

Power contactor, AC-3 50 A, 22 kW / 400 V 220 V DC, 2 NO + 2 NC, 3-pole, Size S2, Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2036-1NP34<<



Product brand name	SIRIUS
Product designation	power contactor
<b>General technical data</b>	
Size of contactor	S2
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• between coil and main contacts acc. to EN 60947-1	400 V
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Shock resistance at rectangular impulse	
• at DC	10g / 5 ms, 5g / 10 ms
Shock resistance with sine pulse	
• at DC	15g / 5 ms, 8g / 10 ms
Mechanical service life (switching cycles)	

<ul style="list-style-type: none"> <li>• of contactor typical</li> </ul>	10 000 000
<ul style="list-style-type: none"> <li>• of the contactor with added electronics-compatible auxiliary switch block typical</li> </ul>	5 000 000
<ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
<b>Reference code acc. to DIN EN 81346-2</b>	Q

Ambient conditions	
<b>Installation altitude at height above sea level</b>	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	2 000 m
<b>Ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-55 ... +80 °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>	60 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>	60 A 55 A
<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 690 V rated value</li> </ul> </li> </ul>	50 A 24 A
<ul style="list-style-type: none"> <li>• at AC-4 at 400 V rated value</li> </ul>	41 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>	16 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>	24 A 12.6 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> </ul> </li> </ul>	55 A 4.5 A 55 A

<ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul>	25 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>	55 A 55 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>	35 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>	55 A 25 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>	55 A 55 A
<b>Operating power</b>	
<ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C rated value</li> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> <li>— at 690 V at 60 °C rated value</li> </ul> </li> </ul>	22 kW 38 kW 66 kW 66 kW
<ul style="list-style-type: none"> <li>• at AC-2 at 400 V rated value</li> </ul>	22 kW
<ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>	15 kW 22 kW 30 kW 22 kW
<b>Operating power for approx. 200000 operating cycles at AC-4</b>	
<ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>	12.6 kW
<ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>	11.4 kW
<b>Thermal short-time current limited to 10 s</b>	
	400 A
<b>No-load switching frequency</b>	
<ul style="list-style-type: none"> <li>• at DC</li> </ul>	1 500 1/h
<b>Operating frequency</b>	
<ul style="list-style-type: none"> <li>• at AC-1 maximum</li> </ul>	1 000 1/h
<ul style="list-style-type: none"> <li>• at AC-2 maximum</li> </ul>	400 1/h
<ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>	800 1/h
<ul style="list-style-type: none"> <li>• at AC-4 maximum</li> </ul>	300 1/h
<b>Control circuit/ Control</b>	
<b>Type of voltage of the control supply voltage</b>	DC
<b>Control supply voltage at DC</b>	

• rated value	220 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	60 ... 100 ms
<b>Opening delay</b>	
• at DC	20 ... 25 ms
<b>Arcing time</b>	10 ... 15 ms

### Auxiliary circuit

<b>Number of NC contacts for auxiliary contacts</b>	
• instantaneous contact	2
<b>Number of NO contacts for auxiliary contacts</b>	
• instantaneous contact	2
Operating current at AC-12 maximum	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)

### 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>	
• for short-circuit protection of the main circuit	
— with type of coordination 1 required	fuse gL/gG: 160 A
— with type of assignment 2 required	fuse gL/gG: 80 A
• for short-circuit protection of the auxiliary switch required	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>	112 mm
<b>Width</b>	55 mm
<b>Depth</b>	179 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>— stranded</li> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> <li>• at AWG conductors for main contacts</li> </ul>	2x (0.75 ... 16 mm <sup>2</sup> ) 2x (0.75 ... 25 mm <sup>2</sup> ) 2x (0,75 ... 16 mm <sup>2</sup> ) 2x (0.75 ... 16 mm <sup>2</sup> ) 2x (0.75 ... 16 mm <sup>2</sup> ) 2x (18 ... 2)
<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	EMC	Functional Safety/Safety of Machinery
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[Type Examination Certificate](#)

Declaration of Conformity	Test Certificates	Marine / Shipping
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[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)



Marine / Shipping	other
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[Confirmation](#)

[Miscellaneous](#)

Railway
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[Special Test Certificate](#)

### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**  
[www.siemens.com/ic10](http://www.siemens.com/ic10)

**Industry Mall (Online ordering system)**  
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1036-1BM44>

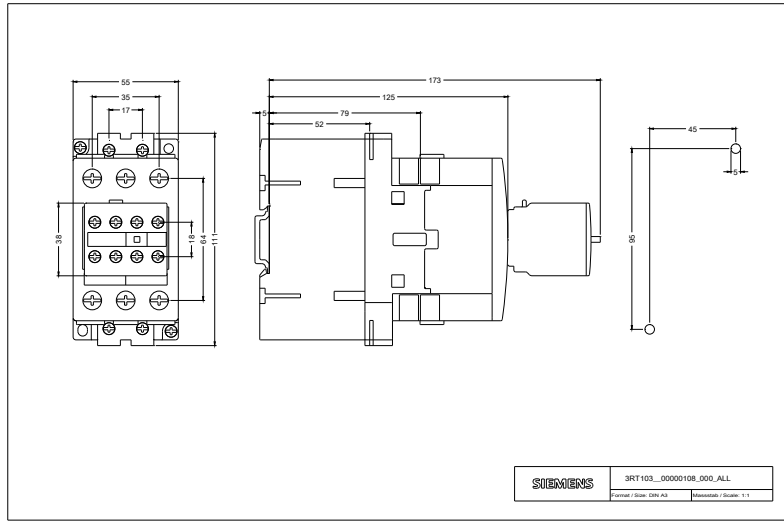
**Cax online generator**  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1036-1BM44>

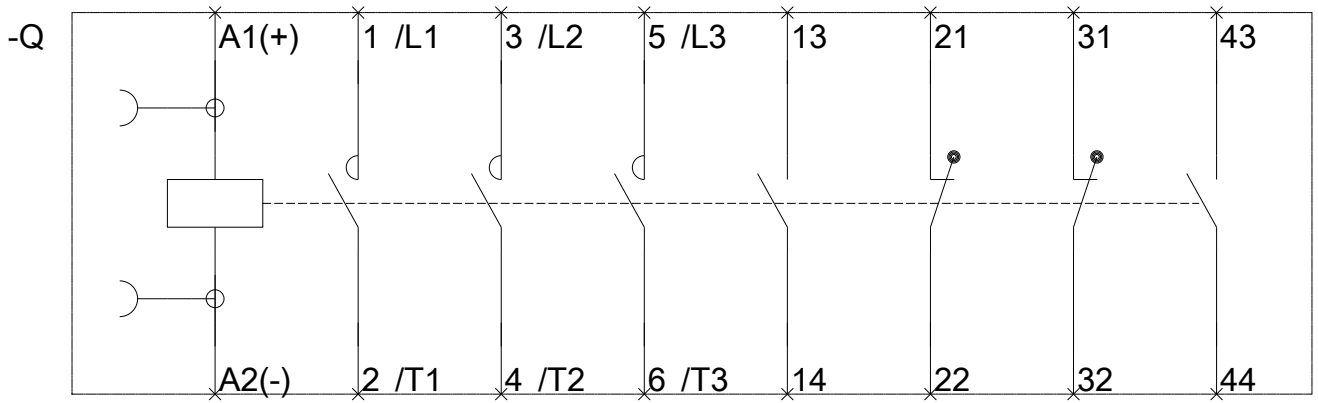
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-1BM44>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1036-1BM44&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1036-1BM44&lang=en)

**Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current**  
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1036-1BM44/char>

**Further characteristics (e.g. electrical endurance, switching frequency)**  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1036-1BM44&objecttype=14&gridview=view1>





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