



Voltage transformer Circuit breaker, Size S00 2.5 A, N-release 10.5 A 1 CO with transverse auxiliary switch

|                                                                                            |                         |
|--------------------------------------------------------------------------------------------|-------------------------|
| <b>product brand name</b>                                                                  | SIRIUS                  |
| <b>product designation</b>                                                                 | Circuit breaker         |
| <b>design of the product</b>                                                               | for distance protection |
| <b>product type designation</b>                                                            | 3RV1                    |
| <b>General technical data</b>                                                              |                         |
| <b>size of the circuit-breaker</b>                                                         | S00                     |
| product extension auxiliary switch                                                         | Yes                     |
| <b>power loss [W] for rated value of the current</b>                                       |                         |
| • 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                   |
| <b>surge voltage resistance rated value</b>                                                | 6 kV                    |
| <b>maximum permissible voltage for safe isolation in networks with grounded star point</b> |                         |
| • between main and auxiliary circuit                                                       | 400 V                   |
| • between main and auxiliary circuit                                                       | 400 V                   |
| <b>mechanical service life (switching cycles)</b>                                          |                         |
| • of the main contacts typical                                                             | 10 000                  |
| • of auxiliary contacts typical                                                            | 10 000                  |
| <b>reference code according to IEC 81346-2</b>                                             | Q                       |
| <b>Substance Prohibitance (Date)</b>                                                       | 01/01/2013              |
| <b>Ambient conditions</b>                                                                  |                         |
| installation altitude at height above sea level maximum                                    | 2 000 m                 |
| <b>ambient temperature</b>                                                                 |                         |
| • during operation                                                                         | -20 ... +60 °C          |
| • during storage                                                                           | -50 ... +80 °C          |
| • during transport                                                                         | -50 ... +80 °C          |
| <b>temperature compensation</b>                                                            | -20 ... +60 °C          |
| relative humidity during operation                                                         | 10 ... 95 %             |
| <b>Main circuit</b>                                                                        |                         |
| <b>number of poles for main current circuit</b>                                            | 3                       |
| <b>operating voltage</b>                                                                   |                         |
| • rated value                                                                              | 400 V                   |
| • rated value                                                                              | 20 ... 690 V            |
| • at AC-3 rated value maximum                                                              | 400 V                   |
| <b>operating frequency rated value</b>                                                     | 60 Hz                   |
| <b>operational current rated value</b>                                                     | 2.5 A                   |
| <b>operational current</b>                                                                 |                         |
| • at AC-3 at 400 V rated value                                                             | 2.5 A                   |

|                                                                                                                                                                                                                                                                                            |                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>operating frequency</b><br>• at AC-3 maximum                                                                                                                                                                                                                                            | 15 1/h                                                                                 |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                   |                                                                                        |
| <b>design of the auxiliary switch</b>                                                                                                                                                                                                                                                      | transverse                                                                             |
| <b>number of NC contacts for auxiliary contacts</b>                                                                                                                                                                                                                                        | 1                                                                                      |
| <b>number of NO contacts for auxiliary contacts</b>                                                                                                                                                                                                                                        | 1                                                                                      |
| number of CO contacts for auxiliary contacts                                                                                                                                                                                                                                               | 1                                                                                      |
| <b>operational current of auxiliary contacts at DC-13</b><br>• at 24 V<br>• at 60 V                                                                                                                                                                                                        | 0.3 A<br>0.3 A                                                                         |
| <b>Protective and monitoring functions</b>                                                                                                                                                                                                                                                 |                                                                                        |
| <b>product function</b><br>• ground fault detection<br>• phase failure detection                                                                                                                                                                                                           | No<br>Yes                                                                              |
| <b>design of the overload release</b>                                                                                                                                                                                                                                                      | thermal                                                                                |
| <b>breaking capacity operating short-circuit current (Ics) at AC</b><br>• at 240 V rated value<br>• at 400 V rated value                                                                                                                                                                   | 100 kA<br>50 kA                                                                        |
| <b>breaking capacity maximum short-circuit current (Icu)</b><br>• at AC at 240 V rated value<br>• at AC at 400 V rated value                                                                                                                                                               | 100 kA<br>50 kA                                                                        |
| response value current of instantaneous short-circuit trip unit                                                                                                                                                                                                                            | 10.5 A                                                                                 |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                      |                                                                                        |
| <b>full-load current (FLA) for 3-phase AC motor</b><br>• at 480 V rated value<br>• at 600 V rated value                                                                                                                                                                                    | 2.5 A<br>2.5 A                                                                         |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                            |                                                                                        |
| <b>product function short circuit protection</b>                                                                                                                                                                                                                                           | Yes                                                                                    |
| <b>design of the short-circuit trip</b>                                                                                                                                                                                                                                                    | magnetic                                                                               |
| <b>design of the fuse link</b><br>• for short-circuit protection of the auxiliary switch required                                                                                                                                                                                          | 2A FF 250V/1.1kA                                                                       |
| <b>design of the fuse link for IT network for short-circuit protection of the main circuit</b><br>• at 240 V<br>• at 400 V<br>• at 500 V<br>• at 690 V                                                                                                                                     | none required<br>gL/gG 35 A<br>gL/gG 25 A<br>gL/gG 25 A                                |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                  |                                                                                        |
| <b>mounting position</b>                                                                                                                                                                                                                                                                   | any                                                                                    |
| <b>fastening method</b>                                                                                                                                                                                                                                                                    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 |
| <b>height</b>                                                                                                                                                                                                                                                                              | 90 mm                                                                                  |
| <b>width</b>                                                                                                                                                                                                                                                                               | 45 mm                                                                                  |
| <b>depth</b>                                                                                                                                                                                                                                                                               | 75 mm                                                                                  |
| <b>required spacing</b><br>• for grounded parts at 400 V<br>— downwards<br>— upwards<br>— at the side<br>• for live parts at 400 V<br>— downwards<br>— upwards<br>— at the side<br>• for grounded parts at 500 V<br>— downwards<br>— upwards<br>— at the side<br>• for live parts at 500 V | 20 mm<br>20 mm<br>9 mm<br>20 mm<br>20 mm<br>9 mm<br>20 mm<br>20 mm<br>9 mm             |

|                               |       |
|-------------------------------|-------|
| — downwards                   | 20 mm |
| — upwards                     | 20 mm |
| — at the side                 | 9 mm  |
| • for grounded parts at 690 V |       |
| — downwards                   | 20 mm |
| — upwards                     | 20 mm |
| — backwards                   | 0 mm  |
| — at the side                 | 9 mm  |
| — forwards                    | 0 mm  |
| • for live parts at 690 V     |       |
| — downwards                   | 20 mm |
| — upwards                     | 20 mm |
| — backwards                   | 0 mm  |
| — at the side                 | 9 mm  |
| — forwards                    | 0 mm  |

#### Connections/ Terminals

|                                                                               |                                                                                                      |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>product component removable terminal for auxiliary and control circuit</b> | No                                                                                                   |
| <b>type of electrical connection</b>                                          |                                                                                                      |
| • for main current circuit                                                    | screw-type terminals                                                                                 |
| • for auxiliary and control circuit                                           | screw-type terminals                                                                                 |
| <b>arrangement of electrical connectors for main current circuit</b>          | Top and bottom                                                                                       |
| <b>type of connectable conductor cross-sections</b>                           |                                                                                                      |
| • for main contacts                                                           |                                                                                                      |
| — solid or stranded                                                           | 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x (1 ... 4 mm <sup>2</sup> ) |
| — finely stranded with core end processing                                    | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                                |
| <b>type of connectable conductor cross-sections</b>                           |                                                                                                      |
| • for auxiliary contacts                                                      |                                                                                                      |
| — solid or stranded                                                           | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                                |
| <b>tightening torque</b>                                                      |                                                                                                      |
| • for main contacts with screw-type terminals                                 | 0.8 ... 1.2 N·m                                                                                      |
| • for auxiliary contacts with screw-type terminals                            | 0.8 ... 1.2 N·m                                                                                      |
| <b>size of the screwdriver tip</b>                                            | Pozidriv size 2                                                                                      |
| <b>design of the thread of the connection screw</b>                           |                                                                                                      |
| • for main contacts                                                           | M3                                                                                                   |
| • of the auxiliary and control contacts                                       | M3                                                                                                   |

#### Safety related data

|                                                                |                                                  |
|----------------------------------------------------------------|--------------------------------------------------|
| <b>protection class IP on the front according to IEC 60529</b> | IP20                                             |
| <b>touch protection on the front according to IEC 60529</b>    | finger-safe, for vertical contact from the front |
| display version for switching status                           | Rocker switch                                    |

#### Certificates/ approvals

|                                 |                                  |
|---------------------------------|----------------------------------|
| <b>General Product Approval</b> | <b>Declaration of Conformity</b> |
|---------------------------------|----------------------------------|



[Confirmation](#)



[UK Declaration of Conformity](#)

Declaration of  
Conformity

Test Certificates

Marine / Shipping



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)[Miscellaneous](#)[Special Test Certificate](#)

### 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=3RV1611-1CG14>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV1611-1CG14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1611-1CG14>

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

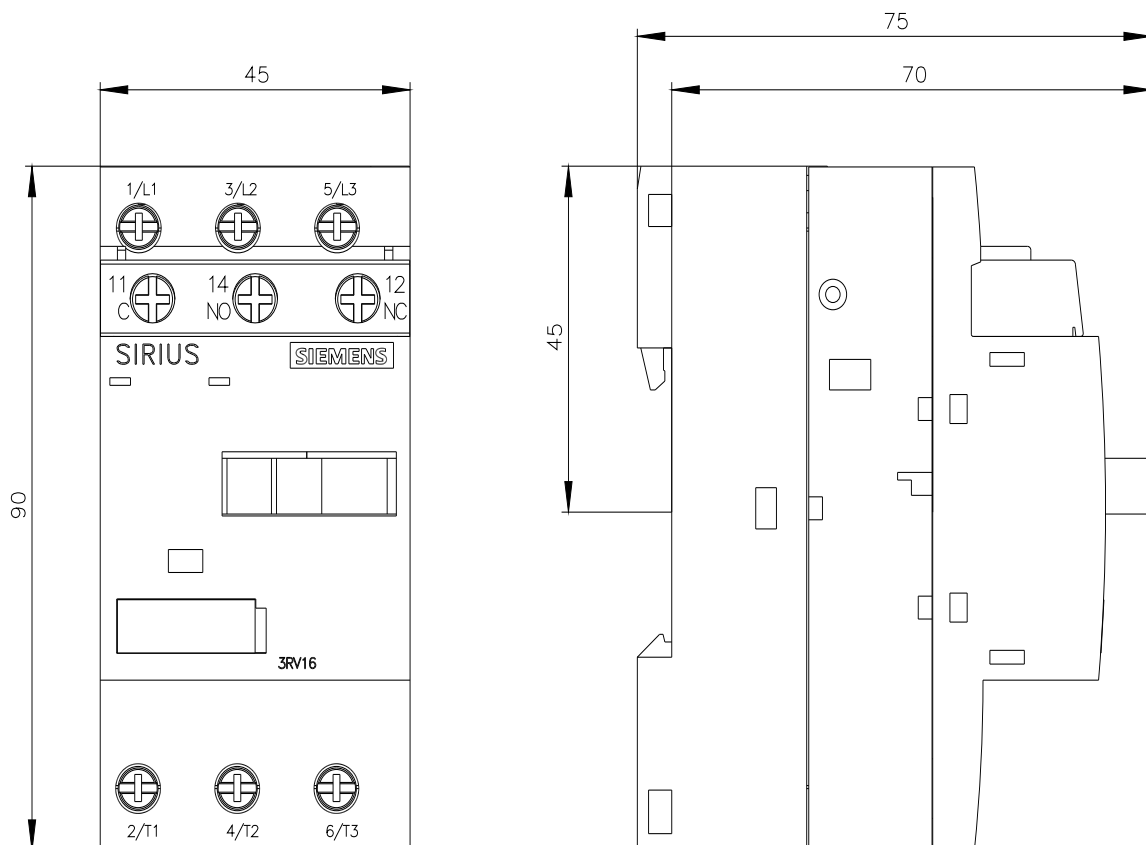
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV1611-1CG14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1611-1CG14&lang=en)

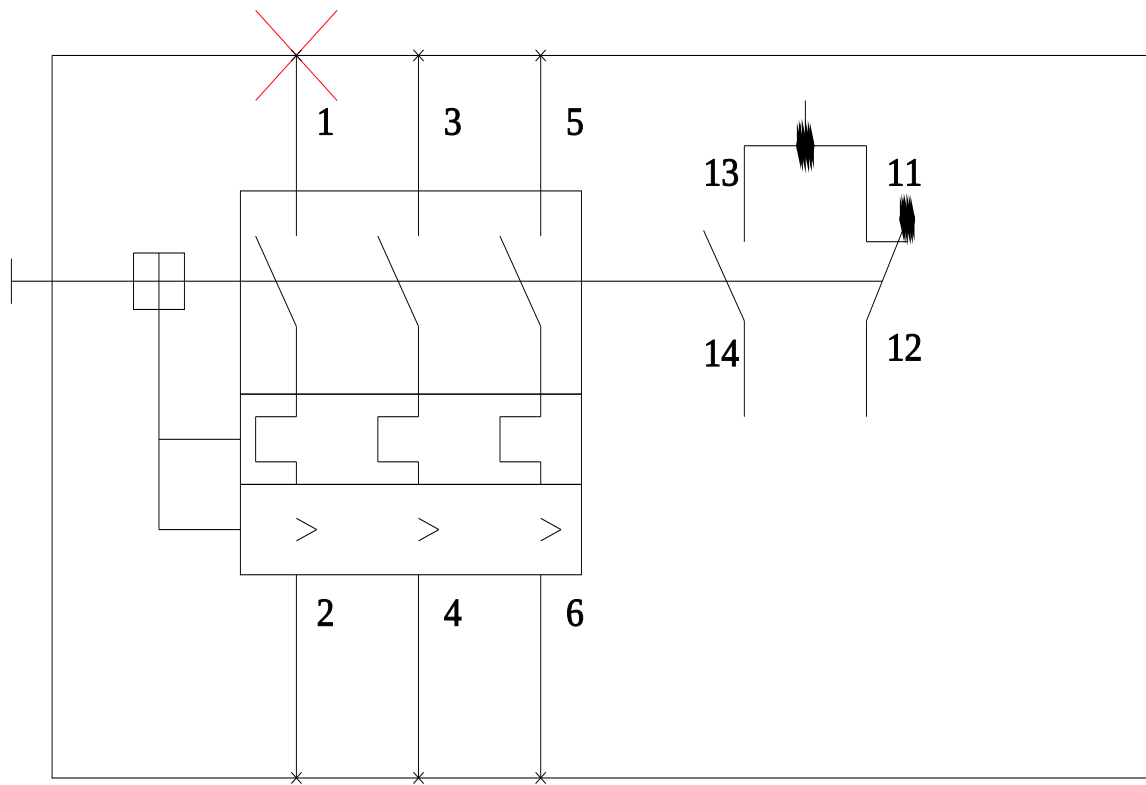
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV1611-1CG14/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1611-1CG14&objecttype=14&gridview=view1>





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