



SIRIUS SOFT STARTER, VALUES WITH 400 V, 40 DEG., STANDARD: 203A, 110KW, INSIDE-DELTA CIRCUIT 3: 352A, 200KW, 200-460 V AC, 230 V AC, SCREW TERMINALS

### General technical data:

|   |  |        |
|---|--|--------|
| <b>product brand name</b>   |  | SIRIUS |
| <b>Product feature</b>  |  |        |
| <ul style="list-style-type: none"> <li>integrated bypass contact system</li> </ul>          |  | Yes    |
| <ul style="list-style-type: none"> <li>Thyristors</li> </ul>                                |  | Yes    |
| <b>Product function</b>   |  |        |
| <ul style="list-style-type: none"> <li>Intrinsic device protection</li> </ul>               |  | Yes    |
| <ul style="list-style-type: none"> <li>motor overload protection</li> </ul>                 |  | Yes    |
| <ul style="list-style-type: none"> <li>Evaluation of thermistor motor protection</li> </ul> |  | Yes    |
| <ul style="list-style-type: none"> <li>External reset</li> </ul>                            |  | Yes    |
| <ul style="list-style-type: none"> <li>Adjustable current limitation</li> </ul>             |  | Yes    |
| <ul style="list-style-type: none"> <li>inside-delta circuit</li> </ul>                      |  | Yes    |
| <b>Product component Motor brake output</b>   |  | Yes    |
| <b>Equipment marking acc. to DIN EN 61346-2</b>   |  | Q      |
| <b>Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</b>  |  | G      |

### Power Electronics:

|                            |  |   |
|----------------------------|--|---|
| <b>Product designation</b> |  | soft starters for high feature applications |
|----------------------------|--|---|

|   |    |             |
|---|----|-------------|
| <b>Operating current</b>  |    |             |
| • at 40 °C rated value  | A  | 203         |
| • at 50 °C rated value  | A  | 180         |
| • at 60 °C rated value  | A  | 156         |
| <b>Operating current for three-phase motors at inside-delta circuit</b>   |    |             |
| • at 40 °C rated value  | A  | 352         |
| • at 50 °C rated value  | A  | 312         |
| • at 60 °C rated value  | A  | 270         |
| <b>Mechanical power output for three-phase motors</b>   |    |             |
| • at 230 V  |    |             |
| — at standard circuit at 40 °C rated value  | W  | 55 000      |
| — at inside-delta circuit at 40 °C rated value  | W  | 110 000     |
| • 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     |
| <b>Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b> | hp | 50          |
| Operating frequency rated value   | Hz | 50 ... 60   |
| <b>Relative negative tolerance of the operating frequency</b>   | %  | -10         |
| <b>Relative positive tolerance of the operating frequency</b>   | %  | 10          |
| <b>Operating voltage at standard circuit rated value</b>  | V  | 200 ... 460 |
| <b>Relative negative tolerance of the operating voltage at standard circuit</b>   | %  | -15         |
| <b>Relative positive tolerance of the operating voltage at standard circuit</b>   | %  | 10          |
| <b>Operating voltage at inside-delta circuit rated value</b>  | V  | 200 ... 460 |
| <b>Relative negative tolerance of the operating voltage at inside-delta circuit</b>                                       | %  | -15         |
| <b>Relative positive tolerance of the operating voltage at inside-delta circuit</b>                                       | %  | 10          |
| <b>Minimum load [% of IM]</b>   | %  | 8           |
| <b>Adjustable motor current for motor overload protection minimum rated value</b>   | A  | 40          |
| <b>Continuous operating current [% of I<sub>e</sub>] at 40 °C</b>   | %  | 115         |
| <b>Power loss [W] at operating current at 40 °C during operation typical</b>  | W  | 89          |
| <b>Control electronics:</b>   |    |             |
| <b>Type of voltage of the control supply voltage</b>  |    | AC          |
| <b>Control supply voltage frequency 1 rated value</b>   | Hz | 50          |
| <b>Control supply voltage frequency 2 rated value</b>   | Hz | 60          |

|   |   |         |
|---|---|---------|
| <b>Relative negative tolerance of the control supply voltage frequency</b>      | % | -10     |
| <b>Relative positive tolerance of the control supply voltage frequency</b>      | % | 10      |
| Control supply voltage 1 at AC  |   |         |
| • at 50 Hz rated value  | V | 230     |
| • at 60 Hz rated value  | V | 230     |
| <b>Relative negative tolerance of the control supply voltage at AC at 60 Hz</b> | % | -15     |
| <b>Relative positive tolerance of the control supply voltage at AC at 60 Hz</b> | % | 10      |
| <b>Display version for fault signal</b>   |   | Display |

#### Mechanical data:

|  |    |  |
|--|----|--|
| <b>Width</b>   | mm | 210  |
| <b>Height</b>  | mm | 230  |
| <b>Depth</b>   | mm | 298  |
| <b>Mounting type</b>                                   |    | screw fixing   |
| <b>Mounting position</b>                               |    | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back |
| <b>Required spacing with side-by-side mounting</b>     |    |  |
| • upwards  | mm | 100  |
| • at the side  | mm | 5  |
| • downwards  | mm | 75   |
| <b>Installation altitude at height above sea level</b> | m  | 5 000  |
| <b>Wire length maximum</b>                             | m  | 500  |
| <b>Number of poles for main current circuit</b>        |    | 3  |

#### Connections/ Terminals:

|  |  |                            |
|--|--|----------------------------|
| <b>Type of electrical connection</b>   |  |                            |
| • for main current circuit   |  | busbar connection          |
| • for auxiliary and control current circuit  |  | screw-type terminals       |
| <b>Number of NC contacts for auxiliary contacts</b>  |  | 0                          |
| <b>Number of NO contacts for auxiliary contacts</b>  |  | 3                          |
| <b>Number of CO contacts for auxiliary contacts</b>  |  | 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  |  |                            |

|  |  |  |
|--|--|--|
| <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>  |
| Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points <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> |
| Type of connectable conductor cross-sections at AWG conductors for main contacts for box terminal <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   |
| Type of connectable conductor cross-sections for DIN cable lug for main contacts <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 conductors</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>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</b>   |    | IP00              |

#### Certificates/ approvals:

|                          |     |                           |
|--------------------------|-----|---------------------------|
| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|



|                   |                   |
|-------------------|-------------------|
| Test Certificates | Shipping Approval |
|-------------------|-------------------|

[Typprüfbescheinigung/Werkszeugnis](#)

[spezielle Prüfbescheinigung](#)  
[n](#)



|                   |       |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|



[Umweltbestätigung](#)

#### UL/CSA ratings:

|  |    |             |
|--|----|-------------|
| Yielded mechanical performance [hp] for three-phase AC motor |    |             |
| • at 200/208 V   |    |             |
| — at inside-delta circuit at 50 °C rated value               | hp | 100         |
| • at 220/230 V   |    |             |
| — at standard circuit at 50 °C rated value                   | hp | 60          |
| — at inside-delta circuit at 50 °C rated value               | hp | 125         |
| • at 460/480 V   |    |             |
| — at standard circuit at 50 °C rated value                   | hp | 125         |
| — at inside-delta circuit at 50 °C rated value               | hp | 250         |
| Contact rating of auxiliary contacts according to UL         |    | B300 / R300 |

#### Further information

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

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

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

<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

##### Cax online generator

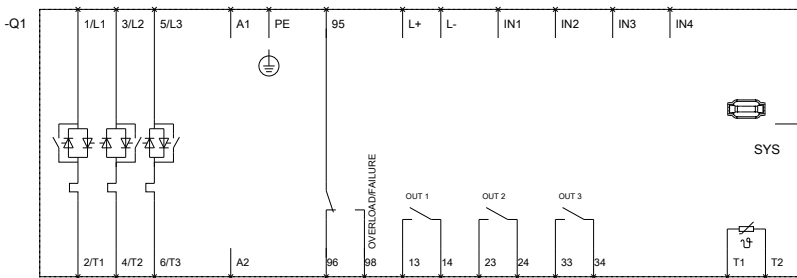
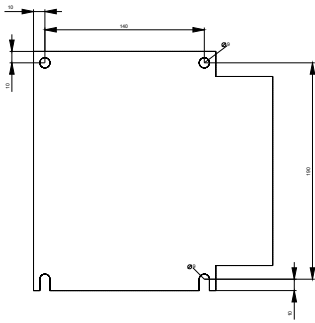
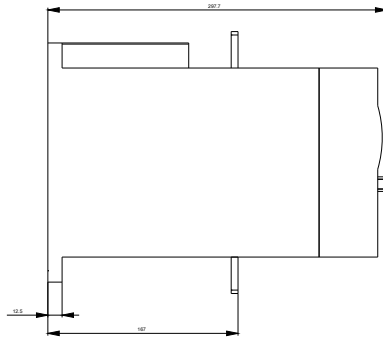
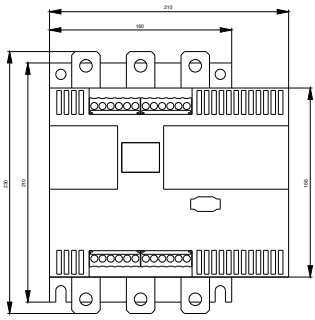
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44436BC44>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW44436BC44>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW44436BC44&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW44436BC44&lang=en)



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