

CONTACTOR, AC-3, 7.5KW/400V, 1NO+1NC,  
DC 24V, COM. CAPABILITY, 3-POLE,  
SZ S0 SPRING-LOADED TERMINAL

## General technical data:

<b>Product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S0
<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>		10g / 5 ms, 7,5g / 10 ms
		15g / 5 ms, 10g / 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>		10,000,000
<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:****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 40

- at 60 °C ambient temperature / rated value

A 35

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

A 17

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

A 17

- 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 7.5

- 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**

W 0.9

**Off-load operating frequency**

- at AC

1/h 5,000

- at DC

1/h 1,500

<b>Frequency of operation</b>		
• 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

<b>Control circuit:</b>		
<b>Type of voltage / of the controlled supply voltage</b>		DC
<b>Control supply voltage / 1</b>		
• for DC / rated value	V	24
<b>Working range factor supply voltage rated value / of the magnet coil</b>		
• for DC		0.8 ... 1.1
<b>Pull-in power / of the solenoid / for DC</b>	W	5.9
<b>Holding power / of the solenoid / for DC</b>	W	5.9
<b>Closing delay</b>		
• at DC	ms	50 ... 170
<b>Opening delay</b>		
• at DC	ms	15 ... 17.5
<b>Arcing time</b>	ms	10 ... 10

<b>Auxiliary circuit:</b>		
<b>Contact reliability / of the auxiliary contacts</b>		1 faulty switching per 100 million (17 V, 1 mA)
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		1
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		1
<b>Operating current / of the auxiliary contacts</b>		
• 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	6
• 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: 63 A

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

### 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 102

#### Depth

mm 107

#### 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

spring-loaded terminals

spring-loaded terminals

#### Type of the connectable conductor cross-section

- for main contacts
  - solid
  - stranded
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for main contacts
- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for auxiliary contacts

2x (1 ... 10 mm<sup>2</sup>)

2x (1 ... 10 mm<sup>2</sup>)

2x (1 ... 6 mm<sup>2</sup>)

2x (1 ... 6 mm<sup>2</sup>)

1x (18 ... 8)

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

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

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

2x (20 ... 14)

**Certificates/approvals:**

General Product Approval		Test Certificates	
 CQC	 CSA	<a href="#">ROSTEST</a>	 UL
Shipping Approval		<a href="#">Manufacturer</a>	<a href="#">other</a>
 ABS	 DNV	 GL	 LRS
 RMRS	<a href="#">Manufacturer</a>	 VDE	 PRS
			 RINA

**UL/CSA ratings:**

<b>yielded mechanical performance (hp)</b>		
<ul style="list-style-type: none"> <li>for single-phase squirrel cage motors                             <ul style="list-style-type: none"> <li>at 110/120 V / rated value</li> <li>at 230 V / rated value</li> </ul> </li> <li>for three-phase squirrel cage motors                             <ul style="list-style-type: none"> <li>at 200/208 V / rated value</li> <li>at 220/230 V / rated value</li> <li>at 460/480 V / rated value</li> <li>at 575/600 V / rated value</li> </ul> </li> </ul>	hp	1
	hp	3
	hp	3
	hp	5
	hp	10
	hp	15
<b>Operating current (FLA) / for three-phase squirrel cage motors</b>		
<ul style="list-style-type: none"> <li>at 480 V / rated value</li> <li>at 600 V / rated value</li> </ul>	A	14
	A	17
<b>Contact rating designation / for auxiliary contacts / according to UL</b>		A600 / Q600

**Safety-related Parameter:**

<b>B10 value / with high demand rate</b>		
<ul style="list-style-type: none"> <li>according to SN 31920</li> </ul>		1,000,000
<b>T1 value / for proof test interval or service life</b>		
<ul style="list-style-type: none"> <li>according to IEC 61508</li> </ul>	a	20
<b>Proportion of dangerous failures</b>		
<ul style="list-style-type: none"> <li>with low demand rate / according to SN 31920</li> <li>with high demand rate / according to SN 31920</li> </ul>	%	40
	%	73
<b>Failure rate (FIT value) / with low demand rate</b>		
<ul style="list-style-type: none"> <li>according to SN 31920</li> </ul>	FIT	100
<b>Product function</b>		

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

Yes
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:**

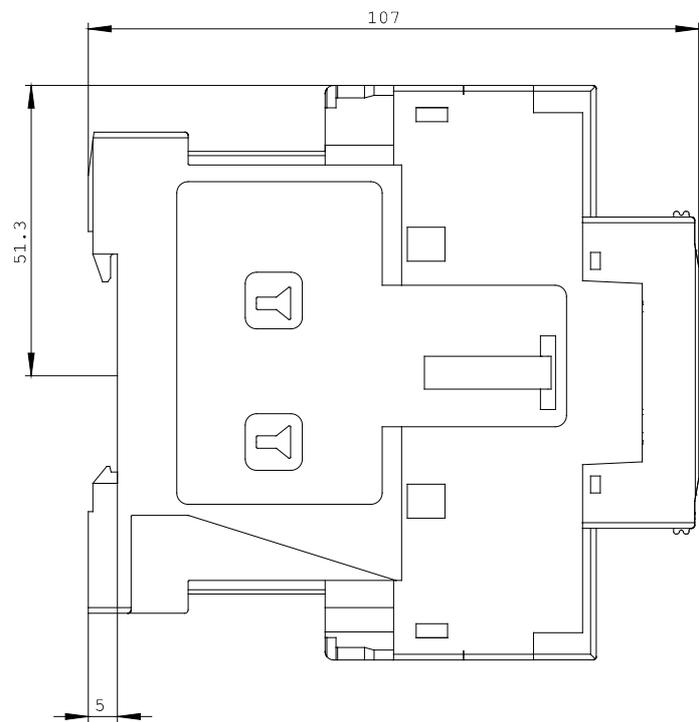
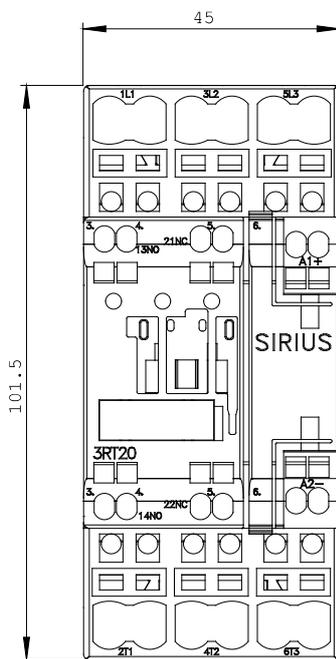
<http://www.siemens.com/cax>

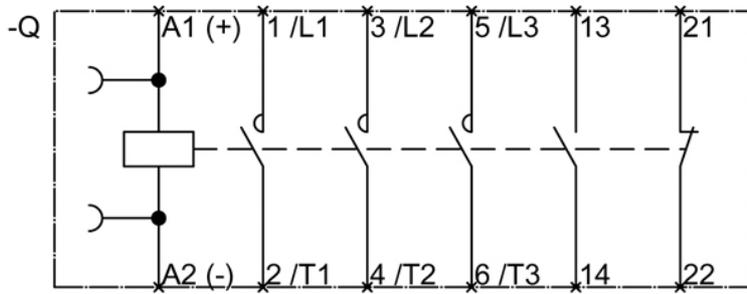
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<http://support.automation.siemens.com/WW/view/en/3RT2025-2BB40-0CC0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT2025-2BB40-0CC0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT2025-2BB40-0CC0)





last change:

Oct 24, 2011