

CONTACTOR, AC-3 7.5 KW/400 V, AC 110 V, 50 HZ, 3-POLE, SIZE S0, SCREW CONNECTION



Figure similar

product brand name	SIRIUS
Product designation	power contactor
<b>General technical data</b>	
Size of contactor	S0
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Mechanical service life (switching cycles)	
• of contactor typical	10 000 000
• of the contactor with added electronics-compatible auxiliary switch block typical	5 000 000
• of the contactor with added auxiliary switch block typical	10 000 000
<b>Ambient conditions</b>	
Installation altitude at height above sea level maximum	2 000 m

<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>during operation</li> </ul>	-25 ... +60 °C
<b>Main circuit</b>	
<b>Number of poles for main current circuit</b>	3
<b>Number of NO contacts for main contacts</b>	3
<b>Number of NC contacts for main contacts</b>	0
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>at AC-1 at 400 V <ul style="list-style-type: none"> <li>— at ambient temperature 40 °C rated value</li> </ul> </li> </ul>	40 A
<ul style="list-style-type: none"> <li>at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> </ul> </li> </ul>	40 A
<ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul>	35 A
<ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	17 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul>	4.5 A
<ul style="list-style-type: none"> <li>with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul>	35 A
<ul style="list-style-type: none"> <li>with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul>	35 A
<b>Operating current</b>	
<ul style="list-style-type: none"> <li>at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>	20 A
<ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul>	2.5 A
<ul style="list-style-type: none"> <li>with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	15 A
<ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul>	35 A
<ul style="list-style-type: none"> <li>with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A
<ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul>	35 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>at AC-1 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>	23 kW
<ul style="list-style-type: none"> <li>at AC-2 at 400 V rated value</li> </ul>	7.5 kW
<ul style="list-style-type: none"> <li>at AC-3</li> </ul>	

— at 400 V rated value	7.5 kW
— at 500 V rated value	10 kW
— at 690 V rated value	11 kW
<b>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</b>	0.9 W

### Control circuit/ Control

<b>Type of voltage of the control supply voltage</b>	AC
<b>Control supply voltage at AC</b>	
• at 50 Hz rated value	110 V
<b>Control supply voltage frequency 1 rated value</b>	50 Hz
<b>Operating range factor control supply voltage rated value of magnet coil at AC</b>	
• at 50 Hz	0.8 ... 1.1
<b>Apparent pick-up power of magnet coil at AC</b>	61 V·A
<b>Inductive power factor with closing power of the coil</b>	0.82
<b>Apparent holding power of magnet coil at AC</b>	7.8 V·A
<b>Inductive power factor with the holding power of the coil</b>	0.24

### Auxiliary circuit

<b>Number of NC contacts</b>	
• for auxiliary contacts	
— instantaneous contact	0
<b>Number of NO contacts</b>	
• for auxiliary contacts	
— instantaneous contact	0
<b>Operating current at AC-12 maximum</b>	10 A
<b>Operating current at AC-15</b>	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
<b>Operating current at DC-12</b>	
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
<b>Operating current at DC-13</b>	
• at 24 V rated value	10 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 A
<b>Contact reliability of auxiliary contacts</b>	1 faulty switching per 100 million (17 V, 1 mA)

### Short-circuit protection

<b>Design of the fuse link</b>	
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- for short-circuit protection of the main circuit
  - with type of coordination 1 required
  - with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

fuse gL/gG: 63 A  
 fuse gL/gG: 25 A  
 fuse gL/gG: 10 A

### Installation/ mounting/ dimensions






<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022
<ul style="list-style-type: none"> <li>• Side-by-side mounting</li> </ul>	Yes
<b>Height</b>	85 mm
<b>Width</b>	45 mm
<b>Depth</b>	91 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>• for grounded parts           <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>	6 mm


### Connections/Terminals

<b>Type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>	<p>screw-type terminals</p> <p>screw-type terminals</p>
<b>Type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts           <ul style="list-style-type: none"> <li>— solid</li> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for main contacts</li> </ul>	<p>2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>), max. 2x 10 mm<sup>2</sup></p> <p>2x (1 ... 2,5 mm<sup>2</sup>), 2x (2,5 ... 6 mm<sup>2</sup>), max. 2x 10 mm<sup>2</sup></p> <p>2x (1 ... 2.5 mm<sup>2</sup>), 2x (2.5 ... 6 mm<sup>2</sup>)</p> <p>2x (16 ... 12), 2x (14 ... 10), 1x 8</p>
<b>Type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for auxiliary contacts           <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for auxiliary contacts</li> </ul>	<p>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>)</p> <p>2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)</p> <p>2x (20 ... 16), 2x (18 ... 14), 1x 12</p>

### Certificates/approvals

General Product Approval				Declaration of Conformity	Test Certificates
 CCC	 CSA	 UL		 EG-Konf.	<a href="#">Typprüfbescheinigung/Werkszeugnis</a>

Test Certificates	Shipping Approval				
<a href="#">spezielle Prüfbescheinigungen</a>	 ABS	 DNV	 GL	 LRS	 RINA

Shipping Approval	other		
 RMRS	<a href="#">Bestätigungen</a>	<a href="#">sonstig</a>	<a href="#">Umweltbestätigung</a>

#### Further information

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

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

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1025-1AF00>

##### Cax online generator

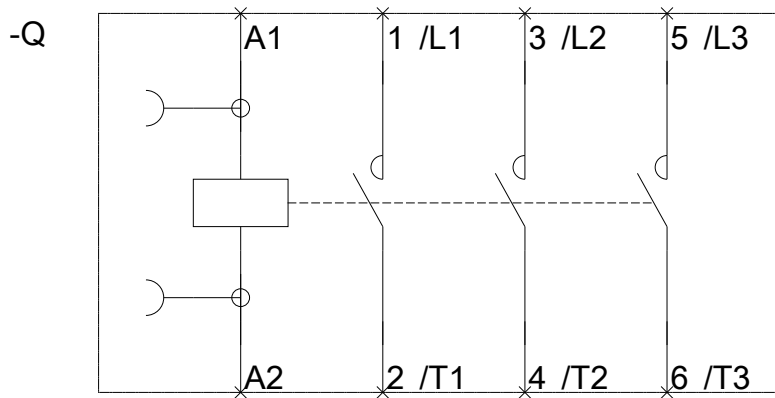
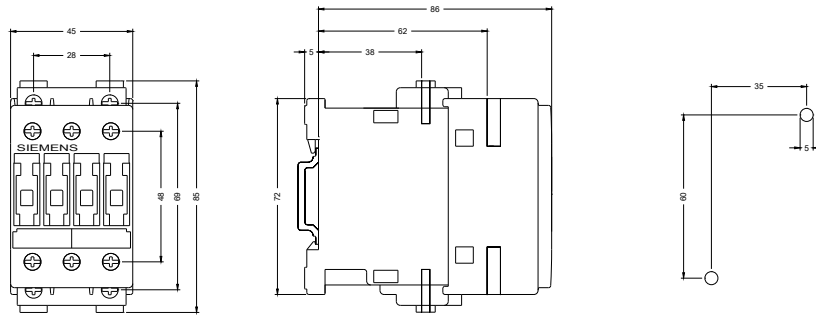
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1025-1AF00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1AF00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1025-1AF00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1025-1AF00&lang=en)



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