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

product designation design of the product product type designation 3RV2 General technical data size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value • at AC in hot operating to IEC 60068-2:27 shock resistance according to IEC 60068-2:27 • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) • of the main contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Sate) Anbient conditions installation altitude at height above sea level maximum abient temperature • during operation • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 ared value maximum • at AC-3 ared value maximum • operating frequency rated value operational current operational current rated value	product brand name	SIRIUS
Separate Separation SRV2	product designation	Circuit breaker
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service IIF (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Qusbstance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during storage • during storage • during storage • during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operational current rated value • at AC-3 reated value maximum operating frequency rated value operational current rated value	design of the product	For transformer protection
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value at AC-3 rated value maximum operating frequency rated value operational current rated value	product type designation	3RV2
size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state	General technical data	
product extension auxiliary switch power loss [W] for rated value of the current	size of the circuit-breaker	S00
power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 get of the main contacts typical of awailiary contacts typical electrical endurance (switching cycles) typical 100 000 electrical endurance (switching cycles) typical 100 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage during transport elative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3e rated value maximum operational current rated value operational current of the current operation at AC-3e rated value operational current rated value operational current rated value operational current of current operational current rated value operational current of current operational current rated value operational current rated value operational current	size of contactor can be combined company-specific	S00, S0
at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 get of the main contacts typical of the main contacts typical of the main contacts typical of auxiliary contacts typical lectrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of uning storage of uning transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage operating frequency rated value operational current operational current of the current-dependent value operational current rated value operational current of the current-dependent overload value operational current rated value operational current rated value operational current rated value operational current of the current-dependent overload value operational current rated value operational current rated value operational current of the current-dependent overload value operational current rated value operational current rated value operational current rated value operational current	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature ouring storage of during storage of during storage of during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage or at AC-3a rated value maximum operational current rated value operational current of the KV sky 100 000	power loss [W] for rated value of the current	
insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81348-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage of during storage of during transport relative humidity during operation mumber of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage operating voltage or at AC-3e rated value maximum operational current operational current rated value operational current 100 000 100 0	 at AC in hot operating state 	9.25 W
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 operating voltage • rated value 20 690 V • at AC-3e rated value maximum 690 V operational current rated value 50 60 Hz operational current rated value 50 60 Hz operational current	at AC in hot operating state per pole	3.1 W
shock resistance according to IEC 60068-2-27 shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical loo 000 electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Quabstance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation during storage olduring transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage orated value at AC-3 rated value maximum operational current rated value	o o i	690 V
mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum oduring operation of during storage of during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage or rated value of AC-3 rated value maximum operational current rated value operational current	surge voltage resistance rated value	6 kV
of the main contacts typical of auxiliary contacts typical lectrical endurance (switching cycles) typical lectrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation during storage oduring transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage or at AC-3 rated value maximum operation long operation	shock resistance according to IEC 60068-2-27	25g / 11 ms
of auxiliary contacts typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature ouring operation during storage during transport relative humidity during operation Admin circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3 rated value maximum e at AC-3 rated value maximum operational current rated value	mechanical service life (switching cycles)	
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reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • rated value maximum 690 V • at AC-3 rated value maximum 690 V operating frequency rated value operational current rated value 10 A operational current rated value 10 A operational current rated value 10 A	of auxiliary contacts typical	100 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum 690 V operating frequency rated value operational current rated value 10 A operational current rated value 10 A operational current rated value	electrical endurance (switching cycles) typical	100 000
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operational current rated value operational current rated value operational current rated value operational current 2 0 00 m 2 0 +60 °C -20 +80 °C -50 +80 °C 7 +80 °C 7 +80 °C 7 10 A 7 10 A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport • during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operational current rated value operational current rated value operational current rated value operational current rated value operational current 20 00 m -20 +60 °C -50 +80 °C -50	Substance Prohibitance (Date)	10/01/2009
ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operational current rated value operational current rated value 10 A -20 +60 °C -50 +80 °C -50 +8	Ambient conditions	
 during operation during storage during transport 50 +80 °C eduring transport 50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3 rated value maximum eat AC-3 rated value maximum eat AC-3e rated value maximum ego V operating frequency rated value operational current rated value operational current 	installation altitude at height above sea level maximum	2 000 m
 during storage during transport felative humidity during operation mumber of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3 rated value maximum at AC-3e rated value maximum operating frequency rated value operational current rated value operational current 	ambient temperature	
 during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage rated value at AC-3 rated value maximum at AC-3e rated value maximum operating frequency rated value operational current rated value operational current 	during operation	-20 +60 °C
relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value 10 A operational current	 during storage 	-50 +80 °C
Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • rated value maximum • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value 10 A operational current	during transport	-50 +80 °C
number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value 10 A operational current	relative humidity during operation	10 95 %
adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value operational current 7 10 A 20 690 V 690 V 690 V 10 A	Main circuit	
current-dependent overload release operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value 10 A operational current	number of poles for main current circuit	3
 rated value at AC-3 rated value maximum at AC-3e rated value maximum 690 V operating frequency rated value operational current rated value operational current 	·	7 10 A
 at AC-3 rated value maximum at AC-3e rated value maximum operating frequency rated value operational current rated value operational current 	operating voltage	
at AC-3e rated value maximum 690 V operating frequency rated value operational current rated value operational current	• rated value	20 690 V
operating frequency rated value 50 60 Hz operational current rated value 10 A operational current	 at AC-3 rated value maximum 	690 V
operational current rated value 10 A operational current	 at AC-3e rated value maximum 	690 V
operational current	operating frequency rated value	50 60 Hz
·	operational current rated value	10 A
40.0	operational current	
at AU-3 at 400 V rated value	• at AC-3 at 400 V rated value	10 A

• at AC-3e at 400 V rated value	10 A
	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	7.5 KVV
— at 230 V rated value	2.2 kW
— at 400 V rated value	2.2 KVV 4 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	7.5 kW
operating frequency	1.5 KVV
• at AC-3 maximum	15 1/h
at AC-3e maximum	15 1/h
Auxiliary circuit	ic iii
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
breaking capacity maximum short-circuit current (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	42 kA
at AC at 690 V rated value	6 kA
breaking capacity operating short-circuit current (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	ODV.
mounting position	any
fastening method	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	
 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
arrangement of electrical connectors for main current	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 + 11111 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for main contacts	2x (18 14), 2x 12
tightening torque	(·- ··· · ·), -·· · · -
for main 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
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 with high demand rate according to SN 31920	50 %
failure rate [FIT]	
	50 FIT
with low demand rate according to SN 31920 T1 value for proof test interval or service life according to	50 FIT 10 y

protection class IP on the front according to IEC 60529

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

Confirmation

Vibration and Shock

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=3RV2411-1JA10

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

 $\label{eq:Characteristic:Tripping characteristics, I^2t, Let-through current} \label{eq:Characteristic:Tripping characteristics}$

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

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