## **SIEMENS**

Data sheet 3RV2411-1HA20



Circuit breaker size S00 for transformer protection A-release 5.5...8 A N-release 163 A Spring-type terminal Standard switching capacity

product designation Circuit breaker design of the product For transformer protection product type designation 3RV2		
<u> </u>		
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 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		
adjustable current response value current of the current- dependent overload release		
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 8 A		
operational current rated value		
operational current		
·		

operating power	
• at AC-3	
— at 230 V rated value	1.5 kW
— at 400 V rated value	3 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	1.5 kW
— at 400 V rated value	3 kW
— at 500 V rated value	4 kW
— at 690 V rated value	5.5 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	Yes
trip class	CLASS 10
design of the overload release	thermal
maximum short-circuit current breaking capacity (Icu)	400.4
at AC at 240 V rated value	100 kA
at AC at 400 V rated value	100 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	42 kA
at AC at 690 V rated value	6 kA
operating short-circuit current breaking capacity (lcs) at AC	
at 240 V rated value	100 kA
<ul> <li>at 400 V rated value</li> </ul>	100 kA
<ul> <li>at 500 V rated value</li> </ul>	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	
<ul> <li>at 480 V rated value</li> </ul>	8 A
<ul> <li>at 600 V rated value</li> </ul>	8 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	0.33 hp
— at 230 V rated value	1 hp
• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	5 hp
Short-circuit protection	- · · · · ·
product function short circuit protection	Yes
<u> </u>	
design of the fuse link for IT network for short circuit	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
Installation/ mounting/ dimensions	333
	any
mounting position	any  ecrew and snap on mounting onto 35 mm DIN rail according to DIN EN 60715
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  106 mm
height	
width	45 mm

depth	97 mm
required spacing	
with side-by-side mounting at the side	0 mm
• for grounded parts at 400 V	
— 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
<ul> <li>for grounded parts at 500 V</li> </ul>	
— 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
<ul> <li>for grounded parts at 690 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
<ul> <li>for live parts at 690 V</li> </ul>	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
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)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
for 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 according to SN 31920	5 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	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 IEC 61508	10 a
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











**Test Certificates** 

Marine / Shipping

Special Test Certific-

Type Test Certificates/Test Report









Marine / Shipping

other

Railway





Confirmation



Confirmation

Vibration and Shock

## 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=3RV2411-1HA20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-1HA20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1HA20

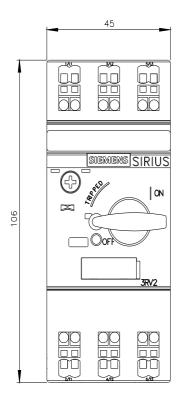
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

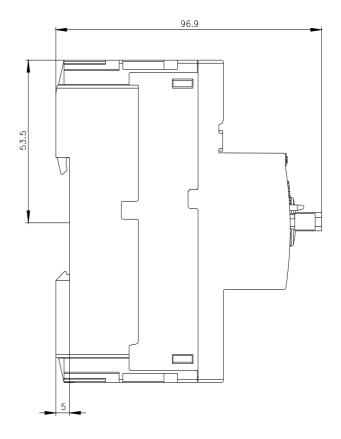
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2411-1HA20&lang=en

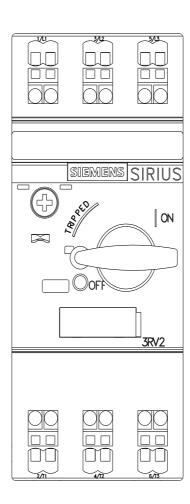
Characteristic: Tripping characteristics, I2t, Let-through current

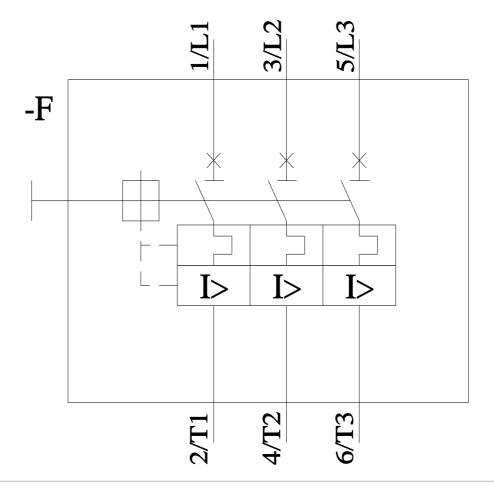
https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1HA20/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-1HA20&objecttype=14&gridview=view1









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