SIEMENS

Data sheet 3RR2143-1AA30



Monitoring relay, can be mounted to Contactor 3RT2, Size S2 basic, analog adjustment Apparent current monitoring 8...80 A, 50...60 Hz, 2-phase Supply 24 V AC/DC 1 change-over contact Monitoring for Current overshoot and undershoot Phase failure, Cable break with or without fault buffer ON delay 0-60 s Noise pulse suppression 0-30 s Switching hysteresis 6% Screw connection system

product brand name	SIRIUS		
product designation	Monitoring relays		
design of the product	analogically adjustable, 2-phase current monitoring		
product type designation	3RR2		
General technical data			
size of contactor can be combined company-specific	S2		
operating apparent power rated value	4 VA		
insulation voltage for overvoltage category III according to IEC 60664			
with degree of pollution 3 rated value	690 V		
surge voltage resistance rated value	6 kV		
consumed current at 24 V	90 mA		
protection class IP			
• on the front	IP20		
of the terminal	IP00		
shock resistance	10g / 11 ms		
mechanical service life (operating cycles) typical	10 000 000		
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000		
reference code according to IEC 81346-2	K		
relative repeat accuracy	2 %		
Substance Prohibitance (Date)	03/01/2017		
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8		
Supply voltage			
type of voltage of the supply voltage	AC/DC		
supply voltage 1 at AC			
at 50 Hz rated value	24 V		
at 60 Hz rated value	24 V		
supply voltage 1 at DC rated value	24 V		
supply voltage frequency 1	50 60 Hz		
Measuring circuit			
type of current for monitoring	AC		
adjustable current response value current			
• 1	8 80 A		
• 2	8 80 A		
adjustable response delay time			
when starting	0 60 s		
 with lower or upper limit violation 	0 30 s		
Precision			
temperature drift per °C	0.1 %/°C		

Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary	fuse gG: 4 A
switch required	35
Communication/ Protocol	
protocol is supported IO-Link protocol	No
type of voltage supply via input/output link master	No
Auxiliary circuit	
number of CO contacts	
for auxiliary contacts	1
operational current of auxiliary contacts at AC-15	·
• at 24 V	3 A
• at 230 V	3 A
• at 400 V	3 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1A
• at 125 V	0.2 A
• at 250 V	0.1 A
contact rating of auxiliary contacts according to UL	B300 / R300
Main circuit	
operating power rated value	2.5 W
ampacity of the semiconductor output in SIO mode	2.5 W
operational current at 17 V minimum	5 mA
Electromagnetic compatibility	JIIIA
	ambience A (industrial coster)
EMC emitted interference according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1	ambience A (industrial sector)
Connections/ Terminals	
product component removable terminal for main circuit	No
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections for main contacts	Solon type terminate
• solid	2x (1 35 mm²), 1x (1 50 mm²)
stranded	2x (1 35 mm²), 1x (1 50 mm²)
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
connectable conductor cross-section for main contacts	24 (1 20 11111), 14 (1 00 11111)
solid or stranded	1 50 mm²
finely stranded with core end processing	1 35 mm²
type of connectable conductor cross-sections	1 55 11111
for auxiliary contacts	
— solid	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
— finely stranded with core end processing	1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
Innely stranded with core end processing for AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section for	2x (20 14) 18 1
main contacts	10 1
tightening torque with screw-type terminals	0.8 1.2 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	direct mounting
height	99 mm
width	55 mm
depth	112 mm
required spacing	
with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	10 mm
— at the side	0 mm
• for grounded parts	
3	

General Product Approval		EMC	Declaration of Con-
Approvals Certificates			
during storage	-40 +80 °C		
during operation	-25 +60 °C		
ambient temperature			
installation altitude at height above sea level maximum	2 000 m		
Ambient conditions			
— at the side	10 mm		
— downwards	10 mm		
— upwards	10 mm		
— backwards	0 mm		
— forwards	10 mm		
• for live parts			
— downwards	10 mm		
— at the side	10 mm		
— upwards	10 mm		
— backwards	0 mm		
— forwards	10 mm		

Confirmation











Declaration of Conformity

Test Certificates

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







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=3RR2143-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2143-1AA30

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

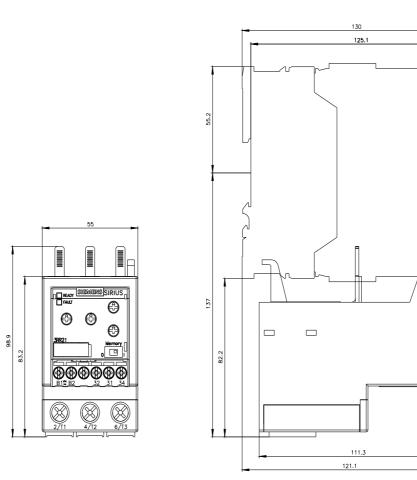
https://support.industry.siemens.com/cs/ww/en/ps/3RR2143-1AA30

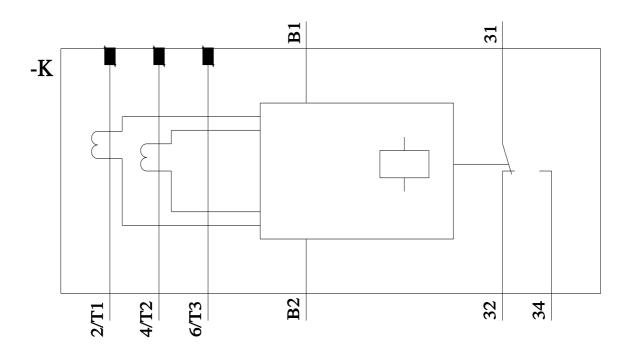
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2143-1AA30\&lang=en}}$

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RR2143-1AA30/manual





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