



Circuit breaker size S3 for starter combination Rated current 84 A N-release 1170 A screw terminal Standard switching capacity

|                          |                          |
|--------------------------|--------------------------|
| product brand name       | SIRIUS                   |
| product designation      | Circuit breaker          |
| design of the product    | For starter combinations |
| 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                                  | 34 W              |
| • at AC in hot operating state per pole                         | 11.3 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 (switching cycles)                      |                   |
| • of the main contacts typical                                  | 25 000            |
| • of auxiliary contacts typical                                 | 25 000            |
| electrical endurance (switching 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 ... 690 V |
| • at AC-3 rated value maximum            | 690 V        |
| • at AC-3e rated value maximum           | 690 V        |
| operating frequency rated value          | 50 ... 60 Hz |
| operational current rated value          | 84 A         |
| operational current                      |              |
| • at AC-3 at 400 V rated value           | 84 A         |
| • at AC-3e at 400 V rated value          | 84 A         |
| operating power                          |              |
| • at AC-3                                |              |
| — at 230 V rated value                   | 22 kW        |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>   | 45 kW<br>55 kW<br>75 kW<br><br>22 kW<br>45 kW<br>55 kW<br>75 kW                        |
| <b>operating frequency</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC-3 maximum</li> <li>• at AC-3e maximum</li> </ul>  | 15 1/h<br>15 1/h   |
| <b>Protective and monitoring functions</b>   |  |
| <b>product function</b>  |  |
| <ul style="list-style-type: none"> <li>• ground fault detection</li> <li>• phase failure detection</li> </ul>  | No<br>No   |
| <b>breaking capacity maximum short-circuit current (Icu)</b>   |  |
| <ul style="list-style-type: none"> <li>• at AC at 240 V rated value</li> <li>• at AC at 400 V rated value</li> <li>• at AC at 500 V rated value</li> <li>• at AC at 690 V rated value</li> </ul>   | 100 kA<br>65 kA<br>8 kA<br>5 kA  |
| <b>breaking capacity operating short-circuit current (Ics) at AC</b>   |  |
| <ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>   | 100 kA<br>30 kA<br>4 kA<br>3 kA  |
| response value current of instantaneous short-circuit trip unit  | 1 170 A  |
| <b>UL/CSA ratings</b>  |  |
| <b>full-load current (FLA) for 3-phase AC motor</b>  |  |
| <ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>   | 84 A<br>84 A   |
| <b>yielded mechanical performance [hp]</b>   |  |
| <ul style="list-style-type: none"> <li>• for single-phase AC motor <ul style="list-style-type: none"> <li>— at 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>  | 7.5 hp<br>15 hp<br><br>25 hp<br>30 hp<br>60 hp<br>75 hp                                |
| <b>Short-circuit protection</b>  |  |
| <b>product function short circuit protection</b>   | Yes  |
| <b>design of the short-circuit trip</b>  | magnetic   |
| <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>  | 165 mm   |
| <b>width</b>   | 70 mm  |
| <b>depth</b>   | 176 mm   |
| <b>required spacing</b>  |  |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting at the side</li> <li>• for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> </ul> </li> </ul> | 0 mm<br><br>70 mm<br>70 mm<br>10 mm<br><br>70 mm<br>70 mm<br>10 mm<br><br>110 mm       |

|                               |        |
|-------------------------------|--------|
| — upwards                     | 110 mm |
| — at the side                 | 10 mm  |
| • for live parts at 500 V     |        |
| — downwards                   | 110 mm |
| — upwards                     | 110 mm |
| — at the side                 | 10 mm  |
| • for grounded parts at 690 V |        |
| — downwards                   | 150 mm |
| — upwards                     | 150 mm |
| — backwards                   | 0 mm   |
| — at the side                 | 30 mm  |
| — forwards                    | 0 mm   |
| • for live parts at 690 V     |        |
| — downwards                   | 150 mm |
| — upwards                     | 150 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 circuit

Top and bottom

##### type of connectable conductor cross-sections

- for main contacts
  - solid
  - solid or stranded
  - finely stranded with core end processing
  - finely stranded without core end processing

2x (2.5 ... 16 mm<sup>2</sup>)  
 2x (2.5 ... 50 mm<sup>2</sup>), 1x (10 ... 70 mm<sup>2</sup>)  
 2x (2.5 ... 35 mm<sup>2</sup>), 1x (2.5 ... 50 mm<sup>2</sup>)  
 2x (10 ... 35 mm<sup>2</sup>), 1x (10 ... 50 mm<sup>2</sup>)

##### tightening torque

- for main contacts for ring cable lug

4.5 ... 6 N·m

##### outer diameter of the usable ring cable lug maximum

19 mm

##### tightening torque

- for main contacts with screw-type terminals

4.5 ... 6 N·m

#### 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
- with high demand rate according to SN 31920

50 %  
 50 %

T1 value for proof test interval or service life according to IEC 61508

10 y

##### protection class IP on the front according to IEC 60529

IP20

##### touch protection on the front according to IEC 60529

display version for switching status

finger-safe, for vertical contact from the front  
 Handle

#### Certificates/ approvals

##### General Product Approval



[Confirmation](#)



[KC](#)



##### Declaration of Conformity

##### Test Certificates

##### Marine / Shipping



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)




[Confirmation](#)

[Vibration and Shock](#)
[Confirmation](#)

### 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=3RV2341-4RC10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2341-4RC10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2341-4RC10>

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

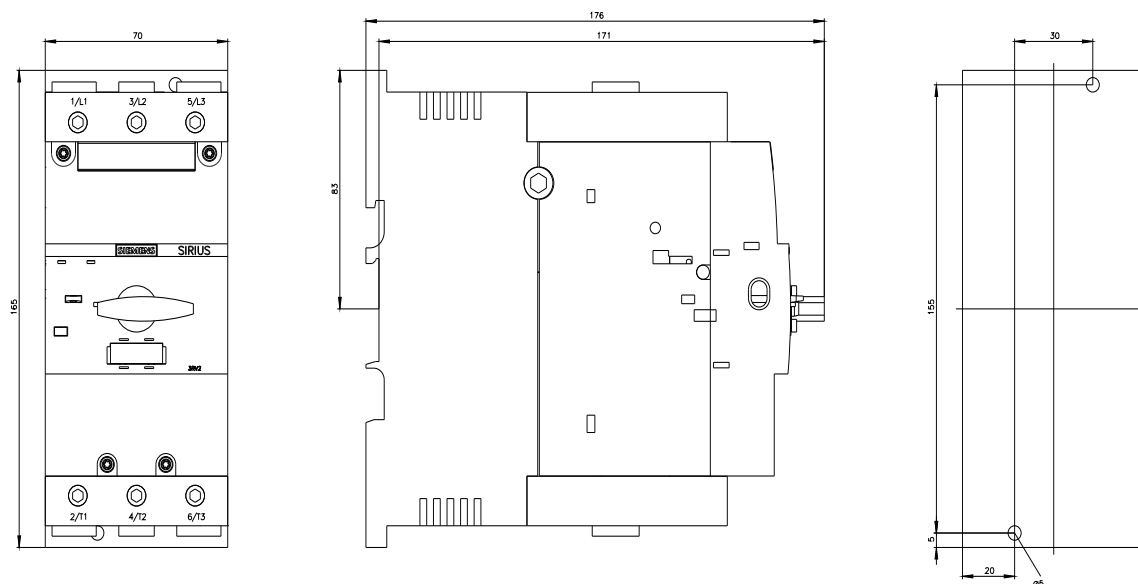
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RV2341-4RC10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2341-4RC10&lang=en)

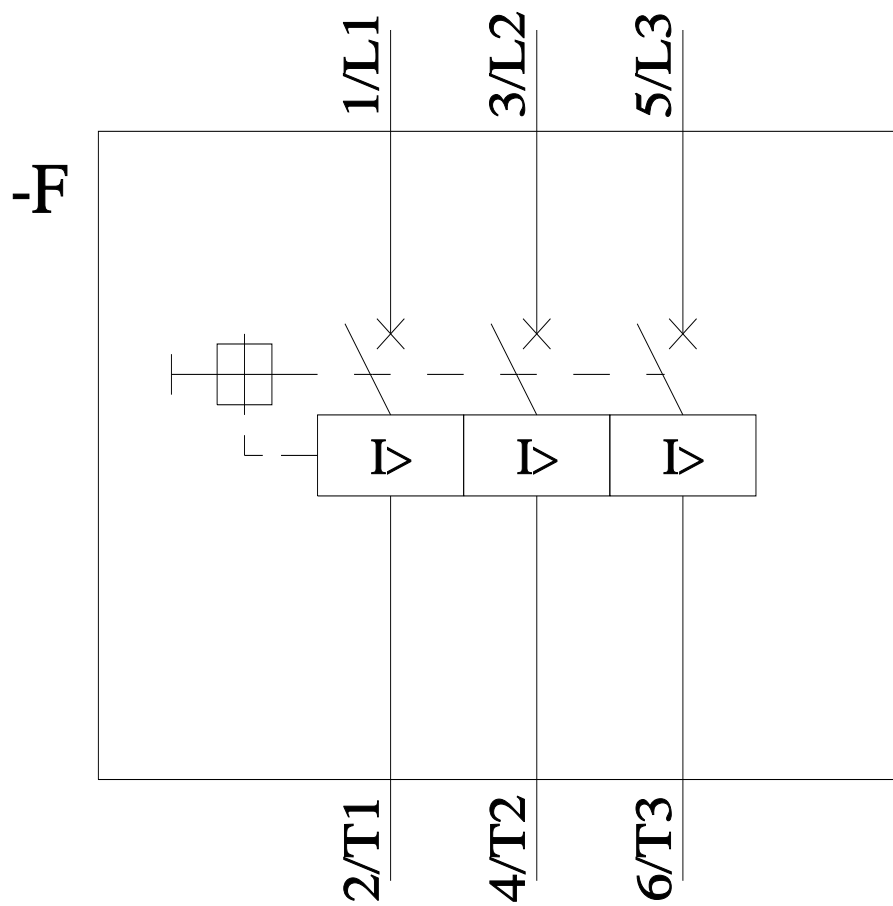
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RV2341-4RC10/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2341-4RC10&objecttype=14&gridview=view1>





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