# **SIEMENS**

Data sheet 3RV2411-0GA10

Circuit breaker size S00 for transformer protection A-release 0.45...0.63 A N-release 13 A screw 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] total typical	5 W
Insulation voltage with degree of pollution 3 rated	690 V
value	
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>in networks with grounded star point between</li> </ul>	400 V
main and auxiliary circuit	
<ul> <li>in networks with grounded star point between</li> </ul>	400 V
main and auxiliary circuit	
Protection class IP	

• on the front	IP20
• of the terminal	IP20
Shock resistance	
• acc. to IEC 60068-2-27	25g / 11 ms
Mechanical service life (switching cycles)	
of the main contacts typical	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	100 000
Electrical endurance (switching cycles)	
• typical	100 000
Certificate of suitability ATEX	No
Protection against electrical shock	finger-safe
Reference code acc. to DIN EN 81346-2	Q
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
Temperature compensation	-20 +60 °C
Relative humidity during operation	10 95 %
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current-	0.45 0.63 A
dependent overload release	
Operating voltage	
• rated value	690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
Operating frequency rated value	50 60 Hz
Operating current rated value	0.63 A
Operating current	

0.63 A

90 W

180 W 180 W

250 W

15 1/h

• at AC-3

Operating power

• at AC-3

Operating frequency

• at AC-3 maximum

- at 400 V rated value

at 230 V rated valueat 400 V rated value

- at 500 V rated value

- at 690 V rated value

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	
<ul> <li>Ground fault detection</li> </ul>	No
Phase failure detection	Yes
Trip class	CLASS 10
Design of the overload release	thermal
Operational 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	100 kA
• at 690 V rated value	100 kA
Maximum short-circuit current breaking capacity (Icu)	
• 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
Breaking capacity short-circuit current (Icn)	
• at 1 current path at DC at 150 V rated value	10 kA
<ul> <li>with 2 current paths in series at DC at 300 V rated value</li> </ul>	10 kA
<ul> <li>with 3 current paths in series at DC at 450 V rated value</li> </ul>	10 kA
Response value current	
• of instantaneous short-circuit trip unit	13 A
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	0.63 A
● at 600 V rated value	0.63 A
Short-circuit protection	
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 690 V	gL/gG 6 A
Installation/ mounting/ dimensions	

Mounting position	any
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
	according to DIN EN 60715
Height	97 mm
Width	45 mm
Depth	97 mm
Required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— at the side	30 mm
— downwards	50 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	50 mm
— downwards	50 mm
— at the side	30 mm
Connections/Terminals	
Product function	
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>	No
Type of electrical connection	
• for main current circuit	screw-type terminals
Arrangement of electrical connectors for main current circuit	Top and bottom
Type of connectable conductor cross-sections	
• for main contacts	
— single or multi-stranded	2x (0,75 2,5 mm²), 2x 4 mm²
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

Tightening torque

Design of screwdriver shaft

Size of the screwdriver tip

• at AWG conductors for main contacts

• for main contacts with screw-type terminals

2x (18 ... 14), 2x 12

Diameter 5 to 6 mm

0.8 ... 1.2 N·m

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#### Design of the thread of the connection screw

• for main contacts

МЗ

Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	5 000
Proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %
Failure rate [FIT]	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 FIT
T1 value for proof test interval or service life acc. to	10 y
IEC 61508	
Display version	
• for switching status	Handle

# Certificates/approvals

### **General Product Approval**

Declaration of Conformity











### **Test Certificates**

# Marine / Shipping

Special Test Certificate Type Test
Certificates/Test
Report









# Marine / Shipping

# other







Confirmation



Miscellaneous

### Railway

Vibration and Shock

#### Further information

#### Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

#### Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV2411-0GA10

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-0GA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-0GA10

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2411-0GA10&lang=en

#### Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-0GA10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-0GA10&objecttype=14&gridview=view1







