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 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 type 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 not operating state • at AC in not 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 • of the main contacts typical • of the main contacts typical • of the main contacts typical • of auxiliary contacts typical voltage voltage coording to IEC 60068-2-7 Substance Prohibitance (switching cycles) typical reference code according to IEC 61346-2 Q Substance Prohibitance (bate) Ambient conditions installation altitude at height above sea level maximum • during storage • during operation • during storage • during transport relative humidity during operation • at AC-3 rated value maximum • at AC-3e rated value maximum • at AC-3e at 400 V rated value | product brand name | SIRIUS |
|--|---|--------------------------|
| product type designation 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 • 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 mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of auxiliary contacts (witching cycles) typical 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 Main circuit number of poles for main current circuit operating voltage • rated value at AC-3 rated value maximum • at AC-3 rated value value • at AC-3 rated value value • at AC-3 rated value | product designation | Circuit breaker |
| Section Sect | design of the product | For starter combinations |
| 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 per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value surge voltage resistance rated value • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical 100 000 electrical endurance (witching 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 ambient temperature • during operation • during storage • during transport relative humidity during operation Main circuit number of poles for main current circuit • at AC-3 arted value maximum e) at AC-3 arted value • operational current • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • operational current • at AC-3 at 400 V 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 • 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 • of the main contacts typical • of auxiliary contacts 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 relative humidity during operation Main circuit number of poles for main current circuit • at AC-3 a rated value maximum • at AC-3 arted value maximum • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value | General technical data | |
| 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 per pole • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 6 kV shock resistance according to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical 100 000 • of auxiliary contacts typical 100 000 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 operating voltage • at AC-3 reated value maximum • at AC-3 at 400 V rated value | size of the circuit-breaker | S0 |
| power loss [W] for rated value of the current • at AC in hot operating state 7.25 W • at AC in hot operating state 9 2.4 W insulation voltage with degree of pollution 3 at AC rated value 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 • of auxiliary contacts 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 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 operating voltage • rated value 690 V • at AC-3 arated value maximum 690 V • at AC-3 rated value maximum 690 V operational current rated value 50 60 Hz operational current rated value 50 60 Hz operational current rated value 3.2 A | size of contactor can be combined company-specific | S00, S0 |
| at AC in hot operating state per pole 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 25g / 11 ms mechanical service life (switching cycles) of the main contacts typical of the main contacts typical lelectrical endurance (switching cycles) typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical vofference 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 elative humidity during operation Main circuit number of poles for main current circuit operating voltage rated value at AC-3 rated value maximum 690 V at AC-3 erated value maximum 690 V operational current rated value operational current of the KV state V | 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 lelectrical endurance (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature olduring operation olduring storage olduring transport relative humidity during operation Main circuit number of poles for main current circuit operating voltage arted value at AC-3 rated value maximum operational current operational current rated value operational current of at AC-3 at 400 V rated value | 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 ledectrical 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 oluring operation oluring storage oluring transport relative humidity during operation Main circuit number of poles for main current circuit operating voltage orated value at AC-3e rated value maximum operational current rated value operational current rated value operational current rated value operational current rated value operational current at AC-3 at 400 V rated value 3.2 A | at AC in hot operating state | 7.25 W |
| 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 lelectrical 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 during storage of during transport relative humidity during operation Main circuit number of poles for main current circuit operating voltage artaed value at AC-3 rated value maximum operational current rated value at AC-3 at 400 V rated value 3.2 A | at AC in hot operating state per pole | 2.4 W |
| 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 electrical endurance (switching cycles) typical to 0000 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 during storage of during transport relative humidity during operation mumber of poles for main current circuit operating voltage or rated value of at AC-3 rated value maximum operation at AC-3 at 400 V rated value operational current of the main current circuit of the main current circuit operating frequency rated value operational current of at AC-3 at 400 V rated value 3.2 A | 0 0 | 690 V |
| mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical lou 000 electrical endurance (switching cycles) typical lou 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 relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 ar 400 V rated value • at AC-3 at 400 V rated value | surge voltage resistance rated value | 6 kV |
| of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical electrical endurance (switching cycles) typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature ouring operation ouring storage ouring storage ouring transport relative humidity during operation number of poles for main current circuit operating voltage or at AC-3 rated value maximum operating frequency rated value operational current rated value operational current operational current at AC-3 at 400 V rated value | 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 Main circuit number of poles for main current circuit operating voltage rated value at AC-3 rated value maximum at AC-3 at 400 V rated value | mechanical service life (switching cycles) | |
| 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 operating voltage • at AC-3 rated value maximum 690 V operating frequency rated value operational current • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value • at AC-3 at 400 V rated value 3.2 A | of the main contacts typical | 100 000 |
| 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 • at AC-3 rated value maximum operating frequency rated value operational current rated value • at AC-3 at 400 V rated value 3 0/01/2009 10/01/2009 10/01/2009 2 0 +60 °C -20 +60 °C -50 +80 °C | 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 operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operational current rated value operational current rated value at AC-3 at 400 V rated value 3 10/01/2009 10/01/2009 20 +60 °C -50 +80 °C -50 | 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 operating voltage • rated value • at AC-3 rated value maximum operating frequency rated value operating level rated value operational current rated value 3.2 A | reference code according to IEC 81346-2 | Q |
| installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport -50 +80 °C • during transport relative humidity during operation Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value operating frequency rated value operational current rated value 3.2 A operational current • at AC-3 at 400 V rated value 3.2 A | Substance Prohibitance (Date) | 10/01/2009 |
| ambient temperature • during operation • during storage • during transport • during transport relative humidity during operation Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value operational current rated value operational current rated value at AC-3 at 400 V rated value 3.2 A | Ambient conditions | |
| during operation during storage during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage rated value at AC-3 rated value maximum et AC-3 rated value maximum operating frequency rated value operational current rated value at AC-3 at 400 V rated value 3.2 A | installation altitude at height above sea level maximum | 2 000 m |
| during storage during transport -50 +80 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage rated value at AC-3 rated value maximum at AC-3e rated value maximum operating frequency rated value operational current rated value 3 Operational current rated value 3.2 A operational current at AC-3 at 400 V rated value 3.2 A 3.2 A 3.2 A | ambient temperature | |
| ◆ during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • 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 3.2 A 3.2 A | during operation | -20 +60 °C |
| relative humidity during operation 10 95 % Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value • at AC-3 at 400 V rated value 3.2 A | during storage | -50 +80 °C |
| Main circuit number of poles for main current circuit operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum operating frequency rated value operational current rated value • at AC-3 at 400 V rated value 3.2 A | during transport | -50 +80 °C |
| number of poles for main current circuit operating voltage orated value otal AC-3 rated value maximum otal AC-3e rated value maximum operating frequency rated value operational current rated value otal AC-3 at 400 V rated value 3.2 A 3.2 A | relative humidity during operation | 10 95 % |
| operating voltage • rated value • at AC-3 rated value maximum • at AC-3e rated value maximum 690 V operating frequency rated value operational current rated value • at AC-3 at 400 V rated value 3.2 A | Main circuit | |
| rated value at AC-3 rated value maximum 690 V at AC-3e rated value maximum 690 V operating frequency rated value operational current rated value at AC-3 at 400 V rated value 3.2 A | number of poles for main current circuit | 3 |
| at AC-3 rated value maximum at AC-3e rated value maximum 690 V operating frequency rated value operational current rated value at AC-3 at 400 V rated value 3.2 A | operating voltage | |
| at AC-3e rated value maximum operating frequency rated value operational current rated value operational current at AC-3 at 400 V rated value 3.2 A | rated value | 20 690 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-3 rated value maximum | 690 V |
| operational current rated value operational current at AC-3 at 400 V rated value 3.2 A 3.2 A | at AC-3e rated value maximum | 690 V |
| operational current ● at AC-3 at 400 V rated value 3.2 A | operating frequency rated value | 50 60 Hz |
| • at AC-3 at 400 V rated value 3.2 A | operational current rated value | 3.2 A |
| | operational current | |
| • at AC-3e at 400 V rated value 3.2 A | • 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 | | | |
| ground fault detection | No | | |
| phase failure detection | No | | |
| 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 | 100 kA | | |
| at AC at 690 V rated value | 10 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 | 100 kA | | |
| at 690 V rated value | 10 kA | | |
| response value current of instantaneous short-circuit trip unit | 42 A | | |
| UL/CSA ratings | | | |
| full-load current (FLA) for 3-phase AC motor | | | |
| at 480 V rated value | 3.2 A | | |
| at 600 V rated value | 3.2 A | | |
| yielded mechanical performance [hp] | | | |
| for single-phase AC motor | | | |
| at 110/120 V rated value | 0.1 hp | | |
| — at 230 V rated value | 0.25 hp | | |
| for 3-phase AC motor | | | |
| — at 200/208 V rated value | 0.5 hp | | |
| at 220/230 V rated value | 0.75 hp | | |
| at 460/480 V rated value | 2 hp | | |
| — at 575/600 V rated value | 2 hp | | |
| Short-circuit protection | | | |
| product function short circuit protection | Yes | | |
| design of the short-circuit trip | magnetic | | |
| Installation/ mounting/ dimensions | | | |
| 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 | 2v /1 2 E mm²\ 2v /2 E 10 mm²\ | |
| | 2x (1 2.5 mm²), 2x (2.5 10 mm²) | |
| finely stranded with core end processing at AWG cables for main contacts | 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) | |
| tightening torque | 2 \((10 \dots 12), 2 \((14 \dots 0) | |
| for main contacts with screw-type terminals | 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 | 1 OZIGITY SIZE Z | |
| • 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 with high demand rate according to SN 31920 | 50 % | |
| failure rate [FIT] | 00 /3 | |
| with low demand rate according to SN 31920 | 50 FIT | |
| T1 value for proof test interval or service life according to | 10 y | |
| IEC 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







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=3RV2321-1DC10

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2321-1DC10approx.exp. with the approximation of the property of the propert$

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, ...)

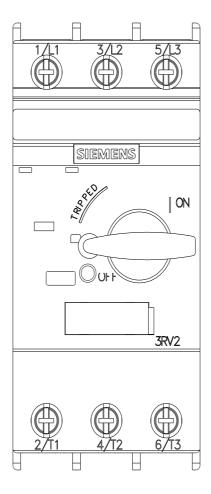
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2321-1DC10&lang=en

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



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