

SIRIUS soft starter Values at 575 V, 50 °C standard: 494 A, 500 hp Inside-delta: 856 A, 950 hp 400-690 V AC, 115 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5548-2HA16<<

| General technical data  |                       |   |
|---|-----------------------|---|
| product brand name  |                       | SIRIUS  |
| product feature   |                       |   |
| <ul style="list-style-type: none"> <li>integrated bypass contact system</li> <li>thyristors</li> </ul>  |                       | Yes<br>Yes  |
| product function  |                       |   |
| <ul style="list-style-type: none"> <li>intrinsic device protection</li> <li>motor overload protection</li> <li>evaluation of thermistor motor protection</li> <li>external reset</li> <li>adjustable current limitation</li> <li>inside-delta circuit</li> </ul>  |                       | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>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 acc. to DIN EN 61346-2   |                       | Q   |
| reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750  |                       | G   |
| Power Electronics   |                       |   |
| product designation   |                       | Soft starter  |
| operational current   |                       |   |
| <ul style="list-style-type: none"> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 60 °C rated value</li> </ul>  | A<br>A<br>A           | 551<br>494<br>438                                   |
| operational current for 3-phase motors at inside-delta circuit  |                       |   |
| <ul style="list-style-type: none"> <li>at 40 °C rated value</li> <li>at 50 °C rated value</li> <li>at 60 °C rated value</li> </ul>  | A<br>A<br>A           | 954<br>856<br>759                                   |
| yielded mechanical performance for 3-phase motors   |                       |   |
| <ul style="list-style-type: none"> <li>at 400 V                             <ul style="list-style-type: none"> <li>at standard circuit at 40 °C rated value</li> <li>at inside-delta circuit at 40 °C rated value</li> </ul> </li> <li>at 500 V                             <ul style="list-style-type: none"> <li>at standard circuit at 40 °C rated value</li> <li>at inside-delta circuit at 40 °C rated value</li> </ul> </li> <li>at 690 V at standard circuit at 40 °C rated value</li> </ul> | W<br>W<br>W<br>W<br>W | 315 000<br>560 000<br>355 000<br>630 000<br>560 000 |
| 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  | 400 ... 690  |
| 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  | 400 ... 600  |
| 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  | 110  |
| 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  | 159  |
| <b>Control circuit/ Control</b>  |    |  |
| 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  | 115  |
| • at 60 Hz rated value   | V  | 115  |
| 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  |
| <b>Mechanical data</b>   |    |  |
| width  | mm | 510  |
| height   | mm | 640  |
| depth  | mm | 290  |
| 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  |
| <b>Connections/ Terminals</b>  |    |  |
| type of electrical connection  |    |  |
| • for main current circuit   |    | busbar connection  |
| • for auxiliary and control circuit  |    | spring-loaded 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 DIN cable lug for main contacts |    |  |
| • finely stranded  |    | 50 ... 240 mm <sup>2</sup>   |

|  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>stranded</li> </ul>   |  | 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 (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (0.25 ... 1.5 mm <sup>2</sup> ) |
| <b>type of connectable conductor cross-sections at AWG cables</b> <ul style="list-style-type: none"> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul>                |  | 2/0 ... 500 kcmil<br>2x (24 ... 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 acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>during operation acc. 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 | 60<br>-25 ... +80   |
| <b>derating temperature</b>  | °C | 40  |
| <b>protection class IP on the front acc. to IEC 60529</b>  |    | IP00  |

| Certificates/ approvals  |     |                           |
|--------------------------|-----|---------------------------|
| General Product Approval | EMC | Declaration of Conformity |



| Test Certificates | Marine / Shipping | other |
|-------------------|-------------------|-------|
|-------------------|-------------------|-------|

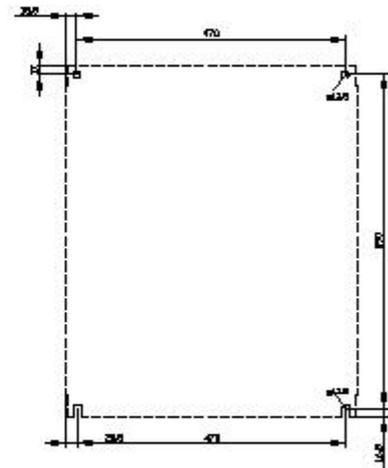
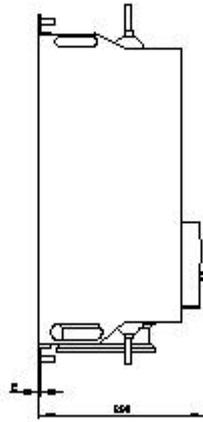
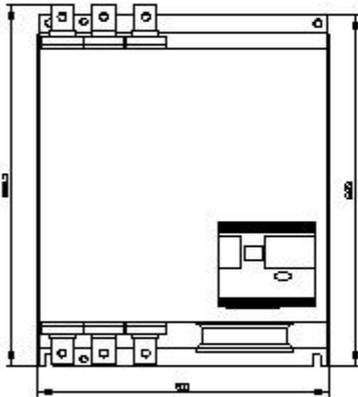
[Special Test Certificate](#)

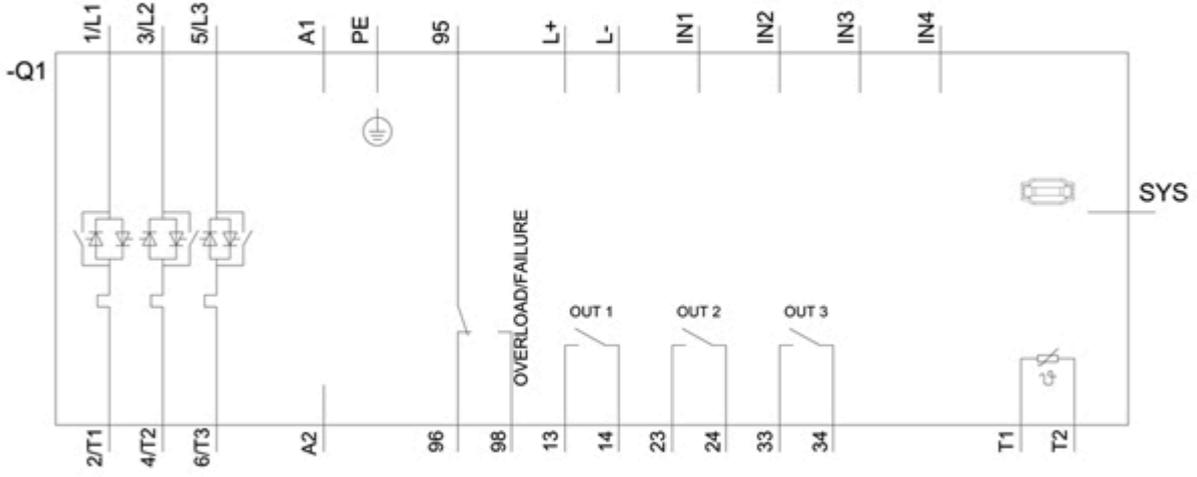


[Confirmation](#)

| UL/CSA ratings   |    |                          |
|--|----|--------------------------|
| <b>yielded mechanical performance [hp] for 3-phase AC motor</b> <ul style="list-style-type: none"> <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> <li>at 575/600 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 | 400<br>750<br>500<br>950 |
| <b>contact rating of auxiliary contacts according to UL</b>  |    | B300 / R300              |

| Further information  |
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| <b>Simulation Tool for Soft Starters (STS)</b><br><a href="https://support.industry.siemens.com/cs/ww/en/view/101494917">https://support.industry.siemens.com/cs/ww/en/view/101494917</a><br><b>Information- and Downloadcenter (Catalogs, Brochures,...)</b><br><a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a><br><b>Industry Mall (Online ordering system)</b><br><a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RW4453-2BC36">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RW4453-2BC36</a><br><b>Cax online generator</b><br><a href="http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&amp;mfb=3RW4453-2BC36">http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&amp;mfb=3RW4453-2BC36</a><br><b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b><br><a href="https://support.industry.siemens.com/cs/ww/en/ps/3RW4453-2BC36">https://support.industry.siemens.com/cs/ww/en/ps/3RW4453-2BC36</a> |





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