SIEMENS

Product data sheet

3RR2141-2AA30



MONITORING RELAY ATTACHABLE TO CONTACTOR 3RT2. SIZE S00 BASIC, ANALOG ADJUSTABLE APPARENT CURRENT MONITORING 1.6 - 16A, 50-60 HZ, 2-PHASE SUPPLY 24 V AC/DC 1 CO CONTACT MONITORING FOR CURRENT OVERSHOOT/UNDERSHOOT PHASE FAILURE, WIRE BREAK WITH OR W/O ERROR LOG ON-DELAY 0-60 S SPURIOUS PEAK SUPPR.0-30 S SWITCHING HYSTERESIS 6% 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 the contactor / can be combined / company-specific		S00		
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3				
rated value	V	690		
Installation altitude / at a height over sea level / maximum	m	2,000		
Ambient temperature				
during storage	°C	-40 80		
• during operating	°C	-25 60		
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4		
EMC immunity to interference				
according to IEC 60947-1		ambience A (industrial sector)		
EMC emitted interference				
according to IEC 60947-1		ambience A (industrial sector)		
Resistance against shock		15g / 11 ms		
Resistance against vibration		10 55 Hz / 0.35 mm		
mpulse voltage resistance / rated value kV 6				

Operating apparent output / rated value	V-A	3.5
Rating / Rated value	W	2.5
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		К
according to DIN EN 61346-2		к
Mechanical operating cycles as operating time	-	
• typical		10,000,000
Electrical operating cycles as operating time / 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
Standby 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 recognition DC		No
 undercurrent recognition of 1 phase 		No
overcurrent recognition DC		No
 current window recognition DC 		No
 undercurrent recognition of 3 phases 		No
 overcurrent recognition of 1 phase 		No
 tension window recognition of 3 phases 		No
 tension window recognition of 1 phase 		No
phase sequence recognition		No
 can be activated or deactivated / phase sequence recognition 		No
• self-reset		Yes
reset external		No
• manual RESET		Yes
Adjustable response current		
• 1	А	1.6 16
•2	А	1.6 16

 with regard to measuring range limit 	%	5
Type of current / for monitoring		AC
Measurable current / for AC	А	1.6 16
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
Current-carrying capacity		
for permanent overcurrent / maximum permissible	А	16
 for overcurrent duration < 1 s / maximum permissible 	А	320

Supply voltage:		
Type of voltage / of supply voltage		AC/DC
Supply voltage frequency / 1	Hz	50 60
Supply voltage / 1		
• for DC / rated value	V	24
• at 50 Hz / for AC / rated value	V	24
• at 60 Hz / for AC / rated value	V	24
Stored energy time / supply voltage failure / minimum	ms	10

Auxiliary circuit:				
Design of the contact element / of the output relay		closed-circuit current		
Operating current / at 17 V / minimum	mA	5		
Number of change-over switches				
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		

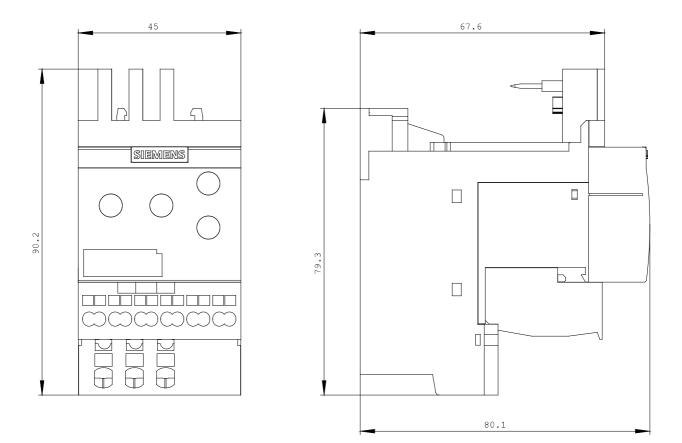
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Inputs/ Outputs:
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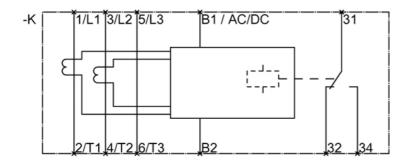
Short-circuit:				
Installation/mounting/dimensions:				
Built in orientation any				
Type of mounting		direct mounting		

Width	mm	45		
Height	mm	mm 91		
Depth	mm	mm 81		
Distance, to be maintained, to the ranks assembly				
• forwards	mm	0		
• backwards	mm	0		
• upwards	mm	0		
• downwards	mm	0		
• sidewards	mm	0		
Distance, to be maintained, to earthed part				
• forwards	mm	6		
backwards	mm	0		
• upwards	mm	0		
downwards	mm	0		
• sidewards	mm	6		
Distance, to be maintained, conductive elements				
• forwards	mm	6		
backwards	mm	0		
• upwards	mm	0		
downwards	mm	0		
• sidewards	mm	6		
Connections:				
Design of the electrical connection				
for main current circuit		spring-loaded 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 the connectable conductor cross-section				
• for main contacts				
• solid		1x (0.5 4 mm²)		
finely stranded				
with conductor end processing		1x (0.5 2.5 mm²)		
 without conductor final cutting 		1x (0.5 2.5 mm²)		
• for AWG conductors / for main contacts		1x (20 12)		
for auxiliary contacts				
• solid		1x (0.5 4 mm²), 2x (0.5 2.5 mm²)		
finely stranded				
with conductor end processing		2x (0.25 1.5 mm²)		

without conductor final cutting				2x (0.25 1.5 mm²)		
 for AWG conductor 	ors / for auxiliary cor	ntacts	2x (24 16)			
Tightening torque						
with screw-type terminals			N·m	0.8 1.2		
Certificates/approv	vals:					
Verification of suitab	bility			CE / UL / CSA		
General Product Ap	oproval			Test Certificates		
coc	CSA	ROSTEST		Manufacturer	other	
Shipping Approval					other	
ABS		GL	Lloyd's Kegister LRS	RMRS	Manufacturer	
UL/CSA ratings:						
Contact rating designation / for auxiliary contacts / according to UL				B300 / R300		
Further informatio	n:					
Information- and Dov http://www.siemens.co		-				
Industry Mall (Online http://www.siemens.co		s/mall				
Cax online generator						
		s, Characteristics, FAQs,) W/view/en/3RR2141-2AA30/				
	-	mension drawings, 3D mo		circuit diagrams,)		

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RR2141-2AA30





last change:

Oct 24, 2011