SIEMENS

Data sheet 3RR2142-2AW30



Monitoring relay, can be mounted to Contactor 3RT2, Size S0 basic, analog adjustment Apparent current monitoring 4...40 A, 50...60 Hz, 2-phase Supply 24-240 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% spring-type 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	S0	
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 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7	
Supply voltage		
type of voltage of the supply voltage	AC/DC	
supply voltage 1 at AC		
● at 50 Hz	24 240 V	
● at 60 Hz	24 240 V	
supply voltage 1 at DC	24 240 V	
supply voltage frequency 1	50 60 Hz	
Measuring circuit		
type of current for monitoring	AC	
adjustable current response value current		
• 1	4 40 A	
• 2	4 40 A	
adjustable response delay time		
when starting	0 60 s	
 with lower or upper limit violation 	0 30 s	
Precision		

temperature drift per °C Short-Circuit protection design of the fuse link for short-circuit protection of the auxiliary switch required Communication Protocol protocol is supported IO-Link protocol type of voltage supply via input/output link master No Auxiliary circuit number of CO contacts • for auxiliary contacts • for auxiliary contacts at AC-15 • at 24 V • at 230 V • at 400 V • at 400 V • at 125 V • at 125 V • at 125 V • at 250 V contact rating of auxiliary contacts according to UL B300 / R300 Main circuit operating power rated value ampacity of the semiconductor output in SIO mode operating power cated value appearity of the semiconductor output in SIO mode operational current at 7 V minimum Electromagnotic compatibility EMC emitted interference according to IEC 60947-1 EMC immunity according to IEC 60947-1 connections/Torminals product component removable terminal for main circuit type of electrical connection • for auxiliary and control circuit spring-loaded terminals spring-loaded term	
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• finely stranded without core end processing 1x (1 6 mm²)	
• solid or stranded 1 10 mm ²	
• finely stranded with core end processing 1 6 mm²	
• finely stranded without core end processing 1 6 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 2x (0.25 1.5 mm²)	
— finely stranded without core end processing 2x (0.25 1.5 mm²)	
• for AWG cables for auxiliary contacts 2x (24 16)	
AWG number as coded connectable conductor cross section for main contacts 18 8	
tightening torque with screw-type terminals 0.8 1.2 N·m	
Installation/ mounting/ dimensions	
mounting position any	
fastening method direct mounting	
height 109 mm	
width 45 mm	
depth 92 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	6 mm
— backwards	0 mm
— upwards	6 mm
— at the side	6 mm
— downwards	6 mm
for live parts	
— forwards	6 mm
— backwards	0 mm
— upwards	6 mm
— downwards	6 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	

Confirmation

General Product Approval









EMC



Declaration of Con-

Declaration of Conformity

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

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







Marine / Shipping

other





Confirmation

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=3RR2142-2AW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2142-2AW30

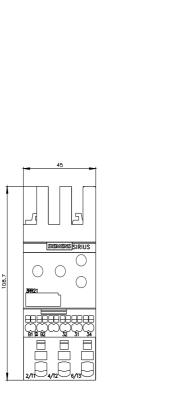
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

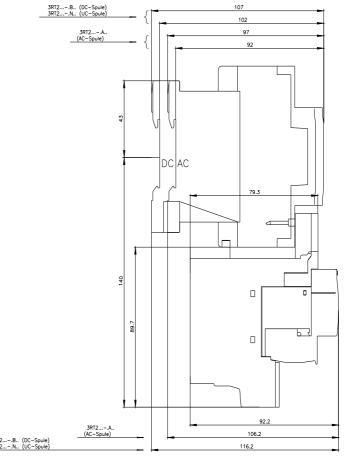
https://support.industry.siemens.com/cs/ww/en/ps/3RR2142-2AW30

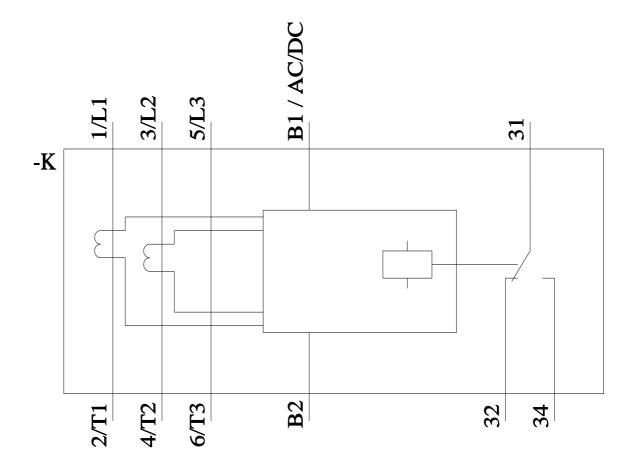
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RR2142-2AW30/manual







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