



SIRIUS SOFT STARTER, VALUES WITH 575 V, 50 DEG., STANDARD: 315A, 300HP, INSIDE-DELTA CIRCUIT 3: 546A, 600HP, 400-600 V AC, 115 V AC, CAGE CLAMP TERMINALS

General technical data:

| | | |
|---|--|--------|
| product brand name | | SIRIUS |
| Product feature | | |
| <ul style="list-style-type: none"> • integrated bypass 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 thermistor motor protection | | Yes |
| <ul style="list-style-type: none"> • External reset | | Yes |
| <ul style="list-style-type: none"> • Adjustable current limitation | | Yes |
| <ul style="list-style-type: none"> • inside-delta circuit | | Yes |
| Product component Motor brake output | | Yes |
| Equipment marking acc. to DIN EN 61346-2 | | Q |
| Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | | G |

Power Electronics:

| | | |
|---|---|---|
| Product designation | | soft starters for high feature applications |
| Operating current | | |
| <ul style="list-style-type: none"> • at 40 °C Rated value | A | 356 |
| <ul style="list-style-type: none"> • at 50 °C Rated value | A | 315 |
| <ul style="list-style-type: none"> • at 60 °C Rated value | A | 280 |
| Operating current for three-phase motors at 3-phase root switching | | |
| <ul style="list-style-type: none"> • at 40 °C Rated value | A | 617 |

| | | |
|---|----|-------------|
| • at 50 °C Rated value | A | 546 |
| • at 60 °C Rated value | A | 485 |
| Mechanical power output for three-phase motors | | |
| • at 400 V | | |
| — at standard circuit at 40 °C Rated value | W | 200 000 |
| — at 3-phase root switching at 40 °C Rated value | W | 355 000 |
| • at 500 V | | |
| — at standard circuit at 40 °C Rated value | W | 250 000 |
| — at 3-phase root switching at 40 °C Rated value | W | 450 000 |
| 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 at standard circuit Rated value | V | 400 ... 600 |
| Relative negative tolerance of the operating voltage at standard circuit | % | -15 |
| Relative positive tolerance of the operating voltage at standard circuit | % | 10 |
| Operating voltage at 3-phase root switching Rated value | V | 400 ... 600 |
| Relative negative tolerance of the operating voltage at 3-phase root switching | % | -15 |
| Relative positive tolerance of the operating voltage at 3-phase root switching | % | 10 |
| Minimum load in % of I_M | % | 8 |
| Adjustable motor current for motor overload protection minimum rated value | A | 71 |
| Continuous operating current in % of I_e at 40 °C | % | 115 |
| Active power loss at operating current at 40 °C during operation typical | W | 174 |

Control electronics:

| | | |
|--|----|-----|
| Type of voltage of the control 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 with AC | | |
| • at 50 Hz Rated value | V | 115 |
| • at 60 Hz Rated value | V | 115 |

| | | |
|--|---|---------|
| Relative negative tolerance of the control supply voltage with AC at 60 Hz | % | -15 |
| Relative positive tolerance of the control supply voltage with AC at 60 Hz | % | 10 |
| Display version for fault signal | | Display |

Mechanical data:

| | | |
|---|----|---|
| Width | mm | 210 |
| Height | mm | 230 |
| Depth | mm | 298 |
| Mounting type | | screw fixing |
| mounting position | | bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar |
| Required spacing with side-by-side mounting | | |
| • upwards | mm | 100 |
| • at the side | mm | 5 |
| • downwards | mm | 75 |
| Installation altitude at height above sea level | m | 5 000 |
| Cable length maximum | m | 500 |
| Number of poles for main current circuit | | 3 |

Connections/ Terminals:

| | | |
|---|--|--|
| Type of electrical connection | | busbar connection 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 CO contacts for auxiliary contacts | | 1 |
| Type of connectable conductor cross-section for main contacts for box terminal using the front clamping point | | |
| • finely stranded with core end processing | | 70 ... 240 mm ² |
| • finely stranded without core end processing | | 70 ... 240 mm ² |
| • stranded | | 95 ... 300 mm ² |
| Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point | | |
| • finely stranded with core end processing | | 120 ... 185 mm ² |
| • finely stranded without core end processing | | 120 ... 185 mm ² |
| • stranded | | 120 ... 240 mm ² |
| Type of connectable conductor cross-section for main contacts for box terminal using both clamping points | | |
| • finely stranded with core end processing | | min. 2x 50 mm ² , max. 2x 185 mm ² |

| | | |
|---|--|--|
| <ul style="list-style-type: none"> finely stranded without core end processing stranded | | min. 2x 50 mm ² , max. 2x 185 mm ² max. 2x 70 mm ² , max. 2x 240 mm ² |
| Type of connectable conductor cross-section for AWG conductors for main contacts for box terminal <ul style="list-style-type: none"> using the back clamping point using the front clamping point using both clamping points | | 250 ... 500 kcmil 3/0 ... 600 kcmil min. 2x 2/0, max. 2x 500 kcmil |
| Type of connectable conductor cross-section for DIN cable lug for main contacts <ul style="list-style-type: none"> finely stranded stranded | | 50 ... 240 mm ² 70 ... 240 mm ² |
| Type of connectable conductor cross-section for auxiliary contacts <ul style="list-style-type: none"> solid finely stranded with core end processing | | 2x (0.25 ... 1.5 mm ²) 2x (0.25 ... 1.5 mm ²) |
| Type of connectable conductor cross-section for AWG conductors <ul style="list-style-type: none"> for main contacts for auxiliary contacts | | 2/0 ... 500 kcmil 2x (24 ... 16) |

Ambient conditions:

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

Certificates/ approvals:

| | | |
|--------------------------|-----|---------------------------|
| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|



| | |
|-------------------|-------------------|
| Test Certificates | Shipping Approval |
|-------------------|-------------------|

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| | |
|-------------------|-------|
| Shipping Approval | other |
|-------------------|-------|



[Environmental Confirmations](#)

UL/CSA ratings:

| | | |
|--|-----------|-------------|
| <p>yielded mechanical performance [hp] for three-phase AC motor</p> <ul style="list-style-type: none"> at 460/480 V <ul style="list-style-type: none"> at standard circuit at 50 °C Rated value at 3-phase root switching at 50 °C Rated value at 575/600 V <ul style="list-style-type: none"> at standard circuit at 50 °C Rated value at 3-phase root switching at 50 °C Rated value | metric hp | 250 |
| | metric hp | 450 |
| | metric hp | 300 |
| | metric hp | 600 |
| Contact rating of the auxiliary contacts acc. to UL | | B300 / R300 |

Further information

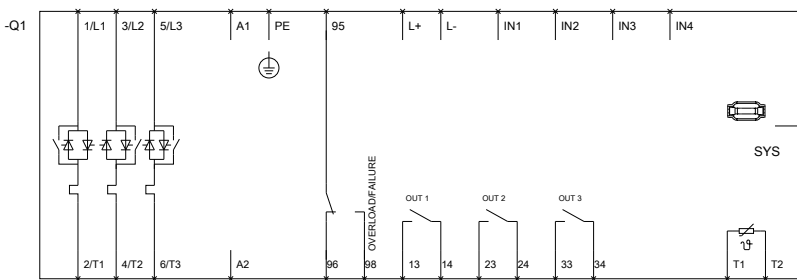
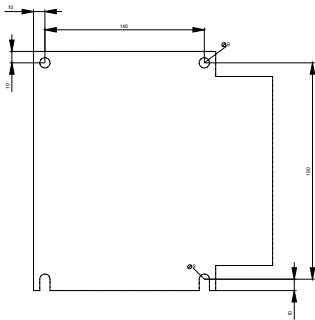
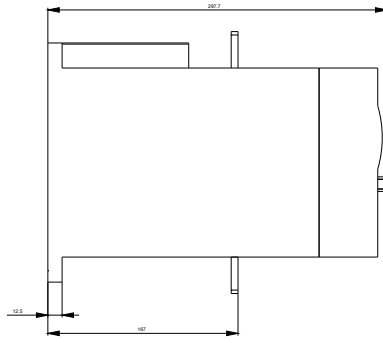
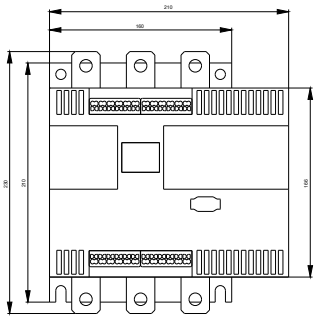
Information- and Downloadcenter (Catalogs, Brochures,...)
<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)
<http://www.siemens.com/industrymall>

Cax online generator
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44462BC35>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
<http://support.automation.siemens.com/WW/view/en/3RW44462BC35/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44462BC35&lang=en>



last modified:

15.01.2015