## SIEMENS

## Data sheet

## 3RW4037-2BB14



SIRIUS soft starter S2 63 A, 30 kW/400 V, 40  $^\circ\text{C}$  200-480 V AC, 110-230 V AC/DC spring-type 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>  |    | No                       |
| external reset   |    | Yes                      |
| <ul> <li>adjustable current limitation</li> </ul>  |    | 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 according to EN 61346-2   |    | Q                        |
| reference code according to DIN 40719 extended<br>according to IEC 204-2 according to IEC 750                        |    | G                        |
| Power Electronics  |    |                          |
| product designation  |    | Soft starter             |
| operational current  |    |                          |
| • at 40 °C rated value   | А  | 63                       |
| <ul> <li>at 50 °C rated value</li> </ul>   | А  | 58                       |
| <ul> <li>at 60 °C rated value</li> </ul>   | А  | 53                       |
| yielded mechanical performance for 3-phase motors  |    |                          |
| • at 230 V   |    |                          |
| <ul> <li>— at standard circuit at 40 °C rated value</li> </ul>   | kW | 18.5                     |
| • at 400 V   |    |                          |
| <ul> <li>— at standard circuit at 40 °C rated value</li> </ul>   | kW | 30                       |
| yielded mechanical performance [hp] for 3-phase AC<br>motor at 200/208 V at standard circuit at 50 °C rated<br>value | hp | 15                       |
| 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   | А  | 26                       |

continuous operating current [% of le] at 40 °C power loss [W] at operational current at 40 °C during % 115 W 12

| power loss [W] at operational current at 40 °C during<br>operation typical  | W  | 12  |
|---|----|---|
| 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   | %  | -10   |
| voltage frequency<br>relative positive tolerance of the control supply<br>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<br>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   |    | S2  |
| width   | mm | 55  |
| height  | mm | 160   |
| depth   | mm | 170   |
| fastening method  |    | screw and snap-on mounting  |
| mounting position   |    | With additional fan: With vertical mounting surface +/-90°  |
|   |    | rotatable, with vertical mounting surface +/- 22.5° tiltable<br>to the front and back Without additional fan: With vertical<br>mounting surface +/-10° rotatable, with vertical mounting<br>surface +/- 10° t |
| required spacing with side-by-side mounting   |    |   |
| • upwards   | mm | 60  |
| • at the side   | mm | 30  |
| <ul> <li>downwards</li> </ul>   | mm | 40  |
| 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  |
| <ul> <li>for auxiliary and control circuit</li> </ul>   |    | spring-loaded 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<br>main contacts for box terminal using the front                  |    |   |
| clamping point<br>• solid   |    | 2x (1.5 16 mm²)   |
| <ul> <li>finely stranded with core end processing</li> </ul>  |    | 0.75 25 mm <sup>2</sup>   |
| stranded     stranded     with core end processing  |    | 0.75 25 mm²   |
| type of connectable conductor cross-sections for<br>main contacts for box terminal using the back<br>clamping point |    |   |
| • solid   |    | 2x (1.5 16 mm²)   |
| <ul> <li>finely stranded with core end processing</li> </ul>  |    | 1.5 25 mm <sup>2</sup>  |
| stranded  |    | 1.5 35 mm <sup>2</sup>  |
| type of connectable conductor cross-sections for<br>main contacts for box terminal using both clamping<br>points    |    |   |
| • solid   |    | 2x (1.5 16 mm²)   |

| <ul> <li>finely stranded</li> </ul>       | with core end processi                           | ng                     |              | 2x (1.5 16 m                          | im²)                           |                         |
|---|--|------------------------|--------------|---------------------------------------|--------------------------------|-------------------------|
| <ul> <li>stranded</li> </ul>              |  |                        |              | 2x (1.5 25 m                          | im²)                           |                         |
|   | e conductor cross-sec<br>stacts for box terminal |                        |              |                                       |                                |                         |
| <ul> <li>using the back</li> </ul>        | clamping point                                   |                        |              | 16 2                                  |                                |                         |
| <ul> <li>using the front</li> </ul>       | clamping point                                   |                        |              | 18 2                                  |                                |                         |
| <ul> <li>using both clan</li> </ul>       | nping points                                     |                        |              | 2x (16 2)                             |                                |                         |
| type of connectable<br>auxiliary contacts | conductor cross-sec                              | tions for              |              |                                       |                                |                         |
| <ul> <li>solid</li> </ul>                 |  |                        |              | 2x (0.25 2.5                          | mm²)                           |                         |
| <ul> <li>finely stranded</li> </ul>       | with core end processi                           | ng                     |              |                                       | 2x (0.25 1.5 mm <sup>2</sup> ) |                         |
| -   | conductor cross-sec                              | -                      |              | , ,                                   | ,                              |                         |
| <ul> <li>for auxiliary cor</li> </ul>     | ntacts   |                        |              | 2x (24 14)                            |                                |                         |
| Ambient conditions                        |  |                        |              | , , , , , , , , , , , , , , , , , , , |                                |                         |
|   | at height above sea le                           | evel                   | m            | 5 000                                 |                                |                         |
| environmental cate                        | -  |                        |              |                                       |                                |                         |
|   | rt according to IEC 607                          | 21                     |              | 2K2, 2C1, 2S1                         | , 2M2 (max. fall heigh         | it 0.3 m)               |
|   | according to IEC 6072                            |                        |              |                                       | sional condensation).          |                         |
| 0 0                                       | 0  |                        |              | 1S2 (sand mus                         | st not get inside the de       | evices), 1M4            |
| <ul> <li>during operatio</li> </ul>       | on according to IEC 607                          | 21                     |              |                                       | ion of ice, no conden          |                         |
|   |  |                        |              | mist), 3S2 (san                       | id must not get into th        | ie devices), 3M6        |
| ambient temperatur                        |  |                        | °C           | 05 100                                |                                |                         |
| <ul> <li>during operatio</li> </ul>       | n  |                        | °C<br>°°     | -25 +60                               |                                |                         |
| during storage                            |  |                        | ວ°<br>ວ°     | -40 +80<br>40                         |                                |                         |
| derating temperatur                       |  | n to IEC               | C            | 40<br>IP20                            |                                |                         |
| 60529                                     | on the front according                           | J TO IEC               |              | IF20                                  |                                |                         |
| touch protection on                       | the front according t                            | o IEC 60529            |              | finger-safe, for                      | vertical contact from          | the front               |
| Certificates/ approval                    | ls   |                        |              |                                       |                                |                         |
| General Product Ap                        | pproval  |                        |              |                                       |                                | EMC                     |
|   |  | Confirmatio            | n            | ~                                     |                                | •                       |
| (SR)                                      | $(\mathbf{m})$                                   |                        | <u></u>      | <i>(</i> Ui)                          | COF                            |                         |
|   |  |                        |              |                                       | СПГ                            | Ś                       |
| CSA                                       | ccc  |                        |              | UL                                    |                                | RCM                     |
|   |  |                        |              |                                       |                                |                         |
|   |  |                        |              |                                       |                                |                         |
| Declaration of                            | Test Certificates                                |                        |              | Marine / Shipping                     |                                |                         |
| Conformity                                | rest oertineates                                 |                        |              | marine / Onipping                     |                                |                         |
|   | Turne Tret Oratifie                              |                        |              |                                       |                                |                         |
| ((  | <u>Type Test Certific-</u><br>ates/Test Report   | Special Test Ce<br>ate | ertific-     | Llovds                                | 633                            | And and a second second |
|   |  |                        |              | Kegister                              |                                | DNV-GL                  |
| EG-Konf.                                  |  |                        |              | LRS                                   | PRS                            | DEVOLUTION              |
|   |  |                        |              |                                       |                                |                         |
|   |  |                        |              |                                       |                                |                         |
| other                                     | Railway  |                        |              |                                       |                                |                         |
|   |  |                        |              |                                       |                                |                         |
| <b>Confirmation</b>                       | <b>Confirmation</b>                              | Vibration and S        | <u>Shock</u> |                                       |                                |                         |
|   |  |                        |              |                                       |                                |                         |

| UL/CSA ratings   |    |             |
|--|----|-------------|
| yielded mechanical performance [hp] for 3-phase AC motor       |    |             |
| • at 220/230 V   |    |             |
| <ul> <li>— at standard circuit at 50 °C rated value</li> </ul> | hp | 20          |
| • at 460/480 V   |    |             |
| — at standard circuit at 50 °C rated value                     | hp | 40          |
| 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 on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4037-2BB14

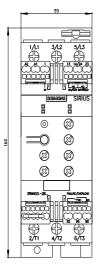
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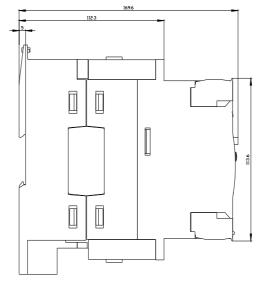
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4037-2BB14

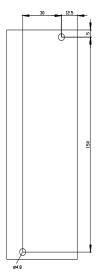
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

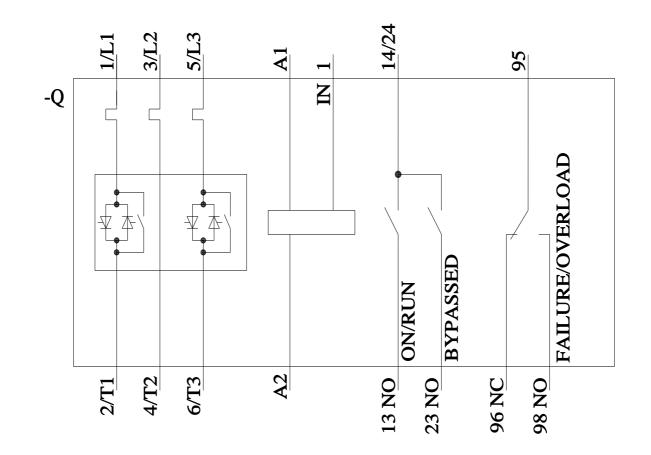
https://support.industry.siemens.com/cs/ww/en/ps/3RW4037-2BB14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW4037-2BB14&lang=en









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