# **SIEMENS**

## Data sheet

### 3RW44 35-2BC35



SIRIUS SOFT STARTER, VALUES WITH 575 V, 50 DEG., STANDARD: 117A, 100HP, INSIDE-DELTA CIRCUIT 3: 203A, 200HP, 400-600 V AC, 115 V AC, CAGE CLAMP TERMINALS

| General technical data:                                       |   |
|---|---|
| product brand name  | SIRIUS                                      |
| Product feature   |   |
| <ul> <li>integrated bypass contact system</li> </ul>          | Yes   |
| • Thyristors  | Yes   |
| Product function  |   |
| <ul> <li>Intrinsic device protection</li> </ul>               | Yes   |
| <ul> <li>motor overload protection</li> </ul>                 | Yes   |
| <ul> <li>Evaluation of thermistor motor protection</li> </ul> | Yes   |
| • External reset  | Yes   |
| <ul> <li>Adjustable current limitation</li> </ul>             | Yes   |
| • inside-delta circuit  | Yes   |
| Product component Motor brake output                          | Yes   |
| Equipment marking acc. to DIN EN 61346-2                      | Q   |
| Equipment marking acc. to DIN 40719 extended                  | G   |
| according to IEC 204-2 acc. to IEC 750                        |   |
| Power Electronics:  |   |
| Product designation   | soft starters for high feature applications |

| Product designation  |   | soft starters for high feature applications |
|--|---|---|
| Operating current  |   |   |
| • at 40 °C Rated value   | А | 134   |
| • at 50 °C Rated value   | А | 117   |
| • at 60 °C Rated value   | А | 100   |
| Operating current for three-phase motors at 3-phase root switching |   |   |
| • at 40 °C Rated value   | А | 232   |

| e et 50 °C. Deted velve   | А  | 203     |
|---|----|---------|
| • at 50 °C Rated value  |    |         |
| • at 60 °C Rated value  | A  | 173     |
| Mechanical power output for three-phase motors                                    |    |         |
| • at 400 V  |    |         |
| — at standard circuit at 40 °C Rated value  | W  | 75 000  |
| — at 3-phase root switching at 40 °C Rated value                                  | W  | 132 000 |
| ● at 500 V  |    |         |
| — at standard circuit at 40 °C Rated value  | W  | 90 000  |
| — at 3-phase root switching at 40 °C Rated value                                  | W  | 160 000 |
| Operating frequency Rated value   | Hz | 50 60   |
| Relative negative tolerance of the operating<br>frequency                         | %  | -10     |
| Relative positive tolerance of the operating frequency                            | %  | 10      |
| Operating voltage at standard circuit Rated value                                 | V  | 400 600 |
| Relative negative tolerance of the operating voltage<br>at standard circuit       | %  | -15     |
| Relative positive tolerance of the operating voltage at standard circuit          | %  | 10      |
| Operating voltage at 3-phase root switching Rated value                           | V  | 400 600 |
| Relative negative tolerance of the operating voltage at 3-phase root switching    | %  | -15     |
| Relative positive tolerance of the operating voltage at<br>3-phase root switching | %  | 10      |
| Minimum load in % of I_M  | %  | 8       |
| Adjustable motor current for motor overload<br>protection minimum rated value     | A  | 26      |
| Continuous operating current in % of I_e at 40 °C                                 | %  | 115     |
| Active power loss at operating current at 40 °C during operation typical          | W  | 76      |
| Control electronics:  |    |         |
| Type of voltage of the control supply voltage                                     |    | AC      |
| 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 with AC  |    |         |
| • at 50 Hz Rated value  | V  | 115     |
| at 60 Hz Rated value  | V  | 115     |
|   |    |         |

| Relative negative tolerance of the control supply voltage with AC at 60 Hz  | %  | -15   |
|---|----|---|
| Relative positive tolerance of the control supply voltage with AC at 60 Hz  | %  | 10  |
| Display version for fault signal  |    | Display   |
| Mechanical data:  |    |   |
| Width   | mm | 170   |
| Height  | mm | 200   |
| Depth   | mm | 270   |
| Mounting type   |    | screw fixing  |
| mounting position   |    | bei senkrechter Montageebene +/-90° drehbar, bei<br>senkrechter Montageebene +/- 22,5° nach vorne und<br>hinten kippbar |
| Required spacing with side-by-side mounting   |    |   |
| • upwards   | mm | 100   |
| • at the side   | mm | 5   |
| <ul> <li>downwards</li> </ul>   | mm | 75  |
| Installation altitude at height above sea level   | m  | 5 000   |
| Cable length maximum  | m  | 500   |
| Number of poles for main current circuit  |    | 3   |
| Connections/ Terminals:   |    |   |
| Type of electrical connection   |    |   |
| <ul> <li>for main current circuit</li> </ul>  |    | busbar connection   |
| <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  |    | 3   |
| Number of CO contacts for auxiliary contacts  |    | 1   |
| Type of connectable conductor cross-section for<br>main contacts for box terminal using the front<br>clamping point |    |   |
| <ul> <li>finely stranded with core end processing</li> </ul>  |    | 16 70 mm²   |
| <ul> <li>finely stranded without core end processing</li> </ul>   |    | 16 70 mm²   |
| • stranded  |    | 16 70 mm²   |
| Type of connectable conductor cross-section for<br>main contacts for box terminal using the back<br>clamping point  |    |   |
| <ul> <li>finely stranded with core end processing</li> </ul>  |    | 16 70 mm²   |
| <ul> <li>finely stranded without core end processing</li> </ul>   |    | 16 70 mm²   |
| • stranded  |    | 16 70 mm²   |
| Type of connectable conductor cross-section for<br>main contacts for box terminal using both clamping<br>points     |    |   |
| <ul> <li>finely stranded with core end processing</li> </ul>  |    | max. 1x 50 mm², 1x 70 mm²   |

| <ul> <li>finely stranded without core end processing</li> </ul>                                      |    | max. 1x 50 mm <sup>2</sup> , 1x 70 mm <sup>2</sup> |
|--|----|--|
| stranded   |    | max. 2x 70 mm <sup>2</sup>                         |
|  |    |  |
| Type of connectable conductor cross-section for<br>AWG conductors for main contacts for box terminal |    |  |
|  |    | C 2/2  |
| <ul> <li>using the back clamping point</li> </ul>  |    | 6 2/0  |
| <ul> <li>using the front clamping point</li> </ul>   |    | 6 2/0  |
| <ul> <li>using both clamping points</li> </ul>   |    | max. 2x 1/0  |
| Type of connectable conductor cross-section for DIN  | -  |  |
| cable lug for main contacts  |    |  |
| <ul> <li>finely stranded</li> </ul>  |    | 16 95 mm²  |
| • stranded   |    | 25 120 mm²   |
| Type of connectable conductor cross-section for<br>auxiliary contacts                                |    |  |
| • solid  |    | 2x (0.25 1.5 mm²)                                  |
| <ul> <li>finely stranded with core end processing</li> </ul>   |    | 2x (0.25 1.5 mm²)                                  |
| Type of connectable conductor cross-section for<br>AWG conductors                                    |    |  |
| <ul> <li>for main contacts</li> </ul>  |    | 4 250 kcmil  |
| <ul> <li>for auxiliary contacts</li> </ul>   |    | 2x (24 16)   |
| Ambient conditions:  |    |  |
| Ambient temperature  |    |  |
| <ul> <li>during operation</li> </ul>   | °C | 60   |
| • during storage   | °C | -25 +80  |
| Derating temperature   | °C | 40   |
| Protection class IP  |    | IP00   |
| Certificates/ approvals:   |    |  |

| General Produc   | ct Approval  |                   |                   | EMC              | Declaration of<br>Conformity |
|--|--------------|-------------------|-------------------|------------------|------------------------------|
| ccc  | CSA          |                   | EHC               | С-тіск           | EG-Konf.                     |
| Test Certificate                                       | S            | Shipping Approval |                   |                  |                              |
| T and Task   | Special Test | CAN CO            | WAU VED           | 0 0              |                              |
| <u>Type Test</u><br>Certificates/Test<br><u>Report</u> | Certificate  | ABS               | BUREAU<br>VERITAS | ŬĂ<br>DNV<br>DNV | GL                           |



| UL/CSA ratings:                                     |        |             |
|---|--------|-------------|
| yielded mechanical performance [hp] for three-phase |        |             |
| AC motor  |        |             |
| ● at 460/480 V                                      |        |             |
| — at standard circuit at 50 °C Rated value          | metric | 75          |
|   | hp     |             |
| — at 3-phase root switching at 50 °C Rated          | metric | 150         |
| value   | hp     |             |
| ● at 575/600 V                                      |        |             |
| — at standard circuit at 50 °C Rated value          | metric | 100         |
|   | hp     |             |
| — at 3-phase root switching at 50 °C Rated          | metric | 200         |
| value   | hp     |             |
| 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=3RW44352BC35

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW44352BC35/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RW44352BC35&lang=en





