SIEMENS

Data sheet

3RV2311-1FC20



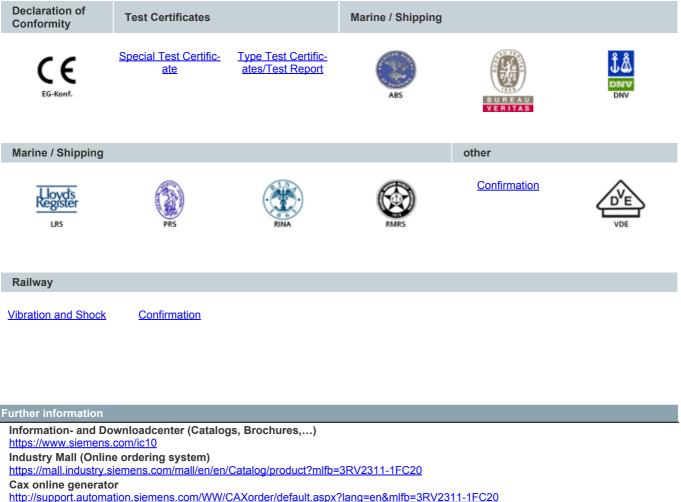
Circuit breaker size S00 for starter combination Rated current 5 A N release 65 A Spring-type terminal Standard switching capacity

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 (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	5 A	
operational current		
 at AC-3 at 400 V rated value 	5 A	
 at AC-3e at 400 V rated value 	5 A	
operating power		
• at AC-3		

— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	4 kW
• at AC-3e	
— at 230 V rated value	1.1 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	4 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e 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 	No
breaking capacity maximum short-circuit current (lcu)	
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
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	4 kA
response value current of instantaneous short-circuit trip unit	65 A
UL/CSA ratings	
IUL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
full-load current (FLA) for 3-phase AC motor • at 480 V rated value	5 A
 full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 	5 A 5 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp]	
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor	5 A
 full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 	5 A 0.17 hp
 full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value 	5 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor	5 A 0.17 hp 0.5 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value	5 A 0.17 hp 0.5 hp 1 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value	5 A 0.17 hp 0.5 hp 1 hp 1 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value	5 A 0.17 hp 0.5 hp 1 hp 1 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value Short-circuit protection	5 A 0.17 hp 0.5 hp 1 hp 3 hp 3 hp Yes
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — 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	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — 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	5 A 0.17 hp 0.5 hp 1 hp 3 hp 3 hp Yes
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — 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	5 A 0.17 hp 0.5 hp 1 hp 3 hp 3 hp Yes magnetic
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — 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 — 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	5 A 0.17 hp 0.5 hp 1 hp 3 hp 3 hp Yes magnetic gL/gG 32 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — 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 — at 575/600 V rated value Short-circuit protection design of the 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	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp Yes magnetic gL/gG 32 A gL/gG 32 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — 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	5 A 0.17 hp 0.5 hp 1 hp 3 hp 3 hp Yes magnetic gL/gG 32 A
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full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 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 • at 690 V Installation/ mounting/ dimensions mounting position	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp Yes magnetic gL/gG 32 A gL/gG 32 A gL/gG 25 A any
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — 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 — at 575/600 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 • at 690 V Installation/ mounting/ dimensions	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp Yes magnetic gL/gG 32 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — 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 — at 575/600 V rated value Short-circuit protection design of the 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	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp Yes magnetic gL/gG 32 A gL/gG 32 A gL/gG 25 A any
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full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 200/208 V rated value — at 200/208 V rated value — 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 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	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp 7 Yes magnetic gL/gG 32 A gL/gG 32 A gL/gG 32 A gL/gG 25 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value yielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value - at 200/208 V rated value - at 220/230 V rated value - at 220/230 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 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 690 V Installation/ mounting/ dimensions mounting position fastening method height width depth	5 A 0.17 hp 0.5 hp 1 hp 1 hp 3 hp 3 hp 3 hp Yes magnetic gL/gG 32 A gL/gG 32 A gL/gG 32 A gL/gG 32 A gL/gG 32 A gL/gG 32 A gL/gG 32 A
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— 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)
 at 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	10 y
IEC 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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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

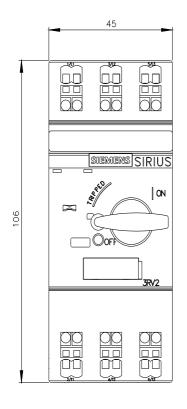
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1FC20&lang=en

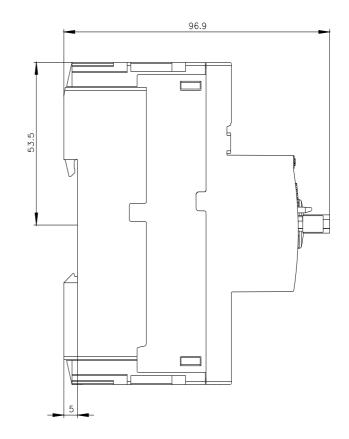
Characteristic: Tripping characteristics, I²t, Let-through current

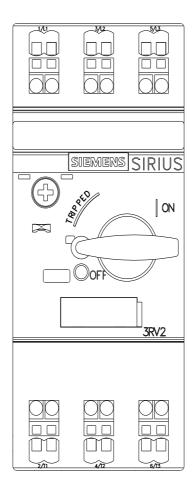
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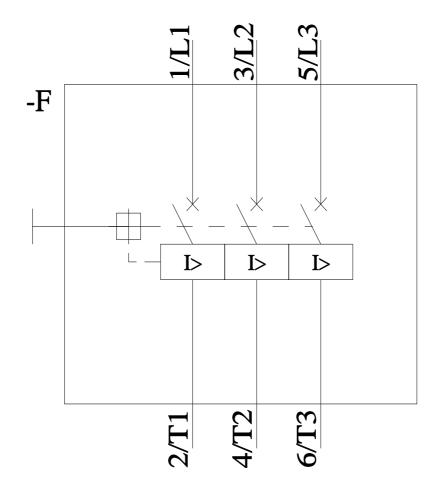
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1FC20&objecttype=14&gridview=view1









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