



SIRIUS SOFT STARTER, SIZE S0, 38A,  
18.5KW/400V, 40 DEGREES, 200-480V AC,  
110-230V AC/DC, SCREW 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  | 38          |
| • at 50 °C / rated value                                                                                                                        | A  | 34          |
| • at 60 °C / rated value                                                                                                                        | A  | 31          |
| <b>Emitted mechanical power / for three-phase servomotors</b>                                                                                   |    |             |
| • at 230 V / at standard switching / at 40 °C                                                                                                   |    |             |
| • rated value                                                                                                                                   | W  | 11,000      |
| • at 400 V / at standard switching / at 40 °C                                                                                                   |    |             |
| • rated value                                                                                                                                   | W  | 18,500      |
| <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 | 10          |
| <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  | 19          |

|                                                                                        |    |             |
|----------------------------------------------------------------------------------------|----|-------------|
| <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 / at 50 Hz / for AC</b>                                  | V  | 110 ... 230 |
| <b>Control supply voltage / 1 / at 60 Hz / for AC</b>                                  | V  | 110 ... 230 |
| <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</b>                                             | V  | 110 ... 230 |
| <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                  |    | S0                                                                                                                     |
| Width                                              | mm | 45                                                                                                                     |
| Height                                             | mm | 125                                                                                                                    |
| Depth                                              | mm | 150                                                                                                                    |
| Type of mounting                                   |    | screw and snap-on mounting                                                                                             |
| mounting position                                  |    | 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 | 15                                                                                                                     |
| • downwards                                        | mm | 40                                                                                                                     |
| Installation altitude / 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                                                                                  |  | screw-type 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 (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ) |
| • finely stranded / with conductor end processing                                                                            |  | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ) |
| Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal                  |  |                                                                  |
| • when using the front c                                                                                                     |  | 1x 8, 2x (16 ... 10)                                             |
| Type of the connectable conductor cross-section                                                                              |  |                                                                  |
| • for auxiliary contacts                                                                                                     |  |                                                                  |
| • solid                                                                                                                      |  | 2x (0.5 ... 2.5 mm <sup>2</sup> )                                |
| • finely stranded / with conductor end processing                                                                            |  | 2x (0.5 ... 1.5 mm <sup>2</sup> )                                |
| • for AWG conductors / for auxiliary contacts                                                                                |  | 2x (20 ... 14)                                                   |
| • finely stranded / with wire end proc                                                                                       |  | 2x (20 ... 16)                                                   |

#### Ambient conditions:

|                                                                      |    |             |
|----------------------------------------------------------------------|----|-------------|
| <b>Ambient temperature</b><br>• during operating<br>• during storage | °C | -25 ... +60 |
|                                                                      | °C | -40 ... +80 |
|                                                                      | °C | 40          |
| <b>Derating temperature</b>                                          | °C | 40          |
| <b>Protection class IP</b>                                           |    | IP20        |

#### Certificates/approvals:

| General Product Approval                                                                 |                                                                                          |                                                                                           |                                                                                         | EMC                                                                                           | Test Certificates                                  |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------|
| <br>CCC | <br>CSA | <br>GOST | <br>UL | <br>C-TICK | <a href="#">Type Test Certificates/Test Report</a> |

other

[Declaration of Conformity](#)

[other](#)

[Environmental Confirmations](#)

#### 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

10

hp

25

**Contact rating designation / for auxiliary contacts / according to UL**

B300 / R300

#### 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**

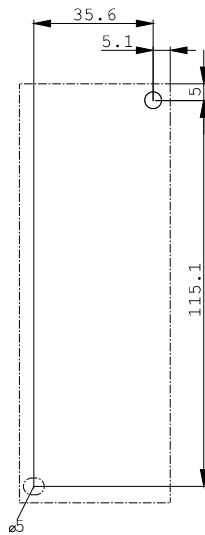
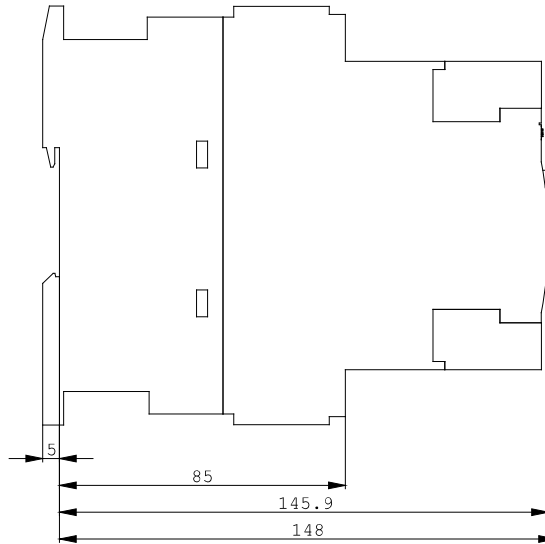
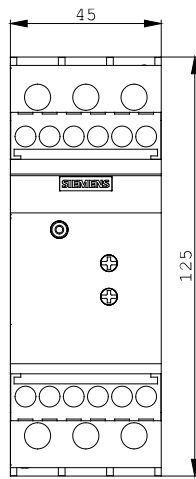
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RW3028-1BB14/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RW3028-1BB14](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW3028-1BB14)



last change:

Feb 7, 2013