SIEMENS

Data sheet

3RV2011-1FA40



Circuit breaker size S00 for motor protection, CLASS 10 A-release 3.5...5 A N release 65 A ring cable lug connection 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			
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		
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	3.5 5 A		



current-dependent overload release	
 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	
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 operating short-circuit current (lcs)	nomal
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
— 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 400 V	gL/gG 32 A
• at 500 V	gL/gG 32 A
• at 690 V	gL/gG 25 A
Installation/ mounting/ dimensions	
mounting position	any

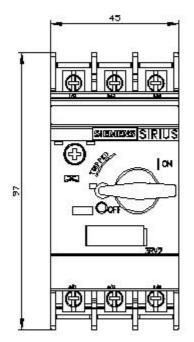
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail			
	according to DIN EN 60715			
height	97 mm			
width	45 mm			
depth	97 mm			
required spacing				
 for grounded parts at 400 V 				
— downwards	30 mm			
— upwards	30 mm			
— at the side	9 mm			
 for live parts at 400 V 				
— 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	No			
control circuit	NO			
type of electrical connection				
for main current circuit	Ring cable lug connection			
 for auxiliary and control circuit 	ring cable connection			
arrangement of electrical connectors for main current	Top and bottom			
circuit				
tightening torque				
— for main contacts for ring cable lug	0.8 1.2 N·m			
— for auxiliary contacts for ring cable lug	1.2 0.8 N⋅m			
outer diameter of the usable ring cable lug maximum	7.5 mm			
design of screwdriver shaft	Diameter 5 to 6 mm			
size of the screwdriver tip	Size 2 and Pozidriv 2			
design of the thread of the connection screw				
for main contacts	M3			
 of the auxiliary and control contacts 	M3			
Safety related data				
B10 value	5 000			
with high demand rate acc. to SN 31920	5 000			
proportion of dangerous failures	50.0/			
 with low demand rate acc. to SN 31920 	50 %			
• with high demand rate acc. to SN 31920	50 %			
with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920	50 % 50 FIT			

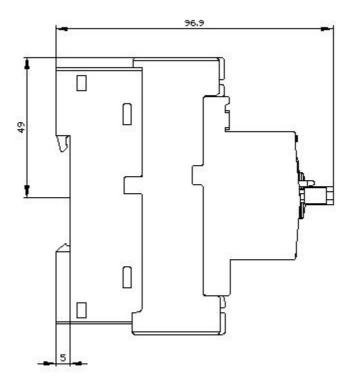


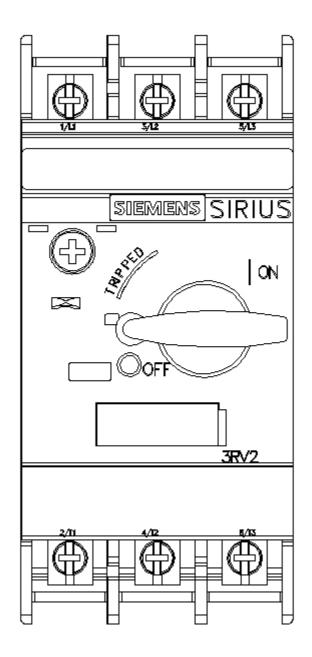
EC 61508 protection class IP	on the front acc. to IEC	60529 IP00			
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General Product A	pproval			For use in hazardou	s locations
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Declaration of Con	formity	Test Certificates		Marine / Shipping	
<u>Miscellaneous</u>	CE EG-Konf.	<u>Special Test</u> <u>Certificate</u>	<u>Type Test</u> <u>Certificates/Test</u> <u>Report</u>	ABS	BUREAU VERITAS
Marine / Shipping					other
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other	Railway				
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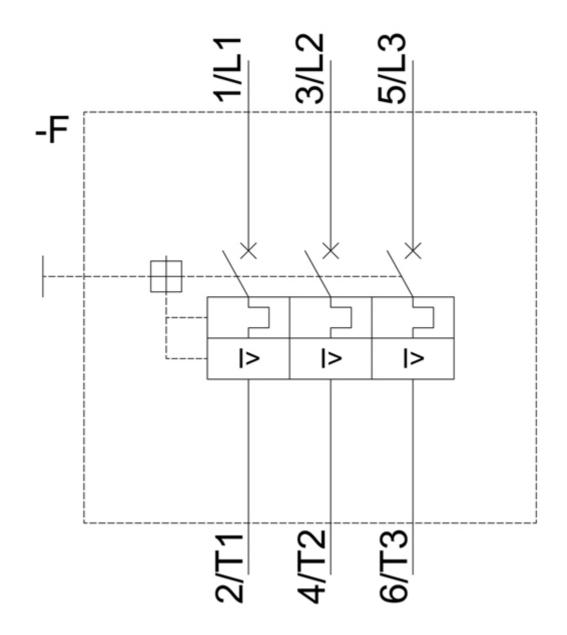
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-1FA40/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-1FA40&objecttype=14&gridview=view1









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