## SIEMENS

## Data sheet

## 3RV2311-1FC20



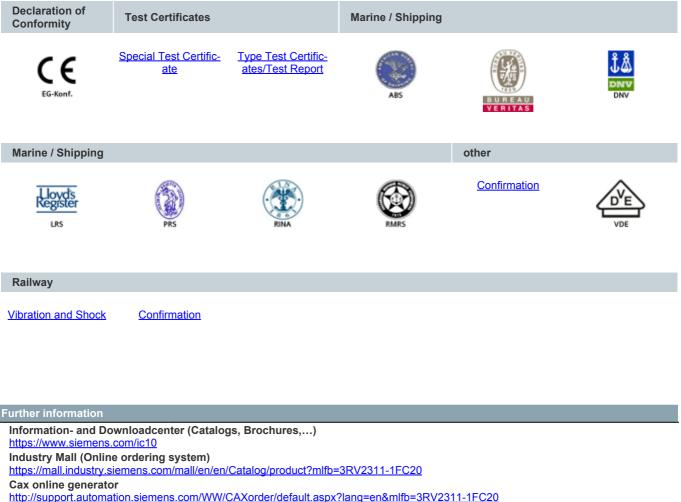
Circuit breaker size S00 for starter combination Rated current 5 A N release 65 A Spring-type terminal Standard switching capacity

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		
<ul> <li>at AC in hot operating state</li> </ul>	7.25 W	
<ul> <li>at AC in hot operating state per pole</li> </ul>	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)		
<ul> <li>of the main contacts typical</li> </ul>	100 000	
<ul> <li>of auxiliary contacts typical</li> </ul>	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		
<ul> <li>during operation</li> </ul>	-20 +60 °C	
<ul> <li>during storage</li> </ul>	-50 +80 °C	
<ul> <li>during transport</li> </ul>	-50 +80 °C	
relative humidity during operation	10 95 %	
Main circuit		
number of poles for main current circuit	3	
operating voltage		
<ul> <li>rated value</li> </ul>	20 690 V	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V	
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V	
operating frequency rated value	50 60 Hz	
operational current rated value	5 A	
operational current		
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	5 A	
<ul> <li>at AC-3e at 400 V rated value</li> </ul>	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	
<ul> <li>ground fault detection</li> </ul>	No
<ul> <li>phase failure detection</li> </ul>	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
<ul> <li>at AC at 500 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 690 V rated value</li> </ul>	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
<ul> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul>	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]	
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<ul> <li>full-load current (FLA) for 3-phase AC motor</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>yielded mechanical performance [hp]</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> </ul>	5 A 0.17 hp
<ul> <li>full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> </li> <li>yielded mechanical performance [hp] <ul> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> </ul> </li> </ul>	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
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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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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 2575/600 V rated value         - at 575/600 V rated value         - at 575/600 V rated value         - at 575/600 V rated value         - at 460/480 V rated value         - at 575/600 V rated value         - at 575/600 V rated value         - at 575/600 V rated value         - at 460/480 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 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 Yes magnetic gL/gG 32 A 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 45 mm 97 mm

— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 500 V</li> </ul>	
– downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— 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	
<ul> <li>for main contacts</li> </ul>	
— solid or stranded	2x (0,5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>at AWG cables for main contacts</li> </ul>	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 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1FC20

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

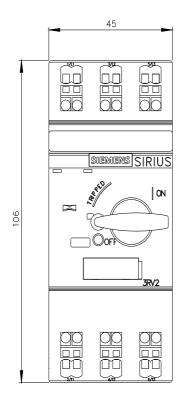
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2311-1FC20&lang=en

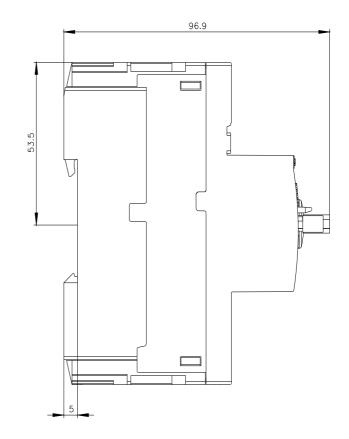
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

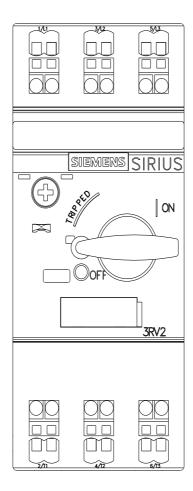
https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1FC20/char

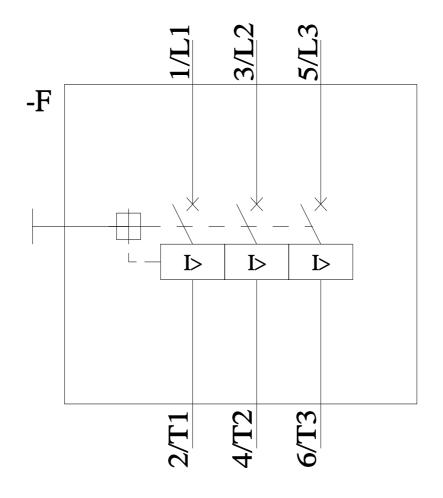
Further characteristics (e.g. electrical endurance, switching frequency)

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









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