## **SIEMENS**

Data sheet 3RV2321-1DC10



Circuit breaker size S0 for starter combination Rated current 3.2 A N release 42 A screw terminal Standard switching capacity

product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For starter combinations
product type designation	3RV2
General technical data	
size of the circuit-breaker	S0
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	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
shock resistance according to IEC 60068-2-27	25g / 11 ms
mechanical service life (operating cycles)	
of the main contacts typical	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	
<ul> <li>during operation</li> </ul>	-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
operating voltage	
rated value	20 690 V
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	3.2 A
operational current	
• at AC-3 at 400 V rated value	3.2 A
at AC-3e at 400 V rated value	3.2 A
operating power	
• at AC-3	

— at 230 V rated value	0.6 kW
— at 400 V rated value	1.1 kW
— at 500 V rated value	1.5 kW
— at 690 V rated value	2.2 kW
• at AC-3e	
— at 230 V rated value	0.6 kW
— at 400 V rated value	1.1 kW
— at 500 V rated value	1.5 kW
— at 690 V rated value	2.2 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     phase failure detection	
phase failure detection  maximum short circuit current breaking capacity (lou)	No
maximum short-circuit current breaking capacity (Icu)	400 kA
at AC at 400 V rated value	100 kA
at AC at 500 V rated value	100 kA
at AC at 500 V rated value	100 kA
at AC at 690 V rated value	10 kA
operating short-circuit current breaking capacity (lcs) at AC	
• at 240 V rated value	100 kA
<ul> <li>at 400 V rated value</li> </ul>	100 kA
at 500 V rated value	100 kA
<ul> <li>at 690 V rated value</li> </ul>	10 kA
response value current of instantaneous short-circuit trip unit	42 A
response value current of instantaneous short-circuit trip unit UL/CSA ratings	42 A
response value current of instantaneous short-circuit trip unit  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	
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	3.2 A
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	
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	3.2 A
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	3.2 A 3.2 A
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]	3.2 A
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	3.2 A 3.2 A
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	3.2 A 3.2 A 0.1 hp
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	3.2 A 3.2 A 0.1 hp
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	3.2 A 3.2 A 0.1 hp 0.25 hp
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	3.2 A 3.2 A 0.1 hp 0.25 hp
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  — at 220/230 V rated value	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp
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  — at 220/230 V rated value  — at 460/480 V rated value	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection	3.2 A 3.2 A  0.1 hp 0.25 hp  0.5 hp 0.75 hp 2 hp 2 hp
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection	3.2 A 3.2 A  0.1 hp 0.25 hp  0.5 hp 0.75 hp 2 hp 2 hp
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip	3.2 A 3.2 A  0.1 hp 0.25 hp  0.5 hp 0.75 hp 2 hp 2 hp
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp 2 magnetic
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method	3.2 A 3.2 A  0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp 2 magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position fastening method height	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp 2 hp  Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • with side-by-side mounting at the side	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp 7 es magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm
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  • for 3-phase AC motor  — at 200/208 V rated value  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • with side-by-side mounting at the side  • for grounded parts at 400 V	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp  Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • with side-by-side mounting at the side  • for grounded parts at 400 V  — downwards	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 0 mm
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • with side-by-side mounting at the side  • for grounded parts at 400 V  — downwards  — upwards	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 30 mm 30 mm
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  — at 220/230 V rated value  — at 460/480 V rated value  — at 575/600 V rated value  Short-circuit protection  product function short circuit protection  design of the short-circuit trip  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing  • with side-by-side mounting at the side  • for grounded parts at 400 V  — downwards	3.2 A 3.2 A 0.1 hp 0.25 hp 0.5 hp 0.75 hp 2 hp 2 hp 2 hp Yes magnetic  any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 97 mm 45 mm 97 mm 0 mm 0 mm

— 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
<ul> <li>for live parts at 500 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 690 V</li> </ul>	
— 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
circuit	Top and bottom
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>for AWG cables for main contacts</li> </ul>	2x (16 12), 2x (14 8)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 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	M4
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	10 a
61508	
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









Test Certificates Marine / Shipping









Marine / Shipping

other

Railway





Confirmation



Confirmation

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 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=3RV2321-1DC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2321-1DC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-1DC10

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

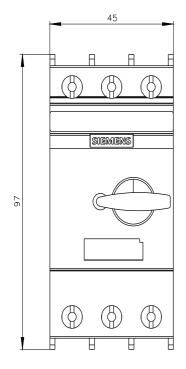
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2321-1DC10&lang=en

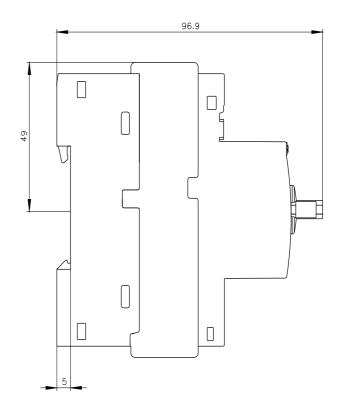
Characteristic: Tripping characteristics, I2t, Let-through current

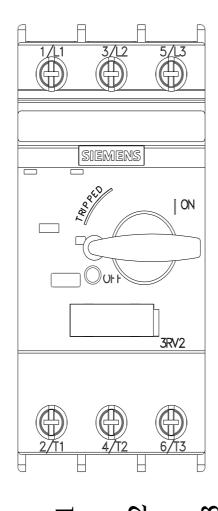
https://support.industry.siemens.com/cs/ww/en/ps/3RV2321-1DC10/char

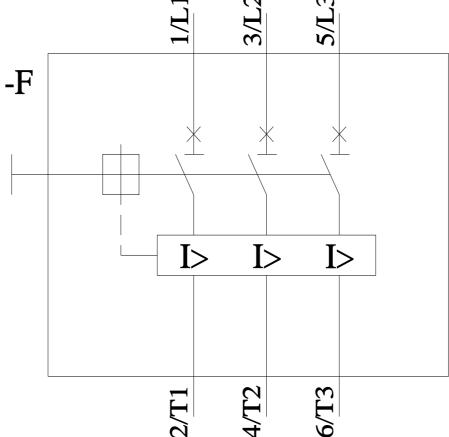
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2321-1DC10&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3RV23211DC10