



CONTACTOR, AC-3, 4KW/400V, 1NC, DC 24V,
3-POLE, SZ S00 SCREW TERMINAL

General technical data:

product brand name		SIRIUS
Size of the contactor		S00
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 DC		6,7g / 5 ms, 4,2g / 10 ms
• at sine pulse		
• at DC		10,5g / 5 ms, 6,6g / 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		30,000,000

- of the contactor with added auxiliary switch block / typical
- of the contactor with added electronics-compatible auxiliary switch block / typical

10,000,000

5,000,000

Main circuit:**Number of NC contacts / for main contacts**

0

Number of NO contacts / for main contacts

3

Operating current

- at AC-1 / at 400 V

- at 40 °C ambient temperature / rated value

A 22

- at 60 °C ambient temperature / rated value

A 20

- at AC-2 / at 400 V / rated value

A 9

- at AC-3 / at 400 V / rated value

A 9

- at AC-4 / at 400 V / rated value

A 8.5

Operating current

- with 1 current path / at DC-1

- at 24 V / rated value

A 20

- at 110 V / rated value

A 2.1

- with 2 current paths in series / at DC-1

- at 24 V / rated value

A 20

- at 110 V / rated value

A 12

- with 3 current paths in series / at DC-1

- at 24 V / rated value

A 20

- at 110 V / rated value

A 20

- with 1 current path / at DC-3 / at DC-5

- at 24 V / rated value

A 20

- at 110 V / rated value

A 0.1

- with 2 current paths in series / at DC-3 / at DC-5

- at 24 V / rated value

A 20

- at 110 V / rated value

A 0.35

- with 3 current paths in series / at DC-3 / at DC-5

- at 24 V / rated value

A 20

- at 110 V / rated value

A 20

Service power

- at AC-2 / at 400 V / rated value

kW 4

- at AC-3 / at 400 V / rated value

kW 4

- at AC-4 / at 400 V / rated value

kW 4

Active power loss / per conductor / typical

W 0.7

Off-load operating frequency

- at AC

1/h 10,000

• at DC	1/h	10,000
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	750
Frequency of operation / at AC-3 / according to IEC 60947-6-2	1/h	750
Frequency of operation / at AC-4 / according to IEC 60947-6-2	1/h	250

Control circuit:

Type of voltage / of the controlled supply voltage		DC
Control supply voltage / 1		
• for DC / rated value	V	24
Operating range factor control supply voltage rated value / of the magnet coil		
• for DC		0.8 ... 1.1
Pull-in power / of the solenoid / for DC	W	4
Holding power / of the solenoid / for DC	W	4
Closing delay		
• at DC	ms	30 ... 100
Opening delay		
• at DC	ms	7 ... 13
Arcing time	ms	10 ... 15

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		0
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
- at 220 V

A	1
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: 35 A

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 20A

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 57.5

Depth

mm 73

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

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

Type of the connectable conductor cross-section

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

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 2x 12

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

2x (20 ... 16), 2x (18 ... 14), 2x 12

Certificates/approvals:

General Product Approval

Declaration of Conformity



Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



Shipping Approval other



[Confirmation](#)



UL/CSA ratings:

yielded mechanical performance (hp)

• for single-phase squirrel cage motors		
• at 110/120 V / rated value	hp	0.33
• at 230 V / rated value	hp	1
• for three-phase squirrel cage motors		
• at 200/208 V / rated value	hp	2
• at 220/230 V / rated value	hp	3
• at 460/480 V / rated value	hp	5
• at 575/600 V / rated value	hp	7.5

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

• at 480 V / rated value	A	7.6
• at 600 V / rated value	A	9

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
• with high demand rate / according to SN 31920	%	73

Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT	100
	Yes
	No

Product function

- mirror contact to IEC 60947-4-1
- positively driven operation to IEC 60947-5-1

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:

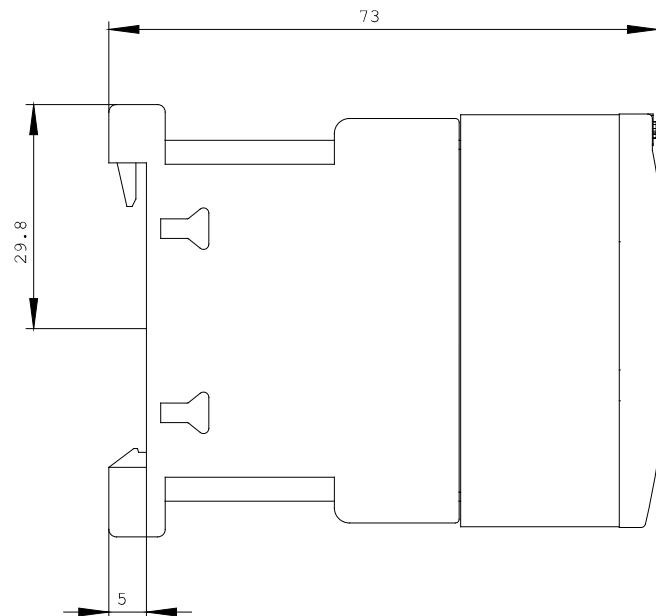
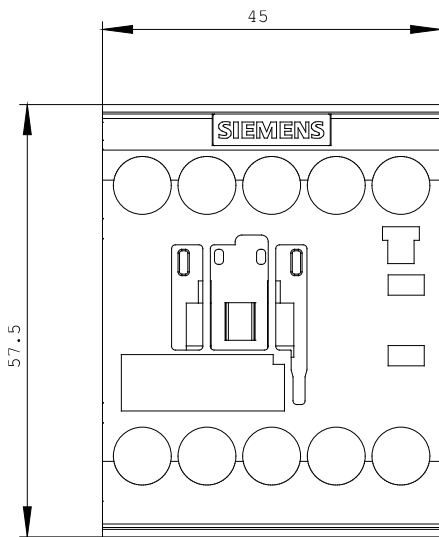
<http://www.siemens.com/cax>

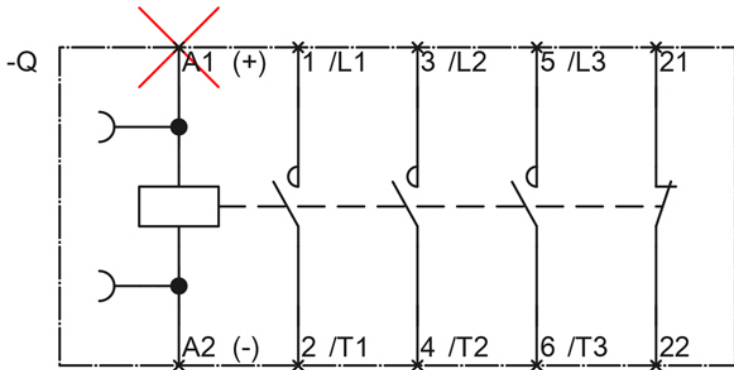
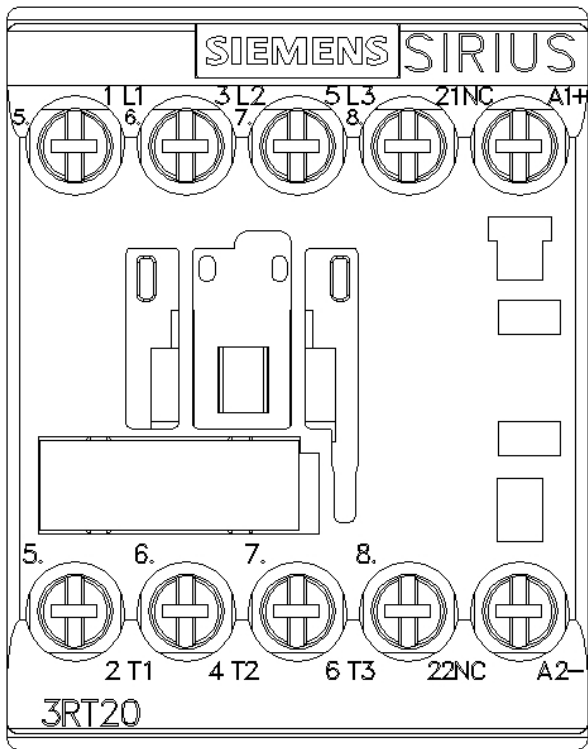
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2016-1BB42/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2016-1BB42





last change:

Jul 26, 2012