

Power contactor, AC-3 32 A, 15 kW / 400 V 250 V DC, 3-pole, Size S2 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2

Product brand name	SIRIUS
Product designation	power contactor

### General technical data

Size of contactor	S2
Insulation voltage <ul style="list-style-type: none"> <li>rated value</li> </ul>	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation <ul style="list-style-type: none"> <li>between coil and main contacts acc. to EN 60947-1</li> </ul>	400 V
Protection class IP <ul style="list-style-type: none"> <li>on the front</li> <li>of the terminal</li> </ul>	IP20 IP00
Shock resistance at rectangular impulse <ul style="list-style-type: none"> <li>at DC</li> </ul>	10g / 5 ms, 5g / 10 ms
Shock resistance with sine pulse <ul style="list-style-type: none"> <li>at DC</li> </ul>	15g / 5 ms, 8g / 10 ms
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>	10 000 000 5 000 000 10 000 000
Reference code acc. to DIN EN 81346-2	Q

### Ambient conditions

Installation altitude at height above sea level <ul style="list-style-type: none"> <li>maximum</li> </ul>	2 000 m
Ambient temperature <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> </ul>	-25 ... +60 °C -55 ... +80 °C

### Main circuit

Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	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> <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> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>• at AC-4 at 400 V rated value</li> </ul>	50 A  50 A 45 A  32 A 20 A 29 A
<b>Connectable conductor cross-section in main circuit at AC-1</b> <ul style="list-style-type: none"> <li>• at 60 °C minimum permissible</li> <li>• at 40 °C minimum permissible</li> </ul>	10 mm <sup>2</sup> 16 mm <sup>2</sup>
<b>Operating current for approx. 200000 operating cycles at AC-4</b> <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>	15.6 A 11 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> <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> <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>	45 A 4.5 A  45 A 25 A  45 A 45 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> <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> <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 2.5 A  45 A 25 A  45 A 45 A
<b>Operating power</b> <ul style="list-style-type: none"> <li>• at AC-1</li> </ul>	

— at 230 V at 60 °C rated value	18 kW
— at 400 V rated value	31 kW
— at 690 V rated value	54 kW
— at 690 V at 60 °C rated value	54 kW
• at AC-2 at 400 V rated value	15 kW
• at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
<b>Operating power for approx. 200000 operating cycles at AC-4</b>	
• at 400 V rated value	8.2 kW
• at 690 V rated value	10 kW
<b>Thermal short-time current limited to 10 s</b>	320 A
<b>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</b>	1.8 W
<b>No-load switching frequency</b>	
• at DC	1 500 1/h
<b>Operating frequency</b>	
• at AC-1 maximum	1 200 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	250 1/h

#### Control circuit/ Control

<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage at DC</b>	
• rated value	250 V
<b>Operating range factor control supply voltage rated value of magnet coil at DC</b>	
• initial value	0.8
• Full-scale value	1.1
<b>Closing power of magnet coil at DC</b>	13.3 W
<b>Holding power of magnet coil at DC</b>	13.3 W
<b>Closing delay</b>	
• at DC	50 ... 95 ms
<b>Opening delay</b>	
• at DC	20 ... 30 ms
<b>Arcing time</b>	10 ... 15 ms

#### Auxiliary circuit

<b>Number of NC contacts for auxiliary contacts</b>	
• instantaneous contact	0

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

#### UL/CSA ratings

<b>Contact rating of auxiliary contacts according to UL</b>	A600 / Q600
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#### Short-circuit protection

<b>Design of the fuse link</b>	
<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>	<p>fuse gL/gG: 125 A</p> <p>fuse gL/gG: 63 A</p> <p>fuse gL/gG: 10 A</p>

#### 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>	112 mm
<b>Width</b>	55 mm
<b>Depth</b>	130 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</li> </ul>	




- solid 2x (0.75 ... 16 mm<sup>2</sup>)
- stranded 2x (0.75 ... 25 mm<sup>2</sup>)
- single or multi-stranded 2x (0,75 ... 16 mm<sup>2</sup>)
- finely stranded with core end processing 2x (0.75 ... 16 mm<sup>2</sup>)
- finely stranded without core end processing 2x (0.75 ... 16 mm<sup>2</sup>)
- at AWG conductors for main contacts 2x (18 ... 2)



**Type of connectable conductor cross-sections**

- for auxiliary contacts
  - solid 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>)
  - finely stranded with core end processing 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)
- at AWG conductors for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14), 1x 12

**Certificates/approvals**

General Product Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
 CCC	 CSA	 UL	 EAC	 EG-Konf.
			<a href="#">Type Examination Certificate</a>	

Test Certificates			Marine / Shipping		
<a href="#">Special Test Certificate</a>	<a href="#">Type Test Certificates/Test Report</a>	<a href="#">Miscellaneous</a>	 ABS	 LRS	 RINA

Marine / Shipping		other	
 RMRS	 DNV-GL	<a href="#">Confirmation</a>	<a href="#">Miscellaneous</a>

**Further information**

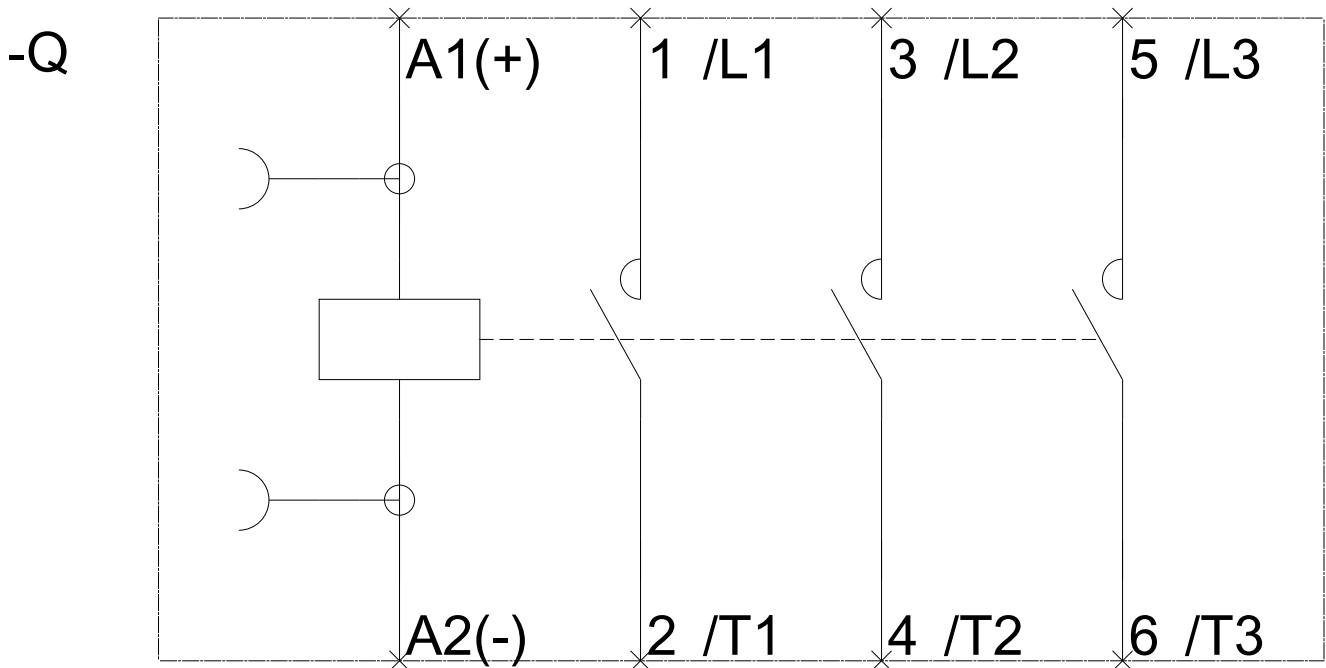
- Information- and Downloadcenter (Catalogs, Brochures,...)**  
<http://www.siemens.com/industrial-controls/catalogs>
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**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1BN40/char>

**Further characteristics (e.g. electrical endurance, switching frequency)**

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1034-1BN40&objecttype=14&gridview=view1>



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