

CIRCUIT-BREAKER, 3.5...5 A, N-RELEASE 65 A, SIZE S00, MOTOR PROTECTION, CLASS 10, SCREW CONNECTION STANDARD BREAKING CAPACITY MULTI-UNIT PACKING PACKING = 24 ITEMS

product brand name	SIRIUS
Product designation	Circuit breaker
Design of the product	For motor protection

### General technical data

Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00
Product extension	
• Auxiliary switch	Yes
Power loss [W] total typical	6 W
Insulation voltage with degree of pollution 3 rated value	690 V
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
• in networks with grounded star point between main and auxiliary circuit	400 V
• in networks with grounded star point between main and auxiliary circuit	400 V
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Mechanical service life (switching cycles)	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Type of protection	Increased safety
Protection against electrical shock	finger-safe
Equipment marking acc. to DIN EN 81346-2	Q

### Ambient conditions

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C

• during transport	-50 ... +80 °C
<b>Temperature compensation</b>	-20 ... +60 °C
<b>Relative humidity during operation</b>	10 ... 95 %

### Main circuit

<b>Number of poles for main current circuit</b>	3
<b>Adjustable pick-up value current of the current-dependent overload release</b>	3.5 ... 5 A
<b>Operating voltage</b>	
• rated value	690 V
• at AC-3 rated value maximum	690 V
<b>Operating frequency rated value</b>	50 ... 60 Hz
<b>Operating current rated value</b>	5 A
<b>Operating current</b>	
• at AC-3	
— at 400 V rated value	5 A
<b>Operating power</b>	
• at AC-3	
— at 230 V rated value	1 100 W
— at 400 V rated value	1 500 W
— at 500 V rated value	2 200 W
— at 690 V rated value	4 000 W
<b>Operating frequency</b>	
• at AC-3 maximum	15 1/h

### Auxiliary circuit

<b>Number of CO contacts</b>	
• for auxiliary contacts	0

### Protective and monitoring functions

<b>Trip class</b>	CLASS 10
<b>Design of the overload release</b>	thermal
<b>Operational short-circuit current breaking capacity (Ics) at AC</b>	
• at 240 V rated value	100 000 A
• at 400 V rated value	100 000 A
• at 500 V rated value	3 000 A
• at 690 V rated value	2 000 A
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
• at AC at 500 V rated value	3 kA
• at AC at 690 V rated value	2 kA
<b>Breaking capacity short-circuit current (Icn)</b>	

• at 1 current path at DC at 150 V rated value	10 kA
• with 2 current paths in series at DC at 300 V rated value	10 kA
• with 3 current paths in series at DC at 450 V rated value	10 kA

### UL/CSA ratings

#### Full-load current (FLA) for three-phase AC motor

• at 480 V rated value	5 A
• at 600 V rated value	5 A

#### Yielded mechanical performance [hp]

• for single-phase AC motor	
— at 110/120 V rated value	0.166 hp
— at 230 V rated value	0.5 hp
• for three-phase AC motor	
— at 200/208 V rated value	1 hp
— at 220/230 V rated value	1 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	3 hp

### Short-circuit protection

<b>Design of the short-circuit trip</b>	magnetic
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#### Design of the fuse link for IT network for short-circuit protection of the main circuit

• at 240 V	none required
• at 400 V	gL/gG 50 A
• at 500 V	gL/gG 35 A
• at 690 V	gL/gG 35 A

### Installation/ mounting/ dimensions

<b>Mounting position</b>	any
<b>Mounting type</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>Height</b>	90 mm
<b>Width</b>	45 mm
<b>Depth</b>	81 mm

### Connections/Terminals

<b>Product function</b>	
• removable terminal for auxiliary and control circuit	No
<b>Type of electrical connection</b>	
• for main current circuit	screw-type terminals
<b>Arrangement of electrical connectors for main current circuit</b>	Top and bottom

<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>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> </ul>	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x (1 ... 4 mm <sup>2</sup> ) 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
<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>— single or multi-stranded</li> </ul> </li> </ul>	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )
<b>Tightening torque</b> <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> <li>• for auxiliary contacts with screw-type terminals</li> </ul>	0.8 ... 1.2 N·m 0.8 ... 1.2 N·m
<b>Design of the thread of the connection screw</b> <ul style="list-style-type: none"> <li>• for main contacts</li> </ul>	M3

### Safety related data

<b>B10 value</b> <ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>	5 000
<b>Proportion of dangerous failures</b> <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul>	50 % 50 %
<b>Failure rate [FIT]</b> <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> </ul>	50 FIT
<b>Display version</b> <ul style="list-style-type: none"> <li>• for switching status</li> </ul>	Rocker switch

### Certificates/approvals

General Product Approval	For use in hazardous locations
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Declaration of Conformity	Test Certificates	Shipping Approval
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Shipping Approval	other
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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=3RV1011-1FA10-Z W97>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1FA10-Z W97>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1FA10-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=3RV1011-1FA10-Z W97&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1FA10-Z W97&lang=en)

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