

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		K
• according to DIN EN 61346-2		K
Mechanical operating cycles as operating time		10,000,000
• typical		

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
• underrun monitoring		Yes
• overcurrent and underrun monitoring		Yes
• apparent current monitoring		Yes
• active current monitoring		No
• Underrun recognition DC		No
• Underrun recognition of 1 phase		No
• Overcurrent recognition DC		No
• Current window recognition DC		No
• Underrun 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	A	4 ... 40
• 2	A	4 ... 40
Relative metering precision		
• with regard to measuring range limit	%	10
Type of current / for monitoring		AC
Measurable current / for AC	A	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
Current carrying capacity		

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

Supply voltage:		
Type of voltage / of the supply voltage		AC/DC
Supply voltage frequency / 1	Hz	50 ... 60
Supply voltage / 1		
• at 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 contact		1
Operating current / of the auxiliary contacts		
• at AC-15		
• at 24 V	A	3
• at 230 V	A	3
• at 400 V	A	3
• at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	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

• sideways	mm	0
distance, to be maintained, to earthed part		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
distance, to be maintained, conductive elements		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	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		2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
• unifilar		
• stranded wire		
• with conductor end processing		2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• at AWG-conductors / for main contacts		2 x (16 ... 14), 2x (14 ... 8)
• for auxiliary contact		
• solid		0.5 ... 4 mm ² , 2x (0.5 ... 2.5 mm ²)
• stranded wire		
• with wire end processing		1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• 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
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Further information:

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

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

Global Industry Mall (Online ordering system)

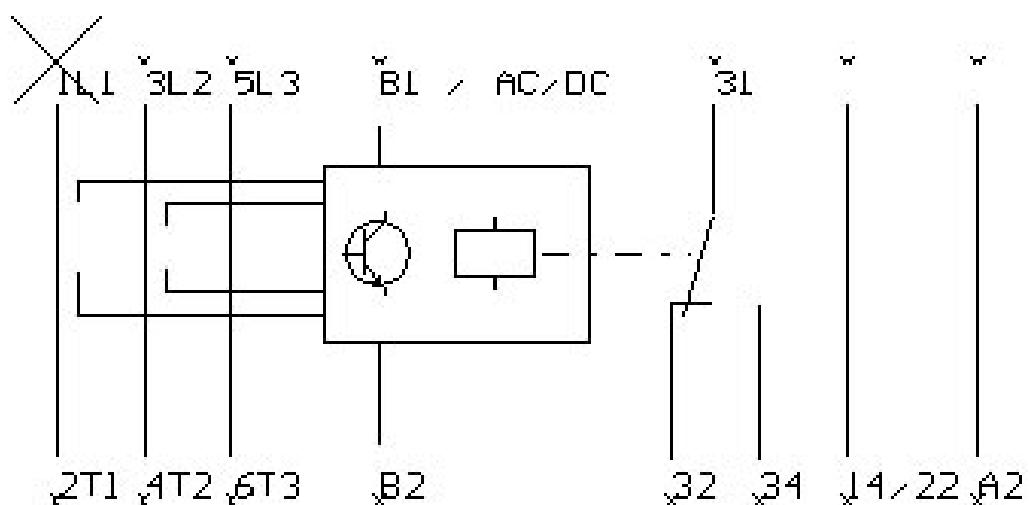
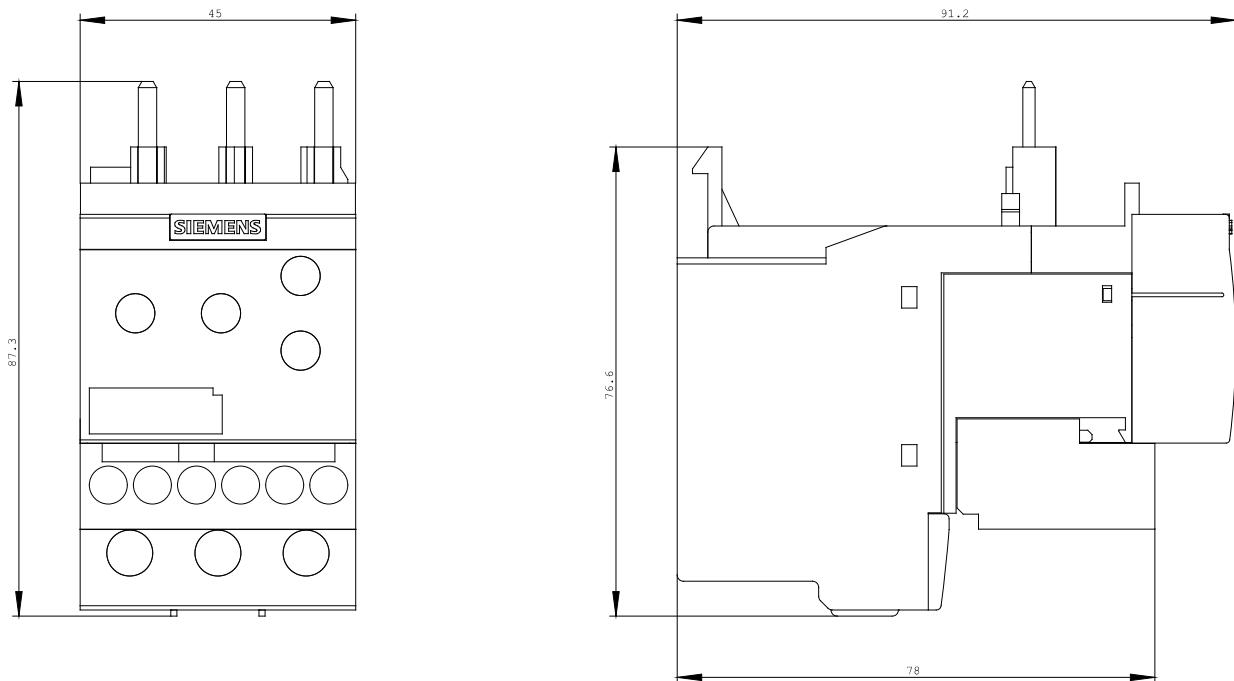
<http://www.siemens.com/industrial-controls/mall>

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

<http://support.automation.siemens.com/WW/view/en/3RR2142-1AA30/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RR2142-1AA30



last change:

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