SIEMENS

Data sheet

3RW40 27-1BB14



SIRIUS soft starter S0 32 A, 15 kW/400 V, 40 °C 200-480 V AC, 110-230 V AC/DC 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 | | 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 | | G |
| according to IEC 204-2 acc. to IEC 750 | | |

| Power Electronics | | |
|--|----|--------------|
| Product designation | | Soft starter |
| Operating current | | |
| • at 40 °C rated value | А | 32 |
| • at 50 °C rated value | А | 29 |
| • at 60 °C rated value | А | 26 |
| Mechanical power output for three-phase motors | | |
| • at 230 V | | |
| — at standard circuit at 40 °C rated value | W | 7 500 |
| • at 400 V | | |
| — at standard circuit at 40 °C rated value | W | 15 000 |
| Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | hp | 7.5 |
| 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 | 17 |
| Continuous operating current [% of le] at 40 °C | % | 115 |
| Power loss [W] at operating current at 40 °C during operation typical | W | 13 |
| 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 |
| 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 |
| 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 |

| \sim | | / Termina | |
|--------|--------------|-----------|-----|
| In | nactione | / Lormina | IC. |
| 001 | III COUDI S/ | | 10 |

| Type of 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 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 mm²), 2x (2.5 6 mm²), max. 1x 10 mm² |
| finely stranded with core end processing | 2x (1 2.5 mm²), 2x (2.5 6 mm²) |
| Type of connectable conductor cross-sections at | |
| AWG conductors 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 | |

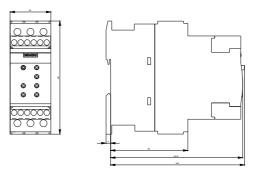
| • solid | | 2x (0.5 2.5 mm²) |
|---|----|---|
| finely stranded with core end processing | | 2x (0.5 1.5 mm²) |
| Type of connectable conductor cross-sections at AWG conductors | | |
| for auxiliary contacts | | 2x (20 14) |
| for auxiliary contacts finely stranded with core end processing | | 2x (20 16) |
| Ambient conditions | | |
| Installation altitude at height above sea level | m | 5 000 |
| Environmental category | | |
| during transport acc. to IEC 60721 | | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) |
| • during storage acc. to IEC 60721 | | 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 |
| during operation acc. 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 | | |
| • during operation | °C | -25 +60 |
| • during storage | °C | -40 +80 |
| Derating temperature | °C | 40 |
| Derating temperature | | |

Certificates/ approvals

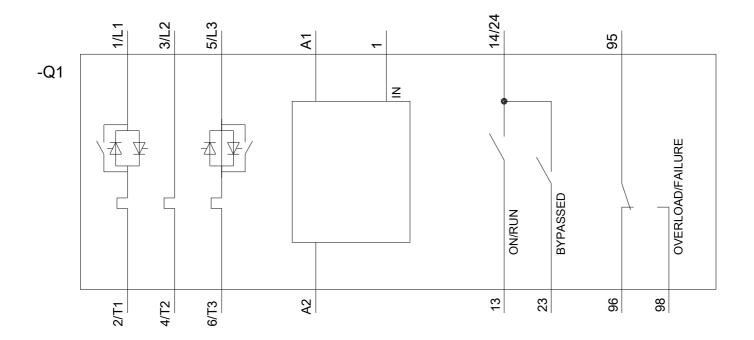
| General Produc | t Approval | | | EMC | For use in haz- ardous loca- tions |
|------------------|----------------------|-------------------------------|---|---------------------|--|
| | CSA | UL | EHC | RCM | ATEX |
| Declaration of C | onformity | Test Certificates | 3 | Marine / Shippi | ing |
| CE | <u>Miscellaneous</u> | Special Test Certi- ficate | Type Test Certific- ates/Test Report | Lloyd's Register | |
| EG-Konf. | | | | LRS | PRS |
| Marine / Ship- | other | | | | |
| ping | | | | | |
| DNV-GL DNV-GL | <u>Confirmation</u> | | | | |

| UL/CSA ratings | | |
|--|----|-------------|
| Yielded mechanical performance [hp] for three-phase | | |
| AC motor | | |
| ● at 220/230 V | | |
| — at standard circuit at 50 °C rated value | hp | 7.5 |
| ● at 460/480 V | | |
| — at standard circuit at 50 °C rated value | hp | 20 |
| Contact rating of auxiliary contacts according to UL | | B300 / R300 |
| | | |

| urther information | |
|--|--|
| Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494917 | |
| Information- and Downloadcenter (Catalogs, Brochures,) www.siemens.com/sirius/catalogs | |
| Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4027-1BB14 | |
| Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4027-1BB14 | |
| Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RW4027-1BB14 | |
| Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4027-1BB14⟨=en | |







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