SIEMENS

Data sheet

3RV2311-0AC20



Circuit breaker size S00 for starter combination Rated current 0.16 A N-release 2.1 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 	5.5 W
 at AC in hot operating state per pole 	1.8 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation in networks with grounded star point	
 between main and auxiliary circuit 	400 V
 between main and auxiliary circuit 	400 V
shock resistance acc. 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
 ambient temperature during operation 	-20 +60 °C
 ambient temperature during storage 	-50 +80 °C
 ambient temperature 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 	690 V
 operating voltage at AC-3 rated value maximum 	690 V
operating frequency rated value	50 60 Hz
operational current rated value	0.16 A

operational current at AC-3 at 400 V rated value	0.16 A
operating power at AC-3	
at 230 V rated value	20 W
 at 400 V rated value 	40 W
 at 500 V rated value 	60 W
at 690 V rated value	60 W
operating frequency at AC-3 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 operating short-circuit current (lcs)	
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	100 kA
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	100 kA
response value current of instantaneous short-circuit trip unit	2.1 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	0.16 A
at 480 V rated valueat 600 V rated value	0.16 A 0.16 A
at 600 V rated value Short-circuit protection	
at 600 V rated value Short-circuit protection product function short circuit protection	0.16 A Yes
at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip	0.16 A
at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions	0.16 A Yes magnetic
at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail
the state of	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
the state of	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm
the state of the short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm
the at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm
the spacing method e at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm
the at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing of grounded parts at 400 V	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm
the at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing of grounded parts at 400 V — downwards	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm
the at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing of or grounded parts at 400 V downwards upwards	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm
the side at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing for grounded parts at 400 V downwards upwards at the side 	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm
the side at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing for grounded parts at 400 V downwards upwards at the side for live parts at 400 V 	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm 30 mm 30 mm 9 mm
the side at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing for grounded parts at 400 V downwards upwards at the side 	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm
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 at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing for grounded parts at 400 V downwards upwards at the side for live parts at 400 V downwards upwards upwards at the side 	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm 30 mm 30 mm 9 mm
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 at 600 V rated value Short-circuit protection product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing for grounded parts at 400 V downwards upwards at the side for live parts at 400 V downwards upwards at the side for grounded parts at 500 V downwards downwards 	0.16 A Yes magnetic any screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 106 mm 45 mm 97 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm 30 mm
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		0	
— at the side		9 mm	
 for grounded participation 			
— downward	IS	50 mm	
— upwards		50 mm	
— backward		0 mm	
— at the side	2	30 mm	
— forwards	000.1/	0 mm	
 for live parts at 			
— downward	ls	50 mm	
— upwards		50 mm	
- backward		0 mm	
— at the side	9	30 mm	
— forwards		0 mm	
Connections/ Termin	als		
	ovable terminal for auxiliary and	No	
control circuit			
type of electrical co			
 for main current 		spring-loaded terminals	
	ctrical connectors for main current	Top and bottom	
circuit			
	conductor cross-sections		
 for main contact 			
— solid or st		2x (0,5 4 mm ²)	
	nded with core end processing	2x (0.5 2.5 mm ²)	
-	nded without core end processing	2x (0.5 2.5 mm²)	
	for main contacts	2x (20 12)	
design of screwdriv		Diameter 3 mm	
size of the screwdri	ver tip	3,0 x 0,5 mm	
Safety related data			
B10 value			
 with high dema 	and rate acc. to SN 31920	5 000	
proportion of dange	erous failures		
	erous failures nd rate acc. to SN 31920	50 %	
with low deman		50 % 50 %	
with low deman	nd rate acc. to SN 31920		
with low deman with high dema failure rate [FIT]	nd rate acc. to SN 31920		
with low deman with high dema failure rate [FIT] with low deman T1 value for proof te	nd rate acc. to SN 31920 and rate acc. to SN 31920	50 %	
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with low deman with high dema failure rate [FIT] with low deman T1 value for proof te IEC 61508 protection class IP	nd rate acc. to SN 31920 and rate acc. to SN 31920 nd rate acc. to SN 31920 est interval or service life acc. to on the front acc. to IEC 60529	50 % 50 FIT 10 y IP20	
with low deman with high dema failure rate [FIT] with low deman T1 value for proof to IEC 61508 protection class IP of touch protection on	nd rate acc. to SN 31920 and rate acc. to SN 31920 nd rate acc. to SN 31920 est interval or service life acc. to on the front acc. to IEC 60529 the front acc. to IEC 60529	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front	
with low deman with high dema failure rate [FIT] with low deman T1 value for proof te IEC 61508 protection class IP of touch protection on display version for sw	nd rate acc. to SN 31920 and rate acc. to SN 31920 nd rate acc. to SN 31920 est interval or service life acc. to on the front acc. to IEC 60529 the front acc. to IEC 60529 vitching status	50 % 50 FIT 10 y IP20	
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with low demant with high demant failure rate [FIT] with low demant T1 value for proof to IEC 61508 protection class IP of touch protection on display version for sw Certificates/ approval General Product Approval General Product Approval Declaration of	And rate acc. to SN 31920 and rate acc. to SN 31920 est interval or service life acc. to on the front acc. to IEC 60529 of the front acc. to IEC 60529 witching status is oproval Test Certificates Special Test Certificate Type To Certificate	50 % 50 FIT 10 y IP20 finger-safe, for vertical contact from the front Handle KC	Declaration of Conformity
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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=3RV2311-0AC20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2311-0AC20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-0AC20

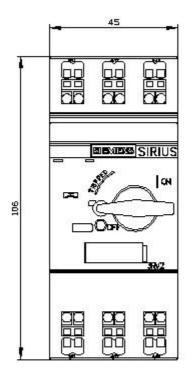
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

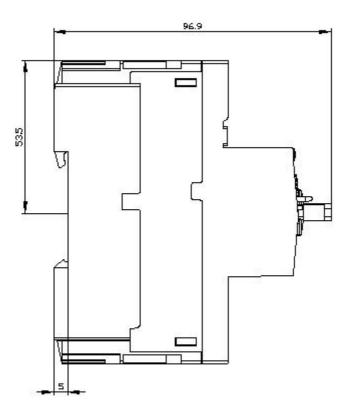
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2311-0AC20&lang=en Characteristic: Tripping characteristics, I²t, Let-through current

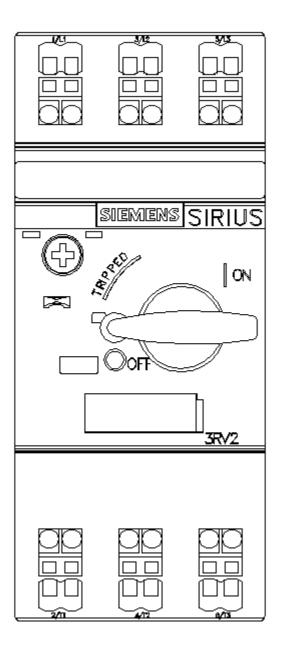
https://support.industry.siemens.com/cs/ww/en/ps/3RV2311-0AC20/char

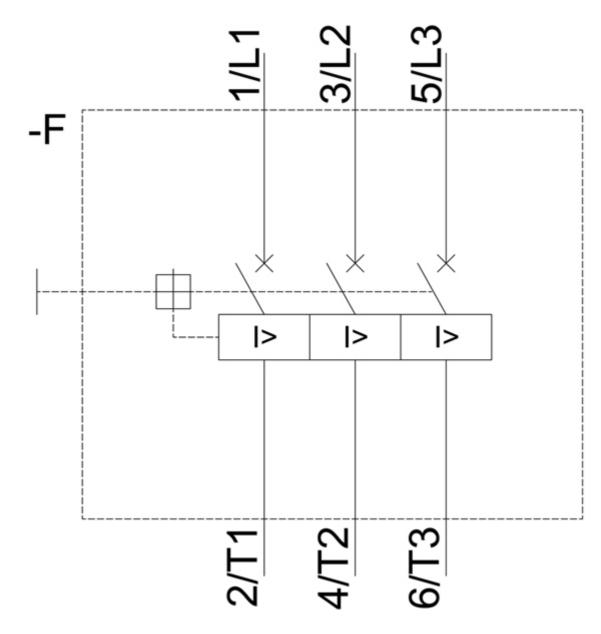
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2311-0AC20&objecttype=14&gridview=view1









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