SIEMENS

Data sheet 3RR2443-1AA40

0101110



Current monitoring relay for IO-Link, can be mounted to Contactor, 3RT2, Size S2 Apparant/active current monitoring 8-80 A, 20-400 Hz, 3-phase Supply voltage 24 V DC 1 change-over contact Monitoring for Current overshoot and undershoot Current asymmetry Phase failure, Cable break Phase sequence, Residual current Blocking current, Switching cycle and Operating hours counter Warning and alarm thresholds Auto-reset or manual reset ON delay 0-9999.9 s OFF delay 0-9999.9 s Reclosing delay 0-300 min Screw connection system

product brand name	SIRIUS
product designation	Monitoring relays
design of the product	digitally adjustable, 3-phase current monitoring, IO-Link
product type designation	3RR2
General technical data	
size of contactor can be combined company-specific	S2
operating apparent power rated value	2.5 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
Supply voltage	
type of voltage of the supply voltage	DC
supply voltage 1 at DC rated value	24 V
relative negative tolerance of the supply voltage	25 %
relative positive tolerance of the supply voltage	25 %
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	0 999.9 s
 with lower or upper limit violation 	0 999.9 s
adjustable switching hysteresis for measured current value	0.2 16 A
accuracy of digital display	+/-1 digit
Precision	

	0.4.0/100
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	Yes
IO-Link transfer rate	COM2 (38,4 kBaud)
point-to-point cycle time between master and IO-Link	10 ms
device minimum	10 1115
type of voltage supply via input/output link master	Yes
data volume	
 of the address range of the inputs with cyclical transfer total 	4 byte
 of the address range of the outputs with cyclical transfer total 	2 byte
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
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	B300 / 10300
	2.5 W
operating power rated value	
ampacity of the semiconductor output in SIO mode	200 mA
operational current at 17 V minimum	5 mA
Electromagnetic compatibility	1: A (; 1 1; 1 1)
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	od on type terminale
• solid	2x (1 35 mm²), 1x (1 50 mm²)
stranded	2x (1 35 mm²), 1x (1 50 mm²)
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
mory character that do to one proceeding	
connectable conductor cross-section for main contacts	
connectable conductor cross-section for main contacts • solid or stranded	1 50 mm²
connectable conductor cross-section for main contacts	
connectable conductor cross-section for main contacts	1 50 mm²
connectable conductor cross-section for main contacts	1 50 mm² 1 35 mm²
connectable conductor cross-section for main contacts	1 50 mm ² 1 35 mm ² 1x (0.5 4 mm ²), 2x (0.5 2.5 mm ²)
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connectable conductor cross-section for main contacts	1 50 mm ² 1 35 mm ² 1x (0.5 4 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²) 2x (20 14)
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connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts	1 50 mm ² 1 35 mm ² 1x (0.5 4 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²) 2x (20 14) 18 1
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connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position	1 50 mm ² 1 35 mm ² 1x (0.5 4 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²) 2x (20 14) 18 1 0.8 1.2 N·m
connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method	1 50 mm ² 1 35 mm ² 1x (0.5 4 mm ²), 2x (0.5 2.5 mm ²) 1x (0.5 2.5 mm ²), 2x (0.5 1.5 mm ²) 2x (20 14) 18 1 0.8 1.2 N·m any direct mounting
connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height	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
connectable conductor cross-section for main contacts	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

• with side-by-side mounting - forwards 0 mm - backwards $0 \, \text{mm}$ - upwards 0 mm 10 mm - downwards - 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 -40 ... +80 °C • during storage Approvals Certificates

(W)

Confirmation

Manufacturer Declaration







EMC

Declaration of Conformity

General Product Approval

Test Certificates

Marine / Shipping





Special Test Certificate







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=3RR2443-1AA40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2443-1AA40

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

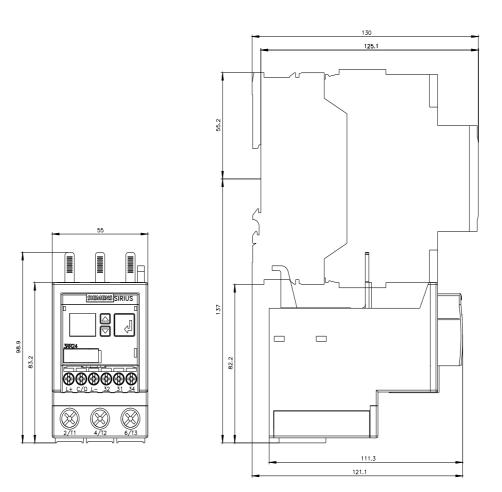
https://support.industry.siemens.com/cs/ww/en/ps/3RR2443-1AA40

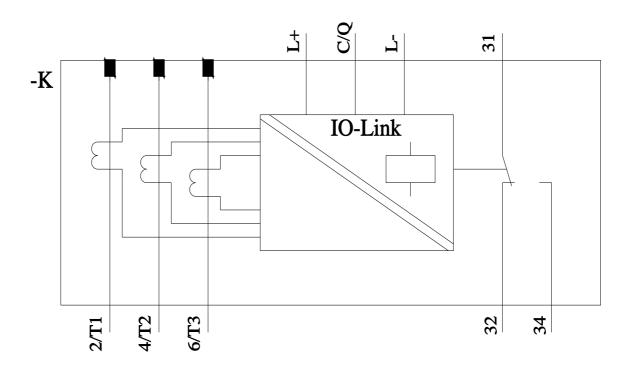
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2443-1AA40&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RR2443-1AA40/manual





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