## **SIEMENS**

Data sheet 3RW30 46-2BB04



SIRIUS SOFT STARTER, SIZE S3, 80A, 45KW/400V, 40 DEGREES, 200-480V AC, 24V AC/DC, SPRING-LOADED TERMINALS

| General technical data:   |        |  |
|---|--------|--|
| product brand name  | SIRIUS |  |
| Product feature   |        |  |
| <ul> <li>integrated bypass contact system</li> </ul>                                | Yes    |  |
| <ul><li>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     |  |
| <ul> <li>Adjustable current limitation</li> </ul>                                   | 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 | 80                                      |
| ● at 50 °C Rated value                         | Α | 73                                      |
| ● at 60 °C Rated value                         | Α | 66                                      |
| Mechanical power output for three-phase motors |   |   |
| ● at 230 V                                     |   |   |

|  | 14/    | 00.000  |
|--|--------|---------|
| — at standard circuit at 40 °C Rated value                   | W      | 22 000  |
| ● at 400 V   |        |         |
| <ul> <li>at standard circuit at 40 °C Rated value</li> </ul> | W      | 45 000  |
| yielded mechanical performance [hp] for three-phase          | metric | 20      |
| AC motor at 200/208 V at standard circuit at 50 °C           | hp     |         |
| 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         | %      | -15     |
| at standard circuit  |        |         |
| Relative positive tolerance of the operating voltage at      | %      | 10      |
| standard circuit   |        |         |
| Minimum load in % of I_M                                     | %      | 10      |
| Continuous operating current in % of I_e at 40 °C            | %      | 115     |
| Active power loss at operating current at 40 °C during       | W      | 12      |
| operation typical  |        |         |
| 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  |        |         |
| Relative positive tolerance of the control supply            | %      | 10      |
| voltage frequency  |        |         |
| Control supply voltage 1 with AC                             |        |         |
| • at 50 Hz Rated value                                       | V      | 24      |
| • at 60 Hz Rated value                                       | V      | 24      |
| Relative negative tolerance of the control supply            | %      | -15     |
| voltage with AC at 60 Hz                                     |        |         |
| Relative positive tolerance of the control supply            | %      | 10      |
| voltage with AC at 60 Hz                                     |        |         |
| Control supply voltage 1 for DC Rated value                  | V      | 24      |
| Relative negative tolerance of the control supply            | %      | -15     |
| voltage for DC   |        |         |
| Relative positive tolerance of the control supply            | %      | 10      |
| voltage for DC   |        |         |
| Display version for fault signal                             |        | red     |
| Mechanical data:   |        |         |
| Size of engine control device                                |        | S3      |
| Width  | mm     | 70      |
| Height   | mm     | 170     |
|  |        |         |

| M   | _  | 1 "  |
|---|----|--|
| 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   |
| • downwards   | mm | 40   |
| Installation altitude at height above sea level                             | m  | 5 000  |
| Cable 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   |
| <ul> <li>for auxiliary and control current circuit</li> </ul>               |    | spring-loaded 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-section for                             |    |  |
| main contacts for box terminal using the front                              |    |  |
| clamping point  • solid   |    | 2x (2.5 16 mm²)  |
|   |    | 2.5 35 mm <sup>2</sup>   |
| <ul><li>finely stranded with core end processing</li><li>stranded</li></ul> |    | 4 70 mm <sup>2</sup>   |
| Type of connectable conductor cross-section for                             |    | 4 70 Hilli   |
| main contacts for box terminal using the back                               |    |  |
| clamping point  |    |  |
| • solid   |    | 2x (2.5 16 mm²)  |
| • finely stranded with core end processing                                  |    | 2.5 50 mm²   |
| • stranded  |    | 10 70 mm²  |
| Type of connectable conductor cross-section 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-section for                             |    |  |
| AWG conductors for main contacts for box terminal                           |    |  |

190

mm

• using the back clamping point

• using the front clamping point

• using both clamping points

Depth

10 ... 2/0

10 ... 2/0

2x (10 ... 1/0)

| Type of connectable conductor cross-section for DIN                |                   |
|--|-------------------|
| cable lug for main contacts  |                   |
| finely stranded  | 2 x (10 50 mm²)   |
| • stranded   | 2x (10 70 mm²)    |
| Type of connectable conductor cross-section for auxiliary contacts |                   |
| • solid  | 2x (0.25 2.5 mm²) |
| • finely stranded with core end processing                         | 2x (0.25 1.5 mm²) |
| Type of connectable conductor cross-section for AWG conductors     |                   |
| • for main contacts  | 2x (7 1/0)        |
| • for auxiliary contacts   | 2x (24 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 | Test         |
|--------------------------|-----|--------------|
|                          |     | Certificates |











Type Test
Certificates/Test
Report

### other

 $\frac{\text{Environmental}}{\text{Confirmations}}$ 

Declaration of Conformity

other

| UL/CSA ratings:                                     |              |             |
|---|--------------|-------------|
| yielded mechanical performance [hp] for three-phase |              |             |
| AC motor  |              |             |
| ● at 220/230 V                                      |              |             |
| — at standard circuit at 50 °C Rated value          | metric<br>hp | 25          |
| ● at 460/480 V                                      |              |             |
| — at standard circuit at 50 °C Rated value          | metric<br>hp | 50          |
| Contact rating of the auxiliary contacts acc. to UL |              | B300 / R300 |

#### Further information

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

http://www.siemens.com/industrial-controls/catalogs

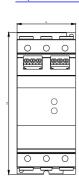
# Industry Mall (Online ordering system) http://www.siemens.com/industrymall

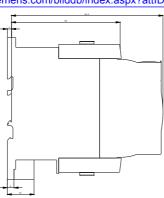
#### Cax online generator

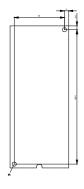
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW30462BB04

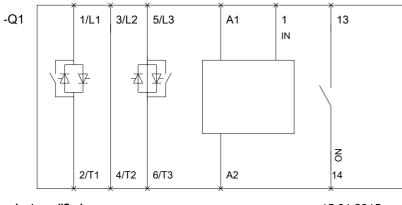
# Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW30462BB04/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW30462BB04&lang=en









last modified: 15.01.2015