



SIRIUS SOFT STARTER, S3, 80A,
45KW/400V, 40 DEGR., AC 200-480V,
AC/DC 24V, SCREW 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 | | No |
| <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 | | No |
| Product component / outlet for enine brake | | No |
| Reference code | | |
| <ul style="list-style-type: none"> according to DIN EN 61346-2 | | Q |
| <ul style="list-style-type: none"> according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 | | G |

Power Electronics:

| | | |
|----------------------------|--|---|
| Product designation | | soft starters for standard applications |
| Operating current | | |

| | | |
|--|----|-------------|
| <ul style="list-style-type: none"> • at 40 °C / rated value • at 50 °C / rated value • at 60 °C / rated value | A | 80 |
| | A | 73 |
| | A | 66 |
| Emitted mechanical power / for three-phase servomotors | | |
| <ul style="list-style-type: none"> • at 230 V / at standard switching / at 40 °C <ul style="list-style-type: none"> • rated value • at 400 V / at standard switching / at 40 °C <ul style="list-style-type: none"> • rated value | W | 22,000 |
| | W | 45,000 |
| yielded mechanical performance [hp] / for three-phase squirrel cage motors / at 200/208 V / at standard circuit / at 50 °C / rated value | hp | 20 |
| Operating frequency | | |
| <ul style="list-style-type: none"> • 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 | 200 ... 480 |
| Relative negative tolerance / of the operating voltage / with standard circuit | % | -15 |
| Relative positive tolerance / of the operating voltage / with standard circuit | % | 10 |
| Minimum load in % of I_M | % | 20 |
| Adjustable rated current of the motor / for motor overload protection / minimum | A | 43 |
| 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 | 12 |

Control electronics:

| | | |
|--|----|-------|
| Voltage type / of control feed voltage | | AC/DC |
| 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 | | |
| <ul style="list-style-type: none"> • for AC / at 50 Hz • for AC / at 60 Hz | V | 24 |
| | V | 24 |
| Relative negative tolerance / of the control supply voltage / at 60 Hz / for AC | % | -20 |
| Relative positive tolerance / of the control supply voltage / at 60 Hz / for AC | % | 20 |
| Control supply voltage / 1 / for DC / rated value | V | 24 |

| | | |
|--|---|-----|
| Relative negative tolerance / of the control supply voltage / for DC | % | -20 |
| Relative positive tolerance / of the control supply voltage / for DC | % | 20 |
| Type of display / for fault signal | | red |

Mechanical design:

| | | |
|--|----|--|
| Size of the engine control device | | S3 |
| Width | mm | 70 |
| Height | mm | 170 |
| Depth | mm | 190 |
| Mounting type | | 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 | 30 |
| • 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 | | screw-type terminals |
| • for auxiliary and control current circuit | | screw-type terminals |
| Number of NC contacts / for auxiliary contacts | | 0 |
| Number of NO contacts / for auxiliary contacts | | 2 |
| Number of changeover contacts / 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 (2.5 ... 16 mm ²) |
| • finely stranded / with conductor end processing | | 2.5 ... 35 mm ² |
| • stranded | | 4 ... 70 mm ² |
| Type of the connectable conductor cross-section / for main contacts / for box terminal / when using the back clamping point | | |
| • solid | | 2x (2.5 ... 16 mm ²) |
| • finely stranded / with conductor end processing | | 2.5 ... 50 mm ² |
| • stranded | | 10 ... 70 mm ² |

| | | |
|--|--|--|
| Type of the connectable conductor cross-section / for main contacts / for box terminal / when using both clamping points <ul style="list-style-type: none"> • solid • finely stranded / with conductor end processing • stranded | | 2x (2.5 ... 16 mm ²) 2x (2.5 ... 35 mm ²) 2x (10 ... 50 mm ²) |
| Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal <ul style="list-style-type: none"> • when using the back cl • when using the front c • when using both clampi | | 2x (10 ... 1/0) 2x (10 ... 1/0) 10 ... 2/0 |
| Type of the connectable conductor cross-section / for DIN cable lug / for main contacts <ul style="list-style-type: none"> • finely stranded • stranded | | 2 x (10 ... 50 mm ²) 2x (10 ... 70 mm ²) |
| Type of the connectable conductor cross-section <ul style="list-style-type: none"> • for AWG conductors / for main contacts | | 2x (7 ... 1/0) |
| Type of the connectable conductor cross-section <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 <ul style="list-style-type: none"> • finely stranded / with wire end proc | | 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²) 2x (20 ... 14) 2x (20 ... 16) |

Ambient conditions:

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

Certificates/approvals:

| | | |
|---------------------------------|------------|---------------------------------------|
| General Product Approval | EMC | For use in hazardous locations |
|---------------------------------|------------|---------------------------------------|



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 220/230 V / at standard circuit
 - at 50 °C / rated value
- at 460/480 V / at standard circuit
 - at 50 °C / rated value

hp 25

hp 50

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

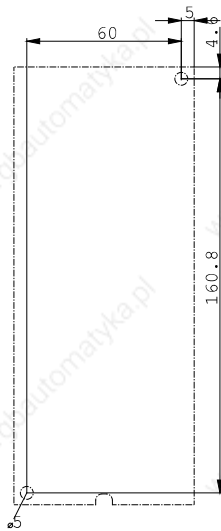
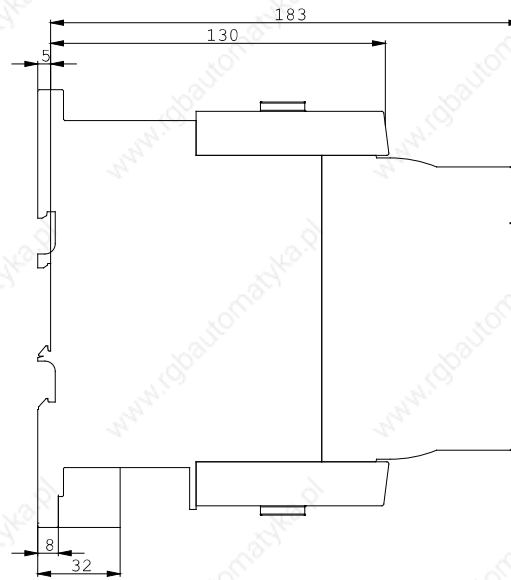
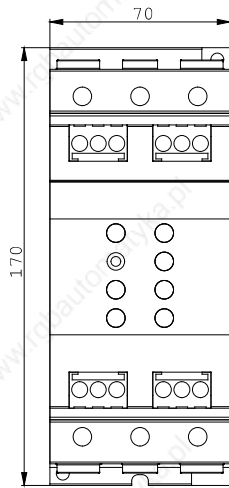
<http://www.siemens.com/cax>

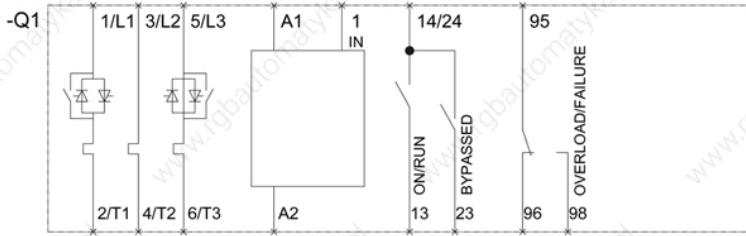
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/VW/view/en/3RW4046-1BB04/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RW4046-1BB04





last change:

Jul 7, 2014