 Thermocouples: Type J, 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 24 V
at 60 Hz rated value	24 24 V
control supply voltage 1 at AC	
• at 50 Hz rated value	24 V
• at 50 Hz	24 24 V
• at 60 Hz rated value	24 V

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AC at 50 Hz Initial value	full-scale value	1.1
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Electromagnetic compatibility EMC emitted interference according to IEC 60947-1 conducted interference	continuous current of DIAZED fuse link of the output relay	2 A
EMC emitted interference according to IEC 60947-1 Class B conducted interference		
conducted interference		Clase B
	-	Class D
	conducted interference	

 due to conductor-earth surge according to IEC 61000-4-5 	2 kV (line to ground)
 due to conductor-conductor surge according to IEC 61000-4-5 	1 kV (line to line)
	10 V/m
field-based interference according to IEC 61000-4-3	
electrostatic discharge according to IEC 61000-4-2 Galvanic isolation	6 kV contact discharge / 8 kV air discharge
	ach anic inelation
design of the electrical isolation	galvanic isolation
galvanic isolation	Voc
between input and output	Yes
between the voltage supply and other circuits	No
Connections/ Terminals	V.
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	screw-type terminals
for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	,,
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
 finely stranded with core end processing 	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
• for AWG cables solid	1x (20 12), 2x (20 14)
connectable conductor cross-section	
• solid	0.5 4 mm²
 finely stranded with core end processing 	0.5 4 mm²
AWG number as coded connectable conductor cross	
section	
• solid	20 12
• stranded	20 12
tightening torque with screw-type terminals	0.6 0.8 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail
height	100 mm
width	22.5 mm
depth	90 mm
required spacing	
with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
downwardsat the side	
— downwards— at the side• for grounded parts	0 mm 0 mm
 downwards at the side for grounded parts forwards 	0 mm 0 mm
 downwards at the side for grounded parts forwards backwards 	0 mm 0 mm 0 mm
 — downwards — at the side ● for grounded parts — forwards — backwards — upwards 	0 mm 0 mm 0 mm 0 mm 0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards 	0 mm 0 mm 0 mm 0 mm 0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts 	0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards 	0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards 	0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards 	0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards downwards 	0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards at the side at the side downwards at the side 	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - upwards - backwards - upwards - the side - downwards - hackwards - upwards - at the side - downwards - at the side	0 mm
 downwards at the side for grounded parts forwards backwards upwards at the side downwards for live parts forwards backwards upwards at the side Ambient conditions installation altitude at height above sea level maximum	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - backwards - upwards - the side - downwards - the side - downwards - installation altitude at height above sea level maximum - ambient temperature	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - backwards - upwards - downwards - at the side - downwards - backwards - upwards - at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - backwards - upwards - downwards - at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - backwards - upwards - to downwards - upwards - backwards - upwards - downwards - at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - backwards - upwards - downwards - at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation	0 mm
- downwards - at the side • for grounded parts - forwards - backwards - upwards - at the side - downwards • for live parts - forwards - backwards - backwards - upwards - to downwards - upwards - backwards - upwards - downwards - at the side Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport	0 mm





Confirmation







EMC

Marine / Shipping

other





Confirmation

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RS2500-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RS2500-1AA30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

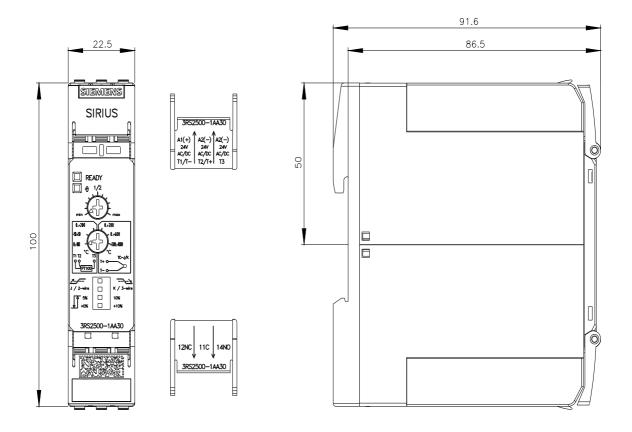
https://support.industry.siemens.com/cs/ww/en/ps/3RS2500-1AA30

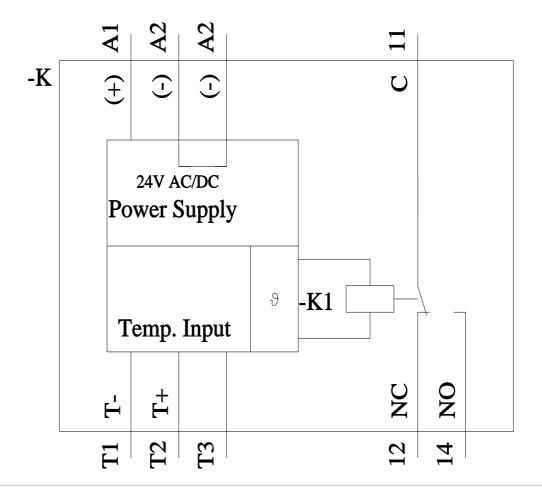
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RS2500-1AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RS2500-1AA30/manual





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