

CIRCUIT-BREAKER SIZE S00, FOR MOTOR PROTECTION, CLASS 10, A-REL. 4.5...6.3A, N-REL. 82A SCREW TERMINAL, STANDARD SWITCHING CAPACITY



Figure similar

Product brand name	SIRIUS
Product designation	Circuit breaker
Design of the product	For motor protection
Product type designation	3RV1

General technical data	
Size of the circuit-breaker	S00
Size of contactor can be combined company-specific	S00
Product extension	Yes
• 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

<b>Protection class IP</b>	
• on the front	IP20
• of the terminal	IP00
<b>Mechanical service life (switching cycles)</b>	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
<b>Electrical endurance (switching cycles)</b>	
• typical	100 000
<b>Type of protection</b>	Increased safety
<b>Protection against electrical shock</b>	finger-safe
Equipment marking acc. to DIN EN 81346-2	Q

#### Ambient conditions

<b>Installation altitude at height above sea level</b>	
• maximum	2 000 m
<b>Ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-50 ... +80 °C
• during transport	-50 ... +80 °C
<b>Temperature compensation</b>	-20 ... +60 °C
Relative humidity during operation	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>	4.5 ... 6.3 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>	6.3 A
<b>Operating current</b>	
• at AC-3	
— at 400 V rated value	6.3 A
<b>Operating power</b>	
• at AC-3	
— at 230 V rated value	1 500 W
— at 400 V rated value	2 200 W
— at 500 V rated value	3 000 W
— at 690 V rated value	5 500 W
<b>Operating frequency</b>	
• at AC-3 maximum	15 1/h

#### Auxiliary circuit

<b>Number of CO contacts</b> • for auxiliary contacts	0
<b>Protective and monitoring functions</b>	
<b>Product function</b> • Ground fault detection • Phase failure detection	No Yes
<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 • at 400 V rated value • at 500 V rated value • at 690 V rated value	100 000 A 100 000 A 3 000 A 2 000 A
<b>Maximum short-circuit current breaking capacity (Icu)</b> • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value	100 kA 100 kA 3 kA 2 kA
<b>Breaking capacity short-circuit current (Icn)</b> • at 1 current path at DC at 150 V rated value • with 2 current paths in series at DC at 300 V rated value • with 3 current paths in series at DC at 450 V rated value	10 kA 10 kA 10 kA
<b>Response value current</b> • of instantaneous short-circuit trip unit	82 A
<b>UL/CSA ratings</b>	
<b>Full-load current (FLA) for three-phase AC motor</b> • at 480 V rated value • at 600 V rated value	6.3 A 6.3 A
<b>Yielded mechanical performance [hp]</b> • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for three-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value	0.25 hp 0.5 hp 1 hp 1.5 hp 3 hp 5 hp
<b>Short-circuit protection</b>	

<b>Product function Short circuit protection</b>	Yes
<b>Design of the short-circuit trip</b>	magnetic
<b>Design of the fuse link for IT network for short-circuit protection of the main circuit</b>	none required gL/gG 50 A gL/gG 40 A gL/gG 40 A
• at 240 V	
• at 400 V	
• at 500 V	
• at 690 V	

### 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>	No
• removable terminal for auxiliary and control circuit	
<b>Type of electrical connection</b>	screw-type terminals
• for main current circuit	
<b>Arrangement of electrical connectors for main current circuit</b>	Top and bottom
<b>Type of connectable conductor cross-sections</b>	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> )
• for main contacts	
— single or multi-stranded — finely stranded with core end processing	
<b>Type of connectable conductor cross-sections</b>	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )
• for auxiliary contacts	
— single or multi-stranded	
<b>Tightening torque</b>	0.8 ... 1.2 N·m
• for main contacts with screw-type terminals	
• for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m
<b>Size of the screwdriver tip</b>	Pozidriv 2
<b>Design of the thread of the connection screw</b>	M3
• for main contacts	

### Safety related data

<b>B10 value</b>	5 000
• with high demand rate acc. to SN 31920	
<b>Proportion of dangerous failures</b>	50 %
• with low demand rate acc. to SN 31920	
• with high demand rate acc. to SN 31920	

<b>Failure rate [FIT]</b> • with low demand rate acc. to SN 31920	50 FIT
<b>Display version</b> • for switching status	Rocker switch

### Certificates/approvals

<b>General Product Approval</b>	<b>For use in hazardous locations</b>
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<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
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[Special Test Certificate](#)



<b>Marine / Shipping</b>	<b>other</b>
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[Confirmation](#)

[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=3RV1011-1GA10>

**Cax online generator**

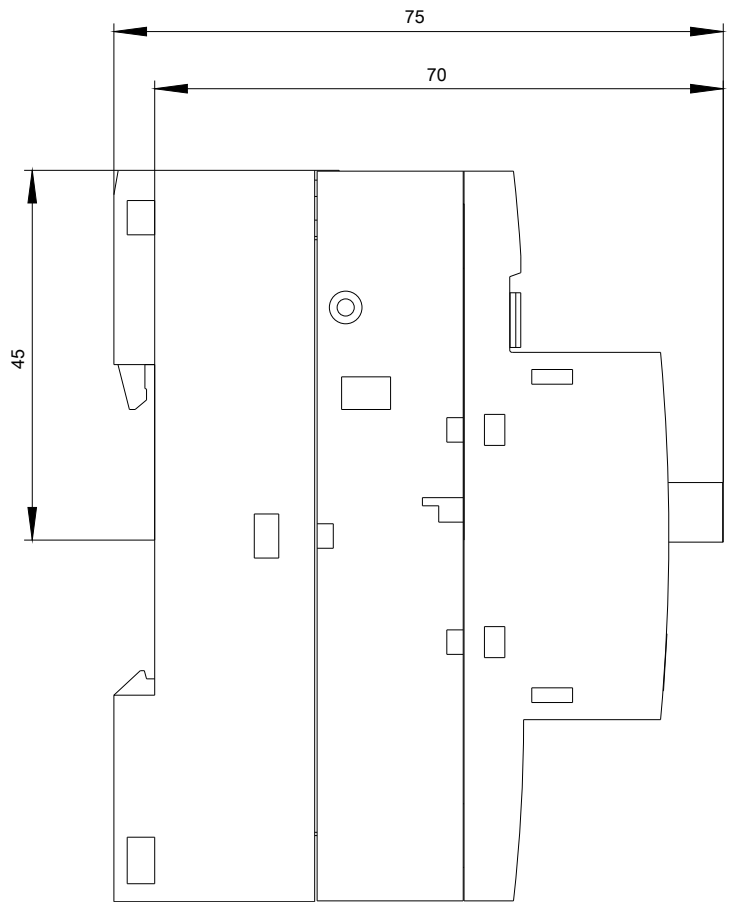
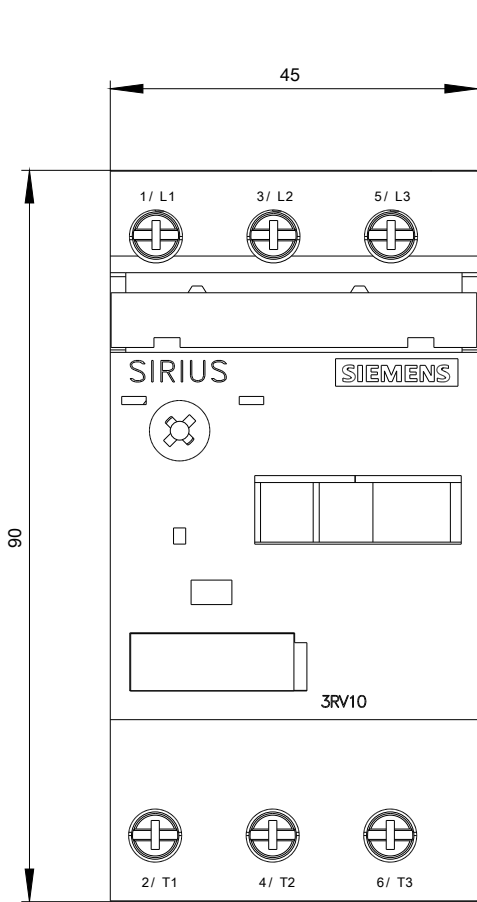
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1GA10>

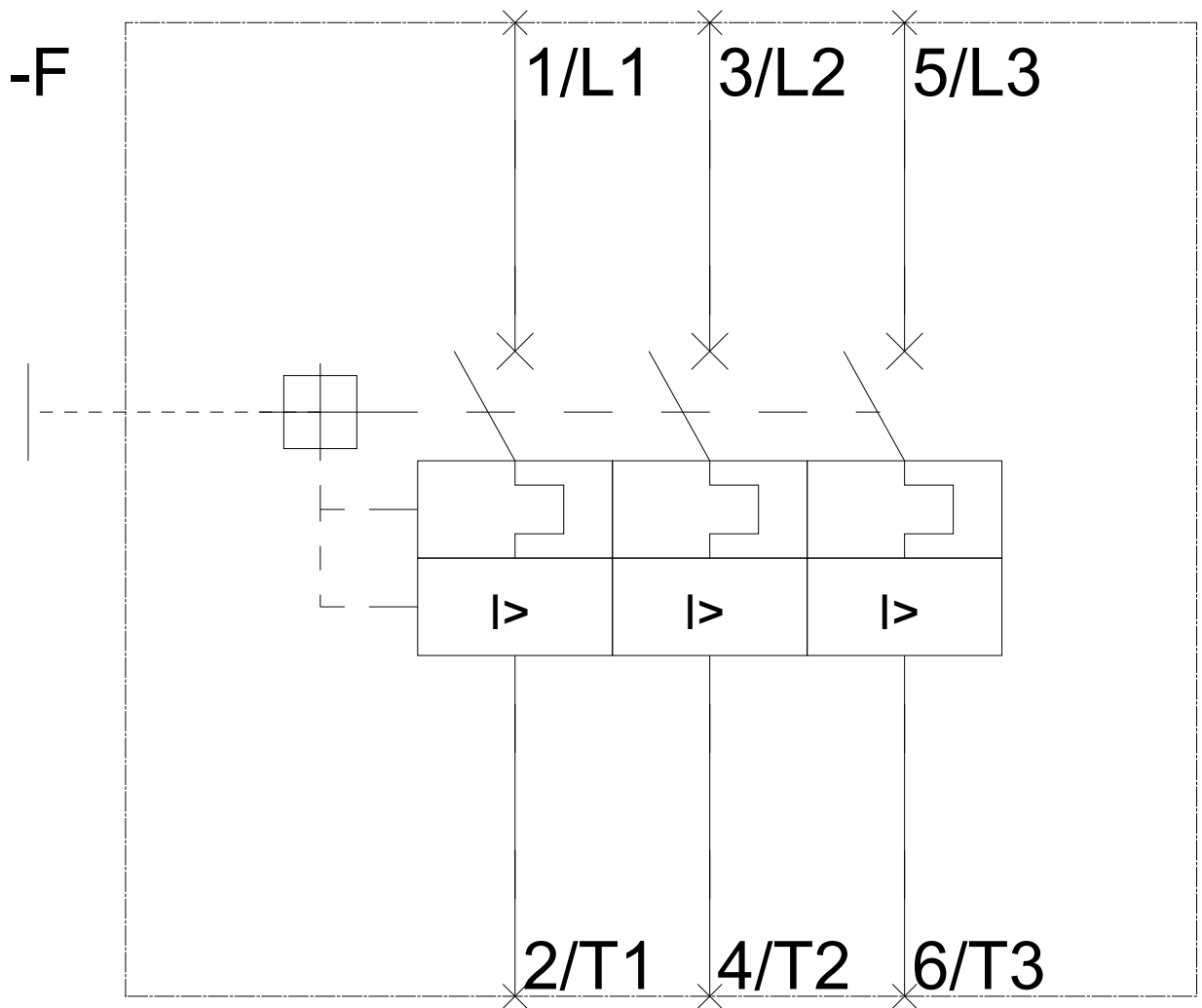
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1GA10>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1011-1GA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1GA10&lang=en)





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