SIEMENS

Data sheet 3RV2742-5ED10



Circuit breaker size S3 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 30 A N-release 390 A screw terminal

product brand name product designation design of the product product type designation SIRIUS Circuit breaker

Sircuit breaker

For system protection according to UL 489/CSA C22.2 No. 5

3RV2

| product type designation | 3RV2 |
|---|-------------------|
| General technical data | |
| size of the circuit-breaker | S3 |
| size of contactor can be combined company-specific | S3 |
| product extension auxiliary switch | Yes |
| power loss [W] for rated value of the current | |
| at AC in hot operating state | 14 W |
| at AC in hot operating state per pole | 4.7 W |
| insulation voltage with degree of pollution 3 at AC rated value | 1 000 V |
| surge voltage resistance rated value | 8 kV |
| shock resistance according to IEC 60068-2-27 | 25g / 11 ms Sinus |
| mechanical service life (operating cycles) | |
| of the main contacts typical | 25 000 |
| of auxiliary contacts typical | 25 000 |
| electrical endurance (operating cycles) typical | 25 000 |
| reference code according to IEC 81346-2 | Q |
| Substance Prohibitance (Date) | 03/01/2017 |
| 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 |
| operating voltage | |
| rated value | 20 600 V |
| at AC-3 rated value maximum | 400 V |
| operating frequency rated value | 50 60 Hz |
| operational current rated value | 30 A |
| operational current | |
| at AC-3 at 400 V rated value | 30 A |
| operating power | |
| • at AC-3 | |
| — at 400 V rated value | 15 kW |
| operating frequency | |

• at AC-3 maximum

15 1/h

| Protective and monitoring functions | |
|---|--|
| product function | |
| ground fault detection | No |
| phase failure detection | No |
| design of the overload release | thermal |
| maximum short-circuit current breaking capacity (Icu) | Commun |
| • at AC at 240 V rated value | 100 kA |
| at AC at 400 V rated value at AC at 400 V rated value | 100 kA |
| at 480 AC Y/277 V according to UL 489 rated value | 65 kA |
| • at 480 V AC according to UL 489 rated value | 65 kA |
| operating short-circuit current breaking capacity (Ics) | 05 KA |
| at AC | |
| at 240 V rated value | 100 kA |
| at 400 V rated value | 50 kA |
| response value current of instantaneous short-circuit trip | 390 A |
| unit | |
| 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 DIN rail according to DIN EN |
| - | 60715 |
| height | 170 mm |
| width | 70 mm |
| depth | 176 mm |
| required spacing | |
| with side-by-side mounting at the side | 0 mm |
| for grounded parts at 400 V | |
| — downwards | 70 mm |
| — upwards | 70 mm |
| — at the side | 10 mm |
| • for live parts at 400 V | |
| — downwards | 70 mm |
| — upwards | 70 mm |
| — at the side | 10 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 | 2x (2.5 16 mm²) |
| — solid or stranded | 2x (2,5 50 mm²), 1x (10 70 mm²) |
| finely stranded with core end processing | 2x (2.5 35 mm²), 1x (2.5 50 mm²) |
| finely stranded without core end processing | 2x (10 35 mm²), 1x (10 50 mm²) |
| tightening torque | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| for main contacts with screw-type terminals | 4.5 6 N·m |
| design of the thread of the connection screw | |
| • for main contacts | M8 |
| Safety related data | |
| B10 value | |
| | 5 000 |
| with high demand rate according to SN 31920 proportion of dangerous failures. | 0 000 |
| proportion of dangerous failures | 50 % |
| with low demand rate according to SN 31920 with high demand rate according to SN 31930 | 50 % |
| with high demand rate according to SN 31920 failure rate [EIT] | 50 % |
| failure rate [FIT] | EO FIT |
| with low demand rate according to SN 31920 The low of the state and the state an | 50 FIT |
| T1 value for proof test interval or service life according to IEC 61508 | 10 a |
| protection class IP on the front according to IEC | IP20 |
| 60529 | |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front |

Certificates/ approvals

General Product Approval



Confirmation





KC



Declaration of Conformity

Test Certificates

Marine / Shipping

other





Type Test Certificates/Test Report

Special Test Certificate



Confirmation

other



Further information

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=3RV2742-5ED10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2742-5ED10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2742-5ED10

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

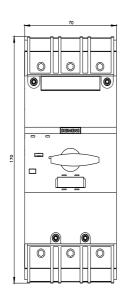
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2742-5ED10&lang=en

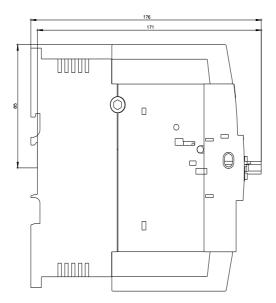
Characteristic: Tripping characteristics, I2t, Let-through current

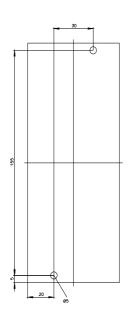
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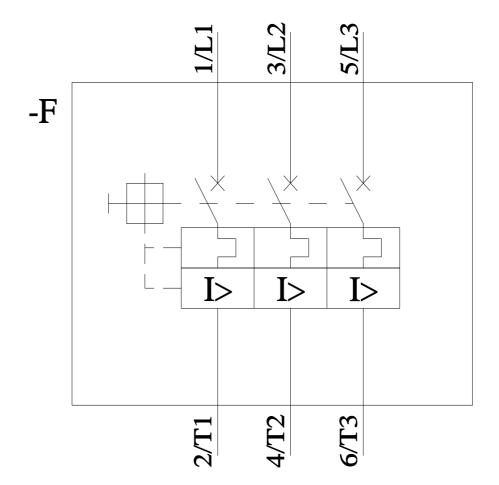
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2742-5ED10&objecttype=14&gridview=view1









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