



SIRIUS soft starter S00 12.5 A, 5.5 kW/400 V, 40 °C 200-480 V AC, 110-230 V AC/DC Screw terminals

| General technical data   |    |                          |
|--|----|--------------------------|
| product brand name   |    | SIRIUS                   |
| product feature  |    |                          |
| <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                      |
| product function   |    |                          |
| <ul style="list-style-type: none"> <li>intrinsic device protection</li> </ul>  |    | No                       |
| <ul style="list-style-type: none"> <li>motor overload protection</li> </ul>  |    | No                       |
| <ul style="list-style-type: none"> <li>evaluation of thermistor motor protection</li> </ul>  |    | No                       |
| <ul style="list-style-type: none"> <li>external reset</li> </ul>   |    | No                       |
| <ul style="list-style-type: none"> <li>adjustable current limitation</li> </ul>  |    | No                       |
| <ul style="list-style-type: none"> <li>inside-delta circuit</li> </ul>   |    | No                       |
| product component motor brake output   |    | No                       |
| insulation voltage rated value   | V  | 600                      |
| 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  |    |                          |
| <ul style="list-style-type: none"> <li>at 40 °C rated value</li> </ul>   | A  | 12.5                     |
| <ul style="list-style-type: none"> <li>at 50 °C rated value</li> </ul>   | A  | 12                       |
| <ul style="list-style-type: none"> <li>at 60 °C rated value</li> </ul>   | A  | 11                       |
| yielded mechanical performance for 3-phase motors  |    |                          |
| <ul style="list-style-type: none"> <li>at 230 V                             <ul style="list-style-type: none"> <li>at standard circuit at 40 °C rated value</li> </ul> </li> </ul> | kW | 3                        |
| <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> </ul> </li> </ul> | kW | 5.5                      |
| yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value   | hp | 3                        |
| 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 ... 480              |
| relative negative tolerance of the operating voltage at standard circuit   | %  | -15                      |
| relative positive tolerance of the operating voltage at standard circuit   | %  | 10                       |
| minimum load [%]   | %  | 10                       |
| 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  | 2  |
| <b>Control circuit/ Control</b>  |    |  |
| type of voltage of the control supply voltage  |    | AC/DC  |
| 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  | V  | 110 ... 230  |
| control supply voltage 1 at AC at 60 Hz  | V  | 110 ... 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   |
| control supply voltage 1 at DC   | V  | 110 ... 230  |
| relative negative tolerance of the control supply voltage at DC  | %  | -20  |
| relative positive tolerance of the control supply voltage at DC  | %  | 20   |
| display version for fault signal   |    | red  |
| <b>Mechanical data</b>   |    |  |
| size of engine control device  |    | S00  |
| width  | mm | 45   |
| height   | mm | 95   |
| depth  | mm | 150  |
| fastening method   |    | screw and snap-on mounting   |
| mounting position  |    | With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back |
| required spacing with side-by-side mounting  |    |  |
| • upwards  | mm | 60   |
| • at the side  | mm | 15   |
| • downwards  | mm | 40   |
| wire length maximum  | m  | 300  |
| number of poles for main current circuit   |    | 3  |
| <b>Connections/ Terminals</b>  |    |  |
| type of electrical connection  |    |  |
| • for main current circuit   |    | screw-type terminals   |
| • for auxiliary and control circuit  |    | screw-type terminals   |
| number of NC contacts for auxiliary contacts   |    | 0  |
| number of NO contacts for auxiliary contacts   |    | 1  |
| number of CO contacts for auxiliary contacts   |    | 0  |
| type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point |    |  |
| • solid  |    | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )   |
| • finely stranded with core end processing   |    | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> )   |
| type of connectable conductor cross-sections for AWG cables for main contacts for box terminal                 |    |  |
| • using the front clamping point   |    | 2x (16 ... 10)   |
| type of connectable conductor cross-sections for auxiliary contacts  |    |  |
| • solid  |    | 2x (0.25 ... 2.5 mm <sup>2</sup> )   |
| • finely stranded with core end processing   |    | 2x (0.25 ... 1.5 mm <sup>2</sup> )   |
| type of connectable conductor cross-sections for AWG cables  |    |  |
| • for auxiliary contacts   |    | 2x (20 ... 14)   |
| • for auxiliary contacts finely stranded with core end processing  |    | 2x (20 ... 16)   |
| <b>Ambient conditions</b>  |    |  |
| installation altitude at height above sea level  | 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 | -25 ... +60   |
|   | °C | -40 ... +80   |
| <b>derating temperature</b>   | °C | 40  |
| <b>protection class IP on the front according to IEC 60529</b>  |    | IP20  |
| <b>touch protection on the front according to IEC 60529</b>   |    | finger-safe, for vertical contact from the front  |

#### UL/CSA ratings

|  |    |             |
|--|----|-------------|
| <b>yielded mechanical performance [hp] for 3-phase AC motor</b>  |    |             |
| <ul style="list-style-type: none"> <li>at 220/230 V <ul style="list-style-type: none"> <li>at standard 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> </ul> </li> </ul> | hp | 3           |
|  | hp | 7.5         |
| <b>contact rating of auxiliary contacts according to UL</b>  |    | B300 / R300 |

#### Approvals Certificates

##### General Product Approval



[Confirmation](#)



|                          |     |                   |       |
|--------------------------|-----|-------------------|-------|
| General Product Approval | EMV | Test Certificates | other |
|--------------------------|-----|-------------------|-------|



[KC](#)

[Type Test Certificates/Test Report](#)

[Confirmation](#)

[Miscellaneous](#)

#### Environment

[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=3RW3017-1BB14>

##### Cax online generator

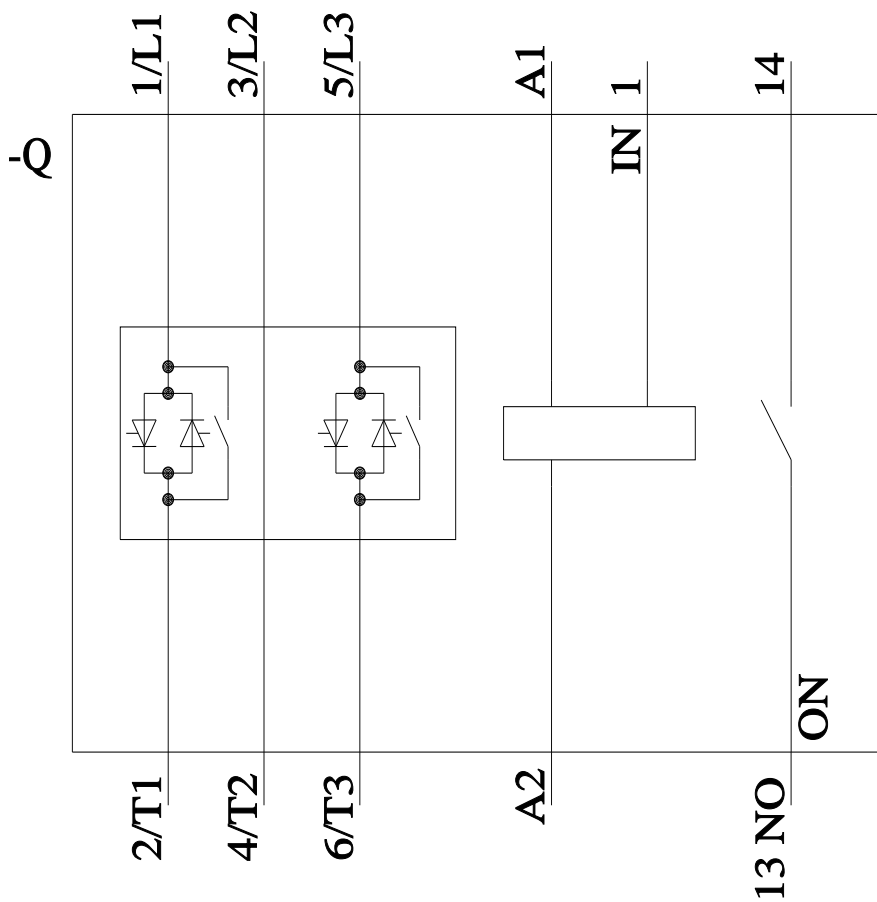
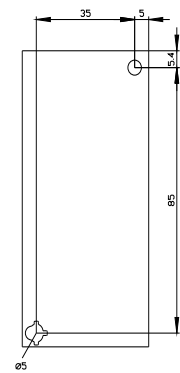
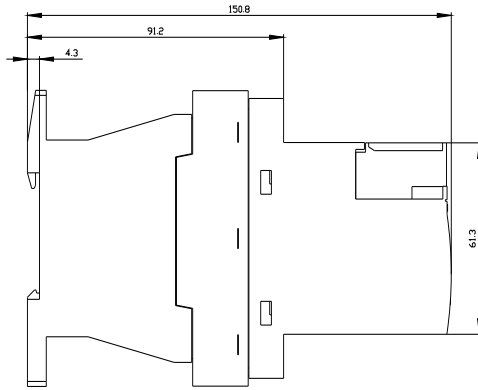
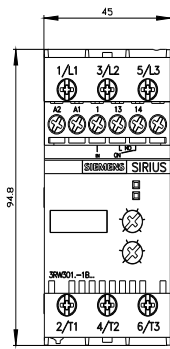
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW3017-1BB14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW3017-1BB14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW3017-1BB14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW3017-1BB14&lang=en)



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