



SIRIUS SOFT STARTER, VALUES AT 575V,  
50DEG., STANDARD: 780A, 850HP,  
INSIDE-DELTA CIRCUIT 3: 1351A, 1500HP,  
400-600V 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 400 V / at standard switching / at 40 °C                                                |    |             |
| • rated value                                                                                | W  | 500,000     |
| • at 500 V / at standard switching / at 40 °C                                                |    |             |
| • rated value                                                                                | W  | 630,000     |
| • at 400 V / at 3-phase root switching / at 40 °C                                            |    |             |
| • rated value                                                                                | W  | 900,000     |
| • at 500 V / at 3-phase root switching / at 40 °C                                            |    |             |
| • rated value                                                                                | W  | 1,000,000   |
| <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  | 400 ... 600 |
| <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  | 400 ... 600 |
| <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          |
| <b>Control supply voltage frequency / 1 / rated value</b>                                    |    |             |
|                                                                                              | Hz | 50          |
| <b>Control supply voltage frequency / 2 / rated value</b>                                    |    |             |
|                                                                                              | 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 |

|                                                    |    |                                                                                                                   |
|----------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------|
| <b>Mechanical design:</b>                          |    |                                                                                                                   |
| 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                                                                                                                 |

|                                                                                         |  |                            |
|-----------------------------------------------------------------------------------------|--|----------------------------|
| <b>Electrical connections:</b>                                                          |  |                            |
| Design of the electrical connection                                                     |  |                            |
| • for main current circuit                                                              |  | busbar connection          |
| • for auxiliary and control current circuit                                             |  | spring-loaded terminals    |
| 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          |
| Type of the connectable conductor cross-section                                         |  |                            |

- for auxiliary contacts
  - solid
  - finely stranded / with conductor end processing
- for AWG conductors / for auxiliary contacts

2x (0.25 ... 1.5 mm<sup>2</sup>)  
 2x (0.25 ... 1.5 mm<sup>2</sup>)  
 2x (24 ... 16)

#### Ambient conditions:

##### Ambient temperature

- during operating
- during storage

/ °C 60  
 °C -25 ... +80

##### Derating temperature

°C 40

##### Protection class IP

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

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

- at 460/480 V / at standard circuit
  - at 50 °C / rated value
- at 575/600 V / at standard circuit
  - at 50 °C / rated value
- at 460/480 V / at inside-delta circuit / at 50 °C / rated value
- at 575/600 V / at inside-delta circuit / at 50 °C / rated value

hp 700  
 hp 850  
 hp 1,200  
 hp 1,500

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

B300 / R300

#### Further information:

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

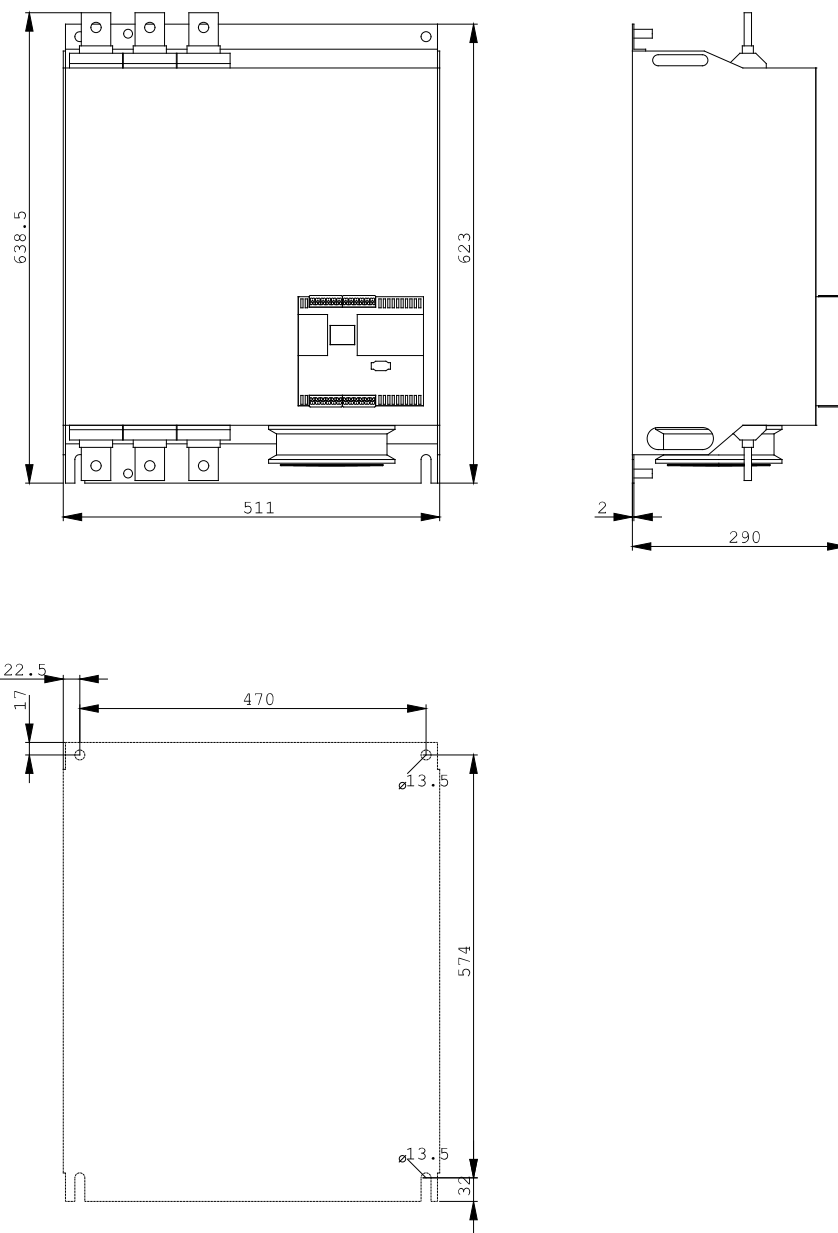
<http://www.siemens.com/industrial-controls/catalogs>

##### Industry Mall (Online ordering system)

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

##### CAX-Online-Generator

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



last change:

Feb 7, 2013