## **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] 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
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
SVHC substance name	Lead - 7439-92-1
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	0.45 0.63 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

operational current rated value	0.63 A
operational current	
<ul> <li>at AC-3 at 400 V rated value</li> </ul>	0.63 A
at AC-3e at 400 V rated value	0.63 A
operating power	
• at AC-3	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.2 kW
— at 500 V rated value	0.2 kW
— at 690 V rated value	0.3 kW
• at AC-3e	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.2 kW
— at 500 V rated value	0.2 kW
— at 690 V rated value	0.3 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)	
• at AC at 240 V rated value	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
at AC at 500 V rated value	100 kA
at AC at 690 V rated value	100 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	100 kA
at 690 V rated value	100 kA
response value current of instantaneous short-circuit trip unit	13 A
UL/CSA ratings	107
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	0.63 A
at 600 V rated value     at 600 V rated value	0.63 A
Short-circuit protection	0.00 //
	Voc
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
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	0. 11111
	0 mm
with side-by-side mounting at the side     for grounded parts at 400 V	0 mm
• for grounded parts at 400 V	30 mm
— 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
• 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	
— downwards	50 mm
— upwards	50 mm
— 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	
type of electrical connection	
for main current circuit	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
— solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²
<ul><li>— solid or stranded</li><li>— finely stranded with core end processing</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul><li>— solid or stranded</li><li>— finely stranded with core end processing</li><li>for AWG cables for main contacts</li></ul>	
— solid or stranded     — finely stranded with core end processing     • for AWG cables for main contacts  tightening torque	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12
— solid or stranded  — finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 0.8 1.2 N·m
solid or stranded finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm
solid or stranded finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12 0.8 1.2 N·m
— solid or stranded — finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
— solid or stranded — finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts  tightening torque • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw • for main contacts  Safety related data product function suitable for safety function	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts  tightening torque • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw • for main contacts  Safety related data  product function suitable for safety function suitability for use	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No  Yes
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF  service life maximum	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No  Yes  10 a
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts  tightening torque • for main contacts with screw-type terminals  design of screwdriver shaft size of the screwdriver tip  design of the thread of the connection screw • for main contacts  Safety related data  product function suitable for safety function  suitability for use • safety-related switching on • safety-related switching OFF  service life maximum  test wear-related service life necessary	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No  Yes
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts  Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF  service life maximum  test wear-related service life necessary  proportion of dangerous failures  • with low demand rate according to SN 31920	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 %
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF  service life maximum  test wear-related service life necessary  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 %
- solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 % 5 000
- solid or stranded - finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on  • safety-related switching OFF  service life maximum  test wear-related service life necessary  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 %
- solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 % 5 000
- solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 % 5 000
- solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 % 5 000 50 FIT
— solid or stranded — finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on • safety-related switching OFF  service life maximum  test wear-related service life necessary  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  ISO 13849  device type according to ISO 13849-1  overdimensioning according to ISO 13849-2 necessary	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  40 % 50 % 5 000 50 FIT
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw • for main contacts  Safety related data product function suitable for safety function suitability for use • safety-related switching on • safety-related switching OFF service life maximum test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 ISO 13849 device type according to ISO 13849-1 overdimensioning according to ISO 13849-2 necessary	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  10 a Yes  40 % 50 % 5 000 50 FIT
— solid or stranded — finely stranded with core end processing  • for AWG cables for main contacts  tightening torque  • for main contacts with screw-type terminals  design of screwdriver shaft  size of the screwdriver tip  design of the thread of the connection screw  • for main contacts  Safety related data  product function suitable for safety function  suitability for use  • safety-related switching on • safety-related switching OFF  service life maximum  test wear-related service life necessary  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  ISO 13849  device type according to ISO 13849-1  overdimensioning according to ISO 13849-2 necessary	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (18 14), 2x 12  0.8 1.2 N·m  Diameter 5 to 6 mm  Pozidriv size 2  M3  Yes  No Yes  40 % 50 % 5 000 50 FIT

IP20
finger-safe, for vertical contact from the front
Handle

## **General Product Approval**







Confirmation



<u>KC</u>

General Product Approval

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping









**Miscellaneous** 

other

Confirmation



Railway

Environment

Special Test Certificate

Confirmation



Siemens EcoTech



Environmental Confirmations

## Further information

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=3RV2411-0GA10

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, ...)

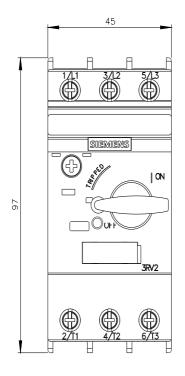
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2411-0GA10\&lang=en}}$ 

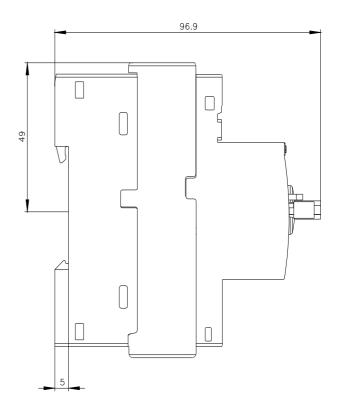
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

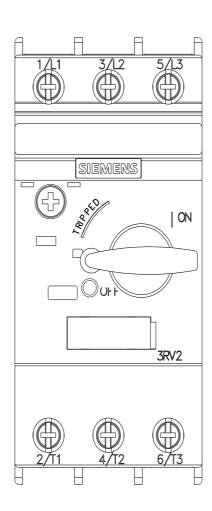
https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-0GA10/char

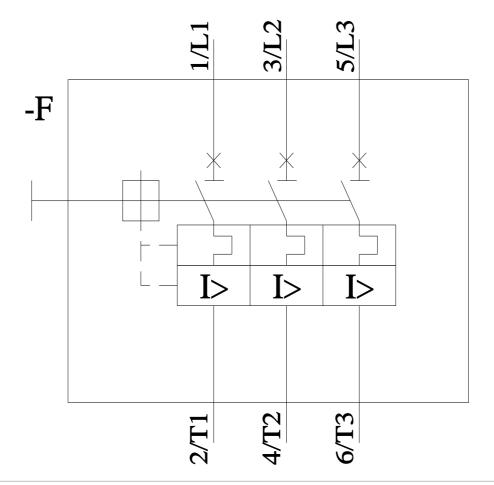
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-0GA10&objecttype=14&gridview=view1









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