



SIRIUS soft starter S12 315 A, 300 hp/575 V, 50 °C 400-600 V AC, 115 V AC Screw terminals !!! Phased-out product !!!
 Successor is SIRIUS 3RW5, Preferred successor type is
 >>3RW5075-6AB15<<

| 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 | | No |
| • external reset | | Yes |
| • adjustable current limitation | | Yes |
| • inside-delta circuit | | No |
| product component motor brake output | | No |
| insulation voltage rated value | V | 600 |
| degree of pollution | | 3, acc. to IEC 60947-4-2 |
| reference code acc. to DIN EN 61346-2 | | Q |
| reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | | G |
| Power Electronics | | |
| product designation | | Soft starter |
| operational current | | |
| • at 40 °C rated value | A | 356 |
| • at 50 °C rated value | A | 315 |
| • at 60 °C rated value | A | 280 |
| yielded mechanical performance for 3-phase motors | | |
| • at 400 V | | |
| — at standard circuit at 40 °C rated value | W | 200 000 |
| • at 500 V | | |
| — at standard circuit at 40 °C rated value | W | 250 000 |
| 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 |
| minimum load [%] | % | 20 |

| | | |
|--|----|---|
| adjustable motor current for motor overload protection minimum rated value | A | 131 |
| continuous operating current [% of I _e] at 40 °C | % | 115 |
| power loss [W] at operational current at 40 °C during operation typical | W | 125 |
| Control circuit/ Control | | |
| 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 at AC | | |
| • at 50 Hz rated value | V | 115 |
| • at 60 Hz rated value | V | 115 |
| relative negative tolerance of the control supply voltage at AC at 50 Hz | % | -15 |
| relative positive tolerance of the control supply voltage at AC at 50 Hz | % | 10 |
| relative negative tolerance of the control supply voltage at AC at 60 Hz | % | -15 |
| relative positive tolerance of the control supply voltage at AC at 60 Hz | % | 10 |
| display version for fault signal | | red |
| Mechanical data | | |
| size of engine control device | | S12 |
| width | mm | 160 |
| height | mm | 230 |
| depth | mm | 278 |
| fastening method | | screw fixing |
| 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 |
| required spacing with side-by-side mounting | | |
| • upwards | mm | 100 |
| • at the side | mm | 5 |
| • downwards | mm | 75 |
| wire length maximum | m | 300 |
| number of poles for main current circuit | | 3 |
| Connections/ Terminals | | |
| type of electrical connection | | |
| • for main current circuit | | busbar connection |
| • for auxiliary and control circuit | | screw-type terminals |
| number of NC contacts for auxiliary contacts | | 0 |
| number of NO contacts for auxiliary contacts | | 2 |
| number of CO contacts for auxiliary contacts | | 1 |
| type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point | | |
| • finely stranded with core end processing | | 70 ... 240 mm² |
| • finely stranded without core end processing | | 70 ... 240 mm² |
| • stranded | | 95 ... 300 mm² |
| type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point | | |
| • finely stranded with core end processing | | 120 ... 185 mm² |
| • finely stranded without core end processing | | 120 ... 185 mm² |
| • stranded | | 120 ... 240 mm² |
| type of connectable conductor cross-sections for | | |

| | | |
|--|--|--|
| main contacts for box terminal using both clamping points <ul style="list-style-type: none"> finely stranded with core end processing finely stranded without core end processing stranded | | min. 2x 50 mm ² , max. 2x 185 mm ² 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-sections at AWG cables 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-sections 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-sections 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-sections at AWG cables <ul style="list-style-type: none"> for main contacts for auxiliary contacts for auxiliary contacts finely stranded with core end processing | | 2/0 ... 500 kcmil 2x (20 ... 14) 2x (20 ... 16) |

Ambient conditions

| | | |
|--|----------|---|
| installation altitude at height above sea level | m | 5 000 |
| environmental category <ul style="list-style-type: none"> during transport acc. to IEC 60721 during storage acc. to IEC 60721 during operation acc. to IEC 60721 | | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| ambient temperature <ul style="list-style-type: none"> during operation during storage | °C °C | -25 ... +60 -40 ... +80 |
| derating temperature | °C | 40 |
| protection class IP on the front acc. to IEC 60529 | | IP00; IP20 with cover |
| touch protection on the front acc. to IEC 60529 | | finger-safe, for vertical contact from the front with cover |

Certificates/ approvals

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



| | | | |
|---------------------------|-------------------|-------------------|-------|
| Declaration of Conformity | Test Certificates | Marine / Shipping | other |
|---------------------------|-------------------|-------------------|-------|

[Miscellaneous](#)



EG-Konf.

[Special Test Certificate](#)



LRS



DNV-GL

[Confirmation](#)

UL/CSA ratings

| | | |
|--|----|-----|
| yielded mechanical performance [hp] for 3-phase AC motor <ul style="list-style-type: none"> at 460/480 V — at standard circuit at 50 °C rated value | hp | 250 |
|--|----|-----|

• at 575/600 V

— at standard circuit at 50 °C rated value

contact rating of auxiliary contacts according to UL

hp

300

B300 / R300

Further information

Simulation Tool for Soft Starters (STS)

<https://support.industry.siemens.com/cs/ww/en/view/101494917>

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4075-6BB35>

Cax online generator

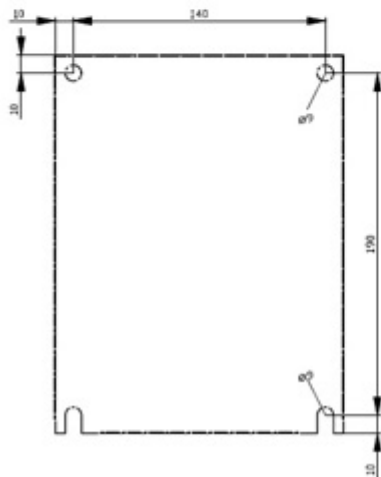
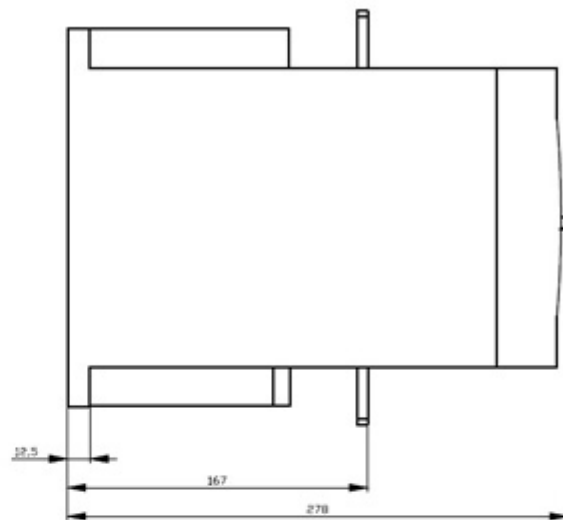
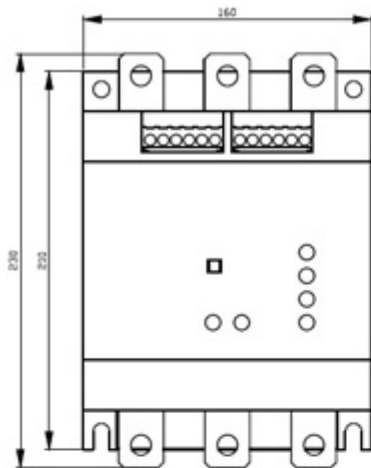
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4075-6BB35>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4075-6BB35>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4075-6BB35&lang=en





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