SIEMENS

Data sheet 3RR2143-1AW30



Monitoring relay, attachable 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 changeover contact Monitoring for current overshoot and undershoot Phase failure, wire break with or without fault buffer ON delay 0-60 s Spurious peak suppr. 0-30 s Switching hysteresis 6% Screw terminal

Figure similar

General technical data:		
product brandname		SIRIUS
Product designation		Monitoring relays
Design of the product		analogically adjustable, 2-phase current monitoring
Size of contactor can be combined company-specific		S2
Protection class IP		
• on the front		IP20
 of the terminal 		IP00
Insulation voltage for overvoltage category III	V	690
according to IEC 60664 with degree of pollution 3		
rated value		
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
during storage	°C	-40 + 80
during operation	°C	-25 +60
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
EMI immunity acc. to IEC 60947-1		ambience A (industrial sector)

EMC emitted interference acc. to IEC 60947-1		ambience A (industrial sector)
Shock resistance		10g / 11 ms
Vibration resistance		10 55 Hz / 0.35 mm
Surge voltage resistance rated value	kV	6
Operating apparent output rated value	V·A	4
Operating power rated value	W	2.5
Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750		К
Equipment marking acc. to DIN EN 61346-2		К
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Adjustable response delay time		
when starting	S	0 60
 with lower or upper limit violation 	S	0 30
Stand-by time for restart after fault	S	0.3
Phase number		3
Number of monitored phases		2
Product function		
 Overcurrent monitoring 		Yes
 Undercurrent monitoring 		Yes
 Overcurrent and undercurrent monitoring 		Yes
 Apparent current monitoring 		Yes
 active current monitoring 		No
 undercurrent detection DC 		No
 undercurrent detection 1 phase 		No
 Overcurrent detection DC 		No
 Current window recognition DC 		No
 undercurrent detection 3 phases 		No
 Overcurrent detection 1 phase 		No
 Voltage window recognition 3 phase 		No
 Voltage window recognition 1 phase 		No
 phase sequence recognition 		No
 can be activated or deactivated phase sequence recognition 		No
Auto-reset		Yes
External reset		No
Manual RESET		Yes
Adjustable pick-up value current		
• 1	Α	8 80
• 2	Α	8 80
Relative metering precision		
• relating to measuring range limit	%	10

Type of current for monitoring		AC
Measurable current at AC	Α	8 80
Relative switching hysteresis for measured current value	%	6.25
Response time maximum	ms	300
Relative repeat accuracy	%	2
Temperature drift per °C	%/°C	0.1
Ampacity		
 for permanent overcurrent maximum permissible 	Α	80
 for overcurrent duration < 1 s maximum permissible 	Α	1 600

Supply voltage:		
Type of voltage of the supply voltage		AC/DC
Supply voltage frequency 1	Hz	50 60
Supply voltage 1		
• at DC	V	24 240
• at AC		
— at 50 Hz	V	24 240
— at 60 Hz	V	24 240
Buffering time in the event of power failure minimum	ms	10

Auxiliary circuit:		
Circuit principle of the output relay		closed-circuit current
Operating current at 17 V minimum	mA	5
Number of CO contacts		
• for auxiliary contacts		1
Operating current of auxiliary contacts		
● at AC-15		
— at 24 V	Α	3
— at 230 V	Α	3
— at 400 V	Α	3
• at DC-13		
— at 24 V	Α	1
— at 125 V	Α	0.2
— at 250 V	Α	0.1

Inputs/ Outputs:

Short-circuit:

Installation/ mounting/ dimensions:		
Mounting position		any
Mounting type		direct mounting
Width	mm	55

Height	mm	99
Depth	mm	112
Required spacing with side-by-side mounting		
• forwards	mm	0
Backwards	mm	0
• upwards	mm	0
downwards	mm	10
• at the side	mm	0
Required spacing for grounded parts		
• forwards	mm	10
Backwards	mm	0
• upwards	mm	10
downwards	mm	10
• at the side	mm	10
Required spacing for live parts		
• forwards	mm	10
Backwards	mm	0
• upwards	mm	10
downwards	mm	10
• at the side	mm	10
Connections/ Terminals:		
Type of electrical connection		
		screw-type terminals
Type of electrical connection		screw-type terminals screw-type terminals
Type of electrical connection ● for main current circuit		
Type of electrical connection • for main current circuit • for auxiliary and control current circuit		
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function		screw-type terminals
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit		screw-type terminals No
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control		screw-type terminals No
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Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections		screw-type terminals No
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections • for main contacts		screw-type terminals No Yes
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections • for main contacts — solid		screw-type terminals No Yes 2x (1 35 mm²), 1x (1 50 mm²)
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections • for main contacts — solid — stranded		screw-type terminals No Yes 2x (1 35 mm²), 1x (1 50 mm²)
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections • for main contacts — solid — stranded — finely stranded		screw-type terminals No Yes 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²)
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections • for main contacts — solid — stranded — finely stranded — with core end processing		screw-type terminals No Yes 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²)
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Product function • removable terminal for main circuit • removable terminal for auxiliary and control circuit Type of connectable conductor cross-sections • for main contacts — solid — stranded — finely stranded — with core end processing • at AWG conductors		screw-type terminals No Yes 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²)
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Tightening torque with screw-type terminals N·m 0.8 ... 1.2

Certificates/ approvals:

Certificate of suitability CE / UL / CSA

General Product Approval

Declaration of Conformity

Test Certificates











Type Test
Certificates/Test
Report

Shipping Approval

other







Environmental Confirmations

Confirmation

UL/CSA ratings:	
Contact rating of auxiliary contacts according to UL	B300 / R300
Safety related data:	
Protection against electrical shock	finger-safe when touched vertically from front acc. to
	IEC 60529

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

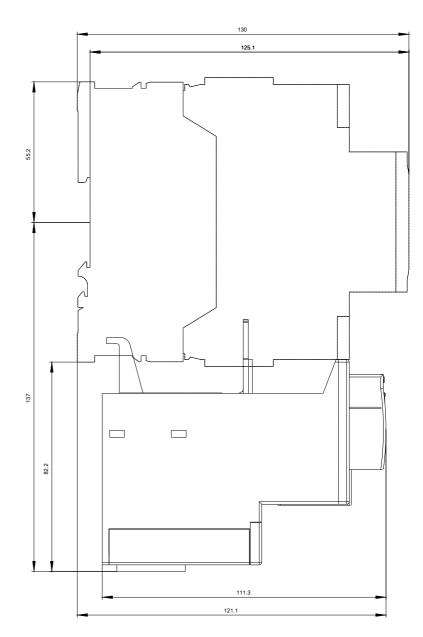
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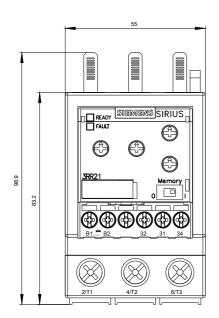
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR2143-1AW30

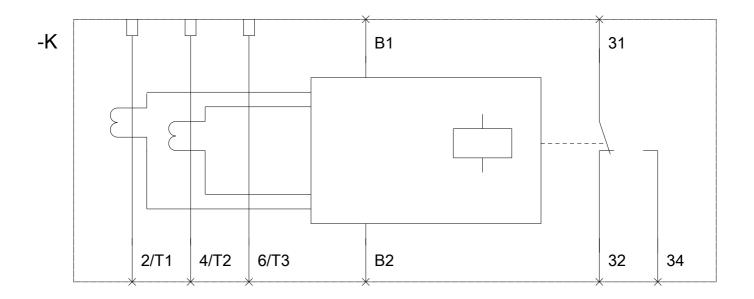
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

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







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