SIEMENS

Data sheet

3RV1011-1JA15



Circuit breaker size S00 for motor protection, CLASS 10 A-release 7...10 A N release 130 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC $\,$

product brand name	SIRIUS						
product designation	Circuit breaker						
design of the product	For motor protection						
product type designation	3RV1						
General technical data	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 	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						
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						
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	7 10 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	10 A						
operational current							
 at AC-3 at 400 V rated value 	10 A						
• at AC-3e at 400 V rated value	10 A						

• at AC-3	
• at AC-5 — at 230 V rated value	2.2 kW
— at 230 V rated value	2.2 KW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	5.5 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	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
• note	1
number of NO contacts for auxiliary contacts	1
note	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 110 V	2 A
• at 120 V	2 A
• at 125 V	2 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
• at 24 V	1 A
• at 60 V	0.15 A
Protective and monitoring functions	
product function	
ground fault detection	No
	No Yes
ground fault detection	
 ground fault detection phase failure detection	Yes
• ground fault detection • phase failure detection trip class	Yes CLASS 10
• ground fault detection • phase failure detection trip class design of the overload release	Yes CLASS 10
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu)	Yes CLASS 10 thermal
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value	Yes CLASS 10 thermal 100 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (lcu) • at AC at 240 V rated value • at AC at 400 V rated value	Yes CLASS 10 thermal 100 kA 50 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA
ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at 240 V rated value e at 500 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA
ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC e at 240 V rated value e at 240 V rated value e at 690 V rated value e at 690 V rated value e at 690 V rated value e at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 400 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (lcu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at 240 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at 240 V rated value • at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A
ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at 690 V rated value e at 400 V rated value e at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 600 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A
ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) e at AC at 240 V rated value e at AC at 400 V rated value e at AC at 500 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at AC at 690 V rated value e at AC at 690 V rated value e at 240 V rated value e at 240 V rated value e at 690 V rated value e at 400 V rated value e at 690 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A
• ground fault detection • phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 400 V rated value • at AC at 500 V rated value • at AC at 690 V rated value • at AC at 690 V rated value • at 240 V rated value • at 240 V rated value • at AC at 690 V rated value • at 240 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value • at 600 V rated value	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A
 ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 480 V rated value at 480 V rated value at 600 V rated value 	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A
 ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 690 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 480 V rated value at 600 V rated value 	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A
 ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value trip class determine the full base of the	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A 2 hp
 ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 200 V rated value at 600 V rated value at 200/208 V rated value at 200/208 V rated value at 220/230 V rated value 	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A
 ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 400 V rated value at 690 V rated value full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 230 V rated value for single-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value 	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 2 kA 100 kA 13 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A 10 A 10 A
 ground fault detection phase failure detection trip class design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 200 V rated value at 600 V rated value at 200/208 V rated value at 200/208 V rated value at 220/230 V rated value 	Yes CLASS 10 thermal 100 kA 50 kA 3 kA 2 kA 100 kA 13 kA 3 kA 2 kA 130 A 10 A 10 A 10 A 10 A 10 A

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 gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)			
design of the fuse link for IT network for short-circuit				
protection of the main circuit				
• at 240 V	gL/gG 80 A			
• at 400 V	gL/gG 63 A			
• at 500 V	gL/gG 50 A			
• at 690 V	gL/gG 50 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			
— backwards	0 mm			
— 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				
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	Top and bottom			
circuit				
type of connectable conductor cross-sections				
 for main contacts 				
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x (1 4 mm²)			
 — finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)			
type of connectable conductor cross-sections				
 for auxiliary contacts 				
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)			
tightening torque				
 for main contacts with screw-type terminals 	0.8 1.2 N·m			

 for auxiliary contacts with screw-type terminals 		0.8 1.2 N·m					
size of the screwdriver tip		Pozidriv size 2					
design of the thread of the	e connection screw	N					
for main contacts		M3	M3				
 of the auxiliary and control contacts 		M3					
Safety related data							
B10 value							
 with high demand rat 	 with high demand rate according to SN 31920 		5 000				
proportion of dangerous failures							
 with low demand rate 	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					
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			-	Rocker switch			
	status		RUCKE	er Switch	_		
Certificates/ approvals							
General Product Approva	1				For use in hazardous	s locations	
<u>Confirmation</u>		(ب س		EHC	ATEX	IECE×	
Declaration of Conformity	1	Test Certificat	tes		Marine / Shipping		
UK CA	CE EG-Konf.	<u>Special Test C</u> <u>ate</u>	<u>ertific-</u>	Type Test Certific- ates/Test Report	ABS	BUREAU VERITAS	
Marine / Shipping						other	
Lloyds Register urs	PRS	- EINA		RMRS RMRS	DINV-GL DINV-GL	<u>Confirmation</u>	
other		Railway					
<u>Miscellaneous</u>		<u>Special Test C</u> <u>ate</u>	<u>erunc-</u>				
Further information							
Siemens has decided to e				ion husin			
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Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1011-1JA15

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

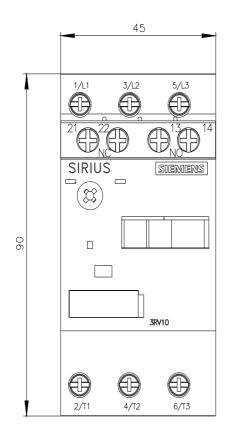
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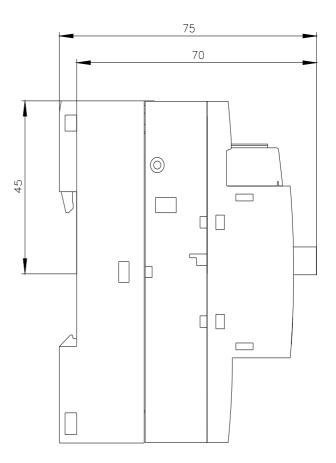
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

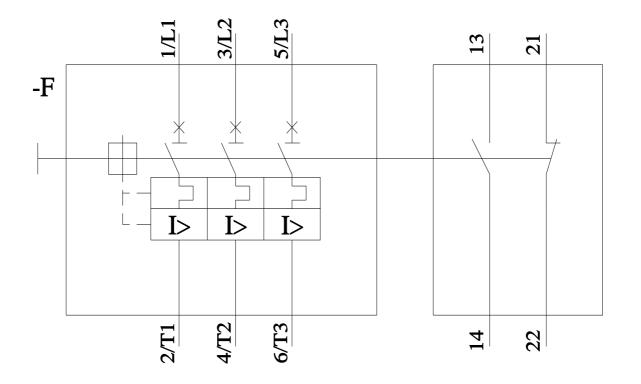
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Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-1JA15/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-1JA15&objecttype=14&gridview=view1







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