SIEMENS

Data sheet 3RR2242-1FW30



Monitoring relay, can be mounted to Contactor 3RT2, Size S0 standard, digitally adjustable Apparant/active current monitoring 4...40 A, 20...400 Hz, 3-phase Supply 24-240 V AC/DC 1 change-over contact, 1 semiconductor output for alarm and warning Monitoring for Current overshoot and undershoot Phase failure, Cable break Phase sequence Residual current Blocking current Warning and alarm thresholds with or without fault buffer ON delay 0-99 s Noise pulse suppression 0-30 s Pause after fault 0-300 min Screw connection system

product brand name	SIRIUS		
product designation	Monitoring relays		
design of the product	digitally adjustable, 3-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-Methyl-1-(4-methylthiophenyl)-2-morpho - 71868-10-5 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 99 s		
with lower or upper limit violation	0 30 s		
adjustable switching hysteresis for measured current value	0.1 8 A		

accuracy of digital display	+/-1 digit
Precision	
temperature drift per °C	0.1 %/°C
Short-circuit protection	0.1 707 C
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	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	2500771000
operating power rated value	2.5 W
ampacity of the semiconductor output at AC-14 at 240 V at 50/60 Hz	20 mA
ampacity of the semiconductor output at DC-13 at 240 V	20 mA
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)
	ambianas A (industrial acetar)
EMC immunity according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1 Connections/ Terminals	ambience A (industrial sector)
· · · · · ·	ambience A (industrial sector) No
Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and	
Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit	No
Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes
Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit	No Yes screw-type terminals
connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection for main current circuit for auxiliary and control circuit	No Yes
connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection for main current circuit for auxiliary and control circuit type of connectable conductor cross-sections for main contacts	No Yes screw-type terminals screw-type terminals
connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection for main current circuit for auxiliary and control circuit type of connectable conductor cross-sections for main contacts solid	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²)
product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing	No Yes screw-type terminals screw-type terminals
connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for main contacts	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection • for main current circuit • for auxiliary and control circuit type of connectable conductor cross-sections for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for main contacts • solid or stranded	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1 10 mm²
product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
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product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1 10 mm² 2.5 10 mm²
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product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1 10 mm² 2.5 10 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)
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product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1 10 mm² 2.5 10 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 16 8 0.8 1.2 N·m
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product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1 10 mm² 2.5 10 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 16 8 0.8 1.2 N·m any direct mounting 87 mm
Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and control circuit type of electrical connection	No Yes screw-type terminals screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 1 10 mm² 2.5 10 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 16 8 0.8 1.2 N·m any direct mounting 87 mm 45 mm
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General Product Approval		EMC	Declaration of Con- formity		
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	6 mm				
— downwards	6 mm				
— upwards	6 mm				
— backwards	0 mm				
— forwards	6 mm				
for live parts					
— downwards	6 mm				
— at the side	6 mm				
— upwards	6 mm				
— backwards	0 mm				
— forwards	6 mm				
for grounded parts	•				
— at the side	0 mm				
— downwards	0 mm				
— upwards	0 mm				
— backwards	0 mm				

Confirmation











formity

Declaration of Conformity

Test Certificates

Marine / Shipping



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

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=3RR2242-1FW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2242-1FW30

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

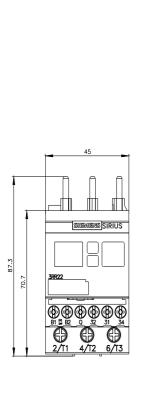
https://support.industry.siemens.com/cs/ww/en/ps/3RR2242-1FW30

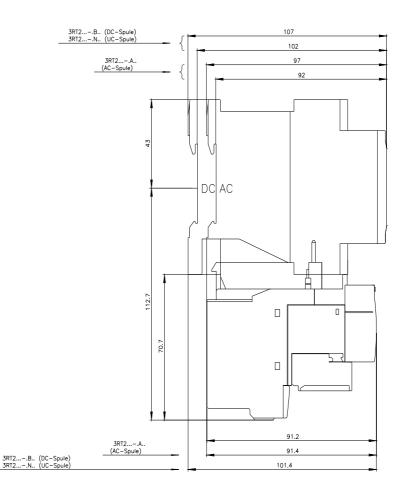
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

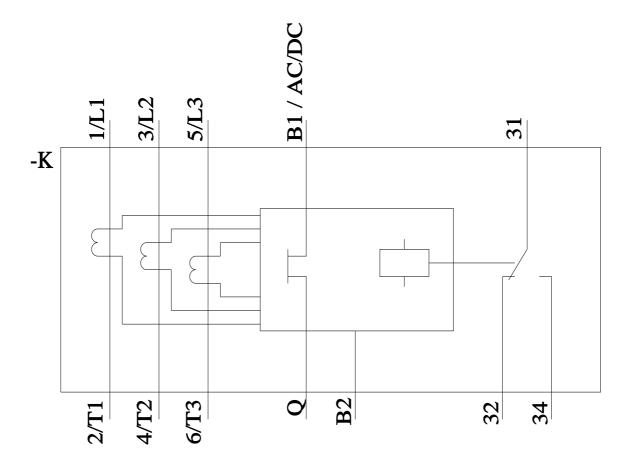
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2242-1FW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RR2242-1FW30/manual







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