SIEMENS

Data sheet 3RR2243-1FW30

0101110



Monitoring relay, can be mounted to Contactor 3RT2, Size S2 standard, digitally adjustable Apparant/active current monitoring 8...80 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	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)	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	8 80 A
• 2	8 80 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	0.2 16 A

accuracy of digital display	+/-1 digit
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 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)
EMC immunity according to IEC 60947-1	ambience A (industrial sector)
Connections/ Terminals	
Connections/ Terminals product component removable terminal for main circuit	No
Connections/ Terminals	
Connections/ Terminals product component removable terminal for main circuit product component removable terminal for auxiliary and	No
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
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 screw-type terminals screw-type terminals 2x (1 35 mm²), 1x (1 50 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	No Yes screw-type terminals screw-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 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 35 mm²), 1x (1 50 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 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 • stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing	No Yes screw-type terminals screw-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 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 • stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections	No Yes screw-type terminals screw-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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)
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 mm² 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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)
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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) 18 1
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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) 18 1
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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) 18 1 0.8 1.2 N·m
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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) 18 1 0.8 1.2 N·m
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 mm² 2 35 mm²) (0.5 2.5 mm²) 3
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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) 18 1 0.8 1.2 N·m
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 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 1 50 mm² 1 35 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) 18 1 0.8 1.2 N·m any direct mounting 99 mm 55 mm

— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
 for live parts 	
— forwards	10 mm
— backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 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 Certific-<u>ate</u>









Marine / Shipping

other



Confirmation

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/qlobal/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=3RR2243-1FW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2243-1FW30

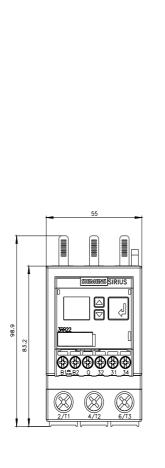
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

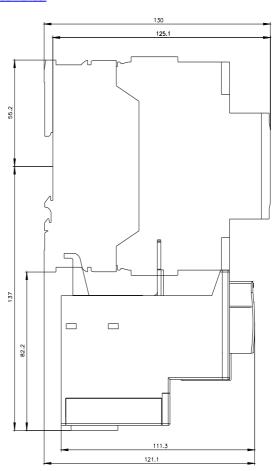
https://support.industry.siemens.com/cs/ww/en/ps/3RR2243-1FW30

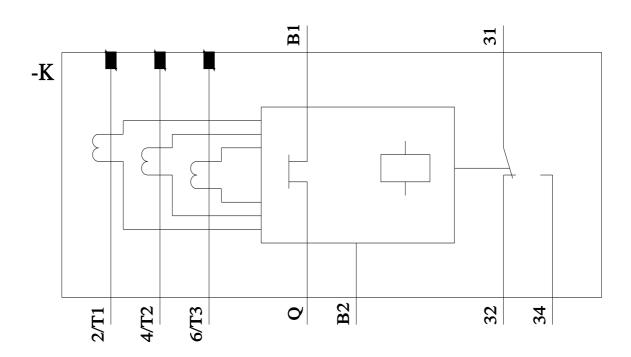
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2243-1FW30&lang=en

Characteristic: Derating







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