# **SIEMENS**

Data sheet 3RW30 47-1BB14



SIRIUS SOFT STARTER, SIZE S3, 106A, 55KW/400V, 40 DEGREES, 200-480V AC, 110-230V AC/DC, SCREW TERMINALS

| General technical data:   |        |  |  |  |
|---|--------|--|--|--|
| product brand name  | SIRIUS |  |  |  |
| <ul> <li>Product equipment Integrated bypass contact<br/>system</li> </ul>          | Yes    |  |  |  |
| <ul> <li>Product feature Thyristors</li> </ul>                                      | Yes    |  |  |  |
| Product function  |        |  |  |  |
| <ul> <li>Intrinsic device protection</li> </ul>                                     | No     |  |  |  |
| <ul> <li>motor overload protection</li> </ul>                                       | No     |  |  |  |
| <ul> <li>Evaluation of thermistor motor protection</li> </ul>                       | 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      |  |  |  |
| Power Electronics:  |        |  |  |  |

Product designation

soft starters for standard applications

| Operating current  |    |         |  |  |
|--|----|---------|--|--|
| ● at 40 °C rated value   | Α  | 106     |  |  |
| • at 50 °C rated value   | Α  | 98      |  |  |
| ● at 60 °C rated value   | Α  | 90      |  |  |
| Mechanical power output for three-phase motors                           |    |         |  |  |
| ● at 230 V   |    |         |  |  |
| — at standard circuit at 40 °C rated value                               | W  | 30 000  |  |  |
| ● at 400 V   |    |         |  |  |
| — at standard circuit at 40 °C rated value                               | W  | 55 000  |  |  |
| Yielded mechanical performance [hp] for three-phase                      | hp | 30      |  |  |
| AC motor at 200/208 V at standard circuit at 50 °C                       |    |         |  |  |
| rated value  |    |         |  |  |
| Operating frequency rated value  | Hz | 50 60   |  |  |
| Relative negative tolerance of the operating                             | %  | -10     |  |  |
| frequency  |    |         |  |  |
| 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                  | %  | 10      |  |  |
| standard circuit   |    |         |  |  |
| 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  | 21      |  |  |
| 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                        | %  | -10     |  |  |
| 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 | %  | -15     |  |  |
| Relative positive tolerance of the control supply                        | %  | 10      |  |  |
| voltage at AC at 60 Hz   |    |         |  |  |
| Control supply voltage 1 at DC   | V  | 110 230 |  |  |
| Relative negative tolerance of the control supply voltage at DC          | %  | -15     |  |  |
|  |    |         |  |  |

voltage at DC

Relative positive tolerance of the control supply

10

%

| Display version for fault signal   |    | red  |
|--|----|--|
| Mechanical data:   |    |  |
| Size of engine control device  |    | S3   |
| Width  | mm | 70   |
| Height   | mm | 170  |
| Depth  | mm | 190  |
| 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 | 30   |
| <ul><li>downwards</li></ul>  | 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 |    | 2x (2.5 16 mm²)  |
| • solid  |    | , and the second se         |
| finely stranded with core end processing   |    | 2.5 35 mm <sup>2</sup>   |
| • stranded   |    | 4 70 mm²   |
| Type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point  |    |  |
| • solid  |    | 2x (2.5 16 mm²)  |
| <ul> <li>finely stranded with core end processing</li> </ul>   |    | 2.5 50 mm²   |
| • stranded   |    | 10 70 mm²  |
| Type of connectable conductor cross-sections for main contacts for box terminal using both clamping points     |    |  |
| • solid  |    | 2x (2.5 16 mm²)  |
| <ul><li>finely stranded with core end processing</li></ul>   |    | 2x (2.5 35 mm²)  |
| • stranded   |    | 2x (10 50 mm²)   |

| Type of connectable conductor cross-sections at                                  |                  |
|--|------------------|
| AWG conductors for main contacts for box terminal                                |                  |
| <ul> <li>using the back clamping point</li> </ul>                                | 10 2/0           |
| <ul> <li>using the front clamping point</li> </ul>                               | 10 2/0           |
| <ul><li>using both clamping points</li></ul>                                     | 2x (10 1/0)      |
| Type of connectable conductor cross-sections for DIN cable lug for main contacts |                  |
| • finely stranded  | 2 x (10 50 mm²)  |
| • stranded   | 2x (10 70 mm²)   |
| 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 main contacts  | 2x (7 1/0)       |
| for auxiliary contacts   | 2x (20 14)       |

| Ambient conditions:                |    |                 |  |  |
|------------------------------------|----|-----------------|--|--|
| Ambient temperature                |    |                 |  |  |
| <ul><li>during operation</li></ul> | °C | -25 <b>+</b> 60 |  |  |
| during storage                     | °C | -40 +80         |  |  |
| Derating temperature               | °C | 40              |  |  |
| Protection class IP                |    | IP00            |  |  |

## Certificates/ approvals:

| General Product Approval | EMC | Declaration of |
|--------------------------|-----|----------------|
|                          |     | Conformity     |













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

| UL/CSA ratings:                                     |  |  |  |
|---|--|--|--|
| Yielded mechanical performance [hp] for three-phase |  |  |  |
| AC motor  |  |  |  |
| ● at 220/230 V                                      |  |  |  |

| <ul> <li>— at standard circuit at 50 °C rated value</li> </ul> | hp | 30           |
|--|----|--------------|
|  |    |              |
| ● at 460/480 V   |    |              |
|  | hn | 76           |
| <ul> <li>— at standard circuit at 50 °C rated value</li> </ul> | hp | 75           |
| Contact rating of auxiliary contacts according to UL           |    | B300 / R300  |
| Contact rating of auxiliary contacts according to OL           |    | D000 / 11000 |

## 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

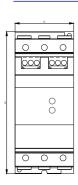
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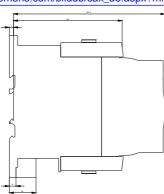
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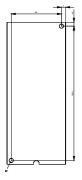
## Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

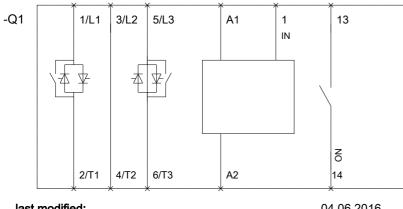
https://support.industry.siemens.com/cs/ww/en/ps/3RW30471BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW30471BB14&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW30471BB14&lang=en</a>









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