



Circuit breaker size S00 for motor protection, CLASS 10 A-release  
0.11...0.16 A N-release 2.1 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>	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	5.5 W
• at AC in hot operating state per pole	1.8 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
<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>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
• ambient temperature during operation	-20 ... +60 °C
• ambient temperature during storage	-50 ... +80 °C
• ambient temperature 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 current-dependent overload release</b>	0.11 ... 0.16 A

<ul style="list-style-type: none"> <li>operating voltage rated value</li> </ul>	690 V
<ul style="list-style-type: none"> <li>operating voltage at AC-3 rated value maximum</li> </ul>	690 V
<b>operating frequency rated value</b>	50 ... 60 Hz
<b>operational current rated value</b>	0.16 A
operational current at AC-3 at 400 V rated value	0.16 A
operating power at AC-3	
<ul style="list-style-type: none"> <li>at 230 V rated value</li> </ul>	25 W
<ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul>	40 W
<ul style="list-style-type: none"> <li>at 500 V rated value</li> </ul>	60 W
<ul style="list-style-type: none"> <li>at 690 V rated value</li> </ul>	60 W
operating frequency at AC-3 maximum	15 1/h
<b>Auxiliary circuit</b>	
number of CO contacts for auxiliary contacts	0
<b>Protective and monitoring functions</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>ground fault detection</li> </ul>	No
<ul style="list-style-type: none"> <li>phase failure detection</li> </ul>	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>	
<ul style="list-style-type: none"> <li>at 240 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>at 400 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>at 500 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>at 690 V rated value</li> </ul>	100 kA
<b>breaking capacity maximum short-circuit current (Icu)</b>	
<ul style="list-style-type: none"> <li>at AC at 240 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>at AC at 400 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>at AC at 500 V rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>at AC at 690 V rated value</li> </ul>	100 kA
response value current of instantaneous short-circuit trip unit	2.1 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> </ul>	0.16 A
<ul style="list-style-type: none"> <li>at 600 V rated value</li> </ul>	0.16 A
<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>	
<ul style="list-style-type: none"> <li>at 240 V</li> </ul>	none required
<ul style="list-style-type: none"> <li>at 400 V</li> </ul>	None required
<ul style="list-style-type: none"> <li>at 500 V</li> </ul>	None required
<ul style="list-style-type: none"> <li>at 690 V</li> </ul>	None required
<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>	
<ul style="list-style-type: none"> <li>for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> </ul> </li> </ul>	20 mm
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— upwards</li> </ul> </li> </ul>	20 mm
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul>	9 mm
<ul style="list-style-type: none"> <li>for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> </ul> </li> </ul>	20 mm

<ul style="list-style-type: none"> <li>— upwards</li> <li>— at the side</li> <li>• for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for live parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts at 690 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for live parts at 690 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> </ul>	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>	
product function removable terminal for auxiliary and control circuit	No
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>	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>— solid or 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>— solid or stranded</li> </ul> </li> </ul>	2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• tightening torque for main contacts with screw-type terminals</li> <li>• tightening torque for auxiliary contacts with screw-type terminals</li> </ul>	0.8 ... 1.2 N·m  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>	
<ul style="list-style-type: none"> <li>• for main contacts</li> </ul>	M3
<b>Safety related data</b>	
<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>protection class IP on the front acc. to IEC 60529</b>	IP20
<b>touch protection on the front acc. to IEC 60529</b>	finger-safe, for vertical contact from the front
display version for switching status	Rocker switch
<b>Certificates/ approvals</b>	
<b>General Product Approval</b>	<b>For use in hazardous locations</b>



Declaration of Conformity

Test Certificates

Marine / Shipping



EG-Konf.

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



Marine / Shipping

other



LRS



RINA



RMRS



DNV-GL

[Confirmation](#)

[Miscellaneous](#)

other

Railway



VDE

[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?mlfb=3RV1011-0AA10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0AA10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0AA10>

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

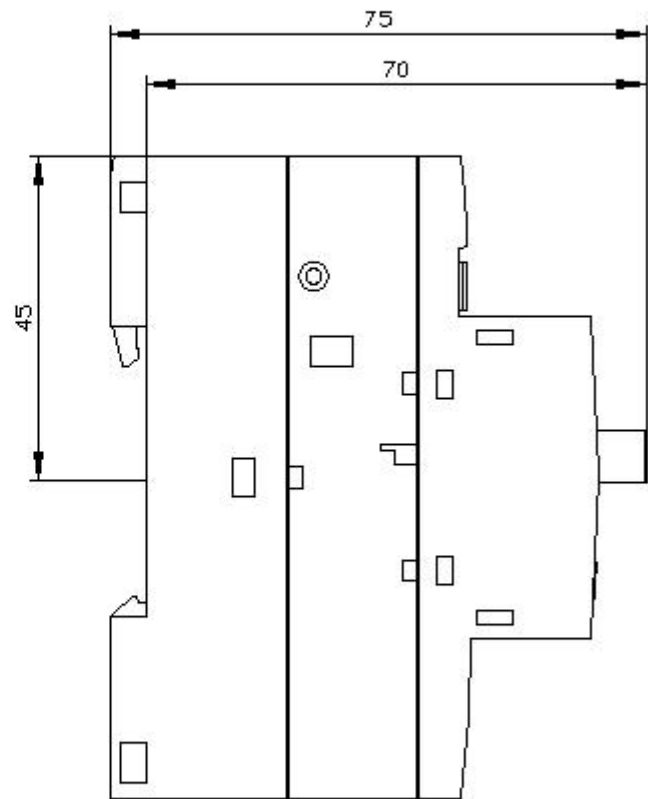
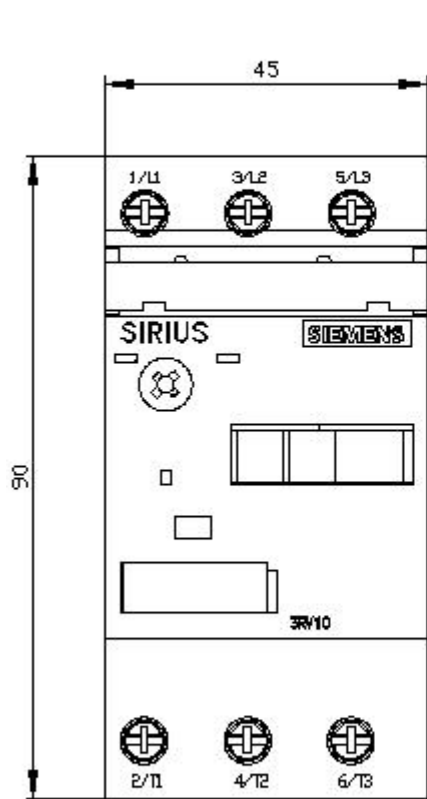
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1011-0AA10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0AA10&lang=en)

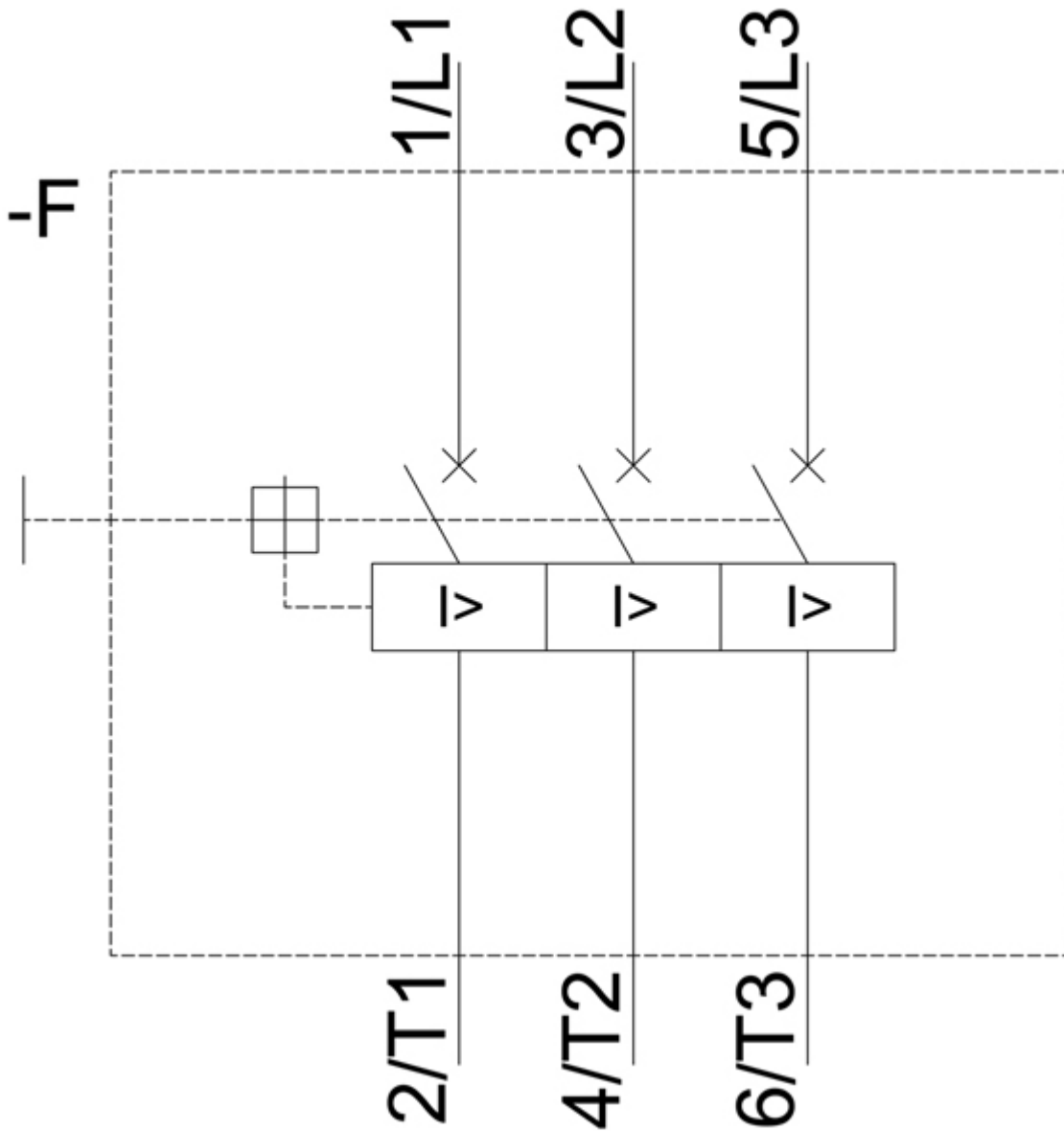
Characteristic: Tripping characteristics, I<sup>t</sup>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0AA10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0AA10&objecttype=14&gridview=view1>





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