

SIRIUS soft starter S00 3.6 A, 1.5 kW/400 V, 40 °C 200-480 V AC, 24 V AC/DC Spring-type 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>               |   | 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>Insulation voltage rated value</b>   | V | 600                      |
| <b>Degree of pollution</b>  |   | 3, acc. to IEC 60947-4-2 |
| <b>Reference code acc. to DIN EN 61346-2</b>  |   | Q                        |
| <b>Reference code 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  | 3.6          |
| • at 50 °C rated value  | A  | 3.3          |
| • at 60 °C rated value  | A  | 3            |
| <b>Mechanical power output for three-phase motors</b>   |    |              |
| • at 230 V  |    |              |
| — at standard circuit at 40 °C rated value  | W  | 750          |
| • at 400 V  |    |              |
| — at standard circuit at 40 °C rated value  | W  | 1 500        |
| <b>Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value</b> | hp | 0.5          |
| <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 [%]</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  | 0.25         |

## Control circuit/ Control

|   |    |       |
|---|----|-------|
| <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</b>   |    |       |
| • at 50 Hz rated value  | V  | 24    |
| • at 60 Hz rated value  | V  | 24    |
| <b>Relative negative tolerance of the control supply voltage at AC at 50 Hz</b> | %  | -20   |
| <b>Relative positive tolerance of the control supply voltage at AC at 50 Hz</b> | %  | 20    |
| <b>Relative negative tolerance of the control supply voltage at AC at 60 Hz</b> | %  | -20   |

|  |   |     |
|--|---|-----|
| Relative positive tolerance of the control supply voltage at AC at 60 Hz | % | 20  |
| Control supply voltage 1 at DC rated value                               | V | 24  |
| 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 |

### 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>  |

|  |  |  |
|--|--|--|
| <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 (0.25 ... 2.5 mm <sup>2</sup> )<br>2x (0.25 ... 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> </ul>            |  | 16 ... 12<br>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> <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<br>°C | -25 ... +60<br>-40 ... +80  |
| <b>Derating temperature</b>  | °C       | 40  |
| <b>Protection class IP</b>   |          | IP20  |

### Certificates/ approvals

| General Product Approval   | EMC  | Declaration of Conformity   |
|--|--|---|
| <br>CCC | <br>EAC   | <br>EG-Konf. |
| <br>CSA | <br>RCM |   |
| <br>UL  |  |   |

| Declaration of Conformity     | Test Certificates                                  | other   |
|-------------------------------|--|---|
| <a href="#">Miscellaneous</a> | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Miscellaneous</a><br><a href="#">Confirmation</a> |

### 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</li> </ul> |  |  |
|--|--|--|

- at standard circuit at 50 °C rated value
- at 460/480 V
- at standard circuit at 50 °C rated value

|   |             |
|---|-------------|
| hp  | 0.5         |
| hp  | 1.5         |
| <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,...)

[www.siemens.com/sirius/catalogs](http://www.siemens.com/sirius/catalogs)

#### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW3013-2BB04>

#### Cax online generator

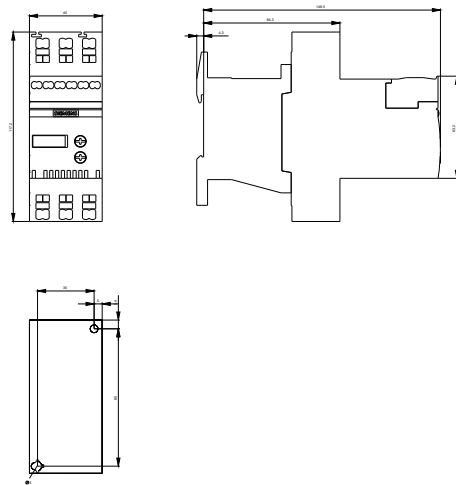
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW3013-2BB04>

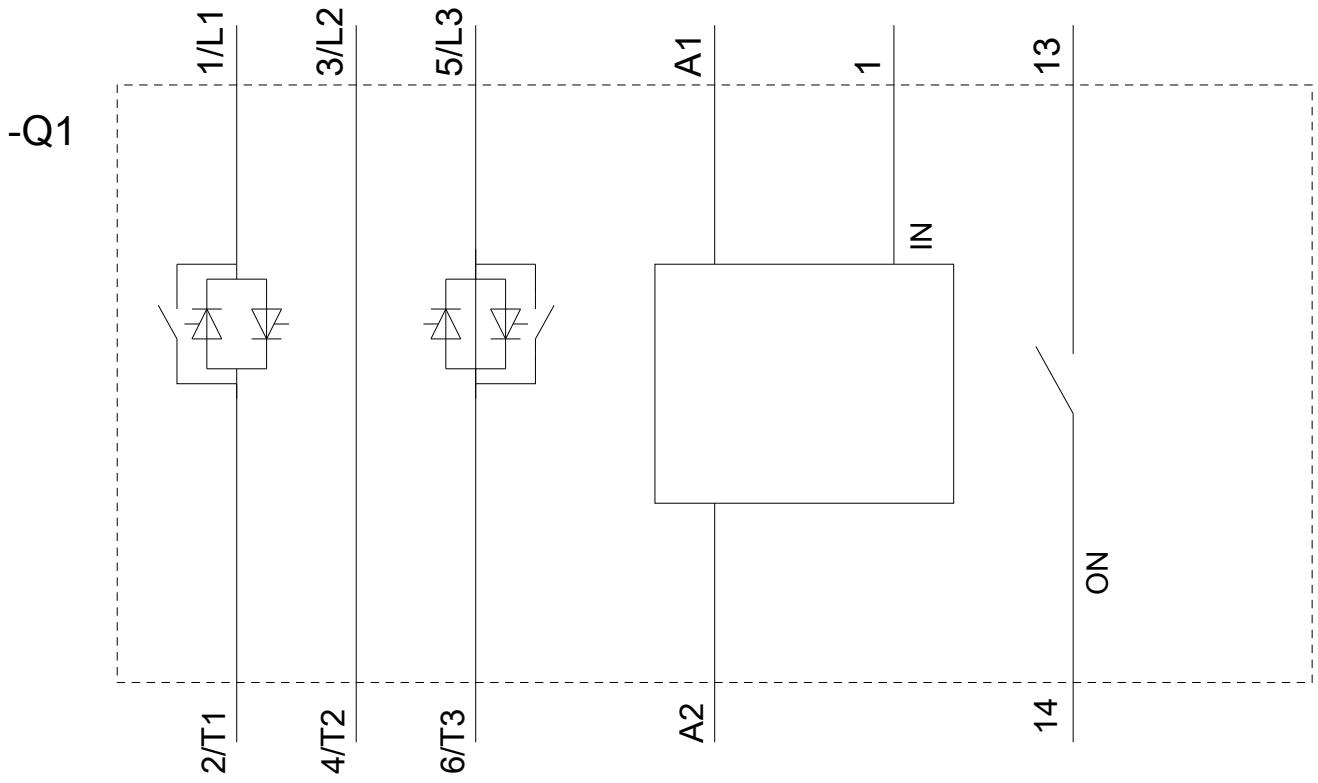
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RW3013-2BB04>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW3013-2BB04&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW3013-2BB04&lang=en)





last modified:

03/21/2020