



SIRIUS SOFT STARTER, SIZE S3, 106A,  
55KW/400V, 40 DEGREES, 200-480V AC,  
24V AC/DC, SPRING-LOADED TERMINALS

### General details:

|  |  |        |
|--|--|--------|
| <b>Product brand name</b>  |  | SIRIUS |
| <b>Product equipment</b>   |  |        |
| • integrated bridging contact system                                       |  | Yes    |
| • thyristors   |  | Yes    |
| <b>Product function</b>  |  |        |
| • intrinsic device protection  |  | No     |
| • motor overload protection  |  | No     |
| • evaluation of thermal resistor motor protection                          |  | No     |
| • reset external   |  | No     |
| • adjustable current limitation  |  | No     |
| • inside-delta circuit   |  | No     |
| <b>Product component / outlet for enine brake</b>                          |  | No     |
| <b>Item designation</b>  |  |        |
| • according to DIN EN 61346-2  |  | Q      |
| • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 |  | G      |

### Power Electronics:

|                            |  |   |
|----------------------------|--|---|
| <b>product designation</b> |  | soft starters for standard applications |
| Operating current          |  |   |

|   |    |             |
|---|----|-------------|
| • at 40 °C / rated value  | A  | 106         |
| • at 50 °C / rated value  | A  | 98          |
| • at 60 °C / rated value  | A  | 90          |
| <b>Emitted mechanical power / for three-phase servomotors</b>   |    |             |
| • at 230 V / at standard switching / at 40 °C   |    |             |
| • rated value   | W  | 30,000      |
| • at 400 V / at standard switching / at 40 °C   |    |             |
| • rated value   | W  | 55,000      |
| <b>yielded mechanical performance (hp) / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value</b> | hp | 30          |
| <b>Operating frequency</b>  |    |             |
| • 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 / with standard circuit / rated value</b>  | V  | 200 ... 480 |
| <b>Relative negative tolerance / of the operating voltage / with standard circuit</b>   | %  | -15         |
| <b>Relative positive tolerance / of the operating voltage / with standard circuit</b>   | %  | 10          |
| <b>Minimum load in % of I<sub>M</sub></b>   | %  | 10          |
| <b>Continuous operating current in % of I<sub>e</sub> / at 40°C</b>   | %  | 115         |
| <b>Active power loss / at operating current / at 40°C / during operating phase / typical</b>  | W  | 21          |

|  |    |       |
|--|----|-------|
| <b>Control electronics:</b>  |    |       |
| <b>Type of voltage / of the controlled 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</b>  |    |       |
| • at 50 Hz / for AC  | V  | 24    |
| • at 60 Hz / for AC  | V  | 24    |
| <b>Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC</b> | %  | -15   |
| <b>Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC</b> | %  | 10    |
| <b>Control supply voltage / 1 / for DC / rated value</b>                               | V  | 24    |
| <b>Relative negative tolerance / of the control supply voltage / for DC</b>            | %  | -15   |

|  |   |     |
|--|---|-----|
| Relative positive tolerance / of the control supply voltage / for DC | % | 10  |
| Type of display / for fault signal                                   |   | red |

#### Mechanical design:

|  |    |  |
|--|----|--|
| Size of the engine control device                          |    | S3   |
| Width  | mm | 70   |
| Height   | mm | 170  |
| Depth  | mm | 190  |
| Type of mounting   |    | screw and snap-on mounting   |
| Built in orientation                                       |    | With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back |
| Distance, to be maintained, to the ranks assembly          |    |  |
| • upwards  | mm | 60   |
| • sideways   | mm | 30   |
| • downwards  | mm | 40   |
| Altitude of installation site / at a height over sea level | m  | 5,000  |
| Cable length / maximum                                     | m  | 300  |
| Number of poles / for main current circuit                 |    | 3  |

#### Electrical connections:





|  |  |                                  |
|--|--|----------------------------------|
| Design of the electrical connection  |  |                                  |
| • for main current circuit   |  | screw-type 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 change-over switches / for auxiliary contacts  |  | 0                                |
| Type of the connectable conductor cross section / for main contacts / for box terminal / when using the front clamping point |  |                                  |
| • solid  |  | 2x (2.5 ... 16 mm <sup>2</sup> ) |
| • finely stranded / with conductor end processing  |  | 2.5 ... 35 mm <sup>2</sup>       |
| • stranded   |  | 4 ... 70 mm <sup>2</sup>         |
| Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point  |  |                                  |
| • solid  |  | 2x (2.5 ... 16 mm <sup>2</sup> ) |
| • finely stranded / with conductor end processing  |  | 2.5 ... 50 mm <sup>2</sup>       |
| • stranded   |  | 10 ... 70 mm <sup>2</sup>        |

|  |  |   |
|--|--|---|
| <b>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded / with conductor end processing</li> <li>• stranded</li> </ul>                                       |  | 2x (2.5 ... 16 mm <sup>2</sup> )<br>2x (2.5 ... 35 mm <sup>2</sup> )<br>2x (10 ... 50 mm <sup>2</sup> ) |
| <b>Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</b> <ul style="list-style-type: none"> <li>• when using the back clamping point</li> <li>• when using the front clamping point</li> <li>• when using both clamping points</li> </ul>            |  | 10 ... 2/0<br>10 ... 2/0<br>2x (10 ... 1/0)   |
| <b>Type of the connectable conductor cross-section / for DIN cable lug / for main contacts</b> <ul style="list-style-type: none"> <li>• finely stranded</li> <li>• stranded</li> </ul>   |  | 2 x (10 ... 50 mm <sup>2</sup> )<br>2x (10 ... 70 mm <sup>2</sup> )                                     |
| <b>Type of the connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for AWG conductors / for main contacts</li> </ul>  |  | 2x (7 ... 1/0)  |
| <b>Type of the connectable conductor cross-section</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded / with conductor end processing</li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul> |  | 2x (0.25 ... 2.5 mm <sup>2</sup> )<br>2x (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (24 ... 14)              |

#### Ambient conditions:

|   |    |            |
|---|----|------------|
| <b>Ambient temperature</b> <ul style="list-style-type: none"> <li>• during operating</li> <li>• during storage</li> </ul> | °C | -25 ... 60 |
|   | °C | -40 ... 80 |
| <b>Derating temperature</b>   | °C | 40         |
| <b>Protection class IP</b>  |    | IP00       |

#### Certificates/approvals:

| General Product Approval   |  | Test Certificates            |   |
|--|--|------------------------------|---|
| <a href="#">CQC</a>  | <br>CSA | <a href="#">ROSTEST</a>      | <br>UL |
| <a href="#">DNV</a>  | <br>GL  | <a href="#">Manufacturer</a> |   |
| <b>Shipping Approval</b>   |  | <b>other</b>                 |   |
| <br>DNV |  | <a href="#">Manufacturer</a> |   |

## UL/CSA ratings

### yielded mechanical performance (hp) / for three-phase squirrel cage motors

- at 220/230 V / at standard circuit
  - at 50 °C / rated value
- at 460/480 V / at standard circuit
  - at 50 °C / rated value

hp 30

hp 75

## Further information:

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

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

### Industry Mall (Online ordering system)

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

### CAX-Online-Generator

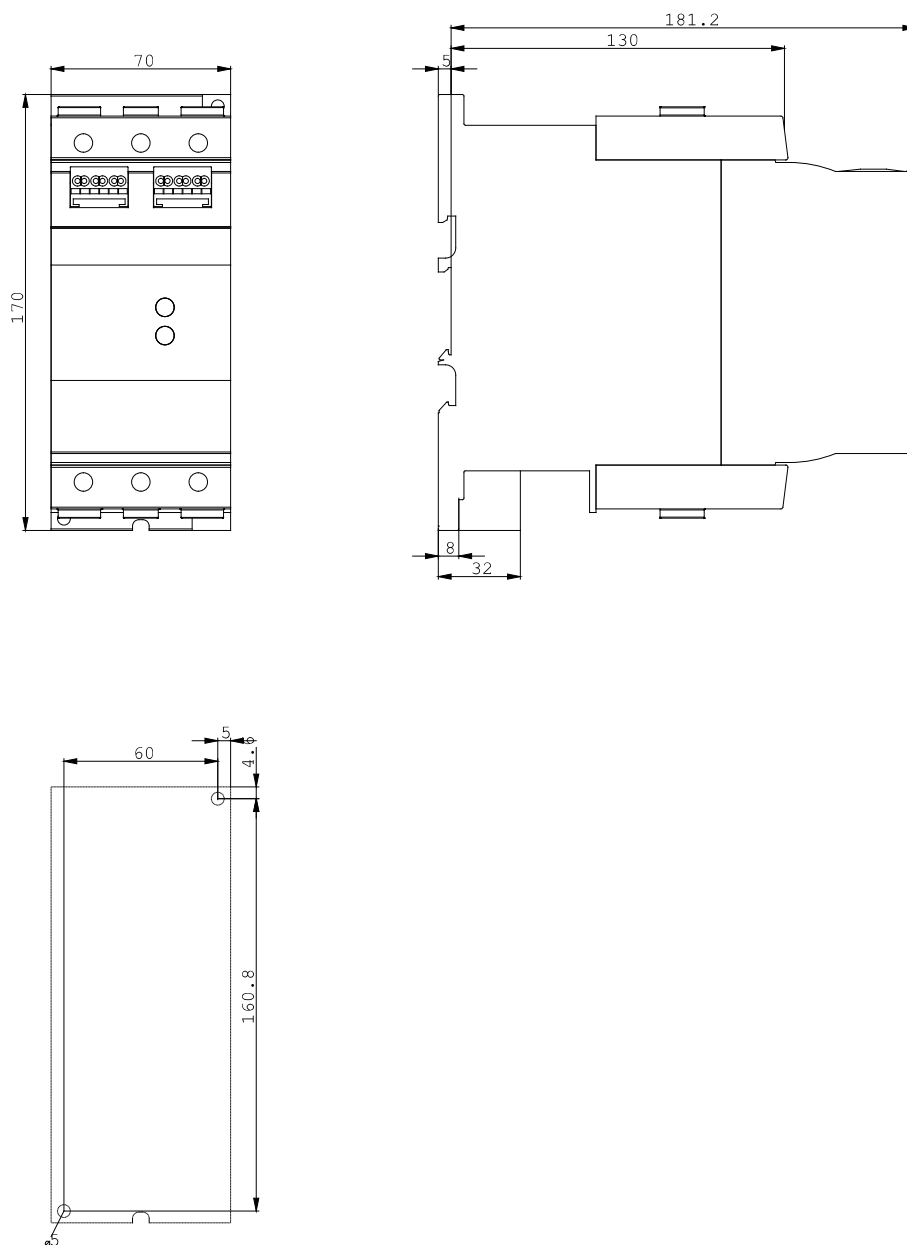
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RW3047-2BB04/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RW3047-2BB04](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW3047-2BB04)



last change:

Aug 22, 2011