



Circuit breaker size S00 for motor protection, CLASS 10 A-release 2.2...3.2 A N release 42 A 1 NO+1 NC transverse 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>	3RV1
<b>General technical data</b>	
<b>size of the circuit-breaker</b>	S00
<b>size of contactor can be combined company-specific</b>	S00
product extension auxiliary switch	Yes
<b>power loss [W] for rated value of the current</b>	
• at AC in hot operating state	7.25 W
• at AC in hot operating state per pole	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
<b>surge voltage resistance rated value</b>	6 kV
<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>reference code according to IEC 81346-2</b>	Q
<b>Substance Prohibition (Date)</b>	01/01/2013
<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
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 current-dependent overload release</b>	2.2 ... 3.2 A
<b>operating voltage</b>	
• rated value	20 ... 690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
<b>operating frequency rated value</b>	50 ... 60 Hz
<b>operational current rated value</b>	3.2 A
<b>operational current</b>	
• at AC-3 at 400 V rated value	3.2 A
• at AC-3e at 400 V rated value	3.2 A

<b>operating power</b>	
<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> <li>● at AC-3e <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>	0.6 kW 1.1 kW 1.5 kW 2.2 kW  0.6 kW 1.1 kW 1.5 kW 2.2 kW
<b>operating frequency</b>	
<ul style="list-style-type: none"> <li>● at AC-3 maximum</li> <li>● at AC-3e maximum</li> </ul>	15 1/h 15 1/h
<b>Auxiliary circuit</b>	
<b>design of the auxiliary switch</b>	transverse
<b>number of NC contacts for auxiliary contacts</b>	1
<ul style="list-style-type: none"> <li>● note</li> </ul>	1
<b>number of NO contacts for auxiliary contacts</b>	1
<ul style="list-style-type: none"> <li>● note</li> </ul>	1
number of CO contacts for auxiliary contacts	0
<b>operational current of auxiliary contacts at AC-15</b>	
<ul style="list-style-type: none"> <li>● at 24 V</li> <li>● at 110 V</li> <li>● at 120 V</li> <li>● at 125 V</li> <li>● at 230 V</li> </ul>	2 A 2 A 2 A 2 A 0.5 A
<b>operational current of auxiliary contacts at DC-13</b>	
<ul style="list-style-type: none"> <li>● at 24 V</li> <li>● at 60 V</li> </ul>	1 A 0.15 A
<b>Protective and monitoring functions</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>● ground fault detection</li> <li>● phase failure detection</li> </ul>	No Yes
<b>trip class</b>	CLASS 10
<b>design of the overload release</b>	thermal
<b>breaking capacity maximum short-circuit current (I<sub>cu</sub>)</b>	
<ul style="list-style-type: none"> <li>● at AC at 240 V rated value</li> <li>● at AC at 400 V rated value</li> <li>● at AC at 500 V rated value</li> <li>● at AC at 690 V rated value</li> </ul>	100 kA 100 kA 3 kA 2 kA
<b>breaking capacity operating short-circuit current (I<sub>cs</sub>) at AC</b>	
<ul style="list-style-type: none"> <li>● at 240 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>	100 kA 100 kA 3 kA 2 kA
response value current of instantaneous short-circuit trip unit	42 A
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
<ul style="list-style-type: none"> <li>● at 480 V rated value</li> <li>● at 600 V rated value</li> </ul>	3.2 A 3.2 A
<b>yielded mechanical performance [hp]</b>	
<ul style="list-style-type: none"> <li>● for single-phase AC motor <ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> <li>● for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> </ul> </li> </ul>	0.1 hp 0.25 hp  0.5 hp 0.75 hp

— at 460/480 V rated value	2 hp
— at 575/600 V rated value	2 hp
<b>contact rating of auxiliary contacts according to UL</b>	C300 / R300
<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</b> • for short-circuit protection of the auxiliary switch required	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current I <sub>k</sub> < 400 A)
<b>design of the fuse link for IT network for short-circuit protection of the main circuit</b> • at 240 V • at 400 V • at 500 V • at 690 V	none required gL/gG 40 A gL/gG 35 A gL/gG 35 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>	90 mm
<b>width</b>	45 mm
<b>depth</b>	75 mm
<b>required spacing</b> • for grounded parts at 400 V — downwards — upwards — at the side • for live parts at 400 V — downwards — upwards — at the side • for grounded parts at 500 V — downwards — upwards — at the side • for live parts at 500 V — downwards — upwards — at the side • for grounded parts at 690 V — downwards — upwards — backwards — at the side — forwards • for live parts at 690 V — downwards — upwards — backwards — at the side — forwards	20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 9 mm 20 mm 20 mm 0 mm 9 mm 0 mm 20 mm 20 mm 0 mm 9 mm 0 mm
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b> • for main current circuit • for auxiliary and control circuit	screw-type terminals 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 — finely stranded with core end processing	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> • for auxiliary contacts — solid or stranded	2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )
<b>tightening torque</b> • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals	0.8 ... 1.2 N·m 0.8 ... 1.2 N·m
<b>size of the screwdriver tip</b>	Pozidriv size 2
<b>design of the thread of the connection screw</b> • for main contacts • of the auxiliary and control contacts	M3 M3

#### Safety related data

<b>B10 value</b> • with high demand rate according to SN 31920	5 000
<b>proportion of dangerous failures</b> • with low demand rate according to SN 31920 • with high demand rate according to SN 31920	50 % 50 %
<b>failure rate [FIT]</b> • with low demand rate according to SN 31920	50 FIT
<b>protection class IP on the front according to IEC 60529</b>	IP20
<b>touch protection on the front according to IEC 60529</b>	finger-safe, for vertical contact from the front
display version for switching status	Rocker switch

#### Certificates/ approvals

<b>General Product Approval</b>	<b>For use in hazardous locations</b>
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[Confirmation](#)



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

[Type Test Certificates/Test Report](#)



#### Marine / Shipping



<b>other</b>	<b>Railway</b>
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[Confirmation](#)

[Miscellaneous](#)



[Special Test Certificate](#)

#### 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?mfb=3RV1011-1DA15>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1DA15>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1DA15>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1011-1DA15&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-1DA15&lang=en)

**Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1DA15/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1DA15&objecttype=14&gridview=view1>

last modified:

6/25/2022 