SIEMENS

Data sheet 3RW30 18-1BB14



SIRIUS SOFT STARTER, SIZE S00, 17.6A, 7.5KW/400V, 40 DEGREES, 200-480V AC, 110-230V AC/DC, SCREW TERMINALS

| General technical data: | |
|---|--------|
| product brand name | SIRIUS |
| Product equipment Integrated bypass contact system | Yes |
| Product feature Thyristors | Yes |
| Product function | |
| Intrinsic device protection | No |
| motor overload protection | No |
| Evaluation of thermistor motor protection | No |
| External reset | No |
| Adjustable current limitation | No |
| Inside-delta circuit | No |
| Product component Motor brake output | No |
| 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 |

Product designation

soft starters for standard applications

| Operating current | | |
|--|----|---------|
| • at 40 °C rated value | Α | 17.6 |
| • at 50 °C rated value | Α | 17 |
| • at 60 °C rated value | Α | 14 |
| Mechanical power output for three-phase motors | | |
| ● at 230 V | | |
| at standard circuit at 40 °C rated value | W | 4 000 |
| ● at 400 V | | |
| at standard circuit at 40 °C rated value | W | 7 500 |
| Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | hp | 3 |
| 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 [% of IM] | % | 10 |
| Continuous operating current [% of le] at 40 °C | % | 115 |
| Power loss [W] at operating current at 40 °C during operation typical | W | 4 |
| Control electronics: | | |
| 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 60 Hz | % | -20 |
| Relative positive tolerance of the control supply voltage at AC at 60 Hz | % | 20 |
| Control supply voltage 1 at DC | V | 110 230 |

voltage at DC

voltage at DC

Relative negative tolerance of the control supply

Relative positive tolerance of the control supply

-20

20

%

%

| Display version for fault signal | | red |
|--|----|--|
| Mechanical data: | | |
| Size of engine control device | | S00 |
| Width | mm | 45 |
| Height | mm | 95 |
| Depth | mm | 150 |
| Mounting type | | screw and snap-on mounting |
| Mounting position | | With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° tiltable to the front and back |
| Required spacing with side-by-side mounting | | |
| • upwards | mm | 60 |
| • at the side | mm | 15 |
| • downwards | mm | 40 |
| Installation altitude at height above sea level | m | 5 000 |
| 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 current circuit | | screw-type terminals |
| Number of NC contacts for auxiliary contacts | | 0 |
| Number of NO contacts for auxiliary contacts | | 1 |
| Number of CO contacts for auxiliary contacts | _ | 0 |
| 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) |
| finely stranded with core end processing | | 2x (1.5 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 | | 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: | | |
| Ambient temperature | | |

| during operation | °C | -25 + 60 |
|----------------------|----|-----------------|
| during storage | °C | -40 +80 |
| Derating temperature | °C | 40 |
| Protection class IP | | IP20 |

Certificates/ approvals:

General Product Approval EMC Declaration of Conformity













| Test Certificates | other | | | |
|------------------------------------|-------------------|---------|---------------|--|
| Typprüfbescheinigu ng/Werkszeugnis | Umweltbestätigung | sonstig | Bestätigungen | |

| 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 | 3 |
| ● at 460/480 V | | |
| — at standard circuit at 50 °C rated value | hp | 10 |
| Contact rating of auxiliary contacts according to UL | | 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,...)

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=3RW30181BB14

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

 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RW30181BB14}}$

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW30181BB14&lang=en







