SIEMENS

Data sheet 3RV2011-0BA20



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.14...0.2 A N-release 2.6 A Spring-type terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
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
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
reference code acc. to IEC 81346-2	Q
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
temperature compensation	-20 +60 °C
relative humidity during operation	10 95 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the	0.14 0.2 A

current-dependent overload release			
 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	0.2 A		
operational current at AC-3 at 400 V rated value	0.2 A		
operating power at AC-3			
 at 230 V rated value 	30 W		
at 400 V rated value	60 W		
at 500 V rated value	60 W		
at 690 V rated value	90 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	Yes		
trip class	CLASS 10		
design of the overload release	thermal		
breaking capacity operating short-circuit current (lcs)			
at AC	100 kA		
• at 240 V rated value			
• 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 (Icu)	400 1-4		
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	2.6 A		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	0.2 A		
 at 600 V rated value 	0.2 A		
Short-circuit protection			
product function short circuit protection	Yes		
design of the short-circuit trip	magnetic		
Installation/ mounting/ dimensions			
mounting position	any		
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail		
	according to DIN EN 60715		
height	106 mm		
width	45 mm		
depth	97 mm		
required spacing			
• for grounded parts at 400 V	20		
— downwards	30 mm		
— upwards	30 mm		
— at the side	9 mm		
• for live parts at 400 V			
— downwards	30 mm		
— upwards— at the side	30 mm 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	3 111111	
— downwards	50 mm	
	50 mm	
— upwards		
— 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		
product function removable terminal for auxiliary and	No	
control circuit		
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 acc. to SN 31920	5 000	
proportion of dangerous failures		
 with low demand rate acc. to SN 31920 	50 %	
 with high demand rate acc. to SN 31920 	50 %	
failure rate [FIT]		
 with low demand rate acc. to SN 31920 	50 FIT	
T1 value for proof test interval or service life acc. to	10 y	
IEC 61508	IDOO	
protection class IP on the front acc. to IEC 60529	IP20	
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front	
display version for switching status	Handle	
Certificates/ approvals		
General Product Approval		For use in hazardous locations













For use in hazardous locations

Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous



Special Test Certificate Type Test
Certificates/Test
Report



Marine / Shipping













other

Railway

Confirmation



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=3RV2011-0BA20

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2011-0BA20}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0BA20

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0BA20&lang=en

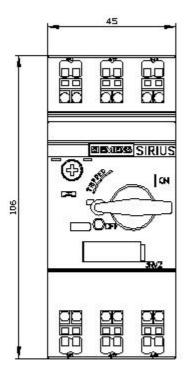
Characteristic: Tripping characteristics, I2t, Let-through current

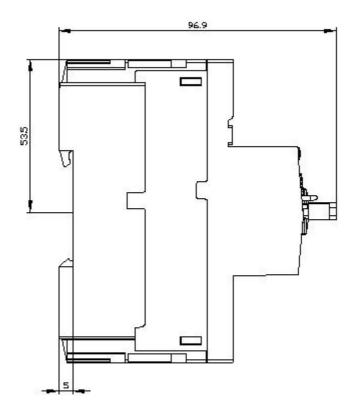
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0BA20/char

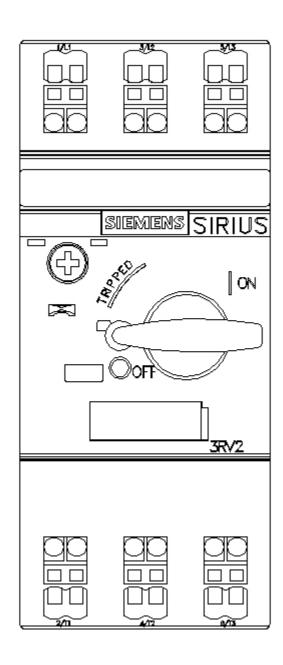
Further characteristics (e.g. electrical endurance, switching frequency)

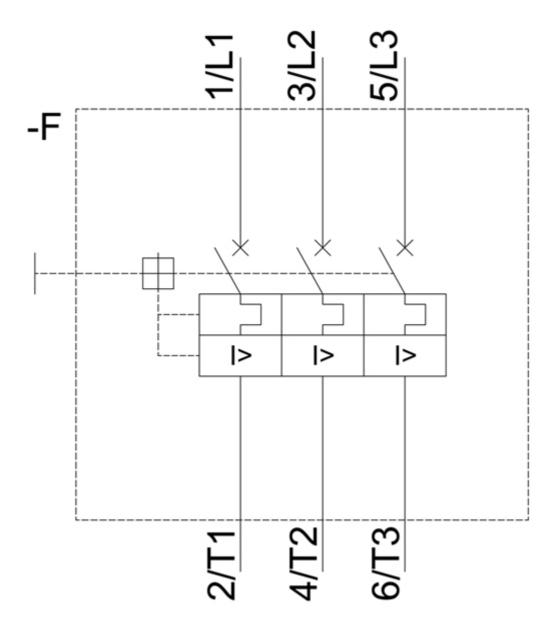
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0BA20&objecttype=14&gridview=view1











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