



SIRIUS soft starter Values at 400 V, 40 °C standard: 432 A, 250 kW  
 Inside-delta: 748 A, 400 kW 200-460 V AC, 230 V AC Screw  
 terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5,  
 Preferred successor type is >>3RW5547-6HA14<<

| General technical data   |    |                          |
|--|----|--------------------------|
| product brand name   |    | SIRIUS                   |
| product feature  |    |                          |
| • integrated bypass contact system   |    | Yes                      |
| • thyristors   |    | Yes                      |
| product function   |    |                          |
| • intrinsic device protection  |    | Yes                      |
| • motor overload protection  |    | Yes                      |
| • evaluation of thermistor motor protection  |    | Yes                      |
| • external reset   |    | Yes                      |
| • adjustable current limitation  |    | Yes                      |
| • inside-delta circuit   |    | Yes                      |
| product component motor brake output   |    | Yes                      |
| insulation voltage rated value   | V  | 690                      |
| degree of pollution  |    | 3, acc. to IEC 60947-4-2 |
| reference code according to EN 61346-2   |    | Q                        |
| reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750                     |    | G                        |
| Power Electronics  |    |                          |
| product designation  |    | Soft starter             |
| operational current  |    |                          |
| • at 40 °C rated value   | A  | 432                      |
| • at 50 °C rated value   | A  | 385                      |
| • at 60 °C rated value   | A  | 335                      |
| operational current for 3-phase motors at inside-delta circuit   |    |                          |
| • at 40 °C rated value   | A  | 748                      |
| • at 50 °C rated value   | A  | 667                      |
| • at 60 °C rated value   | A  | 580                      |
| yielded mechanical performance for 3-phase motors  |    |                          |
| • at 230 V   |    |                          |
| — at standard circuit at 40 °C rated value   | kW | 132                      |
| — at inside-delta circuit at 40 °C rated value   | kW | 250                      |
| • at 400 V   |    |                          |
| — at standard circuit at 40 °C rated value   | kW | 250                      |
| — at inside-delta circuit at 40 °C rated value   | kW | 400                      |
| yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | hp | 125                      |
| operating frequency rated value  | Hz | 50 ... 60                |
| relative negative tolerance of the operating frequency   | %  | -10                      |
| relative positive tolerance of the operating frequency   | %  | 10                       |

|  |   |             |
|--|---|-------------|
| operating voltage at standard circuit rated value                            | V | 200 ... 460 |
| relative negative tolerance of the operating voltage at standard circuit     | % | -15         |
| relative positive tolerance of the operating voltage at standard circuit     | % | 10          |
| operating voltage at inside-delta circuit rated value                        | V | 200 ... 460 |
| relative negative tolerance of the operating voltage at inside-delta circuit | % | -15         |
| relative positive tolerance of the operating voltage at inside-delta circuit | % | 10          |
| minimum load [%]   | % | 8           |
| adjustable motor current for motor overload protection minimum rated value   | A | 86          |
| continuous operating current [% of I <sub>e</sub> ] at 40 °C                 | % | 115         |
| power loss [W] at operational current at 40 °C during operation typical      | W | 232         |

#### Control circuit/ Control

|  |    |         |
|--|----|---------|
| type of voltage of the control supply voltage                            |    | AC      |
| control supply voltage frequency 1 rated value                           | Hz | 50      |
| control supply voltage frequency 2 rated value                           | Hz | 60      |
| relative negative tolerance of the control supply voltage frequency      | %  | -10     |
| relative positive tolerance of the control supply voltage frequency      | %  | 10      |
| control supply voltage 1 at AC   |    |         |
| • at 50 Hz rated value   | V  | 230     |
| • at 60 Hz rated value   | V  | 230     |
| relative negative tolerance of the control supply voltage at AC at 50 Hz | %  | -15     |
| relative positive tolerance of the control supply voltage at AC at 50 Hz | %  | 10      |
| relative negative tolerance of the control supply voltage at AC at 60 Hz | %  | -15     |
| relative positive tolerance of the control supply voltage at AC at 60 Hz | %  | 10      |
| display version for fault signal   |    | Display |

#### Mechanical data

|   |    |  |
|---|----|--|
| width                                       | mm | 210  |
| height                                      | mm | 230  |
| depth                                       | mm | 298  |
| fastening method                            |    | screw fixing   |
| mounting position                           |    | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back |
| required spacing with side-by-side mounting |    |  |
| • upwards                                   | mm | 100  |
| • at the side                               | mm | 5  |
| • downwards                                 | mm | 75   |
| wire length maximum                         | m  | 500  |
| number of poles for main current circuit    |    | 3  |

#### Connections/ Terminals

|  |  |                             |
|--|--|-----------------------------|
| type of electrical connection  |  |                             |
| • for main current circuit   |  | busbar connection           |
| • for auxiliary and control circuit  |  | screw-type terminals        |
| number of NC contacts for auxiliary contacts   |  | 0                           |
| number of NO contacts for auxiliary contacts   |  | 3                           |
| number of CO contacts for auxiliary contacts   |  | 1                           |
| type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point |  |                             |
| • finely stranded with core end processing   |  | 70 ... 240 mm <sup>2</sup>  |
| • finely stranded without core end processing  |  | 70 ... 240 mm <sup>2</sup>  |
| • stranded   |  | 95 ... 300 mm <sup>2</sup>  |
| type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point  |  |                             |
| • finely stranded with core end processing   |  | 120 ... 185 mm <sup>2</sup> |
| • finely stranded without core end processing  |  | 120 ... 185 mm <sup>2</sup> |

|   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• stranded</li> </ul>  |  | 120 ... 240 mm <sup>2</sup>  |
| <b>type of connectable conductor cross-sections for main contacts for box terminal using both clamping points</b> <ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> <li>• stranded</li> </ul> |  | min. 2x 50 mm <sup>2</sup> , max. 2x 185 mm <sup>2</sup><br>min. 2x 50 mm <sup>2</sup> , max. 2x 185 mm <sup>2</sup><br>max. 2x 70 mm <sup>2</sup> , max. 2x 240 mm <sup>2</sup> |
| <b>type of connectable conductor cross-sections for AWG cables for main contacts for box terminal</b> <ul style="list-style-type: none"> <li>• using the back clamping point</li> <li>• using the front clamping point</li> <li>• using both clamping points</li> </ul>                   |  | 250 ... 500 kcmil<br>3/0 ... 600 kcmil<br>min. 2x 2/0, max. 2x 500 kcmil   |
| <b>type of connectable conductor cross-sections for DIN cable lug for main contacts</b> <ul style="list-style-type: none"> <li>• finely stranded</li> <li>• stranded</li> </ul>   |  | 50 ... 240 mm <sup>2</sup><br>70 ... 240 mm <sup>2</sup>   |
| <b>type of connectable conductor cross-sections for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> </ul>  |  | 2x (0.5 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> )   |
| <b>type of connectable conductor cross-sections for AWG cables</b> <ul style="list-style-type: none"> <li>• for main contacts</li> <li>• for auxiliary contacts</li> <li>• for auxiliary contacts finely stranded with core end processing</li> </ul>                                     |  | 2/0 ... 500 kcmil<br>2x (20 ... 14)<br>2x (20 ... 16)  |

#### Ambient conditions

|   |          |   |
|---|----------|---|
| <b>installation altitude at height above sea level</b>  | m        | 5 000   |
| <b>environmental category</b> <ul style="list-style-type: none"> <li>• during transport according to IEC 60721</li> <li>• during storage according to IEC 60721</li> <li>• during operation according to IEC 60721</li> </ul> |          | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)<br>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4<br>3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| <b>ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>   | °C<br>°C | 60<br>-25 ... +80   |
| <b>derating temperature</b>   | °C       | 40  |
| <b>protection class IP on the front according to IEC 60529</b>  |          | IP00; IP20 with box terminal/cover  |
| <b>touch protection on the front according to IEC 60529</b>   |          | finger-safe, for vertical contact from the front with box terminal/cover  |

#### UL/CSA ratings

|  |                            |                                 |
|--|----------------------------|---------------------------------|
| <b>yielded mechanical performance [hp] for 3-phase AC motor</b> <ul style="list-style-type: none"> <li>• at 200/208 V <ul style="list-style-type: none"> <li>— at inside-delta circuit at 50 °C rated value</li> </ul> </li> <li>• at 220/230 V <ul style="list-style-type: none"> <li>— at standard circuit at 50 °C rated value</li> <li>— at inside-delta circuit at 50 °C rated value</li> </ul> </li> <li>• at 460/480 V <ul style="list-style-type: none"> <li>— at standard circuit at 50 °C rated value</li> <li>— at inside-delta circuit at 50 °C rated value</li> </ul> </li> </ul> | hp<br>hp<br>hp<br>hp<br>hp | 200<br>150<br>250<br>300<br>600 |
| <b>contact rating of auxiliary contacts according to UL</b>  |                            | B300 / R300                     |

#### Approvals Certificates

##### General Product Approval



[Confirmation](#)



|                          |     |                   |                   |
|--------------------------|-----|-------------------|-------------------|
| General Product Approval | EMV | Test Certificates | Marine / Shipping |
|--------------------------|-----|-------------------|-------------------|



[KC](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



|                   |       |             |
|-------------------|-------|-------------|
| Marine / Shipping | other | Environment |
|-------------------|-------|-------------|



[Confirmation](#)

[Environmental Confirmations](#)

**Further information**

Simulation Tool for Soft Starters (STS)

<https://support.industry.siemens.com/cs/ww/en/view/101494917>

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=3RW4447-6BC44>

Cax online generator

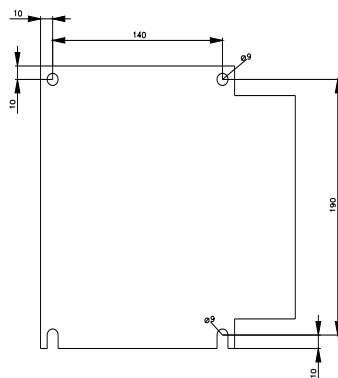
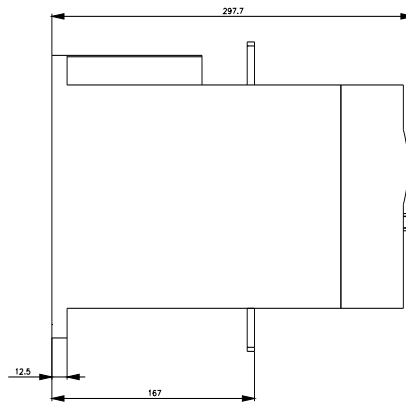
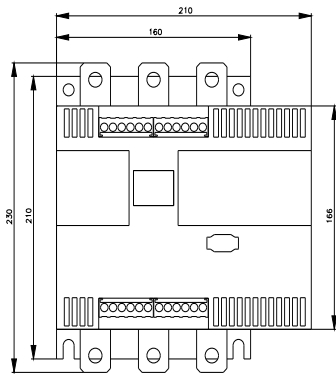
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4447-6BC44>

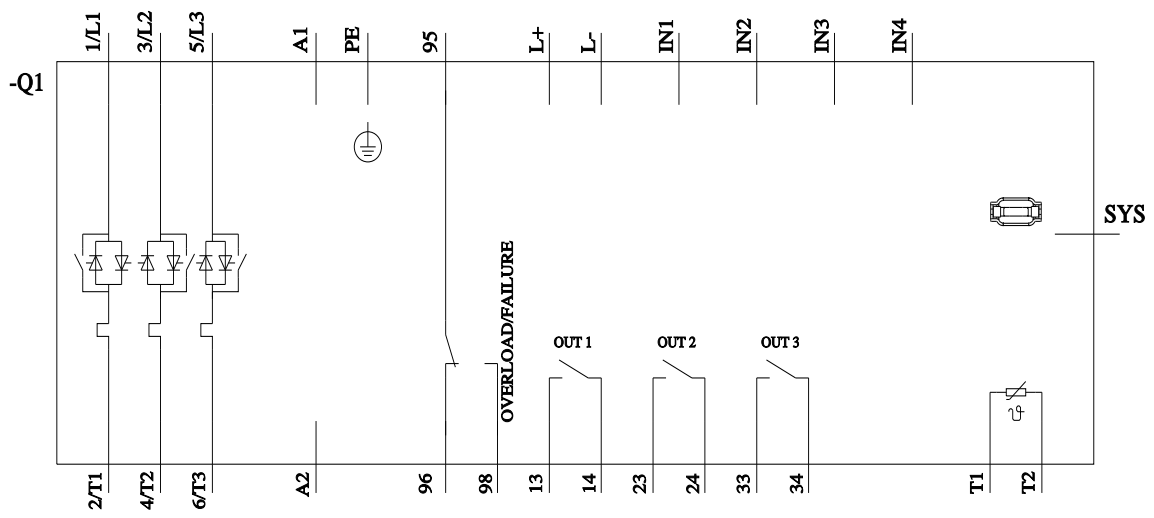
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4447-6BC44>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW4447-6BC44&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4447-6BC44&lang=en)





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