SIEMENS

Data sheet

3RV2011-1CA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 1.8...2.5 A N-release 33 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC

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	
 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
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (operating cycles) typical	100 000
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
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	
 during operation 	-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	1.8 2.5 A
operating voltage	
rated value	20 690 V
 at AC-3 rated value maximum 	690 V
	690 V
 at AC-3e rated value maximum 	090 V
at AC-3e rated value maximum operating frequency rated value	50 60 Hz

 at AC-3 at 400 V rated value 	2.5 A
• at AC-3e at 400 V rated value	2.5 A
operating power	
• at AC-3	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.75 kW
— at 500 V rated value	1.1 kW
— at 690 V rated value	1.5 kW
• at AC-3e	
— at 230 V rated value	0.4 kW
— at 400 V rated value	0.75 kW
— at 500 V rated value	1.1 kW
— at 690 V rated value	1.5 kW
	1.5 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
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• 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
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	100 kA
at AC at 690 V rated value	10 KA
operating short-circuit current breaking capacity (Ics) at AC	
• at 240 V rated value	100 kA
at 400 V rated value	100 kA
at 500 V rated value	100 kA
at 690 V rated value	10 kA
response value current of instantaneous short-circuit trip unit	33 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	2.5 A
• at 600 V rated value	2.5 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 230 V rated value	0.17 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.5 hp
— at 220/230 V rated value	0.5 hp
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	1.5 hp
contact rating of auxiliary contacts according to UL	C300 / R300
Short-circuit protection	

product function short circuit protection	Yes			
design of the short-circuit trip	magnetic			
design of the fuse link				
• for short-circuit protection of the auxiliary switch required	Fuse gL/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	-1 /= 0.05 A			
• at 400 V	gL/gG 25 A			
• at 500 V	gL/gG 25 A			
• at 690 V	gL/gG 20 A			
nstallation/ mounting/ dimensions				
mounting position	any			
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715			
height	97 mm			
width	45 mm			
depth	97 mm			
required spacing				
 with side-by-side mounting at the side 	0 mm			
 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				
type of electrical connection				
for main current circuit	screw-type terminals			
for auxiliary and control circuit	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 (0,75 2,5 mm²), 2x 4 mm²			
— finely stranded with core end processing	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
 for AWG cables for main contacts 	2x (18 14), 2x 12			
type of connectable conductor cross-sections				
for auxiliary contacts				
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)			
 finely stranded with core end processing 	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
and, changed that bere one proceeding				

 for AWG cables f 	for auxiliary contacts		2x (20 16), 2x (18 14	4)	
tightening torque					
 for main contacts with screw-type terminals 		0.8 1.2 N·m			
 for auxiliary containing 	 for auxiliary contacts with screw-type terminals 		0.8 1.2 N·m		
design of screwdriver	design of screwdriver shaft				
size of the screwdrive	r tip		Pozidriv size 2		
design of the thread o	f the connection screw				
 for main contacts 	3		M3		
 of the auxiliary ar 	nd control contacts		M3		
Safety related data					
B10 value					
with high demand rate according to SN 31920			5 000		
proportion of dangerous failures					
 with low demand 	rate according to SN 319	920	50 %		
 with high demand 	d rate according to SN 31	920	50 %		
failure rate [FIT]					
 with low demand 	rate according to SN 319	920	50 FIT		
T1 value for proof test in	nterval or service life acc	ording to IEC	10 a		
61508					
•	the front according to		IP20		
touch protection on th	ne front according to IE	C 60529	finger-safe, for vertical co	ontact from the front	
display version for swite	ching status		Handle		
Certificates/ approvals					
General Product App	roval				For use in hazard-
					ous locations
				LIIL	ATEX
For use in hazard- ous locations	Declaration of Confo	rmity	Test Certificates	i	Marine / Shipping
IECEx IECEx	UK CA	CE EG-Konf.	<u>Special Test Cert</u> <u>ate</u>	ific- <u>Type Test Certific</u> ates/Test Report	ABS
Marine / Shipping					other
BUREAU VERITAS		Lloyd's Register urs	PRS	RINA	<u>Confirmation</u>
other	Railway				
	<u>Confirmation</u>	Vibration and SI	nock		
Further information					

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=3RV2011-1CA15 Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1CA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1CA15

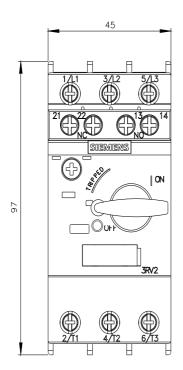
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

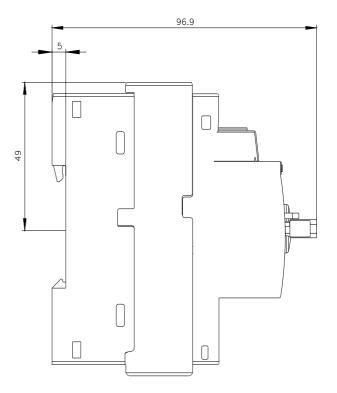
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1CA15&lang=en

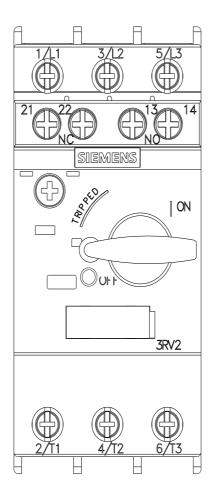
Characteristic: Tripping characteristics, I2t, Let-through current

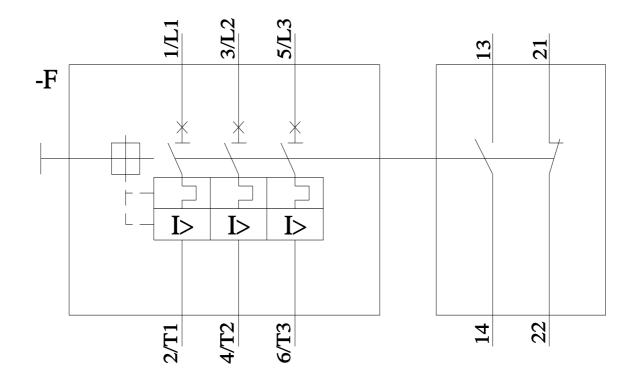
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1CA15/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1CA15&objecttype=14&gridview=view1









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