SIEMENS

Data sheet 3RV2411-1JA15



Circuit breaker size S00 for transformer protection A-release 7...10 A N-release 208 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		
 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 (switching cycles)		
 of the main contacts typical 	100 000	
of auxiliary contacts typical	100 000	
electrical endurance (switching 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	7 10 A	
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	10 A	
operational current		
• at AC-3 at 400 V rated value	10 A	

- of AC 20 of 400 \/ ==f=-1	40 A
at AC-3e at 400 V rated value	10 A
operating power	
• at AC-3	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating frequency	
 at AC-3 maximum 	15 1/h
 at AC-3e 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	4.4
• at 24 V	1 A
• at 60 V	0.15 A
Protective and monitoring functions	
product function	
 ground fault detection 	No
 ground fault detection phase failure detection	No Yes
-	
phase failure detection	Yes
phase failure detection trip class	Yes CLASS 10
phase failure detection trip class design of the overload release	Yes CLASS 10
phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu)	Yes CLASS 10 thermal
phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value	Yes CLASS 10 thermal
phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value	Yes CLASS 10 thermal 100 kA 100 kA
phase failure detection trip class design of the overload release 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	Yes CLASS 10 thermal 100 kA 100 kA 42 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics)	Yes CLASS 10 thermal 100 kA 100 kA 42 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 42 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA
phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu)	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 42 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 42 kA
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 240 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value at 690 V rated value 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	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 42 kA 208 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value tesponse 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	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 208 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 690 V rated value at 690 V rated value tesponse 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 at 600 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 42 kA 208 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value tesponse 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]	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 208 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value tresponse 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 for single-phase AC motor	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 208 A 10 A 10 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 500 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • 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 single-phase AC motor — at 110/120 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 22 kA 4 kA 208 A 10 A 10 A
phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 500 V rated value 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 for single-phase AC motor at 110/120 V rated value at 230 V rated value at 230 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 208 A 10 A 10 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 690 V rated value 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 for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 22 kA 4 kA 208 A 10 A 10 A
phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 500 V rated value 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 for single-phase AC motor at 110/120 V rated value at 230 V rated value at 230 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 42 kA 4 kA 208 A 10 A 10 A 10 A 10 A
phase failure detection trip class design of the overload release 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 breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 690 V rated value 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 for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 100 kA 22 kA 4 kA 208 A 10 A 10 A
• phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • 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 single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 42 kA 4 kA 208 A 10 A 10 A 10 A 10 A
• phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • 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 • at 600 V rated value • at 600 V rated value • at 230 V rated value • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 200/208 V rated value • at 220/230 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 42 kA 6 kA 100 kA 42 kA 4 kA 208 A 10 A 10 A 10 A 10 A

contact rating of auxiliary contacts according to UL	C300 / R300
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link	magnetic
for short-circuit protection of the auxiliary switch	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
design of the fuse link for IT network for short-circuit	IK ~ 400 A)
protection of the main circuit • at 400 V	gL/gG 50 A
• at 500 V	gL/gG 40 A
• at 690 V	gL/gG 40 A
Installation/ mounting/ dimensions	90904074
mounting position	any
fastening method	any screw and snap-on mounting onto 35 mm standard mounting rail
lasterning metriou	according to DIN EN 60715
height	97 mm
width	45 mm
depth	97 mm
required spacing	
• 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
• 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
for auxiliary and control circuit	screw-type 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 (0,75 2,5 mm²), 2x 4 mm²
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for main contacts	2x (18 14), 2x 12
type of connectable conductor cross-sections	(), <u></u> <u>_</u>
• for auxiliary contacts	

— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts	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
design of screwdriver shaft	Diameter 5 to 6 mm
size of the screwdriver tip	Pozidriv size 2
design of the thread of the connection screw	
 for main contacts 	M3
 of the auxiliary and control contacts 	M3
Safety related data	
B10 value	
with high demand rate according to SN 31920	5 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	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 y
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



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping



Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping

other









Confirmation



Railway

Vibration and Shock

Confirmation

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=3RV2411-1JA15

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-1JA15

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1JA15

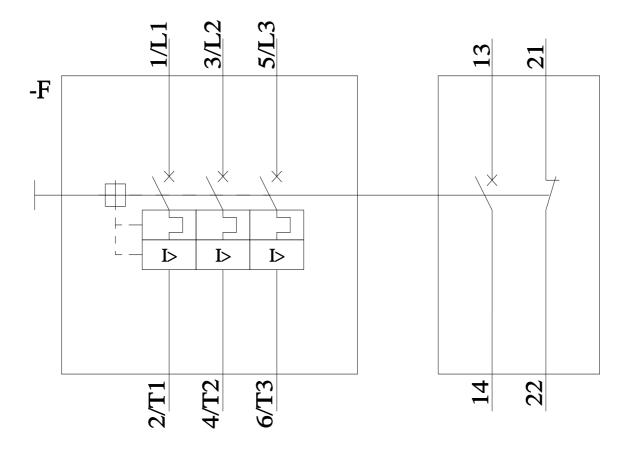
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2411-1JA15&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1JA15/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-1JA15&objecttype=14&gridview=view1



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