SIEMENS

Data sheet

3RV2011-0FA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.35...0.5 A N-release 6.5 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 	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
surge voltage resistance rated value	6 kV
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
 of the main contacts typical 	100 000
 of auxiliary contacts typical 	100 000
electrical endurance (switching 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	0.35 0.5 A
operating voltage	
 rated value 	20 690 V
 at AC-3 rated value maximum 	690 V
 at AC-3e rated value maximum 	690 V

	F0 C011-
operating frequency rated value	50 60 Hz
operational current rated value	0.5 A
 operational current at AC-3 at 400 V rated value 	0.5 A
at AC-3e at 400 V rated value	0.5 A
operating power	
 at AC-3 — at 230 V rated value 	0.4 100
	0.1 kW
— at 400 V rated value	0.12 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.2 kW
• at AC-3e	0.4 100
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.12 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.2 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
breaking capacity maximum short-circuit current (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 100 kA
 at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) 	100 kA
 at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC 	100 kA 100 kA
 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 	100 kA 100 kA 100 kA
 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 	100 kA 100 kA 100 kA 100 kA
 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 	100 kA 100 kA 100 kA 100 kA 100 kA
 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 500 V rated value at 690 V rated value 	100 kA 100 kA 100 kA 100 kA 100 kA
 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 	100 kA 100 kA 100 kA 100 kA 100 kA
 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 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
 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 	100 kA 100 kA 100 kA 100 kA 100 kA
 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 at 690 V rated value tesponse value current of instantaneous short-circuit trip unit UL/CSA ratings 	100 kA 100 kA 100 kA 100 kA 100 kA
 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 500 V rated value at 690 V rated value at 690 V rated value to 500 V	100 kA 100 kA 100 kA 100 kA 100 kA 6.5 A
 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 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 	100 kA 100 kA 100 kA 100 kA 100 kA 6.5 A 0.5 A
 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 	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 6.5 A 0.5 A
 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 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 	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 6.5 A 0.5 A
 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 500 V rated value at 690 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 6.5 A 0.5 A 0.5 A C300 / R300
 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 contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection 	100 kA 100 kA 100 kA 100 kA 100 kA 100 kA 6.5 A 0.5 A 0.5 A C300 / R300 Yes

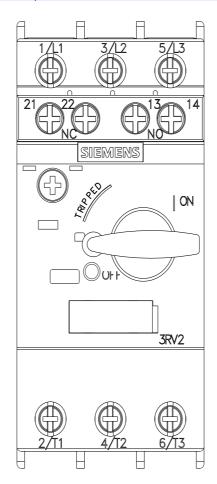
 for short-circuit protection of the auxiliary switch required 	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current $Ik < 400 A$)
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 690 V	gL/gG 4 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	
 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
	50 mm
— upwards — 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 mm²), 2x (0.75 2.5 mm²)
 at 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)
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
tightening torque	
 for main contacts with screw-type terminals 	0.8 1.2 N·m
 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m
design of screwdriver shaft	Diameter 5 to 6 mm
accign of colomative shall	

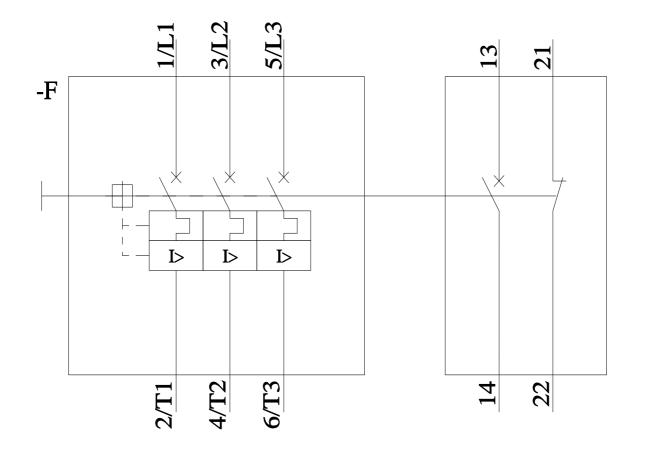
size of the screwdriver tip		Pozidriv size 2			
design of the thread	d of the connection sci	ew			
for main contacts		M3			
 of the auxiliary and control contacts 		M3			
Safety related data					
B10 value					
 with high dema 	and rate according to SN	31920	5 000		
proportion of dangerous failures					
with low demand rate according to SN 31920		50 %			
 with high demand rate according to SN 31920 		50 %			
failure rate [FIT]					
with low demand rate according to SN 31920		50 FIT			
T1 value for proof test interval or service life according to IEC 61508		10 y			
protection class IP on the front according to IEC 60529		IP20			
touch protection on	the front according to	IEC 60529	finger-safe, for vertical conta	act from the front	
display version for sw			Handle		
Certificates/ approval	ls				
General Product Ap	oproval				
S.		<u>Confirmatic</u>		<u>KC</u>	EHC
For use in hazardou	us locations	Declaration of	of Conformity	Test Certificates	
IECEx	K ATEX	CE EG-Konf.	UK CA	Special Test Certific- ate	Type Test Certific- ates/Test Report
Marine / Shipping					
ABS	B U REAU VERITAS		Lloyd's Register urs	PRS	RINA
Marine / Shipping	other		Railway		
	<u>Confirmation</u>	^	Vibration and Shock	Confirmation	
			•		

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https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0FA15/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0FA15&objecttype=14&gridview=view1





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