

CONTACTOR, AC-3 15 KW/400 V, AC 230 V 50/60 HZ, 3-POLE,  
 SIZE S2, CAGE CLAMP MULTIUNIT PACKING PACKING = 7  
 ITEMS



Figure similar

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	IP00
• of the terminal	IP00
Shock resistance	
• at rectangular impulse	
— at AC	10g / 5 ms, 5g / 10 ms

<ul style="list-style-type: none"> <li>• with sine pulse               <ul style="list-style-type: none"> <li>— at AC</li> </ul> </li> </ul>	15g / 5 ms, 8g / 10 ms
<b>Mechanical service life (switching cycles)</b>	
<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>Ambient conditions</b>	
<b>Installation altitude at height above sea level maximum</b>	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
<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>	50 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>	50 A
<ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul>	45 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>	32 A
<ul style="list-style-type: none"> <li>— at 690 V rated value</li> </ul>	20 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> </ul>	10 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• at 40 °C minimum permissible</li> </ul>	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> </ul>	15.6 A
<ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>	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> </ul> </li> </ul>	45 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</li> </ul>	

— at 24 V rated value	45 A
— at 110 V rated value	25 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	45 A
— at 110 V rated value	45 A
<b>Operating current</b>	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	25 A
— at 24 V rated value	45 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	45 A
— at 24 V rated value	45 A
<b>Operating power</b>	
• at AC-1	
— 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 AC	5 000 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	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
Operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1
Apparent pick-up power of magnet coil at AC	127 V·A
Inductive power factor with closing power of the coil	0.73
Apparent holding power of magnet coil at AC	11.3 V·A
Inductive power factor with the holding power of the coil	0.41
Closing delay	
• at AC	11 ... 30 ms
Opening delay	
• at AC	7 ... 20 ms
Arcing time	10 ... 15 ms

Auxiliary circuit	
Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	0
Number of NO contacts	
• for auxiliary contacts	
— instantaneous contact	0
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
Operating current at DC-12	
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at DC-13	
• 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
Contact reliability of auxiliary contacts	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

### 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: 125 A fuse gL/gG: 63 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>	112 mm
<b>Width</b>	55 mm
<b>Depth</b>	115 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

### Type of electrical connection

<ul style="list-style-type: none"><li>• for main current circuit</li><li>• for auxiliary and control current circuit</li></ul>	screw-type terminals spring-loaded terminals
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### Type of connectable conductor cross-sections






<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)
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### Type of connectable conductor cross-sections

<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><li>— finely stranded without core end processing</li></ul></li><li>• at AWG conductors for auxiliary contacts</li></ul>	2x (0.25 ... 2.5 mm <sup>2</sup> ) 2x (0.25 ... 1.5 mm <sup>2</sup> ) 2x (0.25 ... 2.5 mm <sup>2</sup> ) 2x (24 ... 14)
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## Certificates/approvals

General Product Approval	Declaration of Conformity	Test Certificates	Shipping Approval
 CSA		 EG-Konf.	<a href="#">spezielle Prüfbescheinigung</a> <a href="#">n</a> <a href="#">Typprüfbescheinigung/Werkszeugnis</a>  ABS

Shipping Approval	other
 DNV	 GL
 LRS	 RINA
 RMRS	<a href="#">sonstig</a>

other
<a href="#">Bestätigungen</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=3RT1034-3AL20-Z W97>

**Cax online generator**

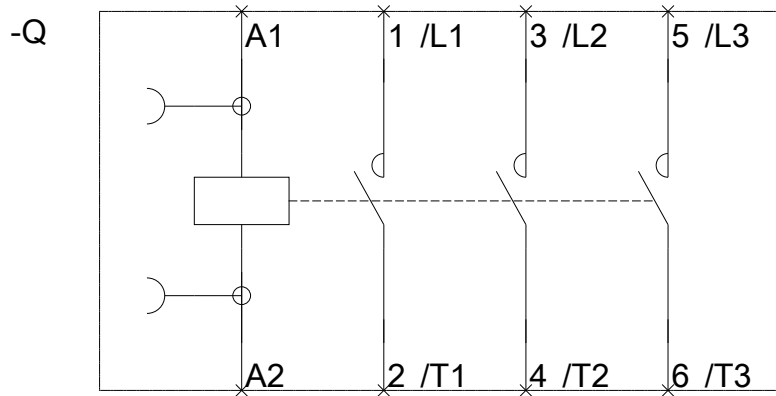
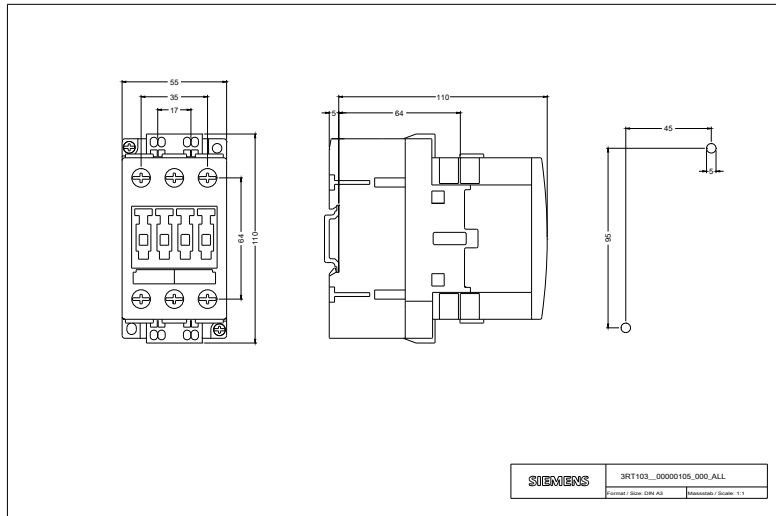
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-3AL20-Z W97>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-3AL20-Z W97>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1034-3AL20-Z W97&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-3AL20-Z W97&lang=en)



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