SIEMENS

Data sheet 3RV2321-1AC20



Circuit breaker size S0 for starter combination Rated current 1.6 A N-release 21 A Spring-type terminal Standard switching capacity

product brand name	SIRIUS	
product designation	Circuit breaker	
design of the product	For starter combinations	
product type designation	3RV2	
General technical data		
size of the circuit-breaker	S0	
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	
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	
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	1.6 A	
operational current		
 at AC-3 at 400 V rated value 	1.6 A	
 at AC-3e at 400 V rated value 	1.6 A	

operating power	
• at AC-3	
— at 230 V rated value	0.3 kW
— at 400 V rated value	0.6 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
• at AC-3e	0.0111/
— at 230 V rated value	0.3 kW
— at 400 V rated value	0.6 kW
— at 500 V rated value	0.8 kW
— at 690 V rated value	1.1 kW
operating frequency	4.F. 4.lb
 at AC-3 maximum at AC-3e maximum 	15 1/h 15 1/h
	15 1/11
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	Si .
ground fault detection	No
phase failure detection	No
breaking capacity maximum short-circuit current (Icu)	400 kA
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 hypothing cancelly apprecing about circuit current (lee)	100 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	100 kA
response value current of instantaneous short-circuit trip unit	21 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	1.6 A
at 600 V rated value	1.6 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 230 V rated value	0.1 hp
• for 3-phase AC motor	
at 460/480 V rated value	1 hp
— at 575/600 V rated value	0.8 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
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	119 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	5	
— downwards	50 mm	
— upwards	50 mm	
— backwards	0 mm	
— at the side	30 mm	
— forwards	0 mm	
Connections/ Terminals	O IIIIII	
type of electrical connection	and a landad to make the	
• for main current circuit	spring-loaded 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 (1 10 mm²)	
 finely stranded with core end processing 	2x (1 6 mm²)	
 finely stranded without core end processing 	2x (1 6 mm²)	
at AWG cables for main contacts	2x (18 8)	
design of screwdriver shaft	Diameter 3 mm	
size of the screwdriver tip	3,0 x 0,5 mm	
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 test interval or service life according to IEC 61508	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/ approvals		
		Declaration of
General Product Approval		Conformity
Confirmation	<u> </u>	



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>







Marine / Shipping

other









Confirmation



Railway

Vibration and Shock Confirmation

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=3RV2321-1AC20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2321-1AC20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-1AC20

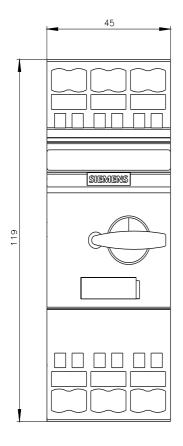
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RV2321-1AC20&lang=en

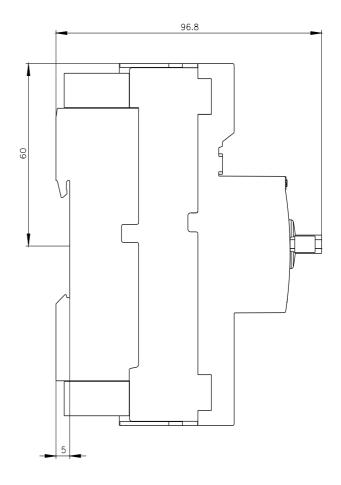
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-1AC20/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2321-1AC20&objecttype=14&gridview=view1





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