SIEMENS

Data sheet

3RV2311-1DC20



Circuit breaker size S00 for starter combination Rated current 3.2 A N release 42 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	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 	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 (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)	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	3.2 A
operational current	
• at AC-3 at 400 V rated value	3.2 A
• at AC-3e at 400 V rated value	3.2 A
operating power	
• at AC-3	

— at 230 V rated value	0.6 kW
— at 400 V rated value	1.1 kW
— at 500 V rated value	1.5 kW
— at 690 V rated value	2.2 kW
• at AC-3e	
— at 230 V rated value	0.6 kW
— at 400 V rated value	1.1 kW
— at 500 V rated value	1.5 kW
— at 690 V rated value	2.2 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
	0
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 	No
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 	100 kA
at AC at 690 V rated value	10 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	100 kA
at 690 V rated value	10 kA
response value current of instantaneous short-circuit trip unit	42 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	3.2 A
• at 600 V rated value	3.2 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.1 hp
— at 230 V rated value	0.25 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	0.5 hp
	0.0 mp
— at 220/230 V rated value	0.75 hp
	0.75 hp
— at 220/230 V rated value	0.75 hp 2 hp
— at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value	0.75 hp
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection	0.75 hp 2 hp 2 hp
	0.75 hp 2 hp 2 hp Yes
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip	0.75 hp 2 hp 2 hp
	0.75 hp 2 hp 2 hp Yes
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit	0.75 hp 2 hp 2 hp Yes
	0.75 hp 2 hp 2 hp Yes magnetic
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V 	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V 	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 35 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position fastening method	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A gL/gG 25 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection design of the short-circuit protection design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position fastening method height	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A d gL/gG 25 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection design of the short-circuit protection design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position fastening method height width 	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 32 A gL/gG 25 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection design of the short-circuit protection design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position fastening method height width depth 	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 25 A d gL/gG 25 A
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing 	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 32 A gL/gG 25 A 4 Screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 106 mm 45 mm 97 mm
 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value Short-circuit protection design of the short-circuit protection design of the fuse link for IT network for short-circuit protection of the main circuit at 400 V at 500 V at 690 V Installation/ mounting/ dimensions mounting position fastening method height width depth 	0.75 hp 2 hp 2 hp Yes magnetic gL/gG 25 A gL/gG 32 A gL/gG 32 A gL/gG 25 A

— 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	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 (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
 for AWG cables for main contacts 	2x (20 12)
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	10 a
61508	
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 General Product Approval	Declaration of Conformity

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Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RV2311-1DC20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1DC20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1DC

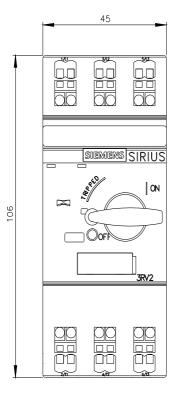
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1DC20&lang=en

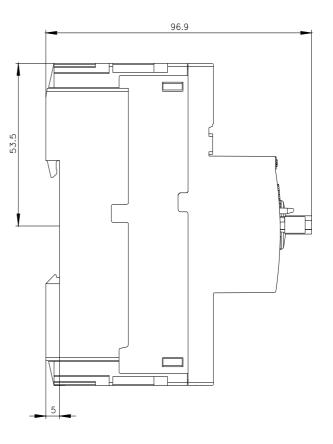
Characteristic: Tripping characteristics, I²t, Let-through current

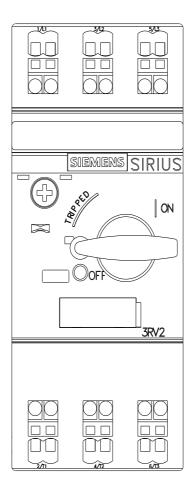
https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1DC20/char

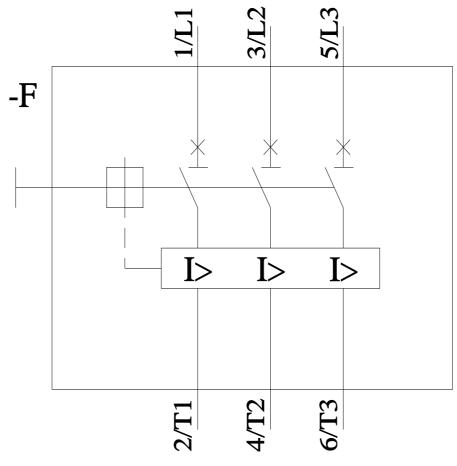
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1DC20&objecttype=14&gridview=view1









11/21/2022 🖸

7/10/2023