SIEMENS

Data sheet

3RV2011-1KA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 9...12 A N-release 163 A screw terminal Standard switching capacity

product brand name SIRIUS product designation Circult breaker design of the product For motor protection product type designation 3RV2 General technical data					
design of the product For motor protection product type designation 3RV2 General technical data S00 size of the circuit-breaker S00, S0 product extension auxiliary switch Yes power loss (W) for rated value of the current ************************************	product brand name	SIRIUS			
product type designation 3RV2 General technical data	product designation	Circuit breaker			
General technical data S00 size of the circuit-breaker S00 size of contactor can be combined company-specific S00, S0 product extension auxilary switch Yes power loss [W] for rated value of the current 9.25 W • at AC in hot operating state 9.25 W • at AC in hot operating state prole 3.1 W Insulation voltage with degree of pollution 3 at AC rated value 690 V surger voltage resistance rated value 64 KV shock resistance according to IEC 60068-2-27 Z5g /11 ms mechanical service life (operating cycles) 64 KV • of the main contacts typical 100 000 • of auxiliary contacts typical 100 000 • electricial endurance (operating cycles) typical 100 000 • electricial endurance (operating cycles) typical 100 000 • of auxiliary contacts typical 100 000 reference code according to IEC 81346-2 Q SWHC substance name Lead - 7439-92-1 Ambient conditions 200 m installation altitude at height above sea level maximum 2 000 m adjustating transport -50 +80 °C • during transport -50 +80 °C • during transport -50 +80 °C • during transport 3 adjus	design of the product	For motor protection			
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 9.25 W at AC in hot operating state 9.25 W at AC in hot operating state 9.25 W at AC in hot operating state per pole 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 Iffe (operating cycles) of the main contacts typical 100 000 electrical endurance (operating cycles) typical 100 000 electrical endurance (operating cycles) typical 100 1000 SUbtace Prohibitance (Date) 100/12009 SUHC substance name Lead - 7439-92-1 Ambient conditions ambient temperature during operation -20 +60 °C -0 auxiliary operation -20 +60 °C -0 during operation -20 +80 °C -10 unpt of poles for main current circuit -3 adjustable current response value current of the current-dependent overload release -12.5 A -12	product type designation	3RV2			
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SVHC substance name Lead - 7439-92-1 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -20 +60 °C • during operation -20 +60 °C • during storage -50 +80 °C • during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit 3 number of poles for main current circuit 3 adjustable current response value current of the current- dependent overload release 9 12.5 A operating voltage - • rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	reference code according to IEC 81346-2	Q			
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	ambient temperature				
• during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit 3 number of poles for main current circuit 3 adjustable current response value current of the current- dependent overload release 9 12.5 A operating voltage - • rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	during operation	-20 +60 °C			
relative humidity during operation 10 95 % Main circuit 3 number of poles for main current circuit 3 adjustable current response value current of the current- dependent overload release 9 12.5 A operating voltage - • rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	during storage	-50 +80 °C			
Main circuit 3 number of poles for main current circuit 3 adjustable current response value current of the current- dependent overload release 9 12.5 A operating voltage 9 690 V • rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	during transport	-50 +80 °C			
number of poles for main current circuit 3 adjustable current response value current of the current- dependent overload release 9 12.5 A operating voltage - • rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	relative humidity during operation	10 95 %			
adjustable current response value current of the current- dependent overload release 9 12.5 A operating voltage • rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	Main circuit				
dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum • at AC-3e rated value maximum	number of poles for main current circuit	3			
• rated value 20 690 V • at AC-3 rated value maximum 690 V • at AC-3e rated value maximum 690 V	•	9 12.5 A			
at AC-3 rated value maximum 690 V at AC-3e rated value maximum 690 V	operating voltage				
• at AC-3e rated value maximum 690 V	rated value	20 690 V			
	 at AC-3 rated value maximum 	690 V			
operating frequency rated value 50 60 Hz	 at AC-3e rated value maximum 	690 V			
	operating frequency rated value	50 60 Hz			

	10.5.4
operational current rated value	12.5 A
operational current	
• at AC-3 at 400 V rated value	12.5 A
at AC-3e at 400 V rated value	12.5 A
operating power	
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
● at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	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
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	
at 240 V rated value	100 kA
at 400 V rated value	100 kA
at 500 V rated value	42 kA
at 690 V rated value	4 kA
	163 A
response value current of instantaneous short-circuit trip unit	103 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	40.5 A
at 480 V rated value	12.5 A
at 600 V rated value	12.5 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	2 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	8 hp
— at 575/600 V rated value	10 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 63 A
• at 500 V	gL/gG 50 A
• at 690 V	gL/gG 40 A
Installation/ mounting/ dimensions	

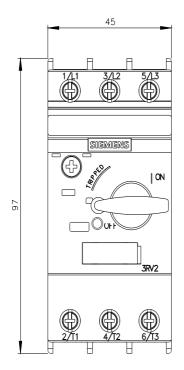
mounting position	any				
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715				
height	97 mm				
width	45 mm				
depth	97 mm				
required spacing					
with side-by-side mounting at the side	0 mm				
 for grounded parts at 400 V 					
- downwards	30 mm				
— upwards	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				
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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
 for 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 	МЗ				
Safety related data					
product function suitable for safety function	Yes				
suitability for use					
safety-related switching on	No				
safety-related switching OFF	Yes				
service life maximum	10 a				
test wear-related service life necessary	Yes				
proportion of dangerous failures	40.0/				
with low demand rate according to SN 31920	40 %				
 with high demand rate according to SN 31920 	50 %				

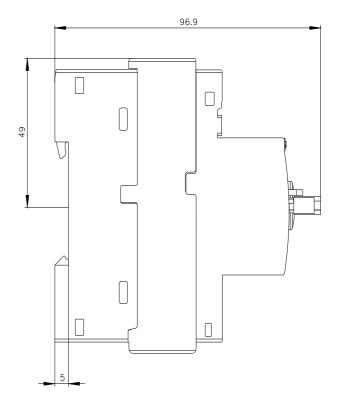
Bio i Martina		ON 0 / 200					
	emand rate according t			5 000			
failure rate [FIT] with I 31920	ow demand rate accord	aing to SN	50 FIT	50 FIT			
ISO 13849							
device type according	to ISO 13849-1		3				
overdimensioning acc	ording to ISO 13849-2	necessary	Yes				
IEC 61508							
safety device type acc	cording to IEC 61508-2		Туре А	A			
T1 value							
 for proof test inte 61508 	rval or service life accord	ding to IEC	10 a				
Electrical Safety			-				
-	the front according to		IP20				
	ne front according to IE	C 60529	finger-	safe, for vertical contact	from the front		
Display							
display version for swite	ching status		Handle	<u>;</u>			
Approvals Certificates			_				
General Product App	roval						
	CE EG-Konf.	<u>Confirmatio</u>	<u>חכ</u>	UK CA		KC	
General Product Approval	For use in hazardous	s locations		Test Certificates		Marine / Shipping	
EHC	IECEX	(Ex)	•	Type Test Certific- ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>	ABS	
Marine / Shipping						other	
BUREAU VERITAS		Lloyds Kegister urs		PES		<u>Miscellaneous</u>	
other		Railway			Environment		
		itanitay					
<u>Confirmation</u>		<u>Special Test Ce</u> <u>ate</u>	<u>ertific-</u>	<u>Confirmation</u>	EPD	Siemens EcoTech	
Environment							
Environmental Con- firmations							
Further information	akaging						
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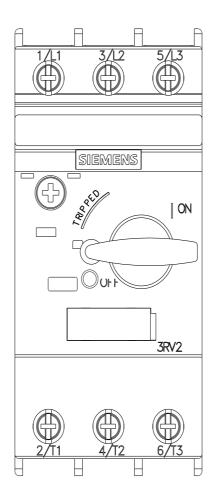
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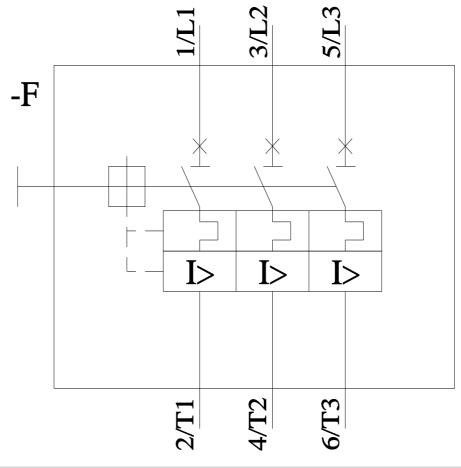
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-1KA10&lang=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1KA10/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1KA10&objecttype=14&gridview=view1









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