SIEMENS

Data sheet 3RV2311-1EC10



Circuit breaker size S00 for starter combination Rated current 4 A N release 52 A screw 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	4 A	
operational current		
 at AC-3 at 400 V rated value 	4 A	
 at AC-3e at 400 V rated value 	4 A	
operating power		
• at AC-3		
— at 230 V rated value	0.8 kW	

— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
• at AC-3e	
— at 230 V rated value	0.8 kW
— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value	3 kW
operating frequency	45 4 lb
 at AC-3 maximum at AC-3e maximum 	15 1/h 15 1/h
	13 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	
 ground fault detection 	No
 phase failure detection 	No
breaking capacity maximum short-circuit current (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	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	52 A
unit	
UL/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	4 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	4 A 4 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	4 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	4 A 0.13 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	4 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	4 A 0.13 hp 0.33 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	4 A 0.13 hp 0.33 hp 0.8 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 product function short circuit protection	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 product function short circuit protection design of the short-circuit trip	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 product function short circuit protection design of the short-circuit trip design of the fuse link for IT network for short-circuit	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 according to DIN EN 60715
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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 according to DIN EN 60715 97 mm
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 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	0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 hp 3 hp 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 97 mm 45 mm
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 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	4 A 0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 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 according to DIN EN 60715 97 mm
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 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	0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 hp 3 hp Yes magnetic gL/gG 32 A gL/gG 32 A gL/gG 32 A gL/gG 35 A any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 97 mm 45 mm 97 mm
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 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	0.13 hp 0.33 hp 0.8 hp 0.75 hp 2 hp 3 hp 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 97 mm 45 mm

— 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	V	
— downwards	50 mm	
	50 mm	
— upwards		
— backwards	0 mm	
— at the side	30 mm	
— forwards	0 mm	
Connections/ Terminals		
type of electrical connection		
for main current 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 (0,75 2,5 mm²), 2x 4 mm²	
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
 at AWG cables for main contacts 	2x (18 14), 2x 12	
tightening torque		
 for main contacts with screw-type terminals 	0.8 1.2 N·m	
design of screwdriver shaft	Diameter 5 to 6 mm	
size of the screwdriver tip	Pozidriv size 2	
design of the thread of the connection screw		
 for main contacts 	M3	
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



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

other









Confirmation



Railway

Confirmation Vibration and Shock

Further information

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=3RV2311-1EC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1EC10

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

 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1EC10}$

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

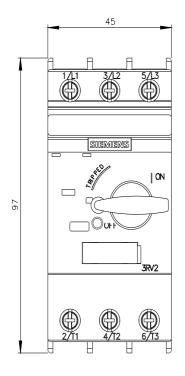
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1EC10&lang=en

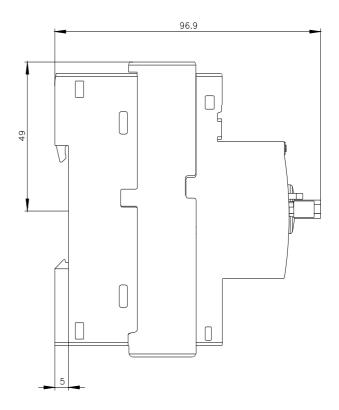
Characteristic: Tripping characteristics, I2t, Let-through current

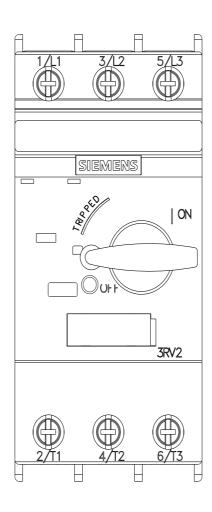
https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1EC10/char

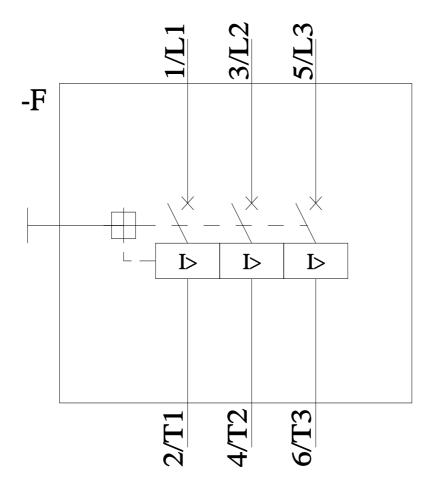
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1EC10&objecttype=14&gridview=view1









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