SIEMENS

Data sheet

3RV2011-1FA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 3.5...5 A N release 65 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		
maximum permissible voltage for safe isolation in networks with grounded star point			
 between main and auxiliary circuit 	400 V		
 between main and auxiliary circuit 	400 V		
shock resistance acc. 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 acc. to IEC 81346-2	Q		
Substance Prohibitance (Date)	01.10.2009 00:00:00		
Ambient conditions			
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		
temperature compensation	-20 +60 °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	3.5 5 A
 operating voltage rated value 	690 V
 operating voltage at AC-3 rated value maximum 	690 V
operating frequency rated value	50 60 Hz
operational current rated value	5 A
operational current at AC-3 at 400 V rated value	5 A
operating power at AC-3	
at 230 V rated value	1 100 W
• at 400 V rated value	1 500 W
• at 500 V rated value	2 200 W
 at 690 V rated value 	4 000 W
operating frequency at AC-3 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 24 V	0.5 A
• at 125 V	0.5 A
• at 125 V • at 230 V	0.5 A
• at 230 V operational current of auxiliary contacts at DC-13	0.0 A
• at 24 V	1 A
• at 24 V • 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 operating short-circuit current (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	4 kA
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
at AC at 690 V rated value	6 kA
response value current of instantaneous short-circuit trip unit	65 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	5 A
• at 600 V rated value	5 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.167 hp
— at 230 V rated value	0.5 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	1 hp
— at 220/230 V rated value	1 hp
— at 460/480 V rated value	3 hp
	510
— at 575/600 V rated value	3 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 Ik < 400 A)
design of the fuse link for IT network for short-circuit	
protection of the main circuit	
● at 400 V ● at 500 V	gL/gG 32 A gL/gG 32 A
	• •
• at 690 V	gL/gG 25 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
— 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	
product function removable terminal for auxiliary and control circuit	No
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 circuit	Top and bottom
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²

— finely stran	ded with core end pro	cessing	2x (0.5 1	l.5 mm²), 2x (0.7	75 2.5 mm²)		
at AWG cables for main contacts		2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12					
• at AWG cables for main contacts type of connectable conductor cross-sections			.,,				
 for auxiliary cont 							
- solid or stranded		2x (0.5 1	l,5 mm²), 2x (0,7	$75 - 2.5 \mathrm{mm}^2$			
— finely stranded with core end processing		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)					
 at AWG cables for auxiliary contacts tightening torque for main contacts with screw-type		0.8 1.2					
terminals							
 tightening torque type terminals 	htening torque for auxiliary contacts with screw- terminals			0.8 1.2 N·m			
design of screwdriver shaft			Diameter 5 to 6 mm				
size of the screwdriv	er tip		Pozidriv 2				
design of the thread	of the connection sc	rew					
 for main contact 	 for main contacts 						
 of the auxiliary a 	 of the auxiliary and control contacts 		M3				
Safety related data							
B10 value							
	with high demand rate acc. to SN 31920		5 000				
	with high demand rate acc. to SN 31920 proportion of dangerous failures		0.000				
		50 %					
• with low demand rate acc. to SN 31920							
with high demand rate acc. to SN 31920		50 %					
failure rate [FIT]							
with low demand rate acc. to SN 31920		50 FIT					
IEC 61508	T1 value for proof test interval or service life acc. to IEC 61508		10 y				
protection class IP of			IP20				
	touch protection on the front acc. to IEC 60529		finger-safe, for vertical contact from the front				
display version for switching status			Handle				
Certificates/ approvals							
General Product Ap	General Product Approval				For use in hazardou	is locations	
(SP) Car	(CCC)			EAC	IECEx	K ATEX	
Declaration of Confo	ormity	Test Certifica	ates		Marine / Shipping		
<u>Miscellaneous</u>	CE EG-Konf.	<u>Type Tes</u> <u>Certificates/T</u> <u>Report</u>		<u>Special Test</u> <u>Certificate</u>	ABS	BUREAU	
Marine / Shipping						other	
Marine / Shipping		~		-			
Marine / Shipping	6				\frown	other Confirmation	
Marine / Shipping					(DNV-GL		
Marine / Shipping	PRS	RINA		KARS KARS	DNV-GL		
Lloyds Register	PRS	() RINA		RMPS	DNV-GL EWILLIAM		
Lloyds Register	PRS	RINA		KMRS	DNV-GL		
Lloyds Kegister us	PRS	RINA		KMRS	DNV-GL DNV-GL SWGLEDIKA		
Lloyds Register	PRS Railway	RINA		KMRS	Eleval conce		



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=3RV2011-1FA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1FA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA15

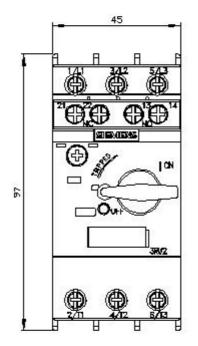
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

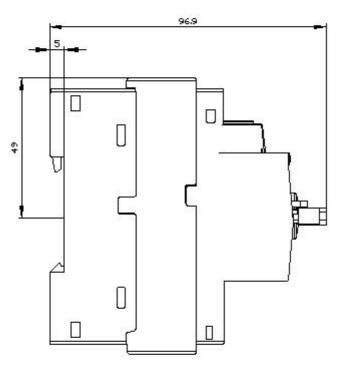
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1FA15&lang=en

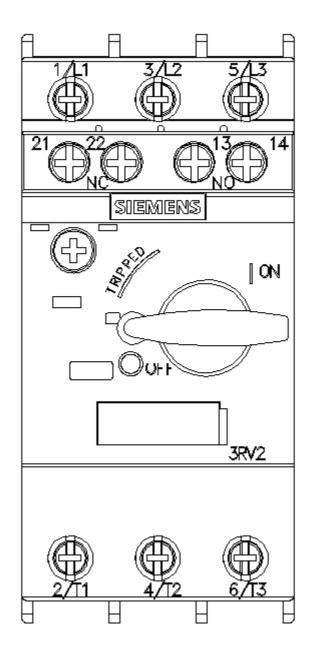
Characteristic: Tripping characteristics, I²t, Let-through current

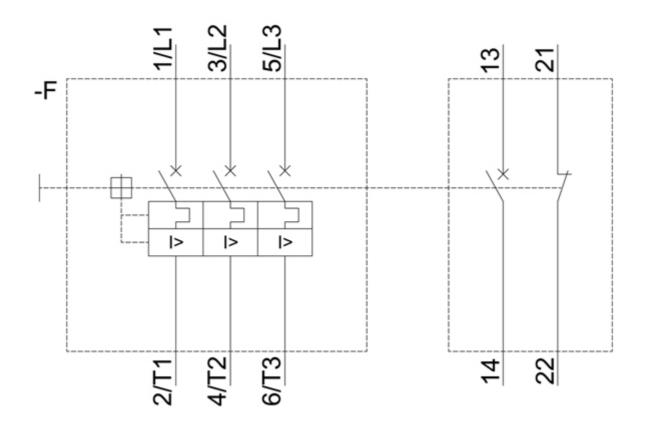
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA15/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1FA15&objecttype=14&gridview=view1









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