



4NO CONTACTOR, AC1: 50A DC 110V 50HZ,
120V 60HZ 4-POLE, 4NO, SZ: S0,
SCREW TERMINAL 1NO+1NC INTEGR.

General technical data:

product brand name	SIRIUS	
Size of the contactor	S0	
Product extension / auxiliary switch	Yes	
Protection class IP / on the front	IP20	
Protection against electrical shock	finger-safe	
Degree of pollution	3	
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature		
• during storage	°C	-55 ... +80
• during operating	°C	-25 ... +60
Shock resistance		
• at rectangular impulse		
• at AC		
• at sine pulse	8,3g / 5 ms, 5,3g / 10 ms	
• at AC	13,5g / 5 ms, 8,3g / 10 ms	
Impulse voltage resistance / rated value	kV	6
Insulation voltage / rated value	V	690
Mechanical operating cycles as operating time		
• of the contactor / typical	10,000,000	

• of the contactor with added auxiliary switch block / typical		10,000,000
• of the contactor with added electronics-compatible auxiliary switch block / typical		5,000,000
Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		4
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	42
• at AC-2 / at 400 V / rated value	A	17
• at AC-3 / at 400 V / rated value	A	15.5
• at AC-4 / at 400 V / rated value	A	15.5
Operating current		
• 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	9
• at AC-3 / at 400 V / rated value	kW	7.5
• at AC-4 / at 400 V / rated value	kW	7.5
Active power loss / per conductor / typical		
Off-load operating frequency		
• at AC	1/h	5,000

• at DC	1/h	1,500
Frequency of operation / at AC-1 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-2 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	1,000
Frequency of operation / at AC-4 / according to IEC 60947-6-2	1/h	300

Control circuit:		
Design of the surge suppressor		with varistor
Type of voltage / of the controlled supply voltage		AC
Control supply voltage / 1		
• at 50 Hz / for AC / rated value	V	110
• at 60 Hz / for AC / rated value	V	120
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		0.85 ... 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	87
Apparent holding power / of the solenoid / for AC	V·A	9.8
Closing delay		
• at AC	ms	8 ... 40
Opening delay		
• at AC	ms	4 ... 16
Arcing time	ms	10 ... 10

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		1
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Operating current / of the auxiliary contacts		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V	A	10
• 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 auxiliary switch / required
- for short-circuit protection of the main circuit
 - with type of assignment 1 / required
 - at type of coordination 2 / required

fuse gL/gG: 10 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25A

Installation/mounting/dimensions:

mounting position		+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Type of mounting		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
Type of fixing/fixation / series installation		Yes
Width	mm	45
Height	mm	85
Depth	mm	97
Distance, to be maintained, to the ranks assembly / sideways	mm	0
Distance, to be maintained, to earthed part / sideways	mm	6

Connections:

Design of the electrical connection		screw-type terminals
• for main current circuit		screw-type terminals
• for auxiliary and control current circuit		
Type of the connectable conductor cross-section		
• for main contacts		2x (1 ... 2.5 mm ²), 2x (2.5 ... 10 mm ²)
• solid		
• finely stranded		
• with conductor end processing		2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ²
• for AWG conductors / for main contacts		2x (16 ... 12), 2x (14 ... 8)
• for auxiliary contacts		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• solid		
• 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:

General Product Approval

Declaration of Conformity



CCC



CSA



GOST



UL



EG-Konf.

Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



ABS



DNV



GL



LRS



PRS



RINA

Shipping Approval

other



RMRS

[Confirmation](#)



VDE

UL/CSA ratings:

yielded mechanical performance (hp)

• for single-phase squirrel cage motors	hp	1
• at 110/120 V / rated value	hp	3
• at 230 V / rated value	hp	3
• for three-phase squirrel cage motors	hp	5
• at 200/208 V / rated value	hp	10
• at 220/230 V / rated value	hp	10
• at 460/480 V / rated value	hp	15
• at 575/600 V / rated value	hp	15

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

• at 480 V / rated value	A	14
• at 600 V / rated value	A	17

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

Sicherheitsrelevante Kenngrößen:

B10 value / with high demand rate

• according to SN 31920		1,000,000
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T1 value / for proof test interval or service life

• according to IEC 61508	a	20
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Proportion of dangerous failures

• with low demand rate / according to SN 31920	%	40
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• with high demand rate / according to SN 31920	%	73
Failure rate (FIT value) / with low demand rate		
• according to SN 31920	FIT	100
Product function		
• mirror contact to IEC 60947-4-1		Yes
• positively driven operation to IEC 60947-5-1		No

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:

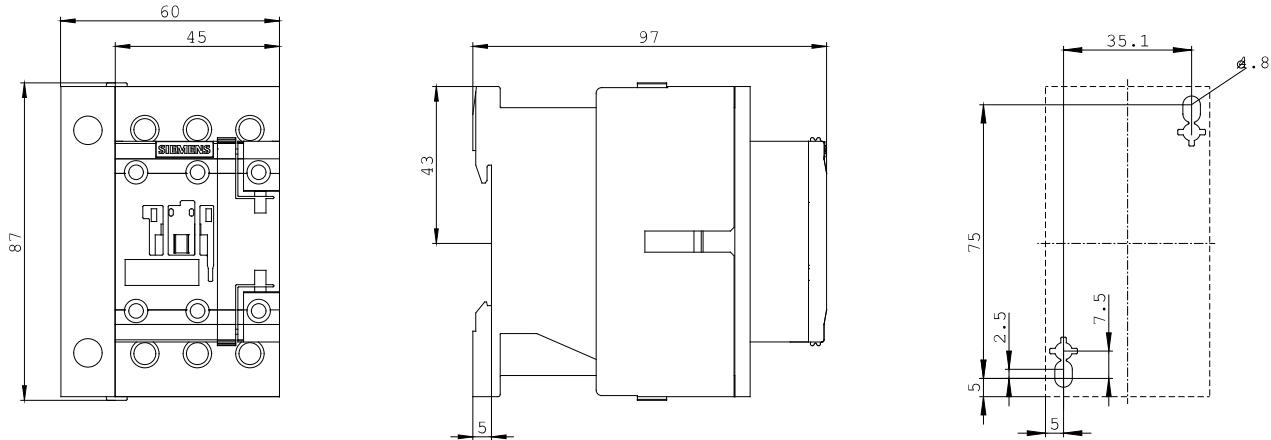
<http://www.siemens.com/cax>

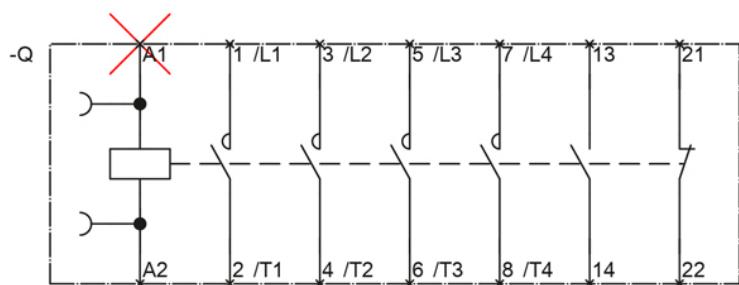
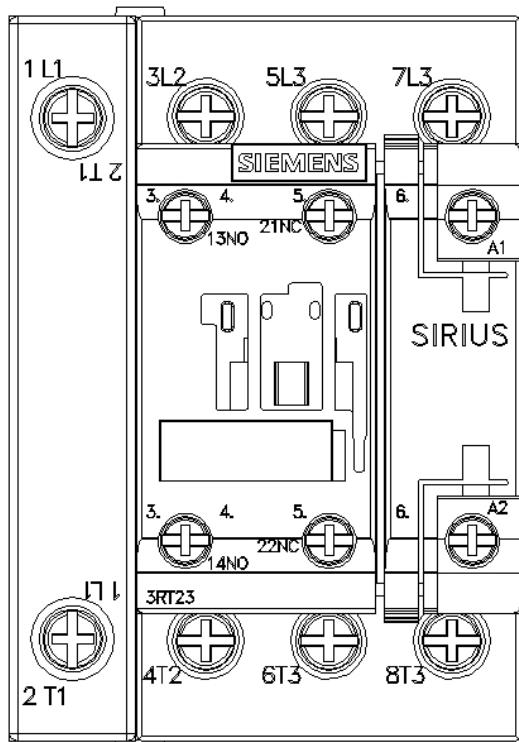
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2327-1AK60/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2327-1AK60





last change:

Jul 26, 2012