



CONTACTOR, AC-3 5.5 KW/400 V, AC 24 V,  
50/60 HZ, 3-POLE, SIZE S0,  
SCREW CONNECTION

### General technical data:

product brand name		SIRIUS
Size of contactor		S0
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at height above sea level / maximum	m	2,000
Ambient temperature		
• during operation	°C	-25 ... +60
Mechanical service life (switching cycles)		
• 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		3
Operating current		
• at AC-1 / up to 690 V		
• at ambient temperature 40 °C / Rated value	A	40
• at ambient temperature 60 °C / Rated value	A	35

• at AC-3 / at 400 V / Rated value	A	12
• at AC-4 / at 400 V / Rated value	A	12.5
<b>Operating current</b>		
• 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
<b>Operating current</b>		
• 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
<b>Operating power</b>		
• at AC-1		
• at 400 V / Rated value	kW	23
• at AC-2		
• at 400 V / Rated value	kW	5.5
• at AC-3		
• at 400 V / Rated value	kW	5.5
• at 500 V / Rated value	kW	7.5
• at 690 V / Rated value	kW	7.5
• at AC-4		
• at 400 V / Rated value	W	5,500
<b>Active power loss / at AC-3 / at 400 V / for rated value of the operating current / per conductor</b>	W	0.5
<b>Control circuit/ Control:</b>		
<b>Type of voltage / of the control supply voltage</b>		AC
<b>Control supply voltage</b>		
• with AC / at 50 Hz / Rated value	V	24

• with AC / at 60 Hz / Rated value	V	24
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
• with AC / at 50 Hz		0.8 ... 1.1
• with AC / at 60 Hz		0.8 ... 1.1
<b>Apparent pick-up power / of the magnet coil / with AC</b>	V·A	64
<b>Apparent holding power / of the magnet coil / with AC</b>	V·A	8.4
<b>Inductive power factor</b>		
• with closing power of the coil		0.72
• with the holding power of the coil		0.24

#### Auxiliary circuit:

<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 contact</b>		0
<b>Number of NO contacts / for auxiliary contacts / instantaneous contact</b>		0
<b>Operating current</b>		
• at AC-12 / maximum	A	10
• at AC-15		
• at 230 V / Rated value	A	6
• at 400 V / Rated value	A	3
<b>Operating current / at DC-12</b>		
• at 60 V / Rated value	A	6
• at 110 V / Rated value	A	3
• at 220 V / Rated value	A	1
<b>Operating current / at DC-13</b>		
• at 24 V / Rated value	A	10
• at 60 V / Rated value	A	2
• at 110 V / Rated value	A	1
• at 220 V / Rated value	A	0.3

#### Short-circuit:

<b>Design of the fuse link</b>		
• for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 10 A
• for short-circuit protection of the main circuit		
• with type of assignment 1 / required		fuse gL/gG: 63 A
• with type of assignment 2 / required		fuse gL/gG: 25 A

#### Installation/ mounting/ dimensions:

<b>Mounting type</b>		screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
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Mounting type / Side-by-side mounting		Yes
Width	mm	45
Height	mm	85
Depth	mm	91
Spacing required / for grounded parts	mm	6

#### Connections/ terminals:

##### Design of the electrical connection

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

screw-type terminals

screw-type terminals

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

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

2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>), max. 2x 10 mm<sup>2</sup>

2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>), max. 2x (0.75 ... 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), 1x 12

#### Certificates/ approvals:

##### General Product Approval

##### Functional Safety / Safety of Machinery

##### Declaration of Conformity



CCC



CSA



UL

[Type Examination](#)



EG-Konf.

##### Test Certificates

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

##### Shipping Approval



ABS



DNV



GL



LRS



RINA



RMRS

##### other

[Confirmation](#)

[other](#)

[Environmental  
Confirmations](#)

#### Further information:

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**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/industrial-controls/catalogs>

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**Industry Mall (Online ordering system)**

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

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**Cax online generator**

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

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

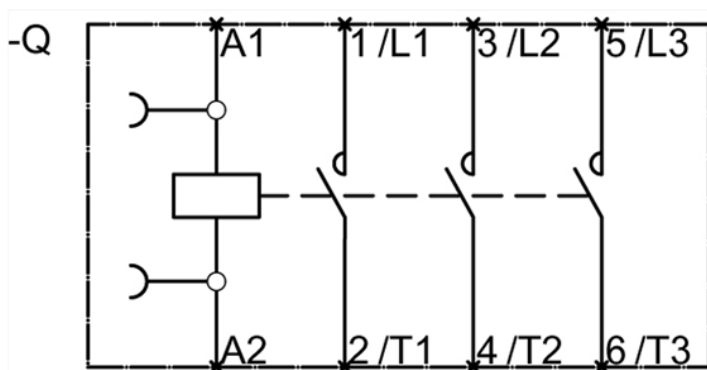
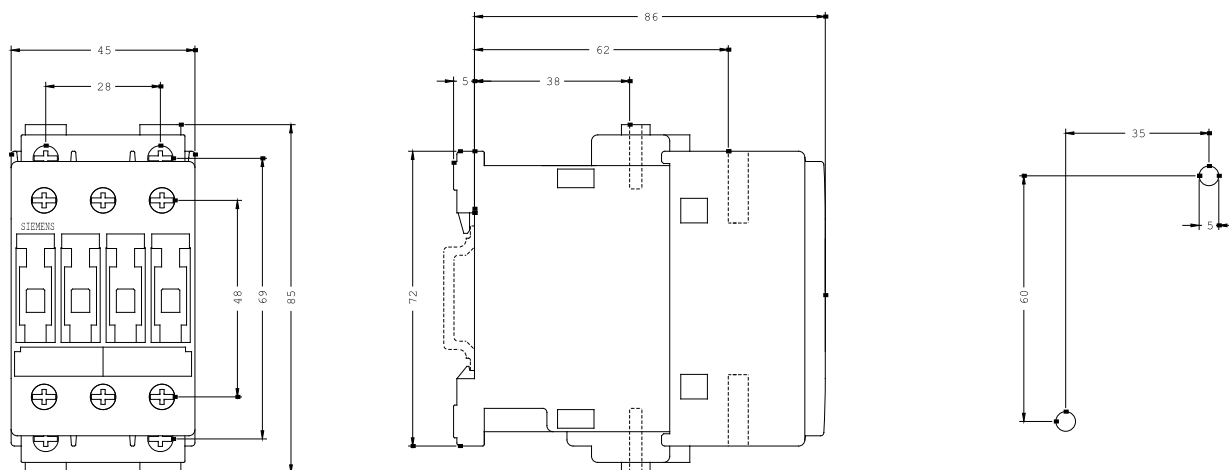
<http://support.automation.siemens.com/WW/view/en/3RT1024-1AC20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1024-1AC20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1024-1AC20)

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last change:

Nov 22, 2014