SIEMENS

Data sheet

3RV2011-1BA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 1.4...2 A N-release 26 A screw terminal Standard switching capacity

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 (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	1.4 2 A		
operating voltage			
 rated value 	20 690 V		
 at AC-3 rated value maximum 	690 V		
 at AC-3e rated value maximum 	690 V		

operating frequency rated value	50 60 Hz
operating frequency rated value operational current rated value	2 A
operational current rated value	
at AC-3 at 400 V rated value	2 A
 at AC-3e at 400 V rated value at AC-3e at 400 V rated value 	2 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	0.8 kW
— at 690 V rated value	1.1 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	0.8 kW
— at 690 V rated value	1.1 kW
operating frequency	
• at AC-3 maximum	15 1/h
 at AC-3 maximum at AC-3e maximum 	15 1/h 15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
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 (lcu)	
 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
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	10 kA
response value current of instantaneous short-circuit trip	26 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	2 A
at 600 V rated value	2 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 230 V rated value	0.13 hp
• for 3-phase AC motor	
— at 460/480 V rated value	1 hp
— at 575/600 V rated value	1 hp
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	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 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	50				
— 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				
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 stranded with core end processing 	2x (0,75 2,5 mm ²), 2x (0.75 2.5 mm ²)				
 at AWG cables for main contacts 	2x (18 14), 2x 12				
tightening torque					
 for main contacts with screw-type terminals 	0.8 1.2 N·m				
design of screwdriver shaft	Diameter 5 to 6 mm				
size of the screwdriver tip	Pozidriv size 2				
design of the thread of the connection screw					
 for main 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 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 tes IEC 61508	t interval or service life	according to	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 contact from the front			
display version for switching status		Handle			
Certificates/ approval	s				
General Product Ap	oproval				
SP M		<u>Confirmation</u>		<u>KC</u>	EHC
For use in hazardou	us locations	Declaration of	of Conformity	Test Certificates	
IECEx	K ATEX	CE EG-Konf.		<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific</u> <u>ate</u>
Marine / Shipping					
ABS	BUREAU VERITAS		Lloyd's Register uis	PRS	RINA
Marine / Shipping	other		Railway		
KMRS	<u>Confirmation</u>		<u>Confirmation</u>	Vibration and Shock	
urther 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=3RV2011-1BA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-1BA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1BA10

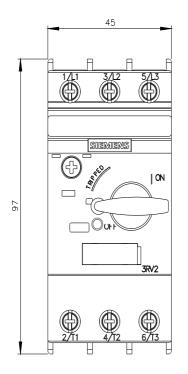
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1BA10&lang=en

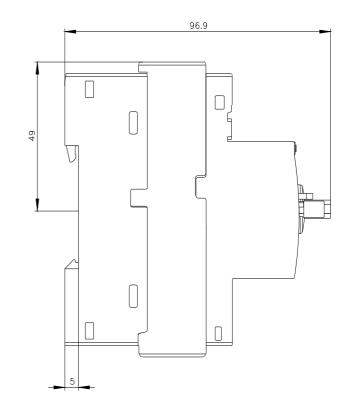
Characteristic: Tripping characteristics, I²t, Let-through current

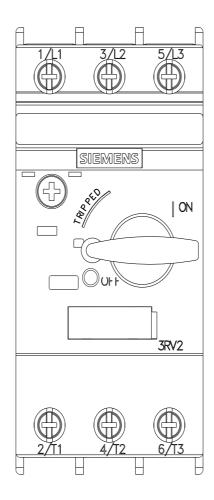
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1BA10/char

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

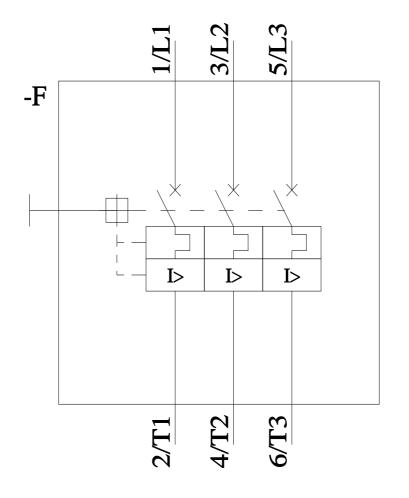
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