



SIRIUS SOFT STARTER, VALUES AT 460V,  
50 DEG., STANDARD: 780A, 700HP,  
INSIDE-DELTA CIRCUIT 3: 1351A, 1200HP,  
200-460V AC, 115V AC, SPRING 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                          |  | Yes    |
| • reset external                                                           |  | Yes    |
| • adjustable current limitation                                            |  | Yes    |
| • inside-delta circuit                                                     |  | Yes    |
| <b>Product component / outlet for enine brake</b>                          |  | Yes    |
| <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 high feature applications |
| Operating current          |  |                                             |

|                                                                                                                                                 |    |             |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|
| • at 40 °C / rated value                                                                                                                        | A  | 880         |
| • at 50 °C / rated value                                                                                                                        | A  | 780         |
| • at 60 °C / rated value                                                                                                                        | A  | 693         |
| • for three-phase servomotors / at 3-phase root switching                                                                                       |    |             |
| • at 40 °C / rated value                                                                                                                        | A  | 1,524       |
| • at 50 °C / rated value                                                                                                                        | A  | 1,351       |
| • at 60 °C / rated value                                                                                                                        | A  | 1,200       |
| <b>Emitted mechanical power / for three-phase servomotors</b>                                                                                   |    |             |
| • at 230 V / at standard switching / at 40 °C                                                                                                   |    |             |
| • rated value                                                                                                                                   | W  | 250,000     |
| • at 400 V / at standard switching / at 40 °C                                                                                                   |    |             |
| • rated value                                                                                                                                   | W  | 500,000     |
| • at 230 V / at 3-phase root switching / at 40 °C                                                                                               |    |             |
| • rated value                                                                                                                                   | W  | 500,000     |
| • at 400 V / at 3-phase root switching / at 40 °C                                                                                               |    |             |
| • rated value                                                                                                                                   | W  | 900,000     |
| <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 | 250         |
| <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 ... 460 |
| <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>Operating voltage / at 3-phase root switching / rated value</b>                                                                              | V  | 200 ... 460 |
| <b>Relative negative tolerance / of the operating voltage / with inside-delta circuit</b>                                                       | %  | -15         |
| <b>Relative positive tolerance / of the operating voltage / with inside-delta circuit</b>                                                       | %  | 10          |
| <b>Minimum load in % of I<sub>M</sub></b>                                                                                                       | %  | 8           |
| <b>Adjustable rated current / of the motor / for motor overload protection / minimum</b>                                                        | A  | 176         |
| <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  | 250         |
| <b>Control electronics:</b>                                                                                                                     |    |             |
| <b>Type of voltage / of the controlled supply voltage</b>                                                                                       |    | AC          |

|                                                                                 |    |         |
|---------------------------------------------------------------------------------|----|---------|
| 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 50 Hz / for AC                                                             | V  | 115     |
| • at 60 Hz / for AC                                                             | V  | 115     |
| Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC | %  | -15     |
| Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC | %  | 10      |
| Type of display / for fault signal                                              |    | Display |

| Mechanical design:                                 |    |                                                                                                                   |
|----------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------|
| Width                                              | mm | 510                                                                                                               |
| Height                                             | mm | 640                                                                                                               |
| Depth                                              | mm | 290                                                                                                               |
| Type of mounting                                   |    | screw fixing                                                                                                      |
| mounting position                                  |    | bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar |
| Distance, to be maintained, to the ranks assembly  |    |                                                                                                                   |
| • upwards                                          | mm | 100                                                                                                               |
| • sideways                                         | mm | 5                                                                                                                 |
| • downwards                                        | mm | 75                                                                                                                |
| Installation altitude / at a height over sea level | m  | 5,000                                                                                                             |
| Cable length / maximum                             | m  | 500                                                                                                               |
| Number of poles / for main current circuit         |    | 3                                                                                                                 |

| Electrical connections:                                                                 |  |                                              |
|-----------------------------------------------------------------------------------------|--|----------------------------------------------|
| Design of the electrical connection                                                     |  | busbar connection<br>spring-loaded terminals |
| • for main current circuit                                                              |  |                                              |
| • for auxiliary and control current circuit                                             |  |                                              |
| Number of NC contacts / for auxiliary contacts                                          |  | 0                                            |
| Number of NO contacts / for auxiliary contacts                                          |  | 3                                            |
| Number of change-over switches / for auxiliary contacts                                 |  | 1                                            |
| Type of the connectable conductor cross-section / for DIN cable lug / for main contacts |  |                                              |
| • finely stranded                                                                       |  | 50 ... 240 mm <sup>2</sup>                   |
| • stranded                                                                              |  | 70 ... 240 mm <sup>2</sup>                   |
| Type of the connectable conductor cross-section                                         |  |                                              |

|                                                        |  |                                    |
|--------------------------------------------------------|--|------------------------------------|
| • for AWG conductors / for main contacts               |  | 2/0 ... 500 kcmil                  |
| <b>Type of the connectable conductor cross-section</b> |  |                                    |
| • for auxiliary contacts                               |  |                                    |
| • solid                                                |  | 2x (0.25 ... 1.5 mm <sup>2</sup> ) |
| • finely stranded / with conductor end processing      |  | 2x (0.25 ... 1.5 mm <sup>2</sup> ) |
| • for AWG conductors / for auxiliary contacts          |  | 2x (24 ... 16)                     |

#### Ambient conditions:

|                             |      |             |
|-----------------------------|------|-------------|
| <b>Ambient temperature</b>  |      |             |
| • during operating          | / °C | 60          |
| • during storage            | °C   | -25 ... +80 |
| <b>Derating temperature</b> | °C   | 40          |
| <b>Protection class IP</b>  |      | IP00        |

#### Certificates/approvals:

##### General Product Approval

##### EMC

##### Shipping Approval



CCC



CSA



GOST



UL



C-TICK



LRS

##### other

[Declaration of  
Conformity](#)

[Environmental  
Confirmations](#)

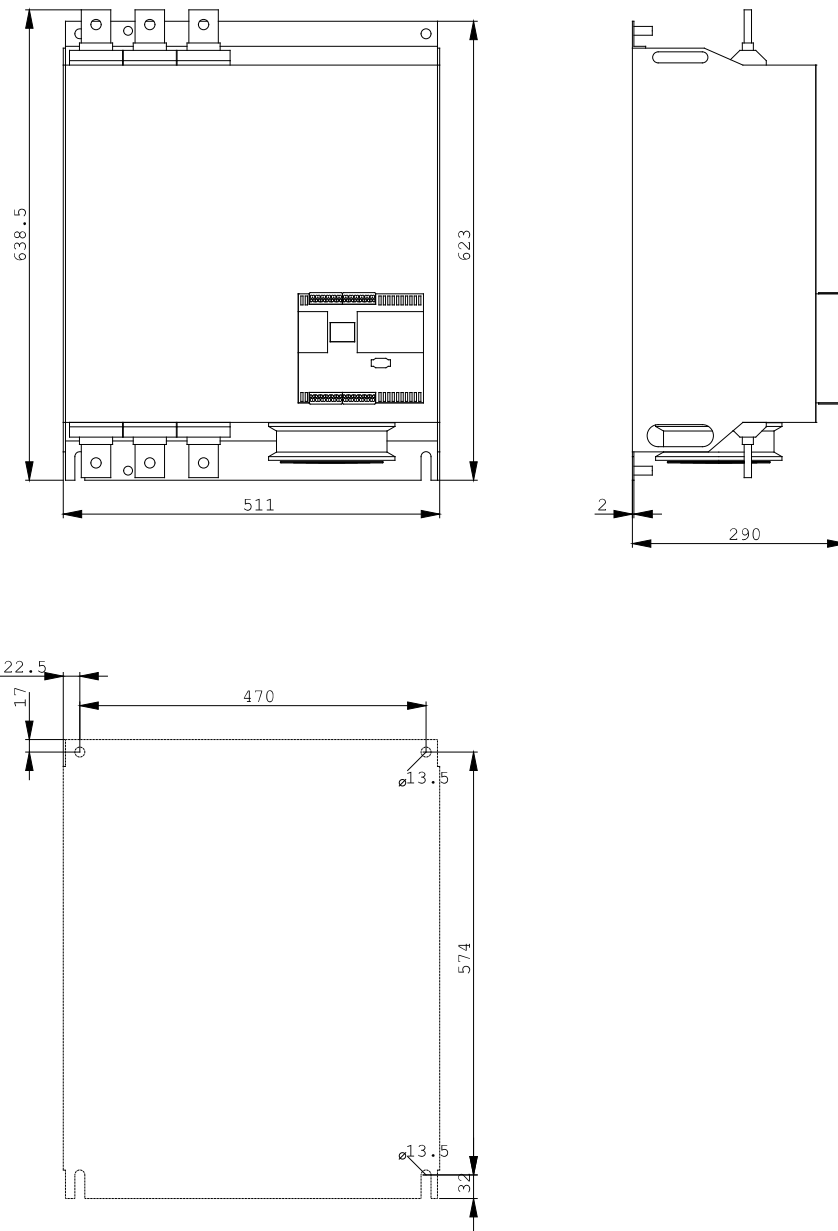
#### UL/CSA ratings

|                                                                                   |    |             |
|-----------------------------------------------------------------------------------|----|-------------|
| <b>yielded mechanical performance (hp) / for three-phase squirrel cage motors</b> |    |             |
| • at 220/230 V / at standard circuit                                              |    |             |
| • at 50 °C / rated value                                                          | hp | 300         |
| • at 460/480 V / at standard circuit                                              |    |             |
| • at 50 °C / rated value                                                          | hp | 700         |
| • at 200/208 V / at inside-delta circuit / at 50 °C / rated value                 | hp | 450         |
| • at 220/230 V / at inside-delta circuit / at 50 °C / rated value                 | hp | 600         |
| • at 460/480 V / at inside-delta circuit / at 50 °C / rated value                 | hp | 1,200       |
| <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>



last change:

Feb 7, 2013