## SIEMENS

## Data sheet

## 3RV2411-1HA10



Circuit breaker size S00 for transformer protection A-release 5.5...8 A N-release 163 A screw terminal Standard switching capacity

2/11 2/12 6/13			
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			
<ul> <li>at AC in hot operating state</li> </ul>	9.25 W		
<ul> <li>at AC in hot operating state per pole</li> </ul>	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)			
<ul> <li>of the main contacts typical</li> </ul>	100 000		
<ul> <li>of auxiliary contacts typical</li> </ul>	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	5.5 8 A		
operating voltage			
rated value	20 690 V		
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V		
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V		
	50 60 Hz		
operating frequency rated value			
operating frequency rated value operational current rated value	8 A		
operational current rated value			

operating power			
• at AC-3			
— at 230 V rated value	1.5 kW		
— at 400 V rated value	3 kW		
— at 500 V rated value	4 kW		
— at 690 V rated value	5.5 kW		
• at AC-3e			
— at 230 V rated value	1.5 kW		
— at 400 V rated value	3 kW		
— at 500 V rated value	4 kW		
— at 690 V rated value	5.5 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	No		
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		
• at AC at 400 V rated value	100 kA		
<ul> <li>at AC at 500 V rated value</li> </ul>	42 kA		
at AC at 690 V rated value	6 kA		
operating short-circuit current breaking capacity (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	42 kA		
• at 690 V rated value	4 kA		
response value current of instantaneous short-circuit trip unit	163 A		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	8 A		
• at 600 V rated value	8 A		
yielded mechanical performance [hp]			
<ul> <li>for single-phase AC motor</li> </ul>			
— at 110/120 V rated value	0.33 hp		
— at 230 V rated value	1 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	2 hp		
— at 220/230 V rated value	2 hp		
— at 460/480 V rated value	5 hp		
— at 575/600 V rated value	5 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 500 V • at 690 V			
	gL/gG 35 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
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	3 1111
<ul> <li>Ion hve parts at 400 v</li> <li>— downwards</li> </ul>	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	20
— 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
<ul> <li>for live parts at 690 V</li> </ul>	
— 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 <ul> <li>for main current circuit</li> </ul> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections</li>	
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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm
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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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2
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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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 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 <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3
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type of electrical connection <ul> <li>for main current circuit</li> </ul> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections <ul> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for AWG cables for main contacts</li> </ul> </li> <li>tightening torque <ul> <li>for main contacts with screw-type terminals</li> </ul> </li> <li>design of screwdriver shaft <ul> <li>size of the screwdriver tip</li> <li>design of the thread of the connection screw</li> <li>for main contacts</li> </ul> </li> <li>Safety related data <ul> <li>B10 value</li> <li>with high demand rate according to SN 31920</li> </ul> </li>	Top and bottom 2x (0,75 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 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 <ul> <li>for main current circuit</li> </ul> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections <ul> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>for AWG cables for main contacts</li> </ul> </li> <li>tightening torque <ul> <li>for main contacts with screw-type terminals</li> </ul> </li> <li>design of screwdriver shaft <ul> <li>size of the screwdriver tip</li> <li>design of the thread of the connection screw</li> <li>for main contacts</li> </ul> </li> <li>Safety related data <ul> <li>B10 value</li> <li>with high demand rate according to SN 31920</li> <li>with low demand rate according to SN 31920</li> <li>with high demand rate according to SN 31920</li> </ul> </li>	Top and bottom 2x (0,75 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup> 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ) 2x (18 14), 2x 12 0.8 1.2 N·m Diameter 5 to 6 mm Pozidriv size 2 M3 5 000 50 %
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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 Approval		Declaration of Conformity		ormity		
(CCC)	<u>Confirmation</u>	(UL)	EHC	CE EG-Konf.	UK CA	
Test Certificates		Marine / Shipping				
Special Test Certific- ate	Type Test Certific- ates/Test Report	ABS	BUREAU VERITAS		Lloyds Register uis	
Marine / Shipping		other		Railway		
PRS	RINA	<u>Confirmation</u>		<u>Confirmation</u>	<u>Vibration and Shock</u>	
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 on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). 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=3RV2411-1HA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2411-1HA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1HA10

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

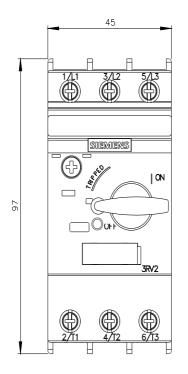
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2411-1HA10&lang=en

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

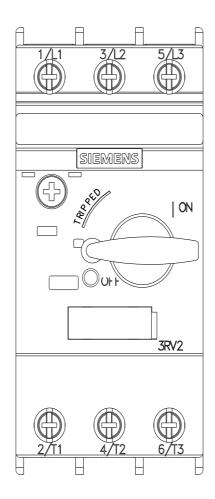
https://support.industry.siemens.com/cs/ww/en/ps/3RV2411-1HA10/char

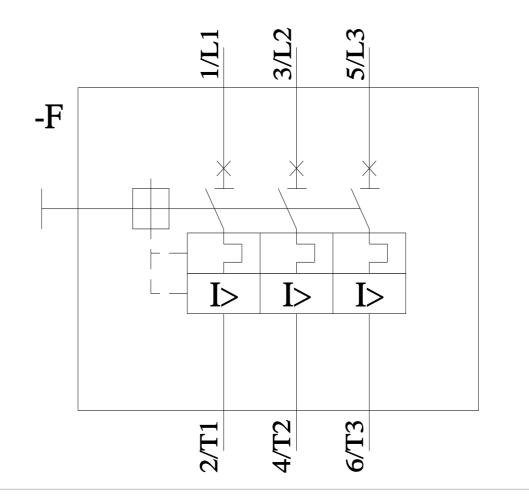
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2411-1HA10&objecttype=14&gridview=view1









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