SIEMENS

Data sheet 3RV2311-1KC10



Circuit breaker size S00 for starter combination Rated current 12.5 A N-release 163 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	\$00
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	9.25 W
at AC in hot operating state per pole	3.1 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	12.5 A
operational current	
• at AC-3 at 400 V rated value	12.5 A
at AC-3e at 400 V rated value	12.5 A
operating power	
• at AC-3	

— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 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
maximum short-circuit current breaking capacity (Icu)	
at AC at 240 V rated value	100 kA
at AC at 500 V rated value	100 kA
at AC at 500 V rated value	42 kA
at AC at 690 V rated value	6 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	42 kA
at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	163 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	12.5 A
	40.5.4
 at 600 V rated value 	12.5 A
	12.5 A
yielded mechanical performance [hp]	12.5 A
yielded mechanical performance [hp] • for single-phase AC motor	
yielded mechanical performance [hp] ● for single-phase AC motor — at 110/120 V rated value	0.5 hp
yielded mechanical performance [hp] ● for single-phase AC motor — at 110/120 V rated value — at 230 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	0.5 hp 2 hp
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	0.5 hp 2 hp 3 hp
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	0.5 hp 2 hp 3 hp 3 hp
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	0.5 hp 2 hp 3 hp 3 hp 8 hp
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	0.5 hp 2 hp 3 hp 3 hp
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	0.5 hp 2 hp 3 hp 3 hp 8 hp
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	0.5 hp 2 hp 3 hp 3 hp 8 hp
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp
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	0.5 hp 2 hp 3 hp 8 hp 10 hp
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	0.5 hp 2 hp 3 hp 8 hp 10 hp
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	0.5 hp 2 hp 3 hp 8 hp 10 hp Yes magnetic
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm
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	0.5 hp 2 hp 3 hp 3 hp 8 hp 10 hp Yes magnetic gL/gG 63 A gL/gG 50 A gL/gG 40 A any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm

Certificates/ approvals General Product Approval	Handle Declaration of Con
Certificates/ approvals	Handle
	Handle
display version for switching status	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
protection class IP on the front according to IEC 60529	IP20
61508	
T1 value for proof test interval or service life according to IEC	10 a
with low demand rate according to SN 31920	50 FIT
with high demand rate according to SN 31920 failure rate [FIT]	SU /0
with low demand rate according to SN 31920 with high demand rate according to SN 31920	50 % 50 %
proportion of dangerous failures	50.0/
with high demand rate according to SN 31920 Proportion of degracous failures.	5 000
B10 value	5,000
Safety related data	
• for main contacts	M3
design of the thread of the connection screw	Mo
size of the screwdriver tip	Pozidriv size 2
design of screwdriver shaft	Diameter 5 to 6 mm
for main contacts with screw-type terminals	0.8 1.2 N·m
tightening torque	
for AWG cables for main contacts	2x (18 14), 2x 12
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
— solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²
for main contacts	
type of connectable conductor cross-sections	
arrangement of electrical connectors for main current circuit	TOP AND DOLLOTT
Tor main current circuit arrangement of electrical connectors for main current	Top and bottom
type of electrical connection • for main current circuit	screw-type terminals
Connections/ Terminals	
— forwards Connections/ Terminals	0 mm
— at the side	30 mm
— backwards	0 mm
— upwards	50 mm
— downwards	50 mm
• for live parts at 690 V	
— forwards	0 mm
— at the side	30 mm
— backwards	0 mm
— upwards	50 mm
— downwards	50 mm
for grounded parts at 690 V	-
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm
for live parts at 500 V	
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm
• for grounded parts at 500 V	
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm
• for live parts at 400 V	
— at the side	9 mm
— upwards	30 mm
— downwards	30 mm









Declaration of Conformity

Test Certificates

Marine / Shipping

<u>KC</u>



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping

other

Railway







Confirmation



Vibration and Shock

Railway

Confirmation

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=3RV2311-1KC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-1KC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1KC10

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

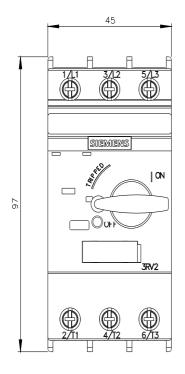
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-1KC10&lang=en

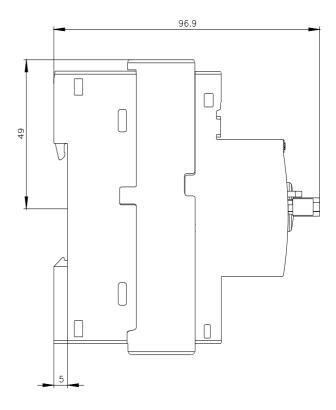
Characteristic: Tripping characteristics, I2t, Let-through current

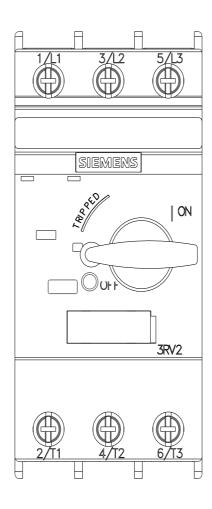
https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-1KC10/char

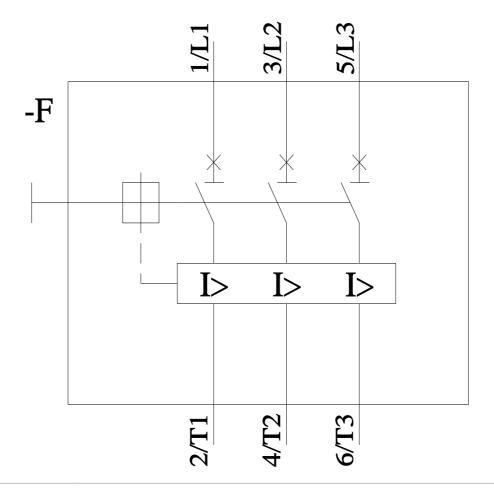
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-1KC10&objecttype=14&gridview=view1









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