## **SIEMENS**

Data sheet 3RV2742-5BD10



Circuit breaker size S3 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 15 A N-release 225 A screw terminal

| product brand name  | SIRIUS  |  |
|---|---|--|
| product designation   | Circuit breaker   |  |
| design of the product   | For system protection according to UL 489/CSA C22.2 No. 5 |  |
| product type designation  | 3RV2  |  |
| General technical data  |   |  |
| size of the circuit-breaker                                     | S3  |  |
| product extension auxiliary switch                              | Yes   |  |
| power loss [W] for rated value of the current                   |   |  |
| <ul> <li>at AC in hot operating state</li> </ul>                | 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                    | 25 g / 11 ms (rectangular impulse and sine pulse)         |  |
| mechanical service life (operating cycles)                      |   |  |
| <ul> <li>of the main contacts typical</li> </ul>                | 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  |  |
| SVHC substance name   | Blei - 7439-92-1  |  |
| 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   | 20 600 V  |  |
| operating frequency rated value                                 | 50 60 Hz  |  |
| operational current rated value                                 | 15 A  |  |
| 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)           |   |  |
| • at AC at 240 V rated value                                    | 100 kA  |  |

| <ul> <li>at AC at 400 V rated value</li> </ul>   |   |                        |
|--|---|------------------------|
|  | 100 kA  |                        |
| at 480 AC Y/277 V according to UL 489 rated value     at 480 V AC according to UL 480 rated value        | 65 kA   |                        |
| at 480 V AC according to UL 489 rated value  | 65 kA   |                        |
| operating short-circuit current breaking capacity (Ics) at AC  • at 240 V rated value                    | 100 kA  |                        |
| at 400 V rated value     at 400 V rated value  | 50 kA   |                        |
| response value current of instantaneous short-circuit trip unit  | 225 A   |                        |
| Short-circuit protection   | 225 A   |                        |
| product function short circuit protection  | Yes   |                        |
| design of the short-circuit trip   | magnetic  |                        |
| Installation/ mounting/ dimensions   | magnetic  |                        |
| mounting position  | any   |                        |
| fastening method   | screw and snap-on mounting onto 35 mm DIN rail accord | ding to DIN FN 60715   |
| height   | 170 mm  | ang to Birt Ert cor to |
| width  | 70 mm   |                        |
| depth  | 176 mm  |                        |
| required spacing   |   |                        |
| for grounded parts at 400 V  |   |                        |
| — downwards  | 90 mm   |                        |
| — upwards  | 90 mm   |                        |
| — at the side  | 10 mm   |                        |
| • for live parts at 400 V  |   |                        |
| — downwards  | 90 mm   |                        |
| — upwards  | 90 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 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)                       |                        |
| <ul> <li>finely stranded with core end processing</li> </ul>   | 2x (2.5 35 mm²), 1x (2.5 50 mm²)                      |                        |
| finely stranded without core end processing  | 2x (10 35 mm²), 1x (10 50 mm²)                        |                        |
| for AWG cables for main contacts   | 14 solid - only front clamping point                  |                        |
| <ul> <li>for AWG cables for main contacts for box terminal using<br/>the front clamping point</li> </ul> | 14 solid - only front clamping point                  |                        |
| tightening torque  |   |                        |
| for main contacts with screw-type terminals  | 4.5 6 N·m   |                        |
| design of screwdriver shaft  | Hexagonal socket                                      |                        |
| size of the screwdriver tip  | 4 mm  |                        |
| design of the thread of the connection screw   | MO  |                        |
| • for main contacts  | M8  |                        |
| Safety related data  |   |                        |
| B10 value  | 5.000   |                        |
| with high demand rate according to SN 31920  | 5 000   |                        |
| proportion of dangerous failures   | 50.9/   |                        |
| with low demand rate according to SN 31920     with high demand rate according to SN 31920               | 50 %  |                        |
| with high demand rate according to SN 31920  failure rate [FIT]  | 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 61508                                  | 10 a  |                        |
| 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  |                        |
| Approvals Certificates   | i iai luic  |                        |
|  |   | Declaration of Con-    |









Declaration of Conformity

**Test Certificates** 

Marine / Shipping

<u>KC</u>

other



Special Test Certificate

Type Test Certificates/Test Report



Household and similar appliances

Confirmation

other

Environment



Environmental Confirmations

## 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=3RV2742-5BD10

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RV2742-5BD10}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2742-5BD10

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RV2742-5BD10\&lang=en}}$ 

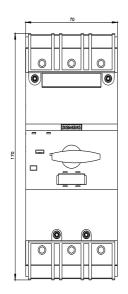
Characteristic: Tripping characteristics, I²t, Let-through current

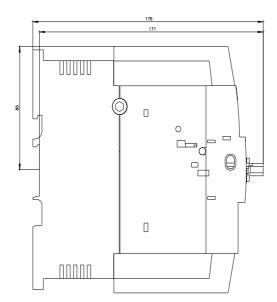
https://support.industry.siemens.com/cs/ww/en/ps/3RV2742-5BD10/char

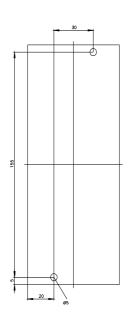
Further characteristics (e.g. electrical endurance, switching frequency)

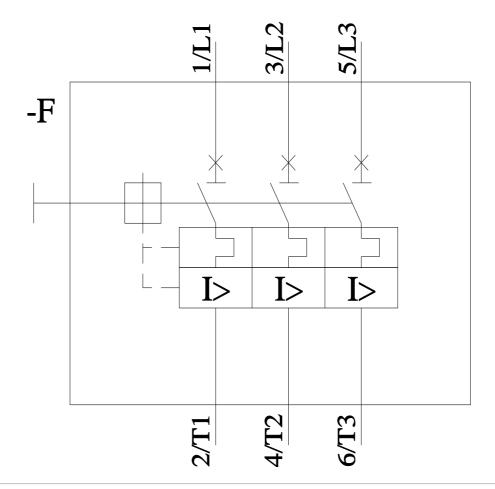
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RV2742-5BD10\&objecttype=14\&gridview=view1}$ 











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