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	
• at 240 V	12 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	К	
relative repeat accuracy	2 %	
Substance Prohibitance (Date)	10/01/2009	
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 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 switch required	fuse gG: 4 A
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	
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	
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	
• 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	20 12
main contacts tightening torque with screw-type terminals	0.8 1.2 N·m
Installation/ mounting/ dimensions	V.V 1.2 IV III
mounting position	any
fastening method	any 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 		
— forwards	0 mm	
— backwards	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	
Approvale Cortificatos		

Approvals Certificates

General Product Approval





Confirmation







EMV **Test Certificates** Marine / Shipping



Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report







Marine / Shipping **Environment** other





Confirmation

Environmental Confirmations

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,...)

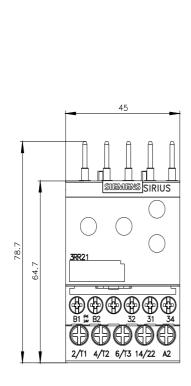
https://support.industry.siemens.com/cs/ww/en/ps/3RR2141-1AA30

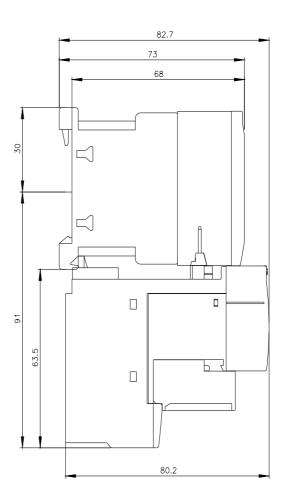
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

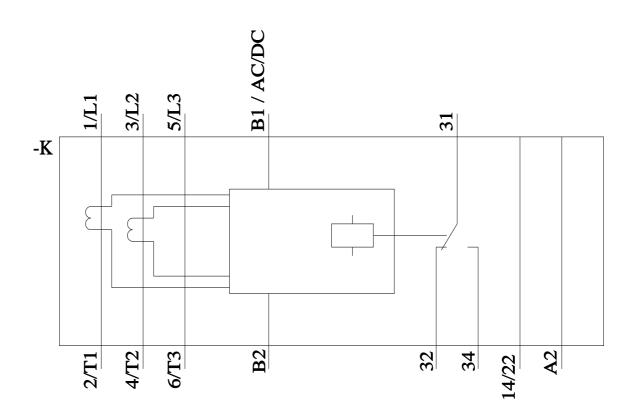
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2141-1AA30&lang=en

Characteristic: Derating

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last modified: 3/11/2024 🖸

