## SIEMENS

## Data sheet

## 3RV2011-1JA10-0BA0



Special type Circuit breaker size S00 for motor protection, CLASS 10 A-release 7...10 A N release 130 A screw terminal Standard switching capacity Ambient temperature -50  $^\circ$ C 500 switching cycles

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	9.25 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	3.1 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
<ul> <li>of the main contacts typical</li> </ul>	500
<ul> <li>of auxiliary contacts typical</li> </ul>	500
electrical endurance (operating cycles) typical	500
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-50 +60 °C
during storage	-50 +80 °C
<ul> <li>during transport</li> </ul>	-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	7 10 A
operating voltage	
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	10 A
operational current	
• at AC-3 at 400 V rated value	10 A
operating power	
• at AC-3	

-+ 000 \ /	0.0100
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating frequency	
• at AC-3 maximum	15 1/h
Auxiliary circuit	0
number of NC contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
Protective and monitoring functions	0
product function	
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	
• at AC at 240 V rated value	100 kA
• at AC at 400 V rated value	100 kA
• at AC at 500 V rated value	42 kA
• at AC at 690 V rated value	6 kA
operating short-circuit current breaking capacity (Ics) at AC	
<ul> <li>at 240 V rated value</li> </ul>	100 kA
<ul> <li>at 400 V rated value</li> </ul>	100 kA
• at 500 V rated value	42 kA
• at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	130 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V	gG 50 A
• at 500 V	gG 40 A
	5
• at 690 V	gG 40 A
	gG 40 A
Installation/ mounting/ dimensions	
	gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
Installation/ mounting/ dimensions mounting position	any
Installation/ mounting/ dimensions mounting position fastening method	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
Installation/ mounting/ dimensions mounting position fastening method height	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm
Installation/ mounting/ dimensions mounting position fastening method height width	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V — downwards — upwards — at the side	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V - downwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V - downwards - at the side • for live parts at 400 V - downwards - at the side • for grounded parts at 500 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V - downwards - at the side • for live parts at 400 V - downwards - at the side • for grounded parts at 500 V - downwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V - downwards - at the side • for live parts at 400 V - downwards - upwards - at the side • for grounded parts at 500 V - downwards - upwards - upwards - at the side	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V - downwards - at the side • for live parts at 400 V - downwards - at the side • for grounded parts at 500 V - downwards - upwards - at the side • for grounded parts at 500 V - downwards - upwards - at the side • for grounded parts at 500 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • 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 grounded parts at 500 V - downwards - upwards - at the side • for grounded parts at 500 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 9 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • 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 grounded parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V - downwards	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • 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 grounded parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • for grounded parts at 400 V - downwards - upwards - at the side • for live parts at 400 V - downwards - at the side • for grounded parts at 500 V - downwards - at the side • for grounded parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V - downwards - at the side • for live parts at 500 V	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting at the side • 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 grounded parts at 500 V - downwards - upwards - at the side • for live parts at 500 V - downwards - upwards - at the side • for live parts at 500 V - downwards - upwards - at the side	any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 0 mm 30 mm 30 mm 9 mm 30 mm 30 mm 9 mm 30 mm 30 mm 30 mm 30 mm 30 mm

— upwards		50 mm					
— backwards			0 mm				
— at the side			30 mm				
— forwards			0 mm				
<ul> <li>for live parts at 69</li> </ul>	90 V						
— downwards			50 mm				
— upwards			50 mm				
— backwards			0 mm	0 mm			
— at the side			30 mm				
— forwards	— forwards			0 mm			
<b>Connections/ Terminals</b>							
type of electrical conn	ection						
for main current circuit			screw-type terminals				
arrangement of electri circuit	arrangement of electrical connectors for main current circuit			Top and bottom			
type of connectable co	onductor cross-sections						
<ul> <li>for main contacts</li> </ul>							
— solid or stra	nded		2x (0,75	. 2,5 mm²), 2x 4 mn	n²		
- finely strand	led with core end processi	ng	2x (0.5	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )			
tightening torque	· ·						
<ul> <li>for main contacts</li> </ul>	with screw-type terminals		0.8 1.2	N·m			
design of screwdriver shaft			Diameter 5 to 6 mm				
size of the screwdrive	r tip		Pozidriv s	Pozidriv size 2			
design of the thread o	f the connection screw						
<ul> <li>for main contacts</li> </ul>	for main contacts			M3			
Safety related data	afety related data						
T1 value for proof test ir 61508	T1 value for proof test interval or service life according to IEC			10 a			
protection class IP on	the front according to IE	C 60529	IP20				
touch protection on th	e front according to IEC	60529	finger-safe, for vertical contact from the front				
display version for swite	hing status		Handle				
Certificates/ approvals	-						
General Product Appr	oval		De	eclaration of Confo	ormity	Test Certificates	
					•		
<u>Confirmation</u>	<u>KC</u>	EHC		CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	
Test Certificates	Marine / Shipping						
Special Test Certific- ate	ABS	BUREAU			Lloyds Register Liks	PRS	
Marine / Shipping	other		Ra	ailway			
RINA	<u>Confirmation</u>	VDE	•	<u>Confirmation</u>	Vibration and Shock		
Further information							
Siemens has decided	Siemens has decided to exit the Russian market (see here).						
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates.							
Please contact your loca	al Siemens office on the st ther than the sanctioned E	atus of validity of	the EAC cer		nd to import or offer to supp	bly these products to an	

Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 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=3RV2011-1JA10-0BA0 Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1JA10-0BA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1JA10-0BA0

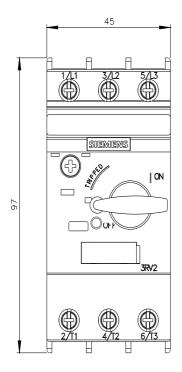
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

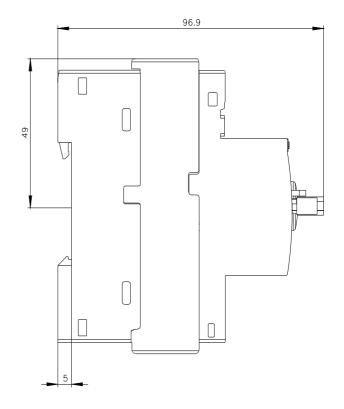
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2011-1JA10-0BA0&lang=en

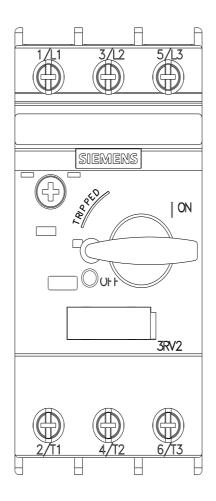
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

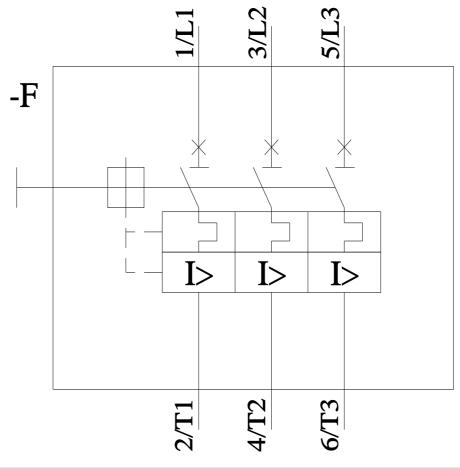
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1JA10-0BA0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1JA10-0BA0&objecttype=14&gridview=view1









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