



REV. COMB.,AC3,18.5KW/400V AC220V 50HZ/240V 60HZ
3-POLE,
SZ S0 SCREW TERMINAL ELECTR. AND MECH.
INTERLOCK 2NO INTEGR.

General technical data:

product brand name	SIRIUS	
product designation	star-delta (wye-delta) contactor assembly 3RA24	
Product function	reversing contactor	
Size of the contactor	S0	
Protection class IP / on the front	IP20	
Degree of pollution	3	
Insulation voltage / with degree of pollution 3 / rated value	V	690
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during transport	°C	-55 ... +80
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Resistance against shock	12.5g / 5 ms and 7.8g / 10 ms	
Impulse voltage resistance / rated value	kV	6
Active power loss / per conductor / typical	W	1.6
Item designation		
• according to DIN 40719 extendable after IEC 204-2 / according to IEC 750	K	
• according to DIN EN 61346-2	Q	

Manufacturer article number		
• 1 / of the contactor included in the scope of supply		3RT2028-1AL20
• 2 / of the contactor included in the scope of supply		3RT2028-1AL20
• of the RS applied assembly kit		3RA2923-2AA1
Mechanical operating cycles as operating time		
• of the main contacts / typical		10,000,000
• of the auxiliary contacts / typical		10,000,000
• of the contactor / typical		10,000,000
• of the contactor with added auxiliary switch block / typical		10,000,000

Communication:		
Product function		
• bus-communication		No
• control circuit interface with IO link		No
Protocol / will be supported / AS interface protocol		No

Main circuit:			
Number of poles / for main current circuit			3
Number of NC contacts / for main contacts			0
Number of NO contacts / for main contacts			3
Operating voltage / at AC-3 / rated value / maximum	V		690
Operating current			
• at AC-1 / at 400 V			
• at 40 °C ambient temperature / rated value	A		50
• at 60 °C ambient temperature / rated value	A		45
• at AC-2 / at 400 V / rated value	A		38
• at AC-3 / at 400 V / rated value	A		38
• at AC-4 / at 400 V / rated value	A		18.5
• with 1 current path / at DC-1			
• at 24 V / rated value	A		35
• at 110 V / rated value	A		4.5
• with 2 current paths in series / at DC-1			
• at 24 V / rated value	A		35
• at 110 V / rated value	A		35
• with 3 current paths in series / at DC-1			
• at 24 V / rated value	A		35
• at 110 V / rated value	A		35
• with 1 current path / at DC-3 / at DC-5			
• at 24 V / rated value	A		20
• at 110 V / rated value	A		2.5

• with 2 current paths in series / at DC-3 / at DC-5			
• at 24 V / rated value	A	35	
• at 110 V / rated value	A	15	
• with 3 current paths in series / at DC-3 / at DC-5			
• at 24 V / rated value	A	35	
• at 110 V / rated value	A	35	
Service power			
• at AC-2 / at 400 V / rated value	kW	18.5	
• at AC-3			
• at 400 V / rated value	kW	18.5	
• at 500 V / rated value	kW	22	
• at 690 V / rated value	kW	18.5	
• at AC-4 / at 400 V / rated value	kW	9.5	
Off-load operating frequency	1/h	15	
Frequency of operation			
• at AC-1 / according to IEC 60947-6-2 / maximum	1/h	1,000	
• at AC-2 / according to IEC 60947-6-2 / maximum	1/h	1,000	
• at AC-3 / according to IEC 60947-6-2 / maximum	1/h	1,000	
• at AC-4 / according to IEC 60947-6-2 / maximum	1/h	300	

Control circuit:		
Design of activation		conventional
Type of voltage / of the controlled supply voltage		AC
Control supply voltage frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Control supply voltage / 1		
• at 50 Hz / for AC / rated value	V	220
• at 60 Hz / for AC / rated value	V	240
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz / for AC		0.8 ... 1.1
• at 60 Hz / for AC		0.8 ... 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	77
Apparent holding power / of the solenoid / for AC	V·A	9.8
Inductive power factor		
• with the pull-in power of the coil		0.82
• with the pull-in power of the coil		0.27

Auxiliary circuit:	
Product extension / auxiliary switch	Yes

Contact reliability / of the auxiliary contacts		< 1 error per 100 million operating cycles	
Number of NC contacts / for auxiliary contacts			
• per direction of rotation		0	
• instantaneous switching		0	
• lagging switching		0	
Number of NO contacts / for auxiliary contacts			
• per direction of rotation		0	
• instantaneous switching		0	
• leading switching		0	
Operating current / of the auxiliary contacts			
• at AC-12 / maximum	A	10	
• at AC-15			
• at 230 V	A	6	
• at 400 V	A	3	
• at DC-12			
• at 48 V	A	6	
• at 60 V	A	6	
• at 110 V	A	3	
• at 220 V	A	1	
• at DC-13			
• at 24 V	A	10	
• at 48 V	A	2	
• at 60 V	A	2	
• at 110 V	A	1	
• at 220 V	A	0.3	

Short-circuit:

Design of the fuse link

- for short-circuit protection of the main circuit
 - with type of assignment 1 / required
 - at type of coordination 2 / required
 - for short-circuit protection of the auxiliary switch / required
- gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 100 A
- gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 35 A
- fuse gL/gG: 10 A

Installation/mounting/dimensions:

Built in orientation		any
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail
Width	mm	90
Height	mm	101
Depth	mm	97

Distance, to be maintained, to the ranks assembly		
• forwards	mm	6
• backwards	mm	0
• upwards	mm	6
• downwards	mm	6
• sideways	mm	6
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
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
• stranded		2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
• finely stranded		2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• with conductor end processing		
• for AWG conductors / for main contacts		2x (16 ... 12), 2x (14 ... 8)
• for auxiliary contacts		
• solid		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• finely stranded		
• with conductor end processing		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors / for auxiliary contacts		2x (20 ... 16), 2x (18 ... 14)

Certificates/approvals:

Verification of suitability	CE / UL / CSA / CCC
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General Product Approval	Declaration of Conformity	Test Certificates
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GOST



EG-Konf.

[Special Test Certificate](#)

Shipping Approval



ABS



DNV



GL



LRS



PRIS



RINA

Shipping Approval



RMRS

UL/CSA ratings

yielded mechanical performance (hp)

• for single-phase squirrel cage motors	hp	3
• at 110/120 V / rated value	hp	5
• at 230 V / rated value	hp	10
• for three-phase squirrel cage motors	hp	25
• at 220/230 V / rated value	hp	25
• at 460/480 V / rated value	hp	25
• at 575/600 V / rated value	hp	25

Operating current (FLA) / for three-phase squirrel cage motors

• at 480 V / rated value	A	34
• at 600 V / rated value	A	27

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

Safety:

B10 value / with high demand rate

• according to SN 31920		1,000,000
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Failure rate (FIT value) / with low demand rate

• according to SN 31920	FIT	100
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Proportion of dangerous failures

• with low demand rate / according to SN 31920	%	40
• with high demand rate / according to SN 31920	%	75

T1 value / for proof test interval or service life

• according to IEC 61508	a	20
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Protection against electrical shock

finger-safe

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

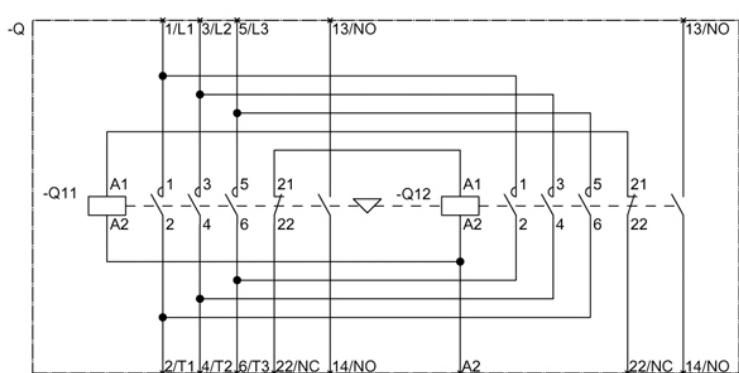
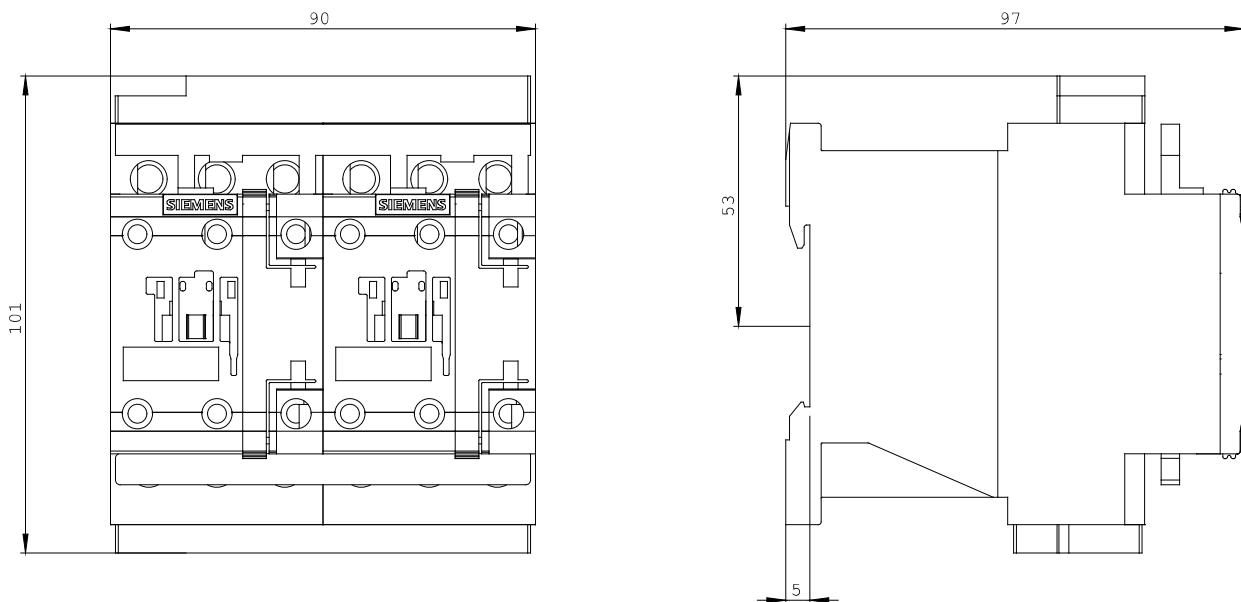
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RA2328-8XB30-1AP6/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA2328-8XB30-1AP6



last change:

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