SIEMENS

Data sheet

3RR2243-3FA30



Figure similar

MONITORING RELAY ATTACHABLE TO CONTACTOR 3RT2. SIZE S2 STANDARD, DIGITAL ADJUSTABLE APPARENT/ACTIVE CURRENT MONIT. 8 - 80A, 20-400 HZ, 3-PHASE SUPPLY 24 V AC/DC 1 CO CONTACT, 1 SEMICOND. FOR ALARM AND WARNING MONITORING FOR CURRENT OVERSHOOT/UNDERSHOOT PHASE FAILURE, WIRE BREAK PHASE SEQUENCE FAULT CURRENT BLOCKING CURRENT WARNING AND ALARM THRESHOLDS WITH OR W/O ERROR LOG ON-DELAY 0-99 S SPURIOUS PEAK SUPPR.0-30 S BREAK AFTER FAULT 0-300 MIN SPRING-LOADED CONNECTION

General technical data:		
product brand name		SIRIUS
Product designation		multi-phase current monitoring
Design of the product		multi-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		К
according to IEC 204-2 acc. to IEC 750		

Equipment marking acc. to DIN EN 61346-2		κ
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at	_	100 000
230 V typical		
Accuracy of digital display		+/-1 digit
Adjustable response delay time	_	
• when starting	S	0 99
 with lower or upper limit violation 	s	0 30
Stand-by time for restart after fault	S	0.2
Phase number		3
Number of monitored phases		3
Product function		
 Overcurrent monitoring 		Yes
 Undercurrent monitoring 		Yes
 Overcurrent and undercurrent monitoring 		Yes
 Apparent current monitoring 		Yes
 active current monitoring 		Yes
 undercurrent detection DC 		No
 undercurrent detection 1 phase 		No
 Overcurrent detection DC 		No
Current window recognition DC		No
 undercurrent detection 3 phases 		Yes
 Overcurrent detection 1 phase 		No
 Voltage window recognition 3 phase 		No
 Voltage window recognition 1 phase 		No
 phase sequence recognition 		Yes
 can be activated or deactivated phase sequence recognition 		Yes
Auto-reset		Yes
• External reset		No
Manual RESET		Yes
Adjustable response value current		
• 1	А	8 80
• 2	А	8 80
Factor as multiple of the current monitoring upper limit for the adjustable value of a blocking current		2 5
Response value residual current detection at 50/60	А	8
Hz typical		
Relative metering precision		
 relating to measured value 	%	5
Type of current for monitoring		AC
Measurable current with AC	А	8 80

Adjustable switching hysteresis for measured current value	A	0.2 16
Response time maximum	ms	200
Relative repeat accuracy	%	2
Temperature drift per °C	%/°C	0.1
Ampacity		
 for permanent overcurrent maximum permissible 	A	80
 for overcurrent duration < 1 s maximum permissible 	A	1 600
Supply voltage:		
Type of voltage of the supply voltage		AC/DC
Supply voltage frequency 1	Hz	50 60
Supply voltage 1		
 for DC Rated value 	V	24
• with AC		
— at 50 Hz Rated value	V	24
— at 60 Hz Rated value	V	24
Buffering time in the event of power failure minimum	ms	10

Circuit principle of the output relay		closed-circuit current / open-circuit current
Operating current at 17 V minimum	mA	5
Number of outputs as contact-less semiconductor	_	1
switching element for signaling function		
instantaneous contact		
Ampacity of the semiconductor output	_	
• at DC-13 at 240 V	mA	20
• at AC-14 at 240 V at 50/60 Hz	mA	20
Residual current of the semiconductor output	mA	0.035
maximum		
Number of CO contacts	_	
 for auxiliary contacts 		1
Operating current of the auxiliary contacts		
• at AC-15		
— at 24 V	А	3
— at 230 V	А	3
— at 400 V	А	3
• at DC-13		
— at 24 V	А	1
— at 125 V	А	0.2
— at 250 V	А	0.1

Inputs/ Outputs:

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mounting position		any
Mounting type		direct mounting
Width	mm	55
Height	mm	99
Depth	mm	112
Required spacing with side-by-side mounting		112
• forwards	mm	0
Backwards	mm	0
	mm	0
• upwards	mm	10
• downwards		
• at the side	mm	0
Required spacing for grounded parts	100 100	10
• 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		
 for main current circuit 		screw-type terminals
 for auxiliary and control current circuit 		spring-loaded terminals
Product function		
 removable terminal for main circuit 		No
 removable terminal for auxiliary and control circuit 		Yes
Type of connectable conductor cross-section		
for main contacts		
— solid		2x (1 35 mm²), 1x (1 50 mm²)
		2x (1 35 mm ²), 1x (1 50 mm ²)
— stranded		2. (1
— finely stranded		$2x (4 - 25 mm^2) 4x (4 - 25 mm^2)$
— with core end processing		2x (1 25 mm²), 1x (1 35 mm²)
 for AWG conductors 		

- for main contacts

2x (18 ... 2), 1x (18 ... 1)

— for auxiliary contacts		2x (24 16)
 for auxiliary contacts 		
— solid		1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
— finely stranded		
— with core end processing		2x (0.25 1.5 mm²)
- without core end processing		2x (0.25 1.5 mm²)
Tightening torque with screw-type terminals	N∙m	0.8 1.2

Certificates/ approvals:

Certificate of suit	tability		CE / UL / C	SA	
General Proc	duct Approval	Test Certificates	other		
CSA	EAC	<u>Type Test</u> <u>Certificates/Test</u> <u>Report</u>	<u>Confirmation</u>	Environmental Confirmations	

JL/CSA ratings:				
Contact rating of the auxiliary contacts acc. 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				
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RR22433FA30				
Service&Support (Manuals, Certificates, Characteristics, FAQs,) http://support.automation.siemens.com/WW/view/en/3RR22433FA30/all				
Income databases (numberstingeness) OD dimension drawin				

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RR22433FA30&lang=en





