



SIRIUS SOFT STARTER, VALUES WITH 460 V, 50 DEG., STANDARD: 42A, 25HP, INSIDE-DELTA CIRCUIT 3: 73A, 50HP, 200-460 V AC, 115 V AC, SCREW TERMINALS

General technical data:

| | | |
|--|--|--------|
| product brand name | | SIRIUS |
| Product feature | | |
| • integrated bypass contact system | | Yes |
| • Thyristors | | Yes |
| Product function | | |
| • Intrinsic device protection | | Yes |
| • motor overload protection | | Yes |
| • Evaluation of thermistor motor protection | | Yes |
| • External reset | | Yes |
| • Adjustable current limitation | | Yes |
| • 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 | | |
| • at 40 °C Rated value | A | 47 |
| • at 50 °C Rated value | A | 42 |
| • at 60 °C Rated value | A | 37 |
| Operating current for three-phase motors at 3-phase root switching | | |
| • at 40 °C Rated value | A | 81 |

| | | |
|---|--------------|-------------|
| • at 50 °C Rated value | A | 73 |
| • at 60 °C Rated value | A | 64 |
| Mechanical power output for three-phase motors | | |
| • at 230 V | | |
| — at standard circuit at 40 °C Rated value | W | 11 000 |
| — at 3-phase root switching at 40 °C Rated value | W | 22 000 |
| • at 400 V | | |
| — at standard circuit at 40 °C Rated value | W | 22 000 |
| — at 3-phase root switching at 40 °C Rated value | W | 45 000 |
| yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C Rated value | metric hp | 10 |
| 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 | 200 ... 460 |
| 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 | 200 ... 460 |
| 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 | 9 |
| Continuous operating current in % of I_e at 40 °C | % | 115 |
| Active power loss at operating current at 40 °C during operation typical | W | 32 |
| 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 |

| | | |
|---|---|---------|
| <ul style="list-style-type: none"> • 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 | 170 |
| Height | mm | 192 |
| Depth | mm | 270 |
| 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 | | |
| <ul style="list-style-type: none"> • upwards | mm | 100 |
| <ul style="list-style-type: none"> • at the side | mm | 5 |
| <ul style="list-style-type: none"> • 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 | | |
| <ul style="list-style-type: none"> • for main current circuit | | box terminals |
| <ul style="list-style-type: none"> • for auxiliary and control current circuit | | screw-type terminals |
| 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 | | |
| <ul style="list-style-type: none"> • solid | | 2.5 ... 16 mm ² |
| <ul style="list-style-type: none"> • finely stranded with core end processing | | 2.5 ... 35 mm ² |
| <ul style="list-style-type: none"> • finely stranded without core end processing | | 4 ... 50 mm ² |
| <ul style="list-style-type: none"> • stranded | | 4 ... 70 mm ² |
| Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point | | |
| <ul style="list-style-type: none"> • solid | | 2,5 ... 16 mm ² |
| <ul style="list-style-type: none"> • finely stranded with core end processing | | 2.5 ... 50 mm ² |
| <ul style="list-style-type: none"> • finely stranded without core end processing | | 10 ... 50 mm ² |
| <ul style="list-style-type: none"> • stranded | | 10 ... 70 mm ² |

| | | |
|--|--|--|
| Type of connectable conductor cross-section for main contacts for box terminal using both clamping points <ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing • stranded | | 2x (2.5 ... 16 mm ²) 2x (2.5 ... 35 mm ²) 2x (4 ... 35 mm ²) 2x (4 ... 50 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 | | 10 ... 2/0 10 ... 2/0 2x (10 ... 1/0) |
| Type of connectable conductor cross-section for auxiliary contacts <ul style="list-style-type: none"> • solid • finely stranded with core end processing | | 2x (0.5 ... 2.5 mm ²) 2x (0.5 ... 1.5 mm ²) |
| Type of connectable conductor cross-section for AWG conductors <ul style="list-style-type: none"> • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing | | 2x (20 ... 14) 2x (20 ... 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 |
|--------------------------|-----|---------------------------|-------------------|



[Special Test Certificate](#)

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

[Type Test Certificates/Test Report](#)



ABS

BUREAU VERITAS

DNV

GL

LRS

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



PRS

[Environmental Confirmations](#)

UL/CSA ratings:

yielded mechanical performance [hp] for three-phase AC motor

- at 200/208 V

- at 3-phase root switching at 50 °C Rated value

metric hp 20

- at 220/230 V

- at standard circuit at 50 °C Rated value
 - at 3-phase root switching at 50 °C Rated value

metric hp 15
metric hp 25

- at 460/480 V

- at standard circuit at 50 °C Rated value
 - at 3-phase root switching at 50 °C Rated value

metric hp 25
metric hp 50

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

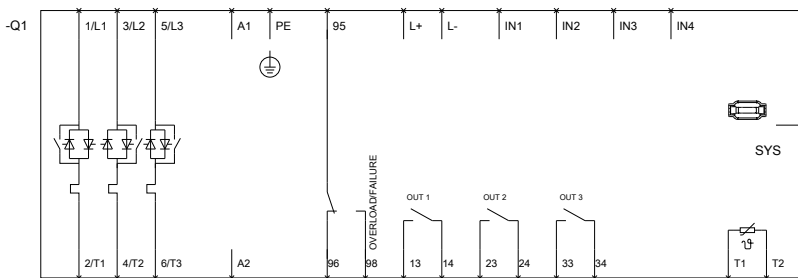
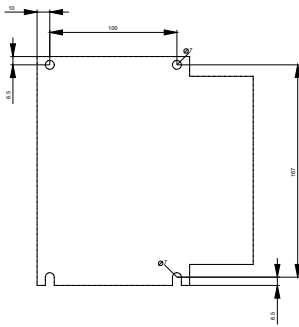
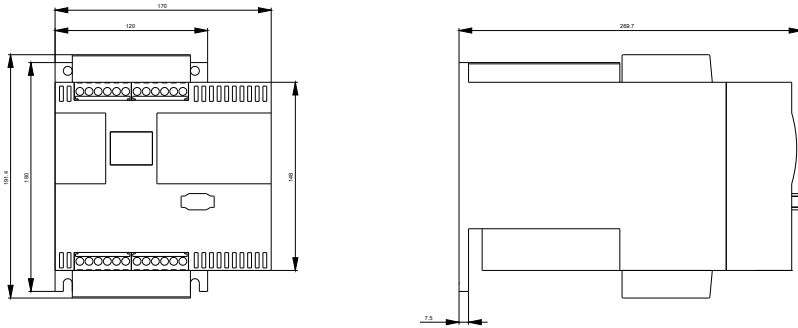
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mf=3RW44241BC34>

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

<http://support.automation.siemens.com/WW/view/en/3RW44241BC34/all>

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

<http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44241BC34&lang=en>



last modified:

15.01.2015