SIEMENS

Data sheet 3RR2143-1AW30



Monitoring relay, can be mounted to Contactor 3RT2, Size S2 basic, analog adjustment Apparent current monitoring 8...80 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% 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	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	
• at 240 V	12 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)	03/01/2017	
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	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 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	0.5.W
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 60047.1	ambiance A (industrial costor)
EMC emitted interference according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1 Electrical Safety	ambience A (industrial sector)
protection class IP on the front according to IEC 60529	IP20
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 (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)
connectable conductor cross-section for main contacts	
• solid or stranded	1 50 mm²
finely stranded with core end processing	1 35 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	4 (05, 4, 3) 0 (05, 55, 3)
— 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 AWG number of add connectable conductor areas agation for	2x (20 14)
AWG number as coded connectable conductor cross section for main contacts	18 1
tightening torque with screw-type terminals	0.8 1.2 N·m
Installation/ mounting/ dimensions	any.
mounting position	any direct mounting
fastening method	direct mounting 99 mm
height	99 mm 55 mm
depth	112 mm
required spacing	112 mm/
with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
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— 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





Confirmation







EMV Test Certificates Marine / Shipping



Special Test Certificate









Marine / Shipping other Environment



Confirmation

Environmental Confirmations

Further information

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)

Cax online generator

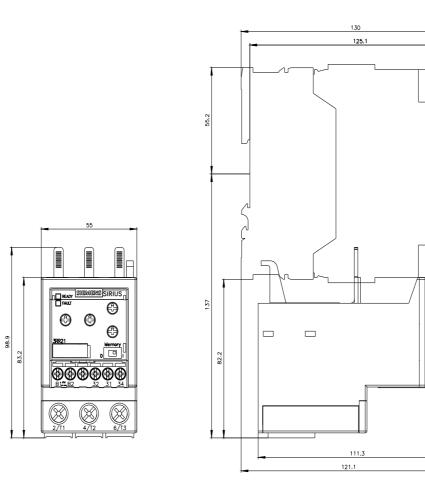
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2143-1AW30

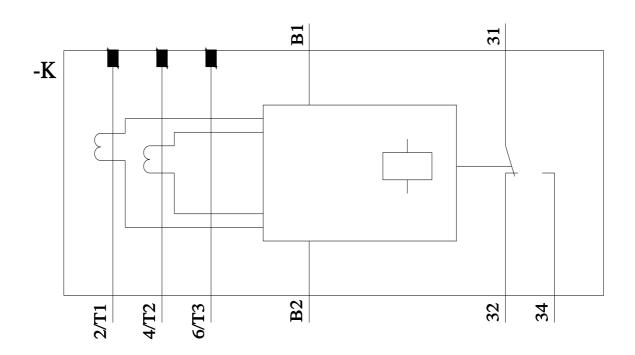
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RR2143-1AW30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RR2143-1AW30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RR2143-1AW30/manual





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