SIEMENS

Data sheet

3RV2411-1JA10



Circuit breaker size S00 for transformer protection A-release 7...10 A N-release 208 A screw terminal Standard switching capacity

4/12 8//13			
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 (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	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		
 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	
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 (lcu)	
 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 	42 kA
at AC at 690 V rated value	6 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 	42 kA
• at 690 V rated value	4 kA
response value current of instantaneous short-circuit trip unit	208 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
 at 480 V rated value 	10 A
● at 600 V rated value	10 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	1.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	10 hp
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 400 V	gL/gG 50 A
● at 500 V	gL/gG 40 A
● at 690 V	gL/gG 40 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	37 11111
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	3 1111
 Ion hve parts at 400 v — downwards 	30 mm
	30 mm
— upwards — at the side	9 mm
	9 1111
for grounded parts at 500 V	30 mm
— downwards	30 mm
— upwards	
— 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	
Connections/ Terminals type of electrical connection	
type of electrical connection • for main current circuit	screw-type terminals
type of electrical connection	screw-type terminals Top and bottom
type of electrical connection • for main current circuit arrangement of electrical connectors for main current	
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit	
type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections	
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm²
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded	Top and bottom
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts tightening torque	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts solid or stranded finely stranded with core end processing • for AWG cables for main contacts tightening torque • for main contacts with screw-type terminals	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — 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	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — 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	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — 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	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — 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	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts — 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 B10 value	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000
type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections for main contacts 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 B10 value with high demand rate according to SN 31920 	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000 50 %
type of electrical connection for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections for main contacts 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 B10 value with high demand rate according to SN 31920 with low demand rate according to SN 31920 with high demand rate according to SN 31920 	Top and bottom 2x (0,75 2,5 mm ²), 2x 4 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000 50 %
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts - 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 B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920	Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 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 5 000 50 % 50 % 50 %
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 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 5 000 50 % 50 % 50 FIT
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts - 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 shaft size of the thread of the connection screw • for main contacts Safety related data B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 failure rate [FIT] • with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529	Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 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 5 000 50 % 50 FIT 10 a IP20
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts	Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 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 5 000 50 % 50 FIT 10 a
type of electrical connection • for main current circuit arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections • for main contacts - 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 shaft size of the thread of the connection screw • for main contacts Safety related data B10 value • with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 failure rate [FIT] • with low demand rate according to SN 31920 T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529	Top and bottom 2x (0,75 2,5 mm²), 2x 4 mm² 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 5 000 50 % 50 % 50 FIT 10 a IP20

General Product Appr	General Product Approval		Declaration of Conformity				
	<u>Confirmation</u>		EAC	CE EG-Konf.	UK CA		
Test Certificates		Marine / Shipping					
<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	ABS	BUREAU VERITAS		Lloyds Register uis		
Marine / Shipping		other		Railway			
PRS	RINA	<u>Confirmation</u>	DE	<u>Confirmation</u>	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 or Please contact your loca	the renewal of the cur al Siemens office on the		certification if you inte	nd to import or offer to sup	oply these products to an		

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=3RV2411-1JA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-1JA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1JA10

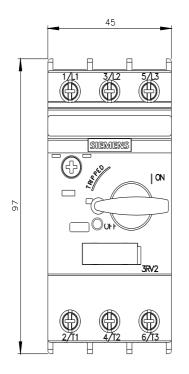
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

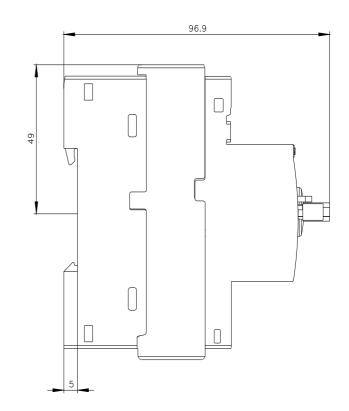
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2411-1JA10&lang=en

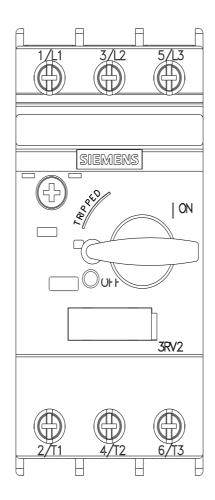
Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1JA10/char

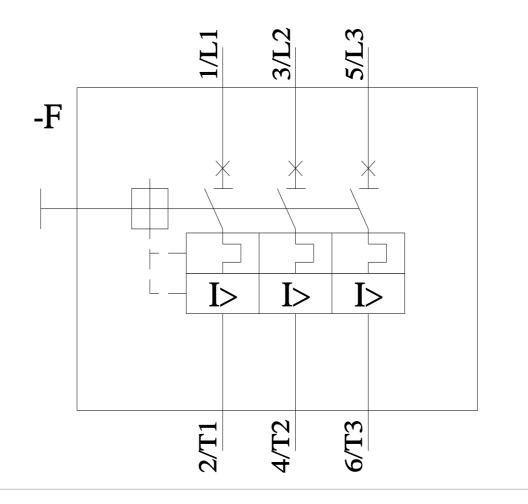
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-1JA10&objecttype=14&gridview=view1







7/26/2023



last modified:

11/21/2022 🖸