SIEMENS

Product data sheet 3RR2443-3AA40

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
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 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	2.5
Operating power / Rated value	W	2.5
Reference code		
• acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750		K
• acc. to DIN EN 61346-2		K
Mechanical service life (switching cycles)		
• typical		10,000,000
Electrical endurance (switching cycles) / at AC-15 / at 230 V		
• typical		100,000
Accuracy of digital display		+/-1 digit
Adjustable response delay time		
• when starting	s	0 ... 999.9
• with lower or upper limit violation	s	0 ... 999.9
Stand-by time / for restart after fault	s	0.2
Phase number		3
Number of monitored phases		3
Product function		
• Overcurrent monitoring		Yes
• Undercurrent monitoring		Yes
• Overcurrent and undercurrent monitoring		Yes
• Apparent current monitoring		Yes
• active current monitoring		Yes
• undercurrent detection DC		No
• undercurrent detection 1 phase		No
• Overcurrent detection DC		No
• Current window recognition DC		No
• undercurrent detection 3 phases		Yes
• Overcurrent detection 1 phase		No
• Voltage window recognition 3 phase		No
• Voltage window recognition 1 phase		No
• phase sequence recognition		Yes
• can be activated or deactivated / phase sequence recognition		Yes
• Auto-reset		Yes
• External reset		Yes
• Manual RESET		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	A	80
• for overcurrent duration < 1 s / maximum permissible	A	1,600

Supply voltage:

Type of voltage / of the supply voltage		DC
Supply voltage / 1		
• for DC / Rated value	V	24
• for DC	V	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	A	3
• at 230 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:		
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		spring-loaded 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 mm²), 1x (1 ... 50 mm²)
• stranded		2x (1 ... 35 mm²), 1x (1 ... 50 mm²)
• finely stranded		
• with core end processing		2x (1 ... 25 mm²), 1x (1 ... 35 mm²)
• for AWG conductors / for main contacts		2x (18 ... 2), 1x (18 ... 1)
• for auxiliary contacts		

• solid		1x (0.5 ... 4 mm²), 2x (0.5 ... 2.5 mm²)
• finely stranded		
• with core end processing		2x (0.25 ... 1.5 mm²)
• without core end processing		2x (0.25 ... 1.5 mm²)
• for AWG conductors / for auxiliary contacts		2x (24 ... 16)
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:

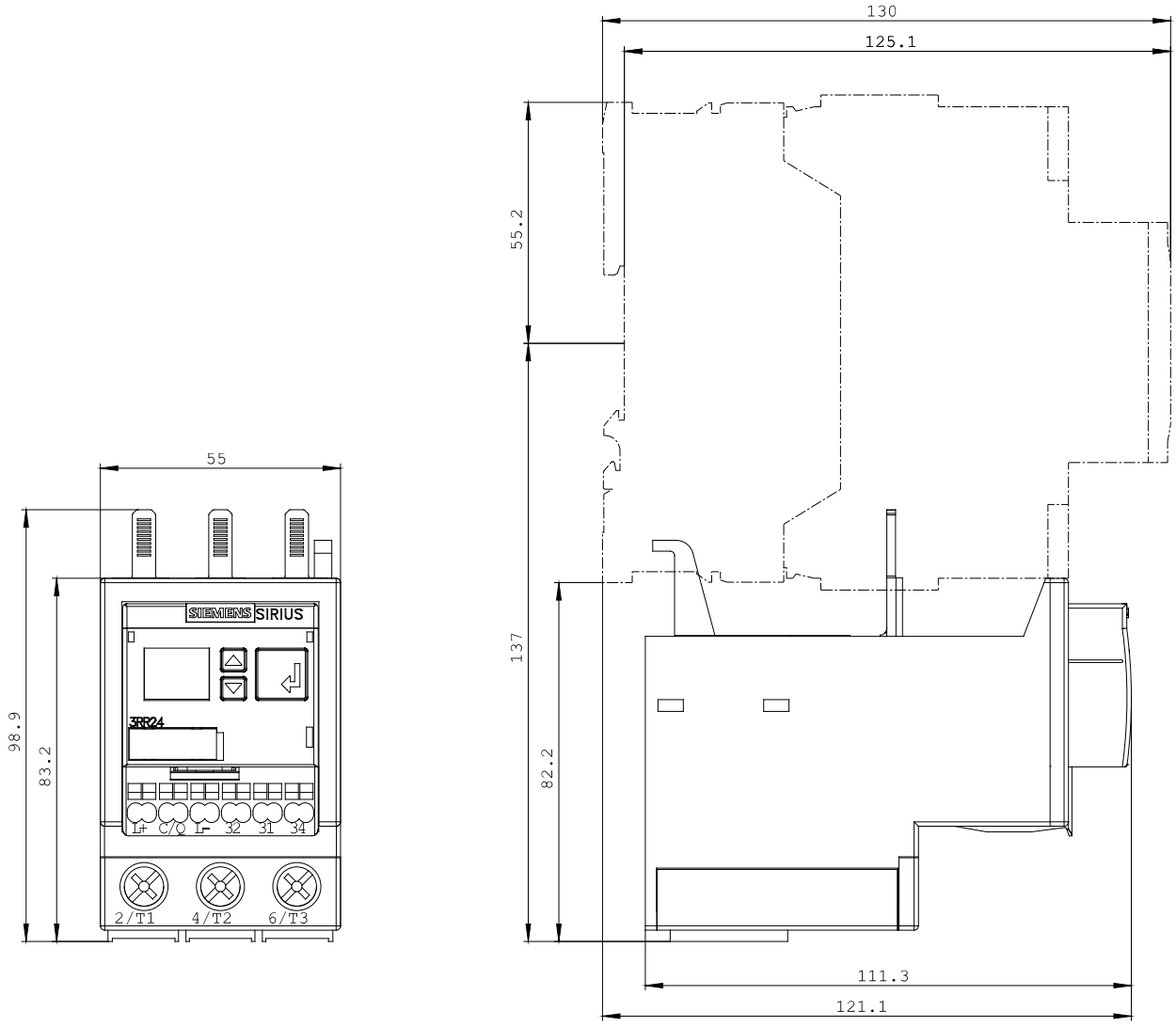
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

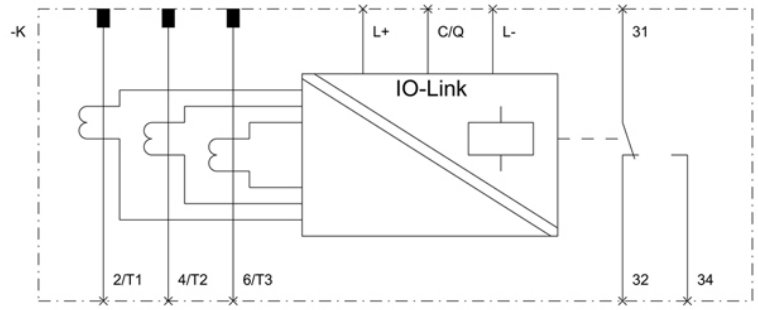
Industry Mall (Online ordering system)
http://www.siemens.com/industrial-controls/mall

Cax online generator:
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
http://support.automation.siemens.com/WW/view/en/3RR2443-3AA40/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RR2443-3AA40





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