



MONITORING RELAY ATTACHABLE TO CONTACTOR 3RT2. SIZE S2 STANDARD, DIGITAL ADJUSTABLE APPARENT/ACTIVE CURRENT MONIT. 8 - 80A, 20-400 HZ, 3-PHASE SUPPLY 24-240 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 SCREW 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 according to IEC 60664 / with degree of pollution 3		
• Rated value	V	690
Installation altitude / at height above sea level / maximum	m	2,000
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
Reference code <ul style="list-style-type: none"> • acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750 • acc. to DIN EN 61346-2 		K K
Mechanical service life (switching cycles) <ul style="list-style-type: none"> • typical 		10,000,000
Electrical endurance (switching cycles) / at AC-15 / at 230 V <ul style="list-style-type: none"> • typical 		100,000
Accuracy of digital display		+/-1 digit
Adjustable response delay time <ul style="list-style-type: none"> • when starting • with lower or upper limit violation 	s s	0 ... 99 0 ... 30
Stand-by time / for restart after fault	s	0.2
Phase number		3
Number of monitored phases		3
Product function <ul style="list-style-type: none"> • Overcurrent monitoring • Undercurrent monitoring • Overcurrent and undercurrent monitoring • Apparent current monitoring • active current monitoring • undercurrent detection DC • undercurrent detection 1 phase • Overcurrent detection DC • Current window recognition DC • undercurrent detection 3 phases • Overcurrent detection 1 phase • Voltage window recognition 3 phase • Voltage window recognition 1 phase • phase sequence recognition • can be activated or deactivated / phase sequence recognition • Auto-reset • External reset • Manual RESET 		Yes Yes Yes Yes Yes No No No No Yes No No No Yes Yes No Yes Yes No Yes
Adjustable response value current		

• 1	A	8 ... 80
• 2	A	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 Hz • typical	A	8
Relative metering precision • relating to measured value	%	5
Type of current / for monitoring		AC
Measurable current / with AC	A	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 • for overcurrent duration < 1 s / maximum permissible	A A	80 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 • with AC / at 50 Hz • with AC / at 60 Hz	V V V	24 ... 240 24 ... 240 24 ... 240
Buffering time / in the event of power failure / minimum	ms	10

Auxiliary circuit:

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 switching element / for signaling function • instantaneous contact		1
Ampacity / of the semiconductor output • at DC-13 / at 240 V • at AC-14 / at 240 V / at 50/60 Hz	mA mA	20 20
Residual current / of the semiconductor output / maximum	mA	0.035
Number of CO contacts • for auxiliary contacts		1
Operating current / of the auxiliary contacts • at AC-15		

- at 24 V
- at 230 V
- at 400 V
- at DC-13
 - at 24 V
 - at 125 V
 - at 250 V

A	3
A	3
A	3
A	1
A	0.2
A	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
Spacing required		
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	0
• with side-by-side mounting	mm	10
• with side-by-side mounting	mm	0
Spacing required		
• for grounded parts	mm	10
• for grounded parts	mm	0
• for grounded parts	mm	10
• for grounded parts	mm	10
• for grounded parts	mm	10
Spacing required		
• for live parts	mm	10
• for live parts	mm	0
• for live parts	mm	10
• for live parts	mm	10
• for live parts	mm	10

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 • removable terminal for auxiliary and control circuit		No
		Yes
Type of connectable conductor cross-section • for main contacts <ul style="list-style-type: none"> • solid • stranded • finely stranded <ul style="list-style-type: none"> • with core end processing • for AWG conductors / for main contacts • for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with core end processing • for AWG conductors / for auxiliary contacts		2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) 2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²) 2x (18 ... 2), 1x (18 ... 1) 1x (0.5 ... 4 mm ²), 2x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) 2x (20 ... 14)
Tightening torque • with screw-type terminals	N·m	0.8 ... 1.2

Certificates/approvals:

Certificate of suitability

CE / UL / CSA

General Product Approval



UL/CSA ratings:

Contact rating / of the auxiliary contacts / acc. to UL

B300 / R300

Further information:

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

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

Industry Mall (Online ordering system)

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

Cax online generator:

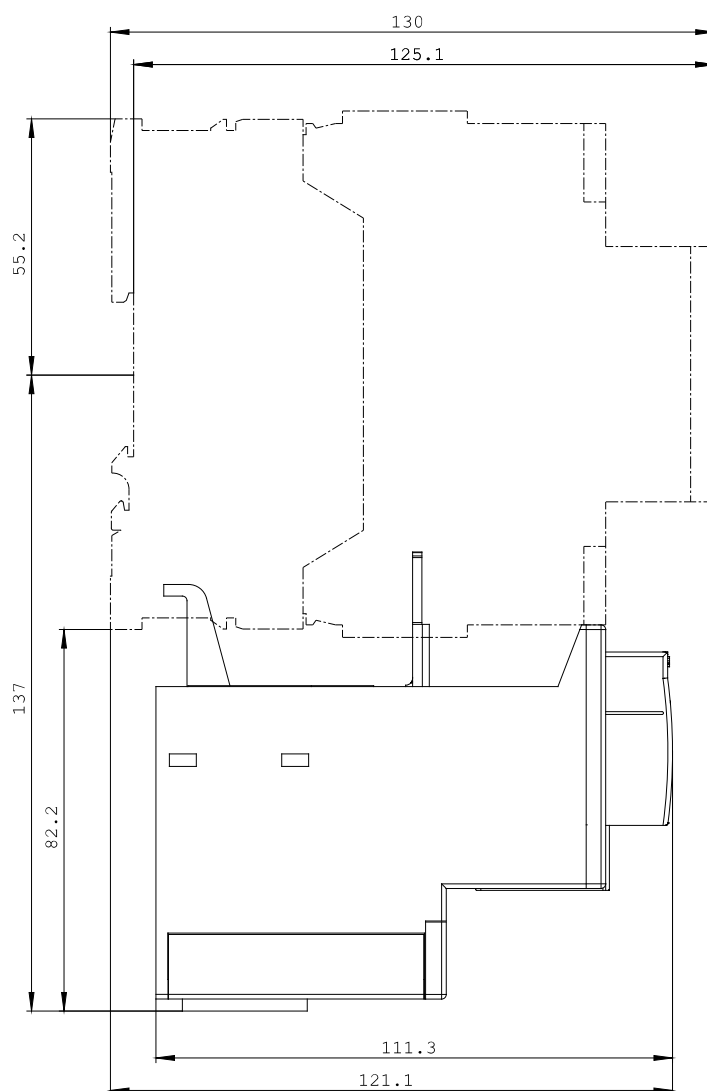
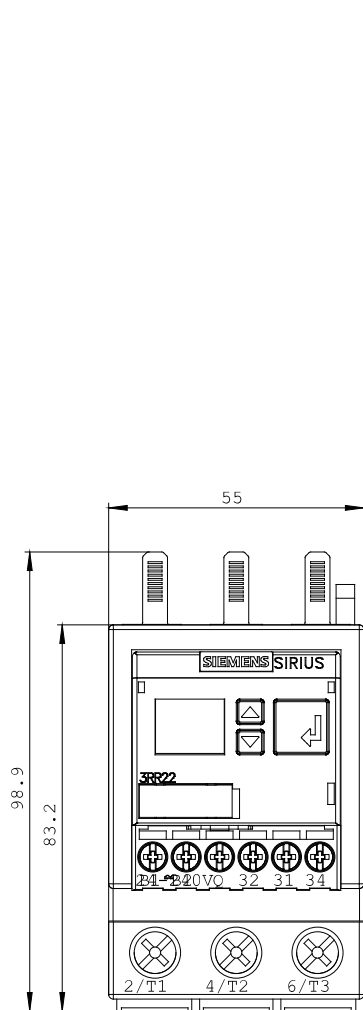
<http://www.siemens.com/cax>

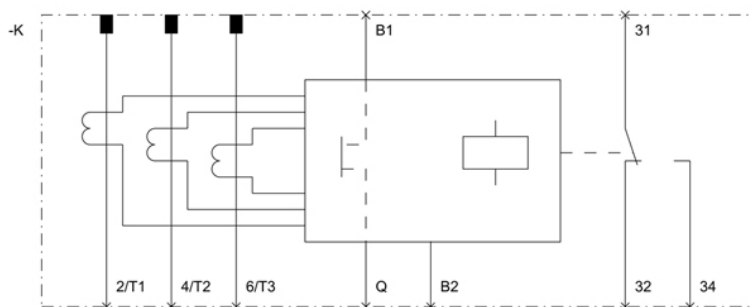
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RR2243-1FW30/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RR2243-1FW30





last change:

Dec 3, 2014