



SIRIUS SOFT STARTER, S0, 25A,  
11KW/400V, 40 DEGR., AC 200-480V,  
AC/DC 110-230V, 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                                              |  | Yes    |
| • motor overload protection                                                |  | Yes    |
| • evaluation of thermal resistor motor protection                          |  | No     |
| • reset external                                                           |  | Yes    |
| • adjustable current limitation                                            |  | Yes    |
| • 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  | 25          |
| • at 50 °C / rated value                                                                                                                        | A  | 23          |
| • at 60 °C / rated value                                                                                                                        | A  | 21          |
| <b>Emitted mechanical power / for three-phase servomotors</b>                                                                                   |    |             |
| • at 230 V / at standard switching / at 40 °C                                                                                                   |    |             |
| • rated value                                                                                                                                   | W  | 5,500       |
| • at 400 V / at standard switching / at 40 °C                                                                                                   |    |             |
| • rated value                                                                                                                                   | W  | 11,000      |
| <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 | 5           |
| <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>                                                                                                       | %  | 20          |
| <b>Adjustable rated current / of the motor / for motor overload protection / minimum</b>                                                        | A  | 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  | 8           |

|                                                                                        |    |             |
|----------------------------------------------------------------------------------------|----|-------------|
| <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 |

|                                                                      |   |     |
|----------------------------------------------------------------------|---|-----|
| Relative negative tolerance / of the control supply voltage / for DC | % | -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 | 150                                                                                                                                                                                                                                                              |
| Depth                                              | mm | 155                                                                                                                                                                                                                                                              |
| Type of mounting                                   |    | screw and snap-on mounting                                                                                                                                                                                                                                       |
| mounting position                                  |    | With additional fan: With vertical mounting surface +/- 90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° t |
| 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                                                                                                   |  | 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                                                                               |  | 2                                                                                              |
| Number of change-over switches / for auxiliary contacts                                                                      |  | 1                                                                                              |
| Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the front clamping point |  |                                                                                                |
| • solid                                                                                                                      |  | 2x (1.5 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), max. 1x 10 mm <sup>2</sup> |
| • finely stranded / with conductor end processing                                                                            |  | 2x (1.5 ... 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 main contacts                                                                                                          |  |                                                                                                |
| • solid                                                                                                                      |  | 1 ... 10 mm <sup>2</sup>                                                                       |

|                                                                                                                                                                                                                                                                                                        |                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>finely stranded / with conductor end processing</li> <li>for AWG conductors / for main contacts</li> </ul>                                                                                                                                                      | 1 ... 6 mm <sup>2</sup><br>16 ... 10, 1x 8                                                 |
| <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<br>-40 ... +80 |
| <b>Derating temperature</b>                                                                                           | °C | 40                         |
| <b>Protection class IP</b>                                                                                            |    | IP20                       |

#### Certificates/approvals:

| General Product Approval                                                           |                                                                                    |                                                                                     |                                                                                     | EMC                                                                                  | For use in hazardous locations                                                       |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |   |   |  |  |
| CCC                                                                                | CSA                                                                                | GOST                                                                                | UL                                                                                  | C-TICK                                                                               | ATEX                                                                                 |
| Test Certificates                                                                  |                                                                                    | Shipping Approval                                                                   |                                                                                     | other                                                                                |                                                                                      |
| <a href="#">Type Test Certificates/Test Report</a>                                 |                                                                                    |  |  |   | <a href="#">Declaration of Conformity</a>                                            |
|                                                                                    |                                                                                    | GL                                                                                  | LRS                                                                                 | PRS                                                                                  | <a href="#">Environmental Confirmations</a>                                          |

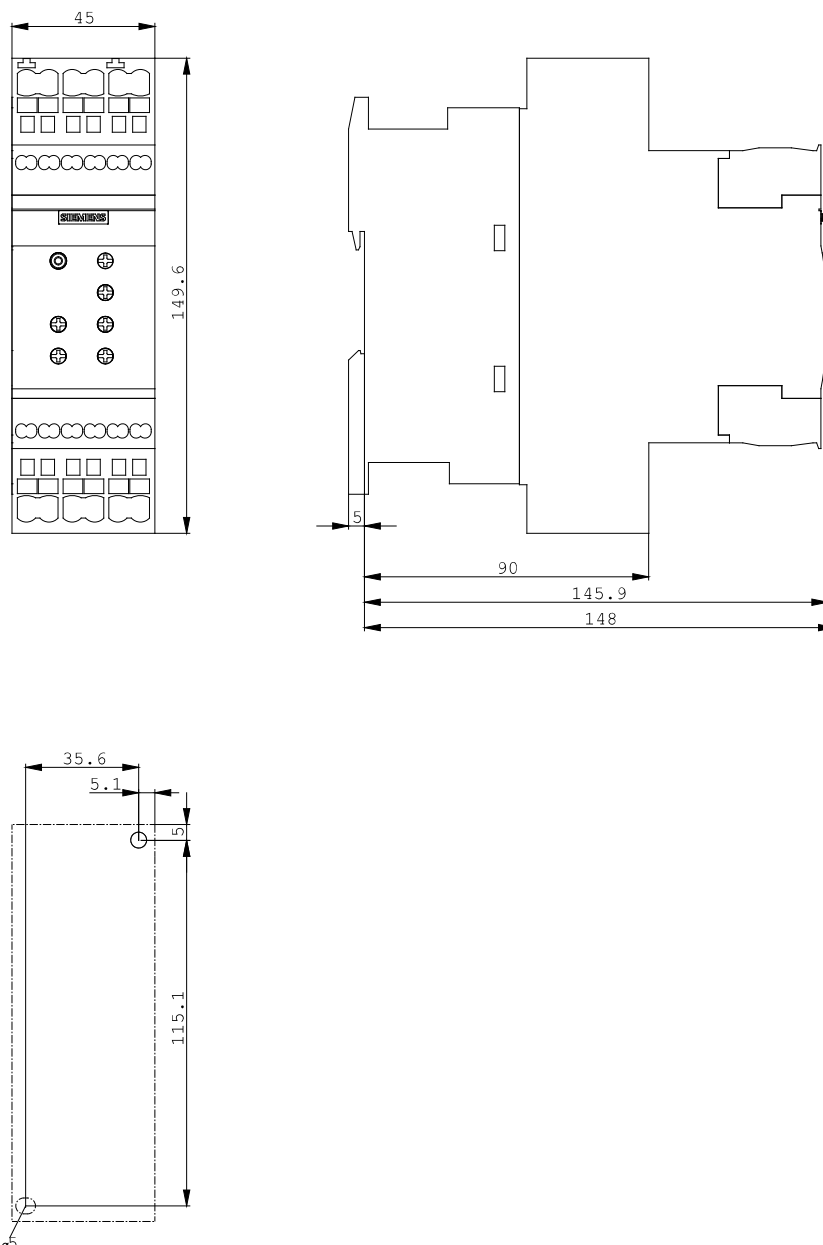
#### UL/CSA ratings

|                                                                                                                                                                                                                                                                                                                                                                        |    |             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|
| <b>yielded mechanical performance (hp) / for three-phase squirrel cage motors</b> <ul style="list-style-type: none"> <li>at 220/230 V / at standard circuit <ul style="list-style-type: none"> <li>at 50 °C / rated value</li> </ul> </li> <li>at 460/480 V / at standard circuit <ul style="list-style-type: none"> <li>at 50 °C / rated value</li> </ul> </li> </ul> | hp | 5           |
|                                                                                                                                                                                                                                                                                                                                                                        | hp | 15          |
| <b>Contact rating designation / for auxiliary contacts / according to UL</b>                                                                                                                                                                                                                                                                                           |    | 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>



last change:

Feb 7, 2013