SIEMENS

Data sheet

3RV1011-1EA10



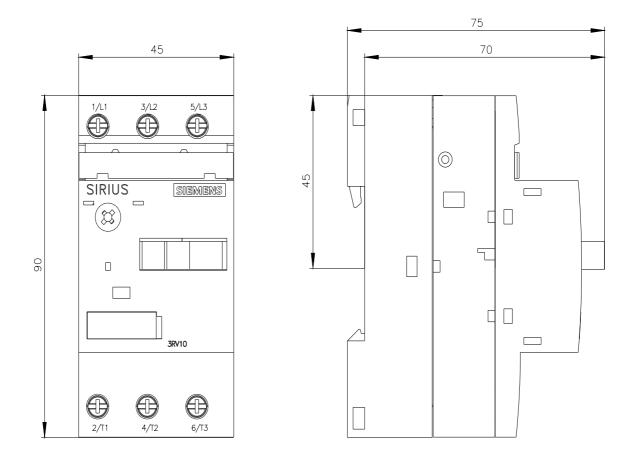
Circuit breaker size S00 for motor protection, CLASS 10 A-release 2.8...4 A N release 52 A Screw terminal Standard switching capacity

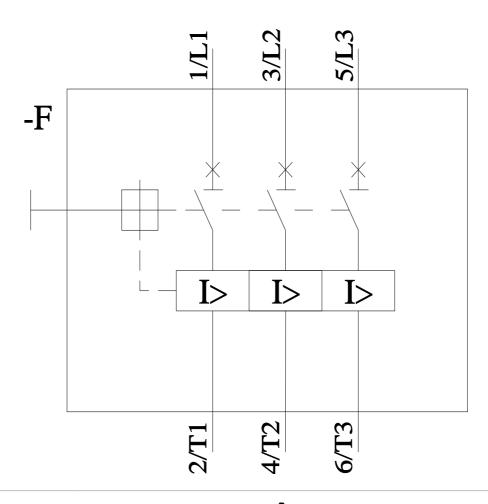
413 413	
product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV1
General technical data	
size of the circuit-breaker	S00
size of contactor can be combined company-specific	S00
product extension auxiliary switch	Yes
power loss [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
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
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	01/01/2013
SVHC substance name	Lead - 7439-92-1
Weight	0.273 kg
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	2.8 4 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
operational current rated value	4 A
operational current	
• at AC-3 at 400 V rated value	4 A

• at AC-3e at 400 V rated value	4 A
operating power	
• at AC-3	
• at AC-3 — at 230 V rated value	0.8 kW
— at 200 V rated value	
	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
• at AC-3e	
— at 230 V rated value	0.8 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
operating frequency	
 at AC-3 maximum 	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
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 	3 kA
at AC at 690 V rated value	2 kA
operating short-circuit current breaking capacity (Ics) at AC	
at 240 V rated value	100 kA
at 200 V rated value	100 kA
at 500 V rated value	3 kA
at 690 V rated value	2 kA
response value current of instantaneous short-circuit trip unit	52 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	4.0
at 480 V rated value	4 A 4 A
at 600 V rated value	4 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.13 hp
— at 230 V rated value	0.33 hp
• for 3-phase AC motor	
— at 200/208 V rated value	0.8 hp
— at 220/230 V rated value	0.75 hp
— at 460/480 V rated value	2 hp
— at 575/600 V rated value	3 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 240 V	none required
• at 400 V	gL/gG 40 A
• at 500 V	gL/gG 35 A
• at 690 V	gL/gG 35 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	90 mm
width	45 mm

depth	75 mm			
required spacing				
 for grounded parts at 400 V 				
— downwards	20 mm			
— upwards	20 mm			
— at the side	9 mm			
 for live parts at 400 V 				
— downwards	20 mm			
— upwards	20 mm			
— at the side	9 mm			
 for grounded parts at 500 V 				
— downwards	20 mm			
— upwards	20 mm			
— at the side	9 mm			
 for live parts at 500 V 				
— downwards	20 mm			
— upwards	20 mm			
— at the side	9 mm			
 for grounded parts at 690 V 				
 downwards 	20 mm			
— upwards	20 mm			
— upwards — backwards	0 mm			
— backwards — at the side	9 mm			
— forwards	0 mm			
• for live parts at 690 V				
— downwards	20 mm			
— upwards	20 mm			
— backwards	0 mm			
— at the side	9 mm			
— forwards	0 mm			
Connections/ Terminals				
Connections/ Terminals	screw-type terminals			
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current	screw-type terminals Top and bottom			
Connections/ Terminals type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit				
Connections/ Terminals type of electrical connection ofor main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections				
Connections/ Terminals type of electrical connection ofor main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections ofor main contacts	Top and bottom			
Connections/ Terminals type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections for main contacts solid or stranded 	Top and bottom 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)			
Connections/ Terminals type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing 	Top and bottom			
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Connections/ Terminals type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing 	Top and bottom 2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²), 2x (1 4 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
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Connections/ Terminals type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts for auxiliary contacts 	Top and bottom 2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²), 2x (1 4 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
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ISO 13849	< 100 400 40 4		<u>^</u>			
device type according			3			
-	ording to ISO 13849-2 ne	ecessary	Yes			
IEC 61508			Туре А			
	safety device type according to IEC 61508-2					
Electrical Safety						
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						
display version for switching status			Rocker switch			
Approvals Certificates						
General Product Appr	oval					
	CE EG-Konf.	UK CA	<u>Confirmation</u>		<u>KC</u>	
General Product Approval	For use in hazardous	locations	Test Certificates		Marine / Shipping	
EHC	IECEx	K ATEX	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report	ABS	
Marine / Shipping				-	-	
BUREAU VERITAS		Lloyd's Register uis	PRS	RINA	RMRS	
other			Railway	Environment		
<u>Confirmation</u>	<u>Miscellaneous</u>		<u>Special Test Certific-</u> ate	Environmental Con- firmations		
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http://support.automatio Service&Support (Mar	uals, Certificates, Chara	cteristics, FAQs,	<u>?lang=en&mlfb=3RV1011-1EA</u>)	<u>10</u>		
https://support.industry. Image database (prod	siemens.com/cs/ww/en/ps uct images, 2D dimensio	/3RV1011-1EA10 on drawings, 3D n	nodels, device circuit diagrar	ns, EPLAN macros,)		
Characteristic: Trippin	siemens.com/bilddb/cax_d ng characteristics, I ² t, Let siemens.com/cs/ww/en/ps	t-through current				
Further characteristics	s (e.g. electrical enduran	ce, switching fre		cttype=14&aridyiew=view1	1	





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