## **SIEMENS**

Data sheet 3RV1011-0JA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.7...1 A N-release 13 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC

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 auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	5.5 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.8 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
of auxiliary contacts typical	100 000
electrical endurance (switching cycles) typical	100 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	01/01/2013
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
during storage	-50 +80 °C
during transport	-50 +80 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	0.7 1 A
operating voltage	
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	1 A
and the second s	
operational current	
<ul><li>operational current</li><li>at AC-3 at 400 V rated value</li></ul>	1 A

operating power	
• at AC-3	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.25 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.6 kW
• at AC-3e	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.25 kW
— at 500 V rated value	0.4 kW
— at 690 V rated value	0.6 kW
operating frequency	
at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
• note	1
number of NO contacts for auxiliary contacts	1
note	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	V
at 24 V	2 A
• at 24 V • at 110 V	2 A 2 A
• at 120 V	2 A
at 125 V     at 230 V	2 A
	0.5 A
operational current of auxiliary contacts at DC-13	4.0
• at 24 V	1.4
• at 60 V	0.15 A
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	
	thermal
breaking capacity maximum short-circuit current (Icu)	
at AC at 240 V rated value	100 kA
<ul><li>at AC at 240 V rated value</li><li>at AC at 400 V rated value</li></ul>	100 kA 100 kA
<ul> <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> </ul>	100 kA 100 kA 100 kA
<ul> <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
<ul> <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> </ul>	100 kA 100 kA 100 kA 100 kA
<ul> <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> breaking capacity operating short-circuit current (Ics)	100 kA 100 kA 100 kA
<ul> <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> breaking capacity operating short-circuit current (Ics) at AC	100 kA 100 kA 100 kA 100 kA
<ul> <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> breaking capacity operating short-circuit current (Ics) at AC <ul> <li>at 240 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA
<ul> <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> <li>breaking capacity operating short-circuit current (Ics) at AC</li> <li>at 240 V rated value</li> <li>at 400 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA 100 kA
<ul> <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> breaking capacity operating short-circuit current (Ics) at AC <ul> <li>at 240 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
<ul> <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> breaking capacity operating short-circuit current (Ics) at AC <ul> <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> response value current of instantaneous short-circuit trip unit	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
<ul> <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> <li>breaking capacity operating short-circuit current (Ics) at AC         <ul> <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> </li> <li>response value current of instantaneous short-circuit trip unit</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 13 A
<ul> <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> <li>breaking capacity operating short-circuit current (Ics) at AC</li> <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> <li>response value current of instantaneous short-circuit trip unit</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 13 A
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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp]	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 13 A
<ul> <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> <li>breaking capacity operating short-circuit current (Ics) at AC</li> <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> <li>response value current of instantaneous short-circuit trip unit</li> <li>UL/CSA ratings</li> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>for 3-phase AC motor</li> <li>at 575/600 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 101 kA 101 kA 102 kA 103 kA 104 kA 105 kA
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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for 3-phase AC motor at 575/600 V rated value contact rating of auxiliary contacts according to UL  Short-circuit protection	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 11 A
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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value full-load current (FLA) for 3-phase AC motor at 480 V rated value for 3-phase AC motor at 575/600 V rated value contact rating of auxiliary contacts according to UL	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 101 kA 101 kA 102 kA 103 kA 104 kA 105 kA

design of the fuse link	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
design of the fuse link for IT network for short-circuit protection of the main circuit	400 A)
• at 240 V	none required
• at 400 V	gL/gG 10 A
• at 500 V	gL/gG 10 A
• at 690 V	gL/gG 10 A
nstallation/ mounting/ dimensions	<u> </u>
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
Tuotoning motilou	according to DIN EN 60715
height	90 mm
width	45 mm
depth	75 mm
required spacing	
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
<ul><li>downwards</li></ul>	20 mm
— upwards	20 mm
— at the side	9 mm
<ul> <li>for live parts at 500 V</li> </ul>	
— downwards	20 mm
— upwards	20 mm
— at the side	9 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
<ul> <li>for live parts at 690 V</li> </ul>	
— downwards	20 mm
— upwards	20 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
onnections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m
<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m

size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	1 SEIGHT SIZE Z
• for main contacts	M3
of the auxiliary and control contacts	M3
Safety related data	
B10 value	
<ul> <li>with high demand rate according to SN 31920</li> </ul>	5 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %
failure rate [FIT]	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 FIT
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Rocker switch
Certificates/ approvals	

## **General Product Approval**

For use in hazardous locations



Confirmation









For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



IECEx



Type Test Certificates/Test Report

Special Test Certificate



## Marine / Shipping





LRS









other

Railway

**Miscellaneous** 

Confirmation



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=3RV1011-0JA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-0JA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0JA15

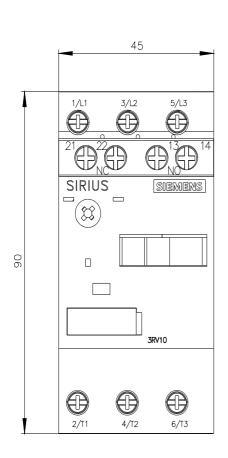
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV1011-0JA15&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV1011-0JA15&lang=en</a>

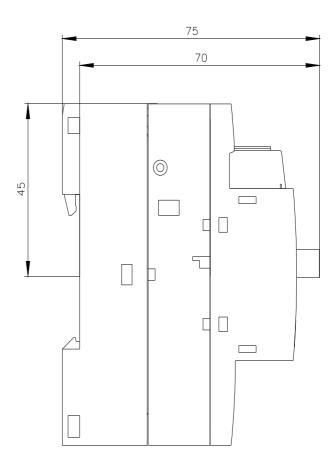
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0JA15/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0JA15&objecttype=14&gridview=view1





last modified:

6/25/2022