SIEMENS

Data sheet 3RV2032-4SA10



Circuit breaker size S2 for motor protection, CLASS 10 A-release 9.5...14 A N-release 208 A screw terminal increased switching capacity

| product brand name | SIRIUS |
|--|----------------------|
| product designation | Circuit breaker |
| design of the product | For motor protection |
| product type designation | 3RV2 |
| General technical data | |
| size of the circuit-breaker | S2 |
| size of contactor can be combined company-specific | S2 |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| at AC in hot operating state | 12.5 W |
| at AC in hot operating state per pole | 4.2 W |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation in networks with grounded star point | |
| between main and auxiliary circuit | 400 V |
| between main and auxiliary circuit | 400 V |
| shock resistance acc. to IEC 60068-2-27 | 25g / 11 ms Sinus |
| mechanical service life (switching cycles) | |
| of the main contacts typical | 50 000 |
| of auxiliary contacts typical | 50 000 |
| electrical endurance (switching cycles) typical | 50 000 |
| type of protection according to ATEX directive 2014/34/EU | Ex II (2) GD |
| certificate of suitability according to ATEX directive 2014/34/EU | DMT 02 ATEX F 001 |
| reference code acc. to IEC 81346-2 | Q |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature during operation | -20 +60 °C |
| ambient temperature during storage | -50 +80 °C |
| ambient temperature during transport | -50 +80 °C |
| temperature compensation | -20 +60 °C |
| relative humidity during operation | 10 95 % |
| Main circuit | |
| number of poles for main current circuit | 3 |
| adjustable current response value current of the | 9.5 14 A |

| current-dependent overload release | |
|---|--|
| operating voltage rated value | 690 V |
| operating voltage at AC-3 rated value maximum | 690 V |
| operating frequency rated value | 50 60 Hz |
| operational current rated value | 14 A |
| operational current at AC-3 at 400 V rated value | 14 A |
| operating power at AC-3 | |
| at 230 V rated value | 3 000 W |
| at 400 V rated value | 5 500 W |
| at 500 V rated value | 7 500 W |
| at 690 V rated value | 11 000 W |
| operating frequency at AC-3 maximum | 15 1/h |
| 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 operating short-circuit current (lcs) at AC | |
| • at 240 V rated value | 100 kA |
| • at 400 V rated value | 50 kA |
| • at 500 V rated value | 10 kA |
| • at 690 V rated value | 5 kA |
| 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 | 18 kA |
| at AC at 690 V rated value | 8 kA |
| response value current of instantaneous short-circuit trip | 208 A |
| unit UL/CSA ratings | |
| | |
| full-load current (FLA) for 3-phase AC motor • at 480 V rated value | 14 A |
| at 600 V rated value at 600 V rated value | 14 A |
| | 14 A |
| yielded mechanical performance [hp] | |
| for single-phase AC motor— at 110/120 V rated value | 4.5 hp |
| | 1.5 hp |
| — at 230 V rated value | 3 hp |
| for 3-phase AC motor— at 200/208 V rated value | 5 hn |
| — at 220/208 V rated value — at 220/230 V rated value | 5 hp |
| — at 220/230 V rated value — at 460/480 V rated value | 5 np 10 hp |
| — at 450/480 V rated value — at 575/600 V rated value | 15 hp |
| Short-circuit protection | TO TIP |
| | Voc |
| 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 240 V | none required |
| • at 400 V | 100 |
| • at 500 V | 80 |
| • at 690 V | 63 |
| 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 | 140 mm |
| | |



| width | 55 mm |
|---|------------------------------|
| depth | 149 mm |
| required spacing | 140 11111 |
| • for grounded parts at 400 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — at the side | 10 mm |
| • for live parts at 400 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — at the side | 10 mm |
| ● for grounded parts at 500 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — at the side | 10 mm |
| • for live parts at 500 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — at the side | 10 mm |
| • for grounded parts at 690 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — backwards | 0 mm |
| — at the side | 10 mm |
| — forwards | 0 mm |
| • for live parts at 690 V | |
| — downwards | 50 mm |
| — upwards | 50 mm |
| — backwards | 0 mm |
| — at the side | 10 mm |
| — forwards | 0 mm |
| Connections/ Terminals | |
| product function removable terminal for auxiliary and | No |
| control circuit | |
| type of electrical connection | |
| for main current circuit | screw-type terminals |
| arrangement of electrical connectors for main current circuit | Top and bottom |
| type of connectable conductor cross-sections | |
| for main contacts | |
| — solid or stranded | 2x (1 35 mm²), 1x (1 50 mm²) |
| finely stranded with core end processing | 2x (1 25 mm²), 1x (1 35 mm²) |
| at AWG cables for main contacts | 2x (18 2), 1x (18 1) |
| tightening torque for main contacts with screw-type terminals | 3 4.5 N·m |
| design of screwdriver shaft | Diameter 5 to 6 mm |
| size of the screwdriver tip | Pozidriv 2 |
| design of the thread of the connection screw | |
| • for main contacts | M6 |
| Safety related data | |
| B10 value | |
| with high demand rate acc. to SN 31920 | 5 000 |
| proportion of dangerous failures | |
| with low demand rate acc. to SN 31920 | 50 % |
| with high demand rate acc. to SN 31920 | 50 % |
| failure rate [FIT] | |
| • with low demand rate acc. to SN 31920 | 50 FIT |
| T1 value for proof test interval or service life acc. to | 10 y |
| IEC 61508 | |
| .200.000 | |



protection class IP on the front acc. to IEC 60529

touch protection on the front acc. to IEC 60529

display version for switching status

IP20

finger-safe, for vertical contact from the front

Handle

Certificates/ approvals

General Product Approval









KC



For use in hazardous locations

Declaration of Conformity

Test Certificates







Miscellaneous

Type Test **Certificates/Test** Report

Type Test Certificates/Test Report

Test Certificates

Marine / Shipping

Type Test **Certificates/Test** Report

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=3RV2032-4SA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2032-4SA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4SA10

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2032-4SA10&lang=en

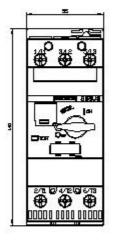
Characteristic: Tripping characteristics, I2t, Let-through current

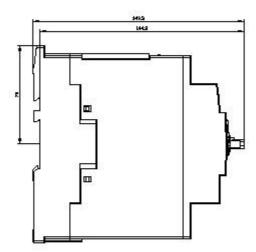
https://support.industry.siemens.com/cs/ww/en/ps/3RV2032-4SA10/char

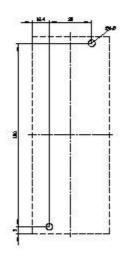
Further characteristics (e.g. electrical endurance, switching frequency)

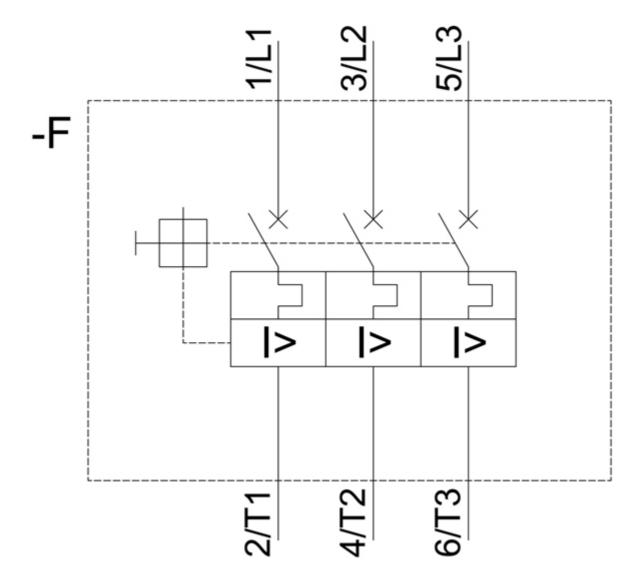
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RV2032-4SA10\&objecttype=14\&gridview=view1}$











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