

SIRIUS SOFT STARTER, SIZE S3, 63 A, 30 KW / 400 V, AC 200...460 V, UC 110...230 V, SCREW CONNECTION

### General technical data:

|                                                                                     |  |        |
|-------------------------------------------------------------------------------------|--|--------|
| product brand name                                                                  |  | SIRIUS |
| Product feature                                                                     |  |        |
| • integrated bypass contact system                                                  |  | Yes    |
| • Thyristors                                                                        |  | Yes    |
| Product function                                                                    |  |        |
| • Intrinsic device protection                                                       |  | No     |
| • motor overload protection                                                         |  | No     |
| • Evaluation of thermistor motor protection                                         |  | No     |
| • External reset                                                                    |  | No     |
| • Adjustable current limitation                                                     |  | No     |
| • inside-delta circuit                                                              |  | No     |
| Product component Motor brake output                                                |  | No     |
| Equipment marking acc. to DIN EN 61346-2                                            |  | Q      |
| Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 |  | G      |

### Power Electronics:

|                                                                                                                    |    |                                         |
|--------------------------------------------------------------------------------------------------------------------|----|-----------------------------------------|
| Product designation                                                                                                |    | soft starters for standard applications |
| Operating current                                                                                                  |    |                                         |
| • at 40 °C rated value                                                                                             | A  | 63                                      |
| • at 50 °C rated value                                                                                             | A  | 54                                      |
| • at 60 °C rated value                                                                                             | A  | 46                                      |
| Mechanical power output for three-phase motors                                                                     |    |                                         |
| • at 230 V                                                                                                         |    |                                         |
| — at standard circuit at 40 °C rated value                                                                         | W  | 18 500                                  |
| • at 400 V                                                                                                         |    |                                         |
| — at standard circuit at 40 °C rated value                                                                         | W  | 30 000                                  |
| yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C Rated value | hp | 15                                      |
| 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 ... 460                             |

|                                                                          |   |     |
|--------------------------------------------------------------------------|---|-----|
| Relative negative tolerance of the operating voltage at standard circuit | % | -10 |
| Relative positive tolerance of the operating voltage at standard circuit | % | 10  |
| Minimum load [% of IM]                                                   | % | 9   |
| Continuous operating current [% of I <sub>e</sub> ] at 40 °C             | % | 100 |

#### Control electronics:

|                                                                          |    |             |
|--------------------------------------------------------------------------|----|-------------|
| 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 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          | %  | -15         |
| Relative positive tolerance of the control supply voltage at DC          | %  | 10          |
| Display version for fault signal                                         |    | red         |

#### Mechanical data:

|                                                 |    |                                                                                                                        |
|-------------------------------------------------|----|------------------------------------------------------------------------------------------------------------------------|
| Size of engine control device                   |    | S3                                                                                                                     |
| Width                                           | mm | 70                                                                                                                     |
| Height                                          | mm | 170                                                                                                                    |
| Depth                                           | mm | 190                                                                                                                    |
| 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 | 30                                                                                                                     |
| • downwards                                     | mm | 40                                                                                                                     |
| Installation altitude at height above sea level | m  | 5 000                                                                                                                  |
| Cable length maximum                            | m  | 100                                                                                                                    |
| Number of poles for main current circuit        |    | 3                                                                                                                      |

#### Connections/ Terminals:

|                                                                                                                                                                                                                                                                     |  |                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------|
| <b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>                                                                                              |  | screw-type terminals<br>screw-type terminals                                                            |
| <b>Number of NC contacts for auxiliary contacts</b>                                                                                                                                                                                                                 |  | 0                                                                                                       |
| <b>Number of NO contacts for auxiliary contacts</b>                                                                                                                                                                                                                 |  | 2                                                                                                       |
| <b>Number of CO contacts for auxiliary contacts</b>                                                                                                                                                                                                                 |  | 0                                                                                                       |
| Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul>                     |  | 2x (2.5 ... 16 mm <sup>2</sup> )<br>2.5 ... 35 mm <sup>2</sup><br>4 ... 70 mm <sup>2</sup>              |
| Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> <li>• stranded</li> </ul>                      |  | 2x (2.5 ... 16 mm <sup>2</sup> )<br>2.5 ... 50 mm <sup>2</sup><br>10 ... 70 mm <sup>2</sup>             |
| Type of connectable conductor cross-section for main contacts for box terminal using both clamping points <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core 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> ) |
| Type of connectable conductor cross-section for 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> |  | 10 ... 2/0<br>10 ... 2/0<br>2x (10 ... 1/0)                                                             |
| Type of connectable conductor cross-section for DIN cable lug for main contacts <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 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> )                                  |
| <ul style="list-style-type: none"> <li>• Type of connectable conductor cross-sections at AWG conductors for main contacts</li> <li>• Type of connectable conductor cross-sections at AWG conductors for auxiliary contacts</li> </ul>                               |  | 2x (7 ... 1/0)<br>2x (20 ... 14)                                                                        |
| <b>Ambient conditions:</b>                                                                                                                                                                                                                                          |  |                                                                                                         |
| <b>Ambient temperature</b>                                                                                                                                                                                                                                          |  |                                                                                                         |

|                      |    |             |
|----------------------|----|-------------|
| • during operation   | °C | -25 ... +60 |
| • during storage     | °C | -40 ... +80 |
| Derating temperature | °C | 40          |
| Protection class IP  |    | IP20        |

#### Certificates/ approvals:

| General Product Approval                                                              | EMC                                                                                  | Declaration of Conformity                                                                    | Test Certificates                                                                        |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|  CSA |  UL |  EAC        |  C-TICK |
|                                                                                       |                                                                                      |  EG-Konf. | <a href="#">spezielle Prüfbescheinigung</a><br>n                                         |

#### other

[Umweltbestätigung](#)

[sonstig](#)

#### UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor

• at 220/230 V

— at standard circuit at 50 °C Rated value

hp

20

• at 460/480 V

— at standard circuit at 50 °C Rated value

hp

40

#### 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=3RW30441AB14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW30441AB14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW30441AB14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW30441AB14&lang=en)

last modified:

15.12.2015