

Product data sheet 3RR2142-1AW30

MONITORING RELAY ATTACHABLE TO CONTACTOR 3RT2. SIZE S0 BASIC, ANALOG ADJUSTABLE APPARENT CURRENT MONITORING 4 - 40A, 50-60 HZ, 2-PHASE

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		S0
Protection class IP		
• frontal/front side		IP20
of the terminal		IP20
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3		
rated value	V	690
Altitude of installation site / at a height over sea level / maximum	m	2,000
Ambient temperature		
during storage	°C	-40 80
during the operating phase	°C	-25 60
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
Impulse voltage resistance / rated value	kV	6
Operating apparent output / rated value	V-A	3.5
Service power / 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 ON 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		2
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	Α	4 40
• 2	Α	4 40
Relative metering precision		
with regard to measuring range limit	%	10
Type of current / for monitoring		AC
Measurable current / for AC	Α	4 40
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

• for permanent overcurrent / max. permissible	Α	40
• for overcurrent duration < 1 a / max. permissible	Α	800

Supply voltage:		
Type of voltage / of the supply voltage		AC/DC
Supply voltage frequency / 1	Hz	50 60
Supply voltage / 1		
• for DC	V	24 240
• at 50 Hz / for AC	V	24 240
• at 60 Hz / for AC	V	24 240
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 contact		1
Operating current / of the 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:			
built in orientation		any	
Type of fixing/fixation		direct mounting	
Width	mm	45	
Height	mm	88	
Depth	mm	93	
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	6
• downwards	mm	6
• sidewards	mm	6
distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sidewards	mm	6

Connections:		
design of the electrical connection		
for main current circuit		screw-type terminals
 for auxiliary and control current circuit 		screw-type 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		
• unifilar		2x (1 2.5 mm2), 2x (2.5 10 mm2)
• stranded wire		
 with conductor end processing 		2x (1 2.5 mm2), 2x (2.5 6 mm2), 1x 10 mm2
at AWG-conductors / for main contacts		2 x (16 14), 2x (14 8)
for auxiliary contact		
• solid		0.5 4 mm2, 2x (0.5 2.5 mm2)
• stranded wire		
 with wire end processing 		1x (0.5 2.5 mm2), 2x (0.5 1.5 mm2)
for AWG conductors / for auxiliary contacts		2x (20 14)
Tightening torque		
at screw-type terminals	N⋅m	0.8 1.2

Certificates/approvals:	
verification of suitability	CE / UL / CSA

Further information:

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

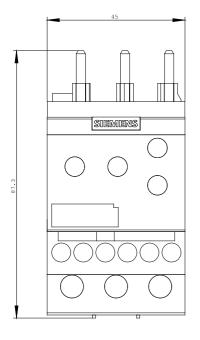
http://www.siemens.com/industrial-controls/catalogs

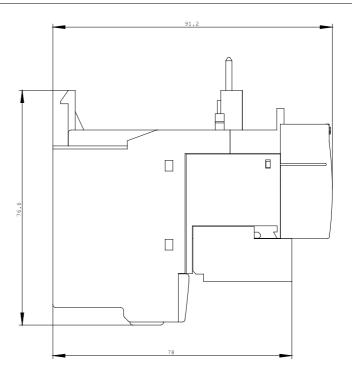
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

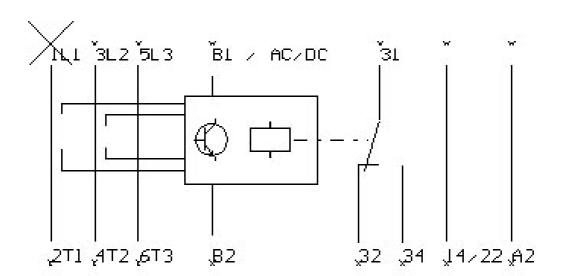
http://support.automation.siemens.com/WW/view/en/3RR2142-1AW30/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RR2142-1AW30







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