



Circuit breaker size S00 for motor protection, CLASS 10 A-release 10...16 A N-release 208 A screw terminal Standard switching capacity

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Circuit breaker
<b>design of the product</b>	For motor protection
<b>product type designation</b>	3RV2
<b>General technical data</b>	
<b>size of the circuit-breaker</b>	S00
<b>size of contactor can be combined company-specific</b>	S00, S0
product extension auxiliary switch	Yes
<b>power loss [W] for rated value of the current</b>	
• at AC in hot operating state	9.25 W
• at AC in hot operating state per pole	3.1 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
<b>maximum permissible voltage for safe isolation in networks with grounded star point</b>	
• between main and auxiliary circuit	400 V
• between main and auxiliary circuit	400 V
shock resistance acc. to IEC 60068-2-27	25g / 11 ms
<b>mechanical service life (switching cycles)</b>	
• of the main contacts typical	100 000
• of auxiliary contacts typical	100 000
electrical endurance (switching cycles) typical	100 000
<b>type of protection according to ATEX directive 2014/34/EU</b>	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
<b>reference code acc. to IEC 81346-2</b>	Q
<b>Substance Prohibitance (Date)</b>	01.10.2009 00:00:00
<b>Ambient conditions</b>	
installation altitude at height above sea level 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 %
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>adjustable current response value current of the</b>	10 ... 16 A

<b>current-dependent overload release</b>		
<b>operating voltage</b>		
• rated value	690 V	
• rated value	20 ... 690 V	
• at AC-3 rated value maximum	690 V	
<b>operating frequency rated value</b>	50 ... 60 Hz	
<b>operational current rated value</b>	16 A	
operational current at AC-3 at 400 V rated value	16 A	
operating power at AC-3		
• at 230 V rated value	4 kW	
• at 400 V rated value	7.5 kW	
• at 500 V rated value	7.5 kW	
• at 690 V rated value	11 kW	
operating frequency at AC-3 maximum	15 1/h	
<b>Auxiliary circuit</b>		
<b>number of NC contacts for auxiliary contacts</b>	0	
<b>number of NO contacts for auxiliary contacts</b>	0	
number of CO contacts for auxiliary contacts	0	
<b>Protective and monitoring functions</b>		
<b>product function</b>		
• ground fault detection	No	
• phase failure detection	Yes	
<b>trip class</b>	CLASS 10	
<b>design of the overload release</b>	thermal	
<b>breaking capacity operating short-circuit current (Ics) at AC</b>		
• at 240 V rated value	100 kA	
• at 400 V rated value	30 kA	
• at 500 V rated value	5 kA	
• at 690 V rated value	2 kA	
<b>breaking capacity maximum short-circuit current (Icu)</b>		
• at AC at 240 V rated value	100 kA	
• at AC at 400 V rated value	55 kA	
• at AC at 500 V rated value	10 kA	
• at AC at 690 V rated value	4 kA	
response value current of instantaneous short-circuit trip unit	208 A	
<b>UL/CSA ratings</b>		
<b>full-load current (FLA) for 3-phase AC motor</b>		
• at 480 V rated value	16 A	
• at 600 V rated value	16 A	
<b>yielded mechanical performance [hp]</b>		
• for single-phase AC motor		
— at 110/120 V rated value	1 hp	
— at 230 V rated value	2 hp	
• for 3-phase AC motor		
— at 200/208 V rated value	3 hp	
— at 220/230 V rated value	5 hp	
— at 460/480 V rated value	10 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>		
• at 240 V	gL/gG 80 A	
• at 400 V	gL/gG 63 A	
• at 500 V	gL/gG 50 A	
• at 690 V	gL/gG 40 A	
<b>Installation/ mounting/ dimensions</b>		
<b>mounting position</b>	any	

<b>fastening method</b>	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
<b>height</b>	97 mm
<b>width</b>	45 mm
<b>depth</b>	97 mm
<b>required spacing</b>	
• for grounded parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm

#### Connections/ Terminals

<b>product component removable terminal for auxiliary and control circuit</b>	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>	
• for main contacts	
— solid or stranded	2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 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 cables for main contacts	2x (18 ... 14), 2x 12
<b>tightening torque</b>	
• for main contacts with screw-type terminals	0.8 ... 1.2 N·m
<b>design of screwdriver shaft</b>	Diameter 5 to 6 mm
<b>size of the screwdriver tip</b>	Pozidriv 2
<b>design of the thread of the connection screw</b>	
• for main contacts	M3

#### Safety related data

<b>B10 value</b>	
• with high demand rate acc. to SN 31920	5 000
<b>proportion of dangerous failures</b>	
• with low demand rate acc. to SN 31920	50 %
• with high demand rate acc. to SN 31920	50 %
<b>failure rate [FIT]</b>	
• with low demand rate acc. to SN 31920	50 FIT
<b>T1 value for proof test interval or service life acc. to</b>	10 y

IEC 61508	
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Handle

#### Certificates/ approvals

##### General Product Approval



[Confirmation](#)



[KC](#)



For use in hazardous locations	Declaration of Conformity	Test Certificates
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[UK Declaration of Conformity](#)



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

#### Marine / Shipping



Marine / Shipping	other	Railway
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[Confirmation](#)



[Vibration and Shock](#)

[Confirmation](#)

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2011-4AA10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-4AA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-4AA10>

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

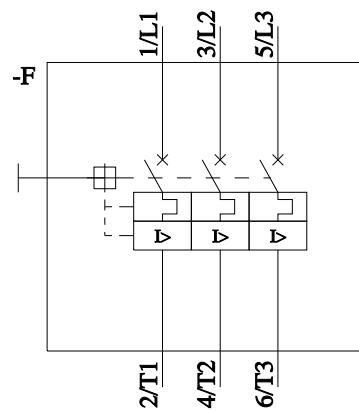
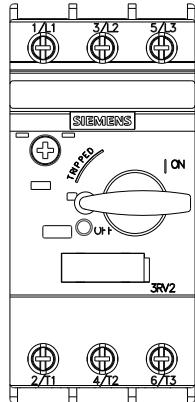
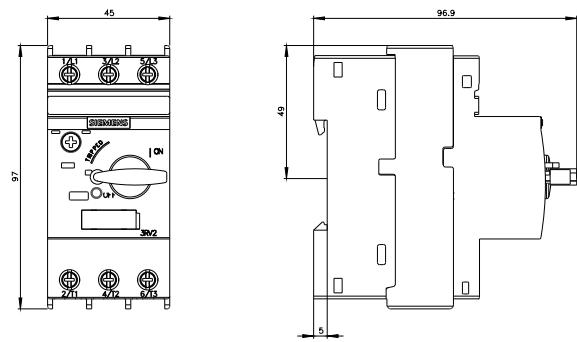
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2011-4AA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-4AA10&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-4AA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-4AA10&objecttype=14&gridview=view1>



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