



CURRENT MONITORING RELAY MOUNTABLE ON CONT.
3RT2,
SZ. S2,
APPARENT/ACTIVE CURR. MONIT. 8 - 80A,
20-400 HZ, 3-PH., SUPPLY 24 V DC,
1 CO CONTACT,
MONITORING F. CURRENT OVER-/UNDERSHOOT,
CURRENT ASYMMETRY,
PHASE FAILURE / WIRE BREAK,
PHASE SEQUENCE, FAULT CURRENT,
BLOCKING CURRENT,
SWITCHING CYCLE/OP. HOURS COUNTER,
WARNING/ALARM THRESHOLDS,
AUTO OR MANUAL RESET ON-DELAY 0-999.9 S OFF-
DELAY 0-999.9 S RECLOSING DELAY 0-999.9MIN
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 <ul style="list-style-type: none"> on the front of the terminal 		IP20 IP00
Insulation voltage / for overvoltage category III according to IEC 60664 / with degree of pollution 3 <ul style="list-style-type: none"> Rated value 	V	690
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature <ul style="list-style-type: none"> during storage during operation 	°C °C	-40 ... +80 -25 ... +60
Electromagnetic compatibility		IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
EMI immunity <ul style="list-style-type: none"> acc. to IEC 60947-1 		ambience A (industrial sector)
EMC emitted interference <ul style="list-style-type: none"> 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	2.5
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 ... 999.9 0 ... 999.9
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 Yes 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		DC
Supply voltage / 1 • for DC / Rated value • for DC	V V	24 18 ... 30

Auxiliary circuit:

Circuit principle / of the output relay		closed-circuit current / open-circuit current
Operating current / at 17 V / minimum	mA	5
Number of CO contacts • for auxiliary contacts		1
Operating current / of the auxiliary contacts • at AC-15 • at 24 V • at 230 V • at DC-13 • at 24 V • at 125 V • at 250 V	A A A A A A	3 3 1 0.2 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		No
• removable terminal for auxiliary and control circuit		Yes
Type of connectable conductor cross-section		
• for main contacts		
• solid		2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
• stranded		2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²)
• finely stranded		
• with core end processing		2x (1 ... 25 mm ²), 1x (1 ... 35 mm ²)
• for AWG conductors / for main contacts		2x (18 ... 2), 1x (18 ... 1)
• for auxiliary contacts		

- solid
- finely stranded
 - with core end processing
- for AWG conductors / for auxiliary contacts

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
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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:

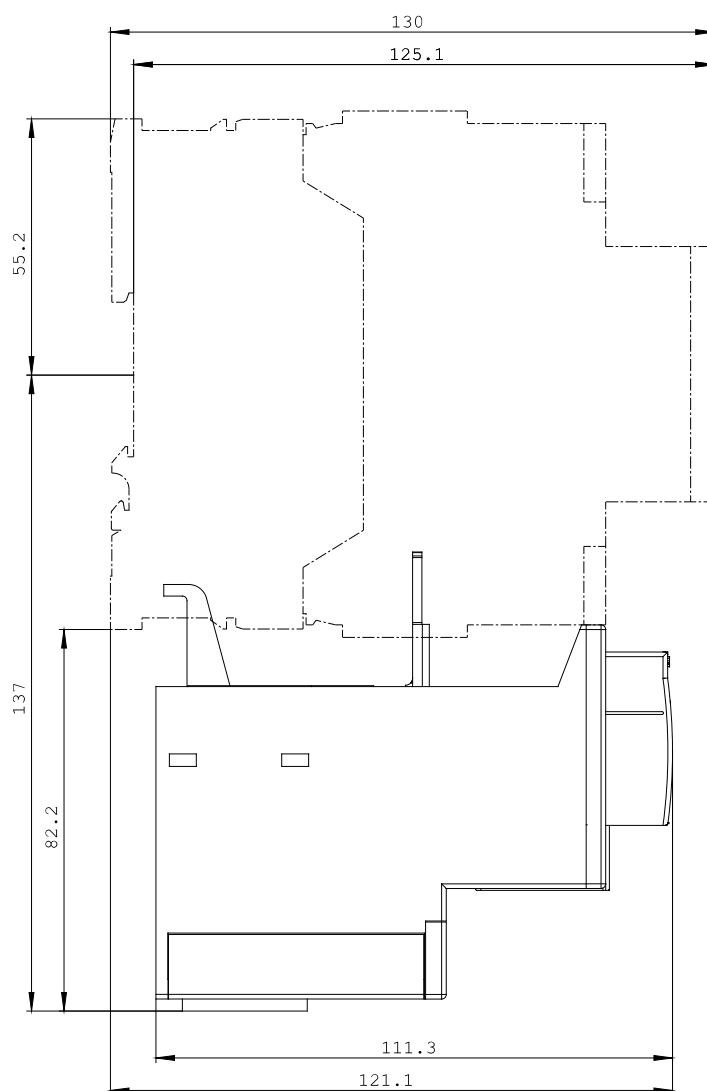
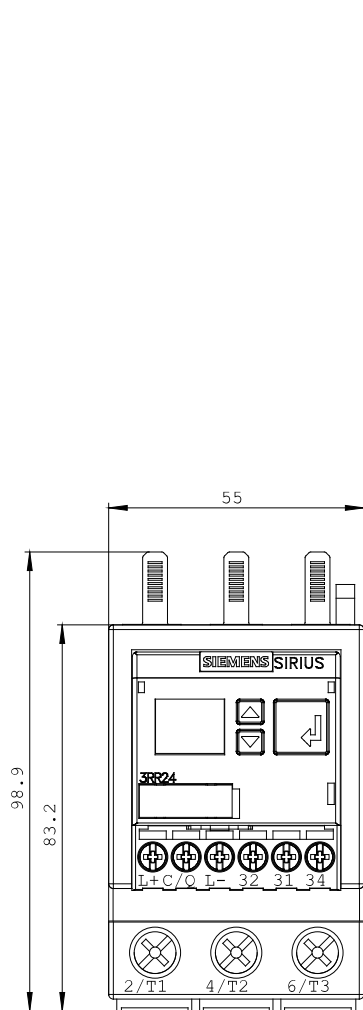
<http://www.siemens.com/cax>

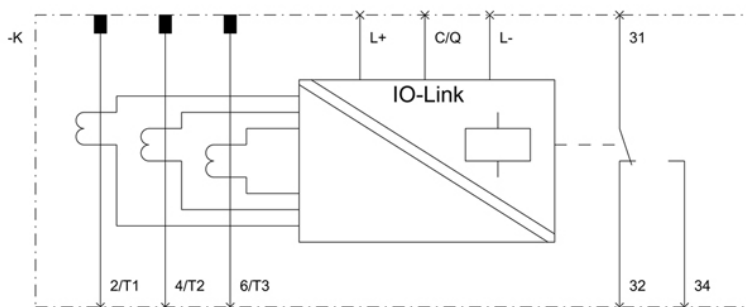
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RR2443-1AA40/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RR2443-1AA40





last change:

Dec 3, 2014