



SIRIUS soft starter S0 38 A, 18.5 kW/400 V, 40 °C 200-480 V AC, 110-230 V AC/DC Screw terminals

| General technical data | | |
|--|----|--------------------------|
| product brand name | | SIRIUS |
| product designation | | Soft starter |
| 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 |
| blocking voltage of the thyristor maximum | V | 1 600 |
| reference code according to EN 61346-2 | | Q |
| reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750 | | G |
| Power Electronics | | |
| operational current | | |
| • at 40 °C rated value | A | 38 |
| • at 50 °C rated value | A | 34 |
| • at 60 °C rated value | A | 31 |
| yielded mechanical performance for 3-phase motors | | |
| • at 230 V | | |
| — at standard circuit at 40 °C rated value | kW | 11 |
| • at 400 V | | |
| — at standard circuit at 40 °C rated value | kW | 18.5 |
| yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | 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 ... 480 |
| 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 | 23 |
| continuous operating current [% of I _e] at 40 °C | % | 115 |
| power loss [W] at operational current at 40 °C during operation typical | W | 19 |

Control circuit/ Control

| | | |
|--|----|-------------|
| type of voltage of the control supply 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 at AC at 50 Hz | V | 110 ... 230 |
| control supply voltage 1 at AC at 60 Hz | V | 110 ... 230 |
| 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 |
| control supply voltage 1 at DC | V | 110 ... 230 |
| relative negative tolerance of the control supply voltage at DC | % | -15 |
| relative positive tolerance of the control supply voltage at DC | % | 10 |
| display version for fault signal | | red |

Mechanical data

| | | |
|---|----|---|
| size of engine control device | | S0 |
| width | mm | 45 |
| height | mm | 125 |
| depth | mm | 155 |
| fastening method | | 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 |
| required spacing with side-by-side mounting | | |
| • upwards | mm | 60 |
| • at the side | mm | 15 |
| • downwards | mm | 40 |
| wire length maximum | m | 300 |
| number of poles for main current circuit | | 3 |

Connections/ Terminals

| | | |
|--|--|--|
| type of electrical connection | | |
| • for main current circuit | | screw-type terminals |
| • 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 | | |
| • solid | | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), max. 1x 10 mm ² |
| • finely stranded with core end processing | | 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²) |
| type of connectable conductor cross-sections for AWG cables for main contacts for box terminal | | |
| • using the front clamping point | | 1x 8, 2x (16 ... 10) |
| type of connectable conductor cross-sections for auxiliary contacts | | |
| • solid | | 2x (0.5 ... 2.5 mm ²) |
| • finely stranded with core end processing | | 2x (0.5 ... 1.5 mm ²) |
| type of connectable conductor cross-sections for AWG cables | | |
| • for auxiliary contacts | | 2x (20 ... 14) |

- for auxiliary contacts finely stranded with core end processing

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 according to IEC 60721 • during storage according 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 |
| <ul style="list-style-type: none"> • during operation according to IEC 60721 | | 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| ambient temperature | °C | |
| <ul style="list-style-type: none"> • during operation • during storage | | -25 ... +60 -40 ... +80 |
| derating temperature | °C | 40 |
| protection class IP on the front according to IEC 60529 | | IP20 |
| touch protection on the front according to IEC 60529 | | finger-safe, for vertical contact from the front |

UL/CSA ratings

| | | |
|--|----|-------------|
| yielded mechanical performance [hp] for 3-phase AC motor | | |
| <ul style="list-style-type: none"> • at 220/230 V — at standard circuit at 50 °C rated value | hp | 10 |
| <ul style="list-style-type: none"> • at 460/480 V — at standard circuit at 50 °C rated value | hp | 25 |
| contact rating of auxiliary contacts according to UL | | B300 / R300 |

Approvals Certificates

General Product Approval



[Confirmation](#)



| | | | |
|-----|--------------------------------|-------------------|-------------------|
| EMV | For use in hazardous locations | Test Certificates | Marine / Shipping |
|-----|--------------------------------|-------------------|-------------------|



[KC](#)



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



| | | | |
|-------------------|-------|---------|-------------|
| Marine / Shipping | other | Railway | Environment |
|-------------------|-------|---------|-------------|



[Confirmation](#)

[Confirmation](#)



[Environmental Confirmations](#)

Further information

Simulation Tool for Soft Starters (STS)

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

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RW4028-1BB14>

Cax online generator

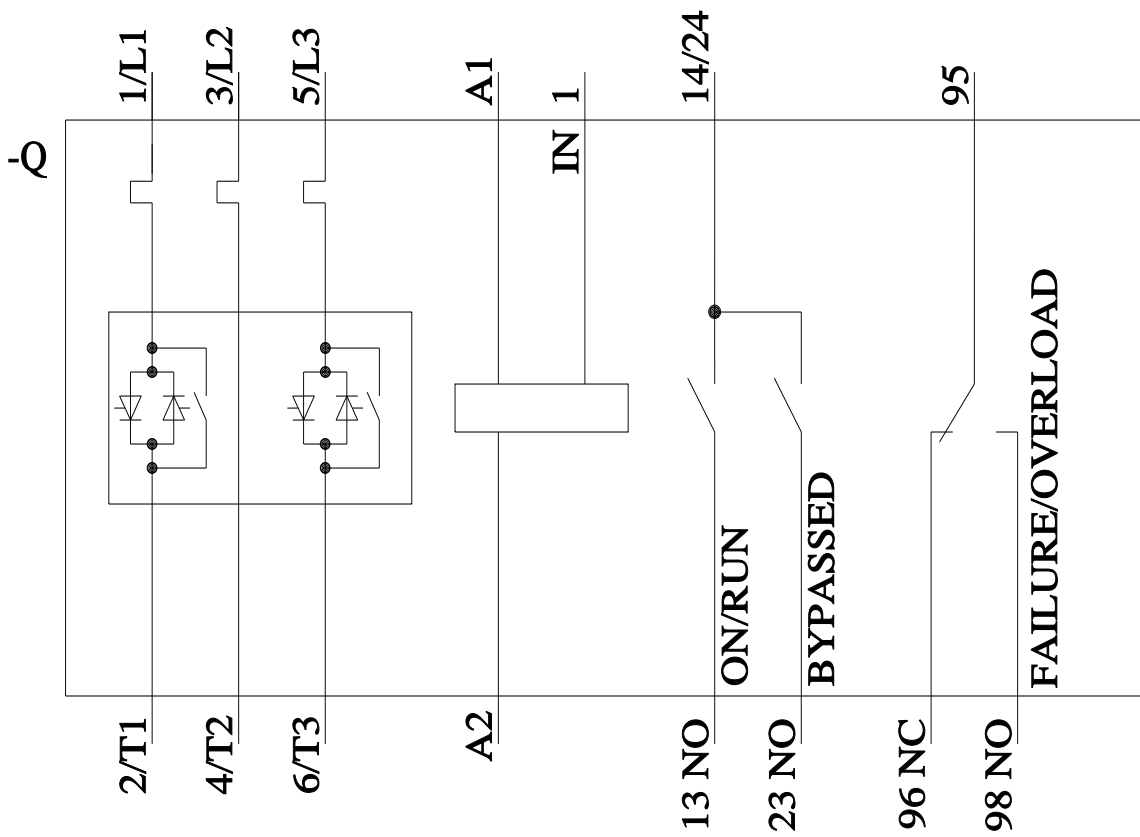
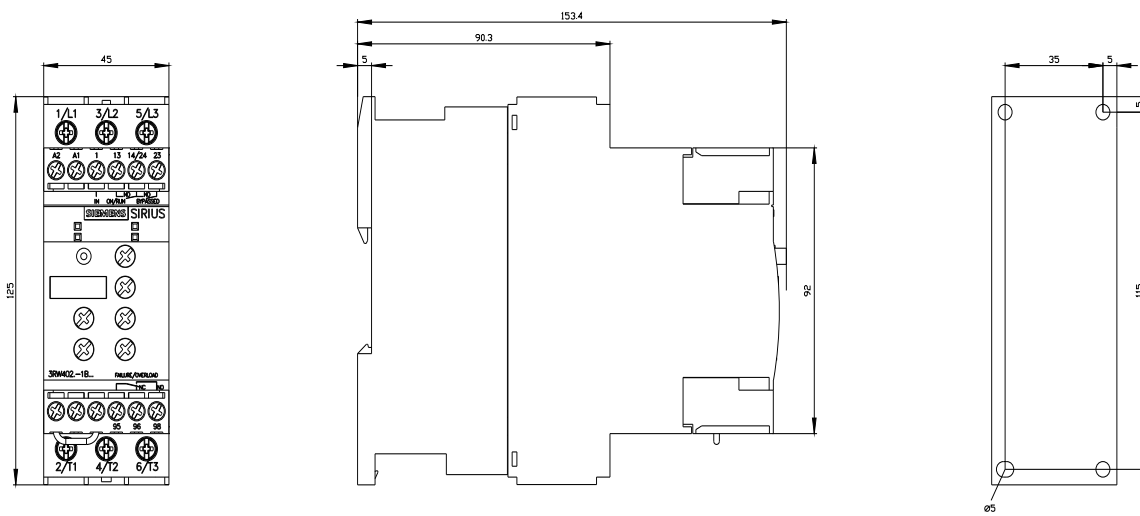
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4028-1BB14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4028-1BB14>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4028-1BB14&lang=en



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