

CONTACTOR, AC-3 7.5 KW/400 V, AC 24 V, 50 HZ, 3-POLE, SIZE S0, SCREW CONNECTION



product brandname	SIRIUS
Product designation	power contactor

### General technical data

Size of contactor	S0
Degree of pollution	3
Protection class IP	
<ul style="list-style-type: none"> <li>• on the front</li> <li>• of the terminal</li> </ul>	<p>IP20</p> <p>IP20</p>
Mechanical service life (switching cycles)	
<ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added electronics-compatible auxiliary switch block typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	<p>10 000 000</p> <p>5 000 000</p> <p>10 000 000</p>

### Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +60 °C

### Main circuit

<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> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul>	40 A 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> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A 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> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A 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> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A 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> <li>— at 110 V rated value</li> </ul> </li> </ul>	20 A 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 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A 15 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 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>	35 A 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 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>	7.5 kW 10 kW 11 kW

Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.9 W
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### Control circuit/ Control

Type of voltage of the control supply voltage	AC
Control supply voltage at AC <ul style="list-style-type: none"> <li>at 50 Hz rated value</li> </ul>	24 V
Operating range factor control supply voltage rated value of magnet coil at AC <ul style="list-style-type: none"> <li>at 50 Hz</li> </ul>	0.8 ... 1.1
Apparent pick-up power of magnet coil at AC	61 V·A
Inductive power factor with closing power of the coil	0.82
Apparent holding power of magnet coil at AC	7.8 V·A
Inductive power factor with the holding power of the coil	0.24

### Auxiliary circuit

Number of NC contacts <ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>instantaneous contact</li> </ul> </li> </ul>	0
Number of NO contacts <ul style="list-style-type: none"> <li>for auxiliary contacts <ul style="list-style-type: none"> <li>instantaneous contact</li> </ul> </li> </ul>	0
Operating current at AC-12 maximum	10 A
Operating current at AC-15 <ul style="list-style-type: none"> <li>at 230 V rated value</li> <li>at 400 V rated value</li> </ul>	6 A 3 A
Operating current at DC-12 <ul style="list-style-type: none"> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> </ul>	6 A 3 A 1 A
Operating current at DC-13 <ul style="list-style-type: none"> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> </ul>	10 A 2 A 1 A 0.3 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

### Short-circuit protection

Design of the fuse link <ul style="list-style-type: none"> <li>for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>with type of coordination 1 required</li> <li>with type of assignment 2 required</li> </ul> </li> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 63 A fuse gL/gG: 25 A fuse gL/gG: 10 A
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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>	screw-type terminals screw-type terminals
<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>	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> ), max. 2x 10 mm <sup>2</sup> 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ) 2x (16 ... 12), 2x (14 ... 10), 1x 8
<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>	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
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CCC



CSA



UL



[Type Examination Certificate](#)



EG-Konf.

Test Certificates	Shipping Approval
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[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



ABS



LRS



RINA



RMRS

other
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[Confirmation](#)

[Environmental Confirmations](#)

[Miscellaneous](#)

### 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=3RT1025-1AB00>

**Cax online generator**

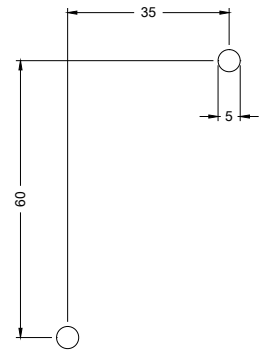
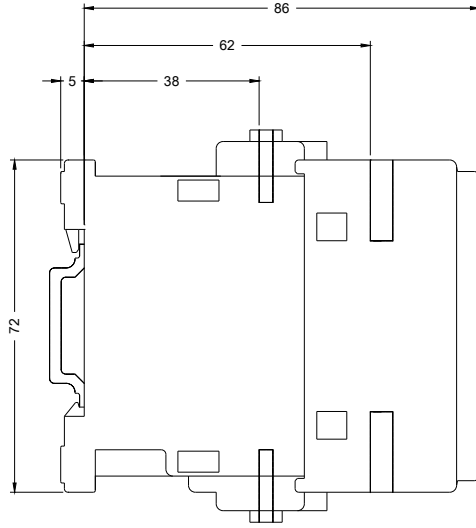
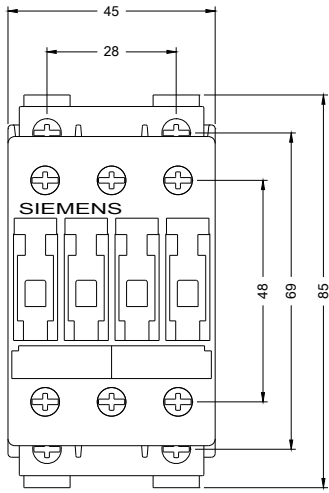
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1025-1AB00>

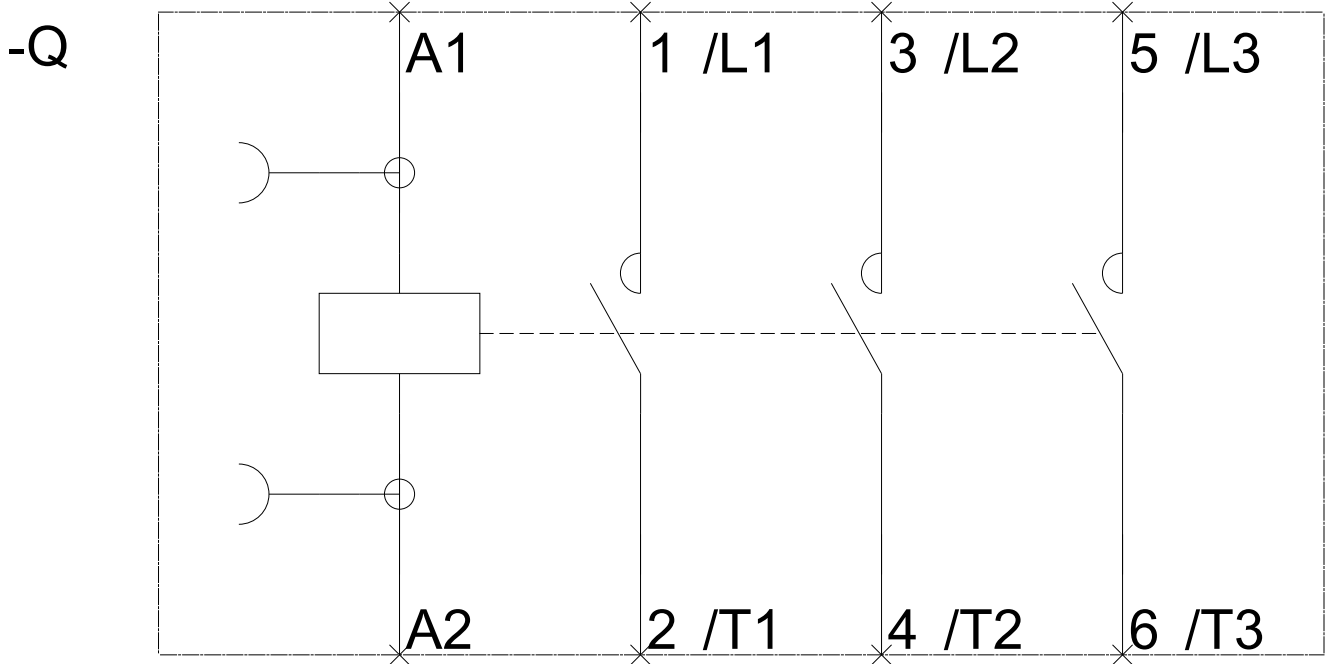
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1AB00>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1025-1AB00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1025-1AB00&lang=en)





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