SIEMENS

Data sheet 3RR2141-1AA30



Monitoring relay, can be mounted to Contactor 3RT2, Size S00 basic, analog adjustment Apparent current monitoring 1.6-16 A, 20-400 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	S00		
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	IP20		
shock resistance	15g / 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)	10/01/2009		
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	1.6 16 A		
• 2	1.6 16 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	
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	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
contact rating of auxiliary contacts according to UL	B300 / R300
Main circuit	0.5 W
operating power rated value	2.5 W
ampacity of the semiconductor output in SIO mode	20 mA
operational current at 17 V minimum	5 mA
Electromagnetic compatibility	ambiana A (industrial acetar)
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	No
product component removable terminal for main circuit	No Voc
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	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x (1 4 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
connectable conductor cross-section for main contacts	
 solid or stranded 	0.75 4 mm²
finely stranded with core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
for AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section for main contacts	20 12
tightening torque with screw-type terminals	0.8 1.2 N·m
Installation/ mounting/ dimensions	
mounting position	any
fastening method	direct mounting
height	79 mm
width	45 mm
depth	80 mm
required spacing	
with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	0
— forwards	0 mm

— backwards	0 mm		
	0 mm		
— upwards	0 mm		
— at the side	6 mm		
— downwards	0 mm		
for live parts			
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	6 mm		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
during operation	-25 +60 °C		
during storage	-40 +80 °C		
Approvals Certificates			
General Product Approval		EMC	Declaration of Conformity

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=3RR2141-1AA30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2141-1AA30

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

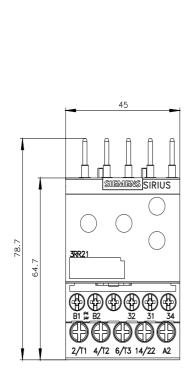
https://support.industry.siemens.com/cs/ww/en/ps/3RR2141-1AA30

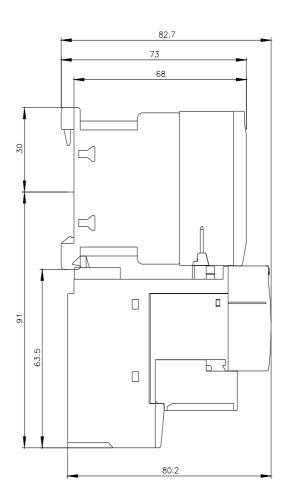
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

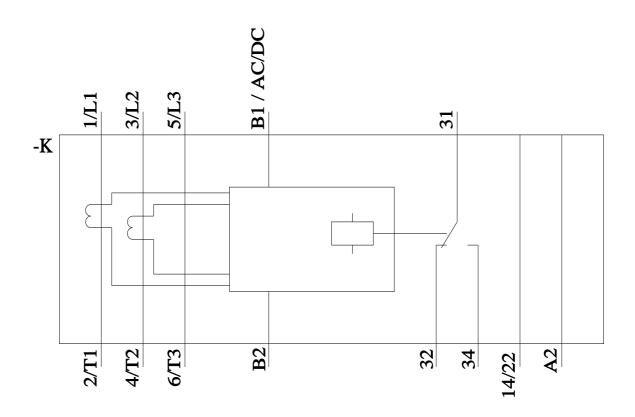
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2141-1AA30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RR2141-1AA30/manual







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