

SIRIUS SOFT STARTER, SIZE S00, 17.6A,  
7.5KW/400V, 40 DEGREES, 200-480V AC, 110-230V  
AC/DC, SPRING-LOADED TERMINALS



## General technical data

|  |  |        |
|--|--|--------|
| <b>product brandname</b>   |  | SIRIUS |
| <ul style="list-style-type: none"> <li>• Product equipment Integrated bypass contact system</li> </ul> |  | Yes    |
| <ul style="list-style-type: none"> <li>• Product feature Thyristors</li> </ul>                         |  | Yes    |
| <b>Product function</b>  |  |        |
| <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     |
| <b>Product component Motor brake output</b>  |  | No     |
| <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 starter |
|----------------------------|--|--------------|

|   |    |             |
|---|----|-------------|
| <b>Operating current</b>  |    |             |
| • at 40 °C rated value  | A  | 17.6        |
| • at 50 °C rated value  | A  | 17          |
| • at 60 °C rated value  | A  | 14          |
| <b>Mechanical power output for three-phase motors</b>   |    |             |
| • at 230 V  |    |             |
| — at standard circuit at 40 °C rated value  | W  | 4 000       |
| • at 400 V  |    |             |
| — at standard circuit at 40 °C rated value  | W  | 7 500       |
| <b>Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b> | hp | 3           |
| <b>Operating frequency rated value</b>  | 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 ... 480 |
| <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>Minimum load [% of IM]</b>   | %  | 10          |
| <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  | 4           |

| <b>Control electronics</b>  |    |             |
|---|----|-------------|
| <b>Type of voltage of the control supply voltage</b>                            |    | AC/DC       |
| <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          |
| <b>Control supply voltage 1 at AC at 50 Hz</b>                                  | V  | 110 ... 230 |
| <b>Control supply voltage 1 at AC at 60 Hz</b>                                  | V  | 110 ... 230 |
| <b>Relative negative tolerance of the control supply voltage at AC at 60 Hz</b> | %  | -20         |
| <b>Relative positive tolerance of the control supply voltage at AC at 60 Hz</b> | %  | 20          |
| <b>Control supply voltage 1 at DC</b>   | V  | 110 ... 230 |
| <b>Relative negative tolerance of the control supply voltage at DC</b>          | %  | -20         |
| <b>Relative positive tolerance of the control supply voltage at DC</b>          | %  | 20          |

|                                  |  |     |
|----------------------------------|--|-----|
| Display version for fault signal |  | red |
|----------------------------------|--|-----|

### Mechanical data

|   |    |  |
|---|----|--|
| Size of engine control device               |    | S00  |
| Width                                       | mm | 45   |
| Height                                      | mm | 120  |
| Depth                                       | mm | 150  |
| Mounting type                               |    | 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  |

### Connections/Terminals

|  |  |  |
|--|--|--|
| Type of electrical connection  |  |  |
| • for main current circuit   |  | spring-loaded terminals  |
| • for auxiliary and control current circuit  |  | spring-loaded 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 at AWG conductors for main contacts for box terminal              |  |  |
| • using the front clamping point   |  | 2x (16 ... 10)   |
| Type of connectable conductor cross-sections for main contacts   |  |  |
| • solid  |  | 1 ... 4 mm <sup>2</sup>  |
| • finely stranded with core end processing   |  | 1 ... 2.5 mm <sup>2</sup>  |
| 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 at AWG conductors   |  |  |
| • for main contacts  |  | 16 ... 12  |
| • for auxiliary contacts   |  | 2x (24 ... 14)   |

## 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> </ul> |    | 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| <ul style="list-style-type: none"> <li>during storage acc. to IEC 60721</li> </ul>   |    | 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| <ul style="list-style-type: none"> <li>during operation acc. to IEC 60721</li> </ul> |    | 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> </ul>                   | °C | -25 ... +60   |
| <ul style="list-style-type: none"> <li>during storage</li> </ul>                     | °C | -40 ... +80   |
| <b>Derating temperature</b>  | °C | 40  |
| <b>Protection class IP</b>   |    | IP20  |

## Certificates/approvals

|                                 |            |                                  |
|---------------------------------|------------|----------------------------------|
| <b>General Product Approval</b> | <b>EMC</b> | <b>Declaration of Conformity</b> |
|---------------------------------|------------|----------------------------------|



CCC



CSA



UL



C-Tick



EG-Konf.

|                          |              |
|--------------------------|--------------|
| <b>Test Certificates</b> | <b>other</b> |
|--------------------------|--------------|

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

[Confirmation](#)

## UL/CSA ratings

|  |    |             |
|--|----|-------------|
| <b>Yielded mechanical performance [hp] for three-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> </ul> | hp | 3           |
| <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> </ul> </li> </ul> | hp | 10          |
| <b>Contact rating of auxiliary contacts according to UL</b>  |    | 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)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RW3018-2BB14>

**Cax online generator**

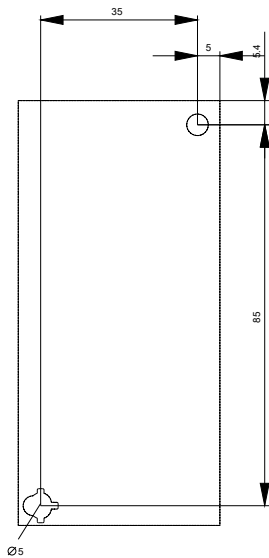
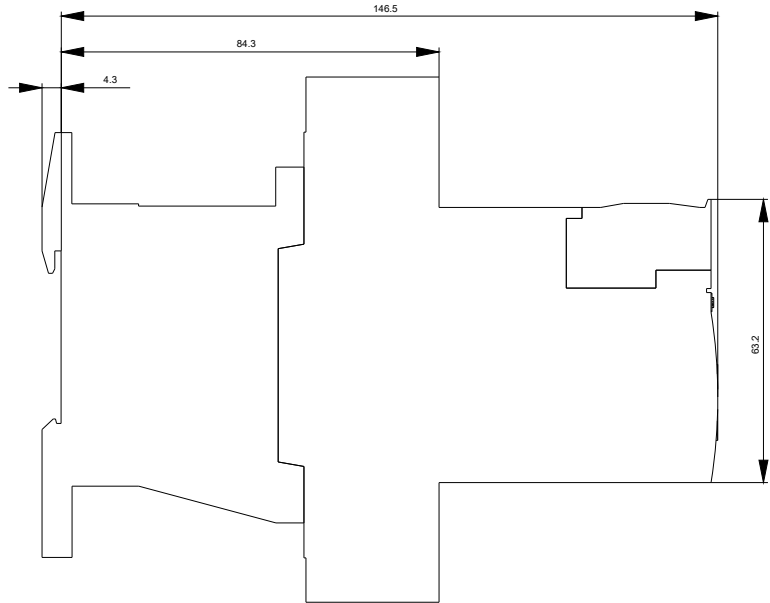
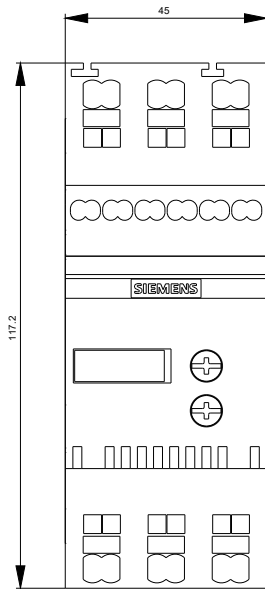
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RW3018-2BB14>

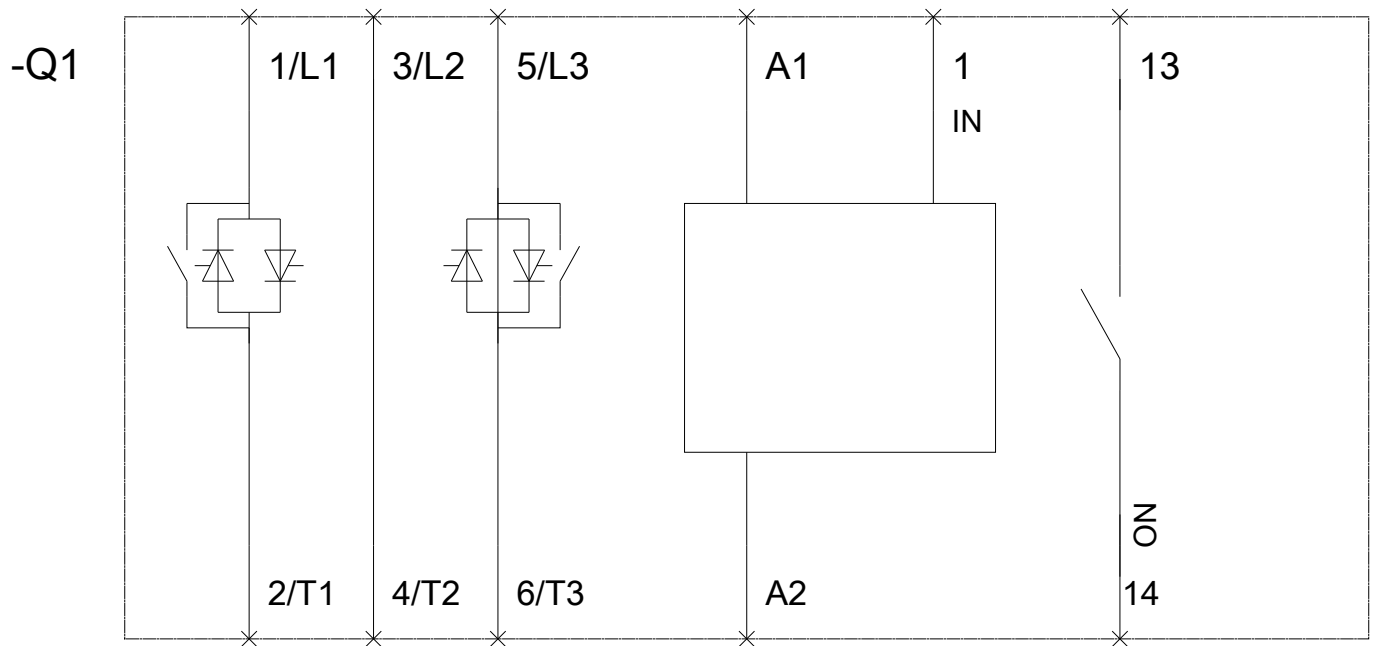
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RW3018-2BB14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mfb=3RW3018-2BB14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RW3018-2BB14&lang=en)





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