



SIRIUS SOFT STARTER, VALUES AT 575V,  
50DEGREES, STANDARD: 850A, 950HP,  
INSIDE-DELTA CIRCUIT 3: 1472A, 1650HP,  
AC 400-600V, AC 115V,  
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                          |  | 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  | 970         |
| • at 50 °C / rated value                                                                     | A  | 850         |
| • at 60 °C / rated value                                                                     | A  | 760         |
| • for three-phase servomotors / at 3-phase root switching                                    |    |             |
| • at 40 °C / rated value                                                                     | A  | 1,680       |
| • at 50 °C / rated value                                                                     | A  | 1,472       |
| • at 60 °C / rated value                                                                     | A  | 1,316       |
| <b>Emitted mechanical power / for three-phase servomotors</b>                                |    |             |
| • at 400 V / at standard switching / at 40 °C                                                |    |             |
| • rated value                                                                                | W  | 560,000     |
| • at 500 V / at standard switching / at 40 °C                                                |    |             |
| • rated value                                                                                | W  | 710,000     |
| • at 400 V / at 3-phase root switching / at 40 °C                                            |    |             |
| • rated value                                                                                | W  | 1,000,000   |
| • at 500 V / at 3-phase root switching / at 40 °C                                            |    |             |
| • rated value                                                                                | W  | 1,200,000   |
| <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  | 194         |
| <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  | 270         |
| <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          |

|                                                                                        |        |            |
|----------------------------------------------------------------------------------------|--------|------------|
| <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</b><br>• at 50 Hz / for AC<br>• at 60 Hz / for AC        | V<br>V | 115<br>115 |
| <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>Type of display / for fault signal</b>                                              |        | Display    |

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

|                                                                                                                                   |  |                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|
| <b>Electrical connections:</b>                                                                                                    |  |                                                          |
| <b>Design of the electrical connection</b><br>• for main current circuit<br>• for auxiliary and control current circuit           |  | busbar connection<br>spring-loaded terminals             |
| <b>Number of NC contacts / for auxiliary contacts</b>                                                                             |  | 0                                                        |
| <b>Number of NO contacts / for auxiliary contacts</b>                                                                             |  | 3                                                        |
| <b>Number of change-over switches / for auxiliary contacts</b>                                                                    |  | 1                                                        |
| <b>Type of the connectable conductor cross-section / for DIN cable lug / for main contacts</b><br>• finely stranded<br>• stranded |  | 50 ... 240 mm <sup>2</sup><br>70 ... 240 mm <sup>2</sup> |
| <b>Type of the connectable conductor cross-section</b><br>• for AWG conductors / for main contacts                                |  | 2/0 ... 500 kcmil                                        |
| <b>Type of the connectable conductor cross-section</b>                                                                            |  |                                                          |

- 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

##### Test Certificates



CCC



CSA



GOST



UL



C-TICK

[Special Test Certificate](#)

##### Shipping Approval



BUREAU  
VERITAS



DNV



GL



LRS



PRS

##### 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 750  
 hp 950  
 hp 1,300  
 hp 1,650

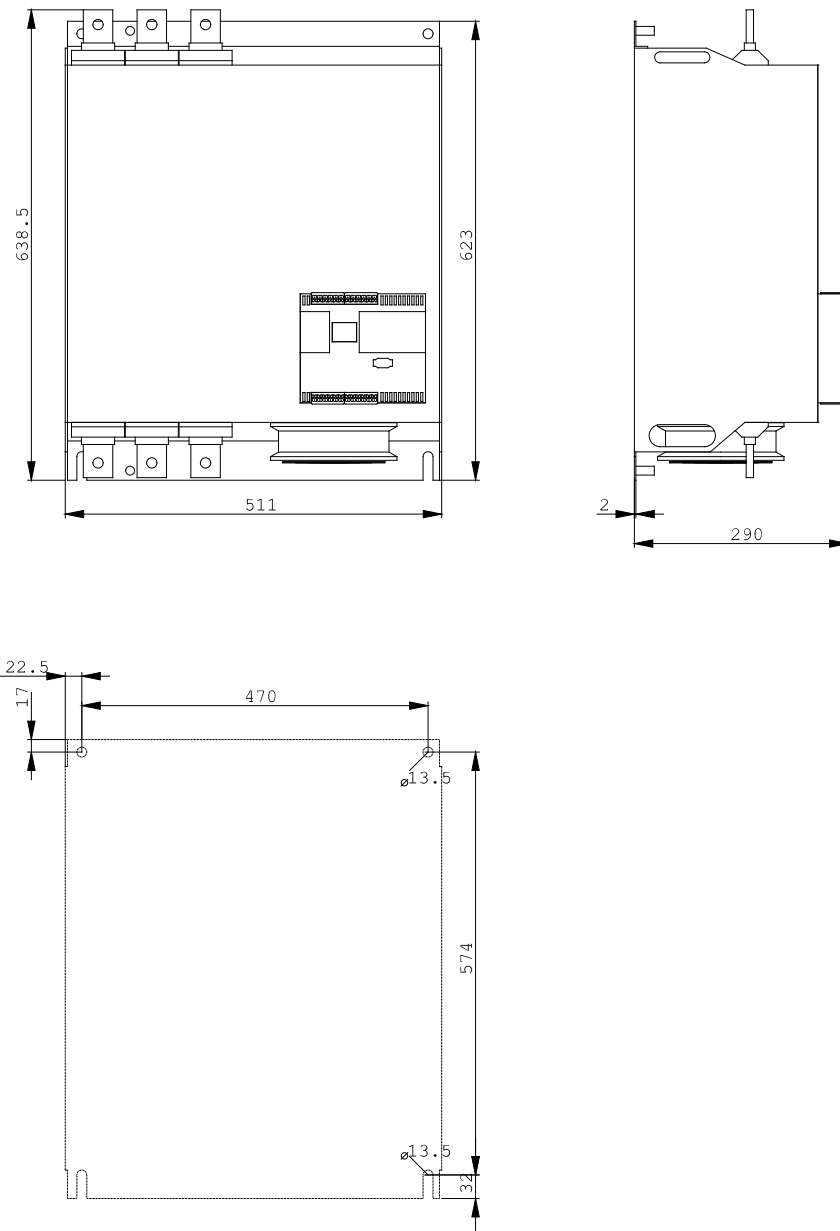
##### Contact rating designation / for auxiliary contacts / according to UL

B300 / R300

#### Further information:

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

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



last change:

Feb 7, 2013