## **SIEMENS**

Data sheet 3RV2411-0JA15



Circuit breaker size S00 for transformer protection A-release 0.7...1 A N-release 21 A screw terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC

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	
at AC in hot operating state per pole	2.4 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		
<ul> <li>between main and auxiliary circuit</li> </ul>	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)		
<ul> <li>of the main contacts typical</li> </ul>	100 000	
of auxiliary contacts typical	100 000	
electrical endurance (switching cycles) typical	100 000	
reference code acc. to IEC 81346-2	Q	
Substance Prohibitance (Date)	01.10.2009	
Ambient conditions	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 current response value current of the current-dependent overload release	0.7 1 A	
operating voltage		
rated value	690 V	
rated value	20 690 V	

<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	1 A
operational current at AC-3 at 400 V rated value	1 A
operating power at AC-3	
at 230 V rated value	0.2 kW
<ul> <li>at 400 V rated value</li> </ul>	0.3 kW
<ul> <li>at 500 V rated value</li> </ul>	0.4 kW
<ul> <li>at 690 V rated value</li> </ul>	0.6 kW
operating frequency at AC-3 maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
● at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	
● at 24 V	1 A
● at 60 V	0.15 A
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
breaking capacity operating short-circuit current (Ics) at AC	
<ul><li>at 240 V rated value</li></ul>	100 kA
<ul> <li>at 400 V rated value</li> </ul>	100 kA
at 500 V rated value	100 kA
	100 kA 100 kA
at 500 V rated value     at 690 V rated value  breaking capacity maximum short-circuit current (Icu)	100 kA
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value	100 kA
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value	100 kA 100 kA 100 kA
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> breaking capacity maximum short-circuit current (Icu) <ul> <li>at AC at 240 V rated value</li> <li>at AC at 400 V rated value</li> <li>at AC at 500 V rated value</li> </ul>	100 kA 100 kA 100 kA
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> breaking capacity maximum short-circuit current (Icu) <ul> <li>at AC at 240 V rated value</li> <li>at AC at 400 V rated value</li> <li>at AC at 500 V rated value</li> <li>at AC at 690 V rated value</li> </ul>	100 kA 100 kA 100 kA 100 kA
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip	100 kA 100 kA 100 kA
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit	100 kA 100 kA 100 kA 100 kA
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings	100 kA 100 kA 100 kA 100 kA
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	100 kA 100 kA 100 kA 100 kA 21 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value	100 kA  100 kA  100 kA  100 kA  100 kA  21 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value	100 kA 100 kA 100 kA 100 kA 21 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit tripunit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp]	100 kA  100 kA  100 kA  100 kA  100 kA  21 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor	100 kA 100 kA 100 kA 100 kA 100 kA 21 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor at 575/600 V rated value	100 kA 100 kA 100 kA 100 kA 100 kA 21 A  1 A 1 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value  contact rating of auxiliary contacts according to UL	100 kA 100 kA 100 kA 100 kA 100 kA 21 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection	100 kA  100 kA  100 kA  100 kA  100 kA  21 A  1 A  1 A  1 A  1 A
at 500 V rated value at 690 V rated value  breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection product function short circuit protection	100 kA  100 kA  100 kA  100 kA  100 kA  21 A   1 A  1 A  0.5 hp  C300 / R300
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection design of the short-circuit trip	100 kA  100 kA  100 kA  100 kA  100 kA  21 A  1 A  1 A  1 A  0.5 hp  C300 / R300
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link	100 kA 100 kA 100 kA 100 kA 100 kA 21 A  1 A 1 A 0.5 hp C300 / R300
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection design of the short-circuit trip	100 kA  100 kA  100 kA  100 kA  100 kA  21 A   1 A  1 A  0.5 hp  C300 / R300
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value contact rating of auxiliary contacts according to UL  Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for short-circuit protection of the auxiliary switch	100 kA 100 kA 100 kA 100 kA 100 kA 21 A  1 A 1 A 0.5 hp C300 / R300  Yes magnetic  Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor — at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection product function short circuit protection design of the short-circuit trip design of the fuse link for short-circuit protection of the auxiliary switch required  design of the fuse link for IT network for short-circuit	100 kA  100 kA  100 kA  100 kA  100 kA  21 A   1 A  1 A  1 A  1 A  1 S  1 P  1 S  1 S  1 S  1 S  1 S  1 S
at 500 V rated value at 690 V rated value breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value  if 600 V rated value  yielded mechanical performance [hp] for 3-phase AC motor —at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  product function short circuit protection design of the short-circuit trip design of the fuse link for short-circuit protection of the auxiliary switch required  design of the fuse link for IT network for short-circuit protection of the main circuit	100 kA  100 kA  100 kA  100 kA  100 kA  21 A  1 A  1 A  0.5 hp  C300 / R300  Yes  magnetic  Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)

nstallation/ mounting/ dimensions	ony
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
haight	97 mm
height 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
<ul> <li>for live parts at 400 V</li> </ul>	
— 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
• 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	O Hilli
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
product component removable terminal for auxiliary	No
and control circuit	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
• for main contacts	0 (0.75 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
— solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for main contacts	2x (18 14), 2x 12
type of connectable conductor cross-sections	
for auxiliary contacts	
<ul><li>— solid or stranded</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
tightening torque	
for main contacts with screw-type terminals	0.8 1.2 N·m
for auxiliary contacts with screw-type terminals	0.8 1.2 N·m
7 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	
design of screwdriver shaft	Diameter 5 to 6 mm
design of screwdriver shaft size of the screwdriver tip	Pozidriv size 2
design of screwdriver shaft size of the screwdriver tip design of the thread of the connection screw	

<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
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 IEC 61508	10 y
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
Cartificates/ approvals	

Certificates/ approvals

## **General Product Approval**

Declaration of Conformity



Confirmation









Declaration of Conformity

**Test Certificates** 

Marine / Shipping

UK Declaration of Conformity

Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

Lloyd's Register

LRS







Confirmation

other



## Railway

<u>Vibration and Shock</u> <u>Confirmation</u>

## 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=3RV2411-0JA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-0JA15

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-0JA15

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

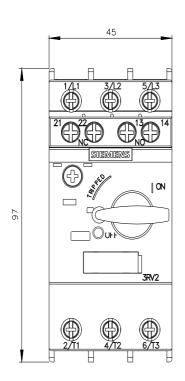
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2411-0JA15&lang=er

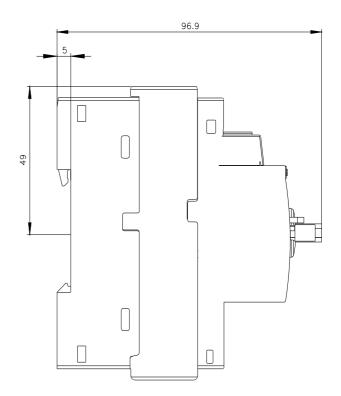
Characteristic: Tripping characteristics, I2t, Let-through current

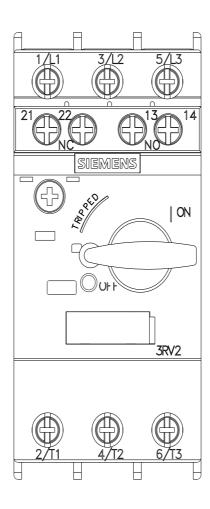
https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-0JA15/char

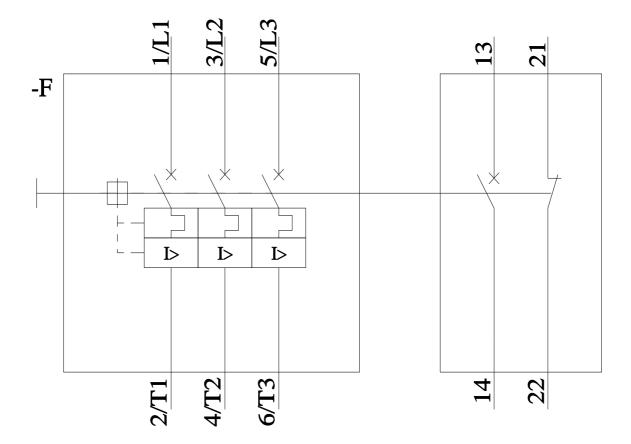
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-0JA15&objecttype=14&gridview=view1









last modified: 1/27/2022 🖸