



CONTACTOR, AC-3, 7.5KW/400V, 1NO,  
DC 24V, 3-POLE, SZ S00 SCREW TERMINAL .

#### General technical data:

<b>Product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S00
<b>Product extension / auxiliary switch</b>		Yes
<b>Protection class IP / on the front</b>		IP20
<b>Protection against electrical shock</b>		finger-safe
<b>Degree of pollution</b>		3
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature / during storage</b>	°C	-55 ... +80
<b>Ambient temperature / during operating</b>	°C	-25 ... +60
<b>Shock resistance</b>		
<ul style="list-style-type: none"> <li>• at rectangular impulse                             <ul style="list-style-type: none"> <li>• at DC</li> </ul> </li> <li>• at sine pulse                             <ul style="list-style-type: none"> <li>• at DC</li> </ul> </li> </ul>		7.3g / 5 ms, 4.7g / 10 ms
		11,4g / 5 ms, 7,3g / 10 ms
<b>Impulse voltage resistance / rated value</b>	kV	6
<b>Insulation voltage / rated value</b>	V	690
<b>Mechanical operating cycles as operating time</b>		
<ul style="list-style-type: none"> <li>• of the contactor / typical</li> </ul>		30,000,000
<ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block / typical</li> </ul>		10,000,000

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

5,000,000

### Main circuit:

<b>Number of NC contacts / for main contacts</b>		0
<b>Number of NO contacts / for main contacts</b>		3
<b>Operating current</b>		
• 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	16
• at AC-3 / at 400 V / rated value	A	16
• at AC-4 / at 400 V / rated value	A	11.5
<b>Operating current</b>		
• 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
<b>Service power</b>		
• at AC-2 / at 400 V / rated value	kW	7.5
• at AC-3 / at 400 V / rated value	kW	7.5
• at AC-4 / at 400 V / rated value	kW	5.5
<b>Active power loss / per conductor / typical</b>	W	2.2
<b>Off-load operating frequency</b>		
• 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
Working range factor 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		0
Number of NO contacts / for auxiliary contacts / instantaneous switching		1
Operating current / of the auxiliary contacts • at AC-12 / maximum • at AC-15 • at 230 V • at 400 V • at DC-12 • at 48 V • at 60 V • at 110 V • at 220 V • at DC-13 • at 24 V • at 48 V • at 60 V • at 110 V	A	10  6 3  6 6 3 1  6 2 2 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: 35 A

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

### Installation/mounting/dimensions:

#### Built in orientation

vertical

#### 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 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>), 2x 4 mm<sup>2</sup>

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

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

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>), 2x 4 mm<sup>2</sup>

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

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

### Certificates/approvals:

**General Product Approval**



CQC



CSA

[ROSTEST](#)



UL

**Test Certificates**

[Manufacturer](#)

[other](#)

**Shipping Approval**



ABS



DNV



GL



LRS



PRS



RINA

**Shipping Approval** [other](#)



RMRS

[Manufacturer](#)



VDE

**UL/CSA ratings:**

**yielded mechanical performance (hp)**

- for single-phase squirrel cage motors
  - at 110/120 V / rated value
  - at 230 V / rated value
- for three-phase squirrel cage motors
  - at 200/208 V / rated value
  - at 220/230 V / rated value
  - at 460/480 V / rated value
  - at 575/600 V / rated value

hp	1
hp	2
hp	3
hp	5
hp	10
hp	10

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

- at 480 V / rated value
- at 600 V / rated value

A	14
A	11

**Contact rating designation / for auxiliary contacts / according to UL**

A600 / Q600

**Safety:related Parameter:**

**B10 value / with high demand rate**

- according to SN 31920

1,000,000

**T1 value / for proof test interval or service life**

- according to IEC 61508

a 20

**Proportion of dangerous failures**

- with low demand rate / according to SN 31920
- with high demand rate / according to SN 31920

% 40  
% 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

- comment
- positively driven operation to IEC 60947-5-1

with 3RH29

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:

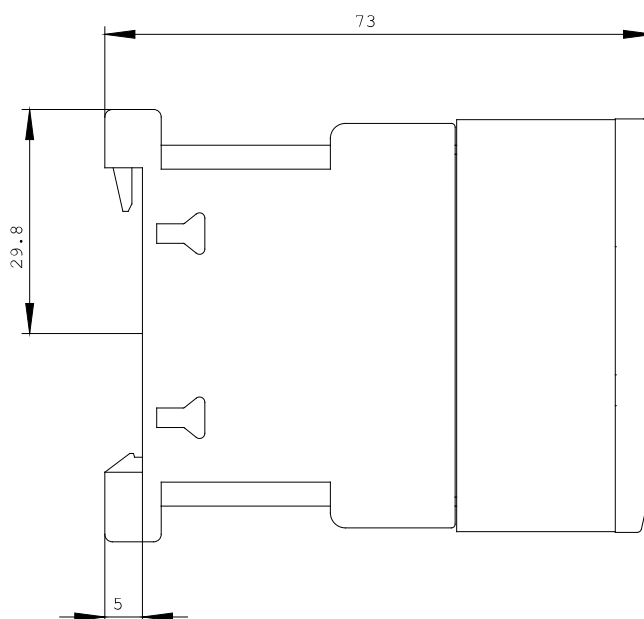
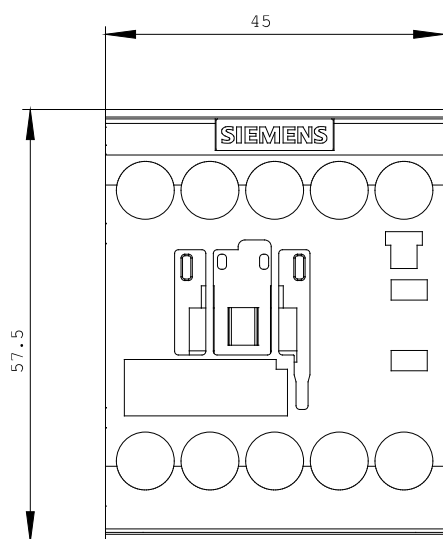
<http://www.siemens.com/cax>

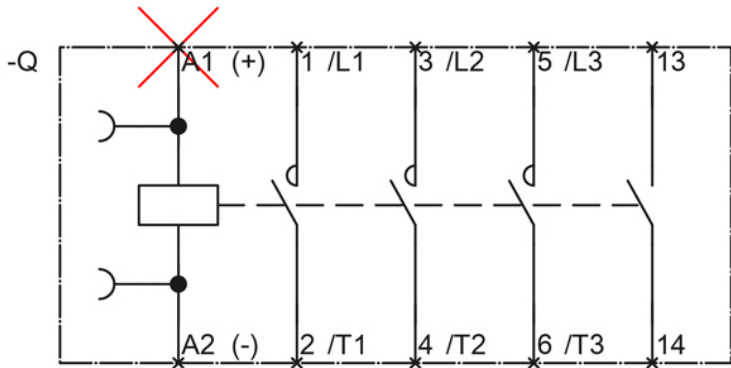
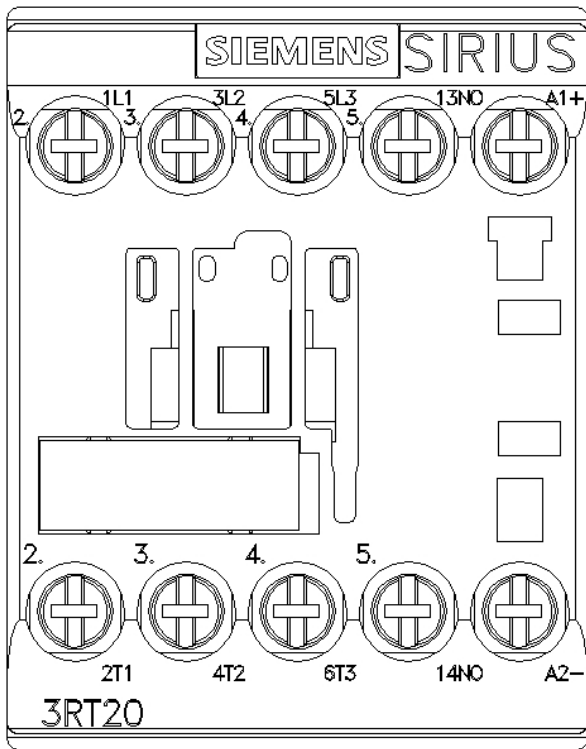
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RT2018-1BB41/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2018-1BB41](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2018-1BB41)





last change:

Nov 30, 2011