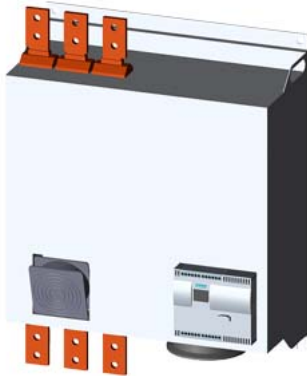




SIRIUS soft starter Values at 400 V, 40 °C standard: 1076 A, 630 kW Inside-delta: 1864 A, 1100 kW 200-460 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5558-6HA14<<

### General technical data

|                                                                                            |                          |
|--------------------------------------------------------------------------------------------|--------------------------|
| product brand name                                                                         | SIRIUS                   |
| product designation                                                                        | Soft starter             |
| 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                                                             | 690 V                    |
| 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

|                                                                                                                |              |
|----------------------------------------------------------------------------------------------------------------|--------------|
| operational current                                                                                            |              |
| • at 40 °C rated value                                                                                         | 1 076 A      |
| • at 50 °C rated value                                                                                         | 970 A        |
| • at 60 °C rated value                                                                                         | 880 A        |
| operational current for 3-phase motors at inside-delta circuit                                                 |              |
| • at 40 °C rated value                                                                                         | 1 864 A      |
| • at 50 °C rated value                                                                                         | 1 680 A      |
| • at 60 °C rated value                                                                                         | 1 524 A      |
| yielded mechanical performance for 3-phase motors                                                              |              |
| • at 230 V                                                                                                     |              |
| — at standard circuit at 40 °C rated value                                                                     | 355 kW       |
| — at inside-delta circuit at 40 °C rated value                                                                 | 630 kW       |
| • at 400 V                                                                                                     |              |
| — at standard circuit at 40 °C rated value                                                                     | 630 kW       |
| — at inside-delta circuit at 40 °C rated value                                                                 | 1 100 kW     |
| yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | 350 hp       |
| operating frequency rated value                                                                                | 50 ... 60 Hz |
| relative negative tolerance of the operating frequency                                                         | -10 %        |

|                                                                                  |                                                                                                                          |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| relative positive tolerance of the operating frequency                           | 10 %                                                                                                                     |
| operating voltage at standard circuit rated value                                | 200 ... 460 V                                                                                                            |
| 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                            | 200 ... 460 V                                                                                                            |
| 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       | 215 A                                                                                                                    |
| continuous operating current [% of I <sub>e</sub> ] at 40 °C                     | 115 %                                                                                                                    |
| power loss [W] at operational current at 40 °C during operation typical          | 510 W                                                                                                                    |
| <b>Control circuit/ Control</b>                                                  |                                                                                                                          |
| type of voltage of the control supply voltage                                    | AC                                                                                                                       |
| control supply voltage frequency 1 rated value                                   | 50 Hz                                                                                                                    |
| control supply voltage frequency 2 rated value                                   | 60 Hz                                                                                                                    |
| 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                                                           | 230 V                                                                                                                    |
| • at 60 Hz rated value                                                           | 230 V                                                                                                                    |
| 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                                                                            | 575 mm                                                                                                                   |
| height                                                                           | 780 mm                                                                                                                   |
| depth                                                                            | 292 mm                                                                                                                   |
| 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                                                                        | 100 mm                                                                                                                   |
| • at the side                                                                    | 5 mm                                                                                                                     |
| • downwards                                                                      | 75 mm                                                                                                                    |
| wire length maximum                                                              | 500 m                                                                                                                    |
| 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                                              | 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 DIN cable lug for main contacts |                                                                                                                          |
| • finely stranded                                                                | 50 ... 240 mm²                                                                                                           |
| • stranded                                                                       | 70 ... 240 mm²                                                                                                           |
| type of connectable conductor cross-sections for auxiliary contacts              |                                                                                                                          |

|                                                                                                                                                                                                                                                       |                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• solid</li> </ul>                                                                                                                                                                                             | 2x (0.5 ... 2.5 mm²)                                  |
| <ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>                                                                                                                                                          | 2x (0.5 ... 1.5 mm²)                                  |
| <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) |

|                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ambient conditions</b>                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                         |
| <b>installation altitude at height above sea level</b>                                                                                                                                                                        | 5 000 m                                                                                                                                                                                                                                                                 |
| <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>                                                                                                     | 60 °C<br>-25 ... +80 °C                                                                                                                                                                                                                                                 |
| <b>derating temperature</b>                                                                                                                                                                                                   | 40 °C                                                                                                                                                                                                                                                                   |
| <b>protection class IP on the front according to IEC 60529</b>                                                                                                                                                                | IP00                                                                                                                                                                                                                                                                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                  |
| <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> | 650 hp<br>400 hp<br>750 hp<br>850 hp<br>1 500 hp |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | B300 / R300                                      |

|                               |                                 |
|-------------------------------|---------------------------------|
| <b>Approvals Certificates</b> |                                 |
| <b>Environment</b>            | <b>General Product Approval</b> |

[Environmental Confirmations](#)



|            |                          |                             |
|------------|--------------------------|-----------------------------|
| <b>EMV</b> | <b>Test Certificates</b> | <b>Maritime application</b> |
|------------|--------------------------|-----------------------------|



[Special Test Certificate](#)



|                             |              |
|-----------------------------|--------------|
| <b>Maritime application</b> | <b>other</b> |
|-----------------------------|--------------|



[Confirmation](#)

[Confirmation](#)



|                            |
|----------------------------|
| <b>Further information</b> |
|----------------------------|

#### Simulation Tool for Soft Starters (STS)

<https://www.modulplc.com/?s=3RW4465-6BC44>

#### Information on the packaging

<https://www.modulplc.com/?s=3RW4465-6BC44>

#### Information for data generation and storage

<https://www.modulplc.com/?s=3RW4465-6BC44>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.modulplc.com/?s=3RW4465-6BC44>

Industry Mall (Online ordering system)

<https://www.modulplc.com/?s=3RW4465-6BC44>

Cax online generator

<https://www.modulplc.com/?s=3RW4465-6BC44>

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

<https://www.modulplc.com/?s=3RW4465-6BC44>

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

<https://www.modulplc.com/?s=3RW4465-6BC44>

