



SIRIUS SOFT STARTER, VALUES WITH 500 V,
 40 DEG., STANDARD: 29A, 18,5KW,
 INSIDE-DELTA CIRCUIT 3: 50A, 30KW,
 400-600 V AC, 230 V AC,
 CAGE CLAMP TERMINALS

General details:

| | | |
|--|--|--------|
| product brand name | | SIRIUS |
| Product equipment | | |
| <ul style="list-style-type: none"> integrated bridging contact system | | Yes |
| <ul style="list-style-type: none"> thyristors | | Yes |
| Product function | | |
| <ul style="list-style-type: none"> intrinsic device protection | | Yes |
| <ul style="list-style-type: none"> motor overload protection | | Yes |
| <ul style="list-style-type: none"> evaluation of thermal resistor motor protection | | Yes |
| <ul style="list-style-type: none"> reset external | | Yes |
| <ul style="list-style-type: none"> adjustable current limitation | | Yes |
| <ul style="list-style-type: none"> inside-delta circuit | | Yes |
| Product component / outlet for enine brake | | Yes |
| Item designation | | |
| <ul style="list-style-type: none"> according to DIN EN 61346-2 | | Q |
| <ul style="list-style-type: none"> according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | G |

Power Electronics:

| | | |
|----------------------------|--|---|
| product designation | | soft starters for high feature applications |
| Operating current | | |

| | | |
|--|----|-------------|
| • at 40 °C / rated value | A | 29 |
| • at 50 °C / rated value | A | 26 |
| • at 60 °C / rated value | A | 23 |
| • for three-phase servomotors / at 3-phase root switching | | |
| • at 40 °C / rated value | A | 50 |
| • at 50 °C / rated value | A | 45 |
| • at 60 °C / rated value | A | 40 |
| Emitted mechanical power / for three-phase servomotors | | |
| • at 400 V / at standard switching / at 40 °C | | |
| • rated value | W | 15,000 |
| • at 500 V / at standard switching / at 40 °C | | |
| • rated value | W | 18,500 |
| • at 400 V / at 3-phase root switching / at 40 °C | | |
| • rated value | W | 22,000 |
| • at 500 V / at 3-phase root switching / at 40 °C | | |
| • rated value | W | 30,000 |
| Operating frequency | | |
| • rated value | Hz | 50 ... 60 |
| Relative negative tolerance / of the operating frequency | % | -10 |
| Relative positive tolerance / of the operating frequency | % | 10 |
| Operating voltage / with standard circuit / rated value | V | 400 ... 600 |
| Relative negative tolerance / of the operating voltage / with standard circuit | % | -15 |
| Relative positive tolerance / of the operating voltage / with standard circuit | % | 10 |
| Operating voltage / at 3-phase root switching / rated value | V | 400 ... 600 |
| Relative negative tolerance / of the operating voltage / with inside-delta circuit | % | -15 |
| Relative positive tolerance / of the operating voltage / with inside-delta circuit | % | 10 |
| Minimum load in % of I_M | % | 8 |
| Adjustable rated current / of the motor / for motor overload protection / minimum | A | 5 |
| Continuous operating current in % of I_e / at 40°C | % | 115 |
| Active power loss / at operating current / at 40°C / during operating phase / typical | W | 8 |
| Control electronics: | | |
| Type of voltage / of the controlled supply voltage | | 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 | 230 |
| • at 60 Hz / for AC | V | 230 |
| 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 | 170 |
| Height | mm | 192 |
| Depth | mm | 270 |
| 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 | | |
| • for main current circuit | | box 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 | | 3 |
| 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 | | 2.5 ... 16 mm ² |
| • finely stranded / with conductor end processing | | 2.5 ... 35 mm ² |
| • finely stranded / without conductor end processing | | 4 ... 50 mm ² |
| • stranded | | 4 ... 70 mm ² |

| | | |
|--|--|---|
| <p>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point</p> <ul style="list-style-type: none"> • solid • finely stranded / with conductor end processing • without conductor final cutting / without conductor end processing • stranded | | <p>2,5 ... 16 mm²</p> <p>2.5 ... 50 mm²</p> <p>10 ... 50 mm²</p> <p>10 ... 70 mm²</p> |
| <p>Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points</p> <ul style="list-style-type: none"> • solid • finely stranded / with conductor end processing • without conductor final cutting / without conductor end processing • stranded | | <p>2x (2.5 ... 16 mm²)</p> <p>2x (2.5 ... 35 mm²)</p> <p>2x (4 ... 35 mm²)</p> <p>2x (4 ... 50 mm²)</p> |
| <p>Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal</p> <ul style="list-style-type: none"> • when using the back cl • when using the front c • when using both clampi | | <p>10 ... 2/0</p> <p>10 ... 2/0</p> <p>2x (10 ... 1/0)</p> |
| <p>Type of the connectable conductor cross-section</p> <ul style="list-style-type: none"> • for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded / with conductor end processing • for AWG conductors / for auxiliary contacts | | <p>2x (0.25 ... 1.5 mm²)</p> <p>2x (0.25 ... 1.5 mm²)</p> <p>2x (24 ... 16)</p> |

Ambient conditions:

| | | |
|--|-----------------------|------------------------------|
| <p>Ambient temperature</p> <ul style="list-style-type: none"> • during operating • during storage | <p>/ °C</p> <p>°C</p> | <p>60</p> <p>-25 ... +80</p> |
| <p>Derating temperature</p> | <p>°C</p> | <p>40</p> |
| <p>Protection class IP</p> | | <p>IP00</p> |

Certificates/approvals:

General Product Approval

EMC



Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



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 | 15 |
| hp | 20 |
| hp | 30 |
| hp | 40 |

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

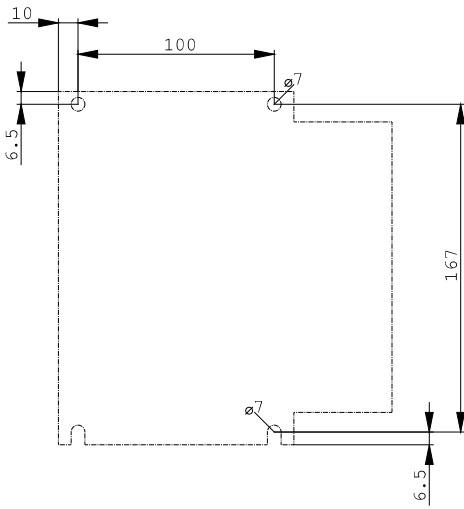
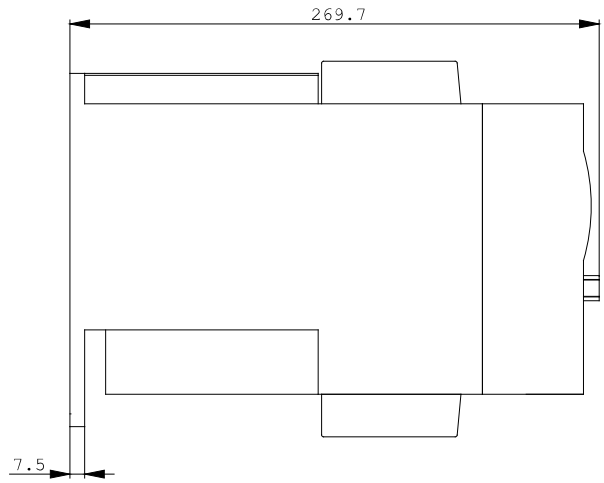
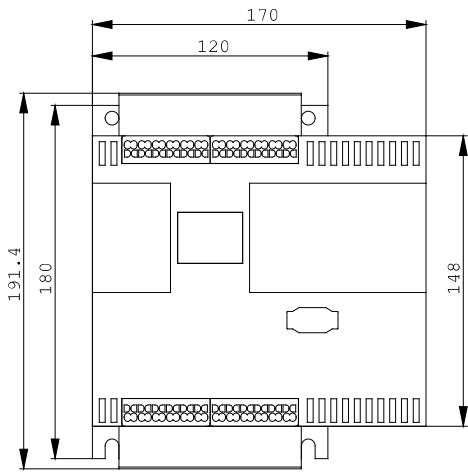
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RW4422-3BC45/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4422-3BC45



last change:

Feb 7, 2013