## **SIEMENS**

Data sheet 3RV2411-1GA20



Circuit breaker size S00 for transformer protection A-release 4.5...6.3 A N release 130 A Spring-type terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For transformer 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	
<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 (operating cycles)	
<ul> <li>of the main contacts typical</li> </ul>	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	
<ul> <li>during operation</li> </ul>	-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
adjustable current response value current of the current- dependent overload release	4.5 6.3 A
operating voltage	
• rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operating frequency rated value operational current rated value	50 60 Hz 6.3 A
operational current rated value	
operational current rated value operational current	6.3 A

operating power	
• at AC-3	
— at 230 V rated value	1.5 kW
— at 400 V rated value	2.2 kW
— at 500 V rated value	3 kW
— at 690 V rated value	4 kW
• at AC-3e	
— at 230 V rated value	1.5 kW
— at 400 V rated value	2.2 kW
— at 500 V rated value	3 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	
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	Woma
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
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     at 500 V rated value	100 kA
at 690 V rated value     at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	130 A
UL/CSA ratings	100 A
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	6.3 A
at 600 V rated value     at 600 V rated value	6.3 A
	0.5 A
yielded mechanical performance [hp]	
• for single-phase AC motor	0.25 hp
— at 110/120 V rated value	0.25 hp
— at 230 V rated value	0.5 hp
• for 3-phase AC motor	1 hn
— at 200/208 V rated value	1 hp
— at 220/230 V rated value	1.5 hp
— at 460/480 V rated value	3 hp
— at 575/600 V rated value	5 hp
Short-circuit protection	V
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V	gL/gG 50 A
• at 500 V	gL/gG 40 A
• at 690 V	gL/gG 35 A
	gugo so A
Installation/ mounting/ dimensions	COV
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	106 mm
width	45 mm

General Product Approval		Declaration of Conformity
Certificates/ approvals		
display version for switching status	Handle	
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	
T1 value for proof test interval or service life according to IEC 61508	10 a	
with low demand rate according to SN 31920	50 FIT	
failure rate [FIT]		
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	50 %	
proportion of dangerous failures		
<ul> <li>with high demand rate according to SN 31920</li> </ul>	5 000	
B10 value		
Safety related data		
size of the screwdriver tip	3,0 x 0,5 mm	
design of screwdriver shaft	Diameter 3 mm	
for AWG cables for main contacts	2x (20 12)	
finely stranded without core end processing	2x (0.5 2.5 mm²)	
— finely stranded with core end processing	2x (0.5 2.5 mm²)	
— solid or stranded	2x (0,5 4 mm²)	
for main contacts		
type of connectable conductor cross-sections		
arrangement of electrical connectors for main current circuit	Top and bottom	
for main current circuit	spring-loaded terminals	
type of electrical connection	and a land discontinue	
Connections/ Terminals		
— forwards	0 mm	
— at the side	30 mm	
— backwards	0 mm	
— upwards	50 mm	
— downwards	50 mm	
• for live parts at 690 V	50	
— forwards	0 mm	
— at the side	30 mm	
— backwards	0 mm	
— upwards	50 mm	
— downwards	50 mm	
for grounded parts at 690 V	50 mm	
— at the side	9 mm	
— upwards	30 mm	
— downwards	30 mm	
• for live parts at 500 V	20 mm	
— 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	
<ul> <li>for grounded parts at 400 V</li> </ul>		
<ul> <li>with side-by-side mounting at the side</li> </ul>	0 mm	
required spacing		
depth	97 mm	









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

<u>KC</u>



Type Test Certificates/Test Report

Special Test Certificate







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=3RV2411-1GA20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-1GA20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1GA20

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

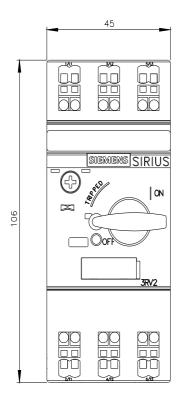
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2411-1GA20&lang=en

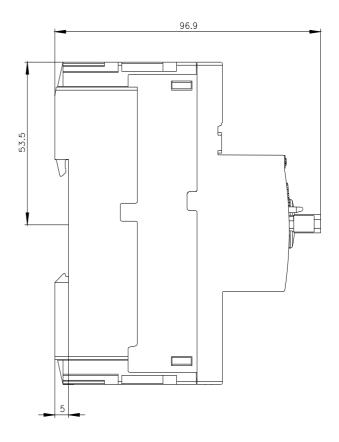
Characteristic: Tripping characteristics, I2t, Let-through current

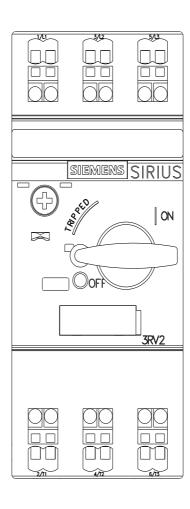
https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1GA20/char

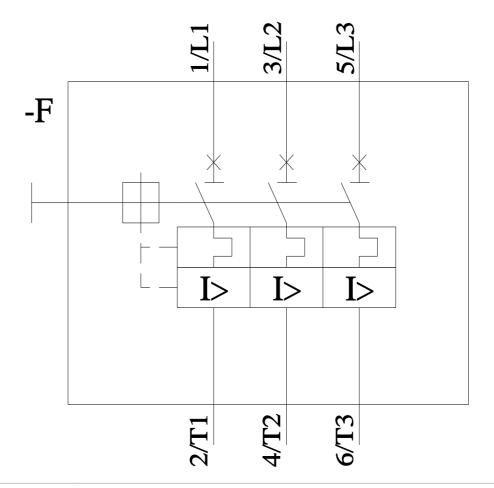
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-1GA20&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸