



SIRIUS soft starter Values at 690 V, 40 °C standard: 203 A, 200 kW Inside-delta: only up to 600 V 400-690 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5543-6HA16<<

| 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 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  |    |                          |
| • at 40 °C rated value   | A  | 203                      |
| • at 50 °C rated value   | A  | 180                      |
| • at 60 °C rated value   | A  | 156                      |
| operational current for 3-phase motors at inside-delta circuit                   |    |                          |
| • at 40 °C rated value   | A  | 352                      |
| • at 50 °C rated value   | A  | 312                      |
| • at 60 °C rated value   | A  | 270                      |
| yielded mechanical performance for 3-phase motors                                |    |                          |
| • at 400 V   |    |                          |
| — at standard circuit at 40 °C rated value                                       | W  | 110 000                  |
| — at inside-delta circuit at 40 °C rated value                                   | W  | 200 000                  |
| • at 500 V   |    |                          |
| — at standard circuit at 40 °C rated value                                       | W  | 132 000                  |
| — at inside-delta circuit at 40 °C rated value                                   | W  | 250 000                  |
| • at 690 V at standard circuit at 40 °C rated value                              | W  | 200 000                  |
| 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  | 40  |
| 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  | 89  |
| <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  | 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   |
| <b>Mechanical data</b>   |    |   |
| 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   |
| <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 main contacts for box terminal using the front clamping point |    |   |

|  |    |   |
|--|----|---|
| <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>  |    | 70 ... 240 mm <sup>2</sup><br>70 ... 240 mm <sup>2</sup><br>95 ... 300 mm <sup>2</sup>  |
| <b>type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point</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> |    | 120 ... 185 mm <sup>2</sup><br>120 ... 185 mm <sup>2</sup><br>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 at 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 at 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>   | 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; IP20 with box terminal/cover  |
| <b>touch protection on the front acc. to IEC 60529</b>   |    | finger-safe, for vertical contact from the front with box terminal/cover  |
| <b>Certificates/ approvals</b>   |    |   |
| General Product Approval   |    | EMC<br>Declaration of Conformity  |



Test Certificates

Marine / Shipping



