## SIEMENS

## Data sheet

## 3RW3013-2BB04



SIRIUS soft starter S00 3.6 A, 1.5 kW/400 V, 40  $^\circ\text{C}$  200-480 V AC, 24 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>   |    | 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                       |
| 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 according to IEC 204-2 according to IEC 750                        |    | G                        |
| Power Electronics   |    |                          |
| product designation   |    | Soft starter             |
| operational current   |    |                          |
| • at 40 °C rated value  | А  | 3.6                      |
| • at 50 °C rated value  | А  | 3.3                      |
| • at 60 °C rated value  | А  | 3                        |
| yielded mechanical performance for 3-phase motors   |    |                          |
| • at 230 V  |    |                          |
| — at standard circuit at 40 °C rated value  | kW | 0.75                     |
| • at 400 V  |    |                          |
| — at standard circuit at 40 °C rated value  | kW | 1.5                      |
| yielded mechanical performance [hp] for 3-phase AC motor<br>at 200/208 V at standard circuit at 50 °C rated value | hp | 0.5                      |
| 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<br>standard circuit                                       | %  | -15                      |
| relative positive tolerance of the operating voltage at<br>standard circuit                                       | %  | 10                       |
| minimum load [%]  | %  | 10                       |
| continuous operating current [% of le] at 40 °C   | %  | 115                      |

| Operation typicalControl circuit/ Controltype of voltage of the control supply voltageAC/DCcontrol supply voltage frequency 1 rated valueHz50control supply voltage frequency 2 rated valueHz60relative negative tolerance of the control supply voltage%-10relative positive tolerance of the control supply voltage%10control supply voltage 1 at AC• at 50 Hz rated valueV24• at 60 Hz rated valueV24relative negative tolerance of the control supply voltage at AC at 50 Hz%relative negative tolerance of the control supply voltage at AC at 50 Hz%relative negative tolerance of the control supply voltage at AC at 50 Hz%relative positive tolerance of the control supply voltage at AC at 50 Hz%relative negative tolerance of the control supply voltage at AC at 50 Hz%relative negative tolerance of the control supply voltage at AC at 50 Hz%relative negative tolerance of the control supply voltage at AC at 60 Hz%relative negative tolerance of the control supply voltage at AC at 60 Hz%relative negative tolerance of the control supply voltage at DC rated value%voltage 1 at DC rated valueV24relative positive tolerance of the control supply voltage at DC%control supply voltage 1 at DC rated valueV20COCosize of engine control devicewidthmmheightmm   | power loss [W] at operational current at 40 °C during        | W  | 0.25                           |
|---|--|----|--------------------------------|
| type of voltage of the control supply voltageAC/DCcontrol supply voltage frequency 1 rated valueHz50control supply voltage frequency 2 rated valueHz60relative negative tolerance of the control supply voltage<br>frequency%-10relative positive tolerance of the control supply voltage<br>frequency%10control supply voltage 1 at AC<br>• at 50 Hz rated valueV24• at 60 Hz rated valueV24relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%10relative positive tolerance of the control supply voltage at<br>AC at 50 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 60 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 60 Hz%10control supply voltage 1 at DC rated valueV24relative negative tolerance of the control supply voltage at<br>DC%10control supply voltage 1 at DC rated valueV24relative positive tolerance of the control supply voltage at<br>DC%20control supply voltage 1 at DC rated valueV24relative negative tolerance of the control supply voltage at<br>DC%20control supply voltage 1 at DC rated valueV24relative positive tolerance of the control supply voltage at<br>DC <th>operation typical</th> <th></th> <th></th>   | operation typical  |    |                                |
| Arrow of the probability of tage frequency 1 rated valueHz50control supply voltage frequency 2 rated valueHz60relative negative tolerance of the control supply voltage<br>frequency%-10relative positive tolerance of the control supply voltage<br>frequency%10control supply voltage 1 at ACV24• at 50 Hz rated valueV24relative negative tolerance of the control supply voltage at<br>at 60 Hz rated value%-15Control supply voltage 1 at ACV24• at 50 Hz rated valueV24relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%10relative positive tolerance of the control supply voltage at<br>AC at 50 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 60 Hz%10control supply voltage 1 at DC rated valueV24relative positive tolerance of the control supply voltage at<br>DC%10relative positive tolerance of the control supply voltage at<br>DC%10relative negative tolerance of the control supply voltage at<br>DC%20relative positive tolerance of the control supply voltage at<br>DC <t< th=""><th></th><th></th><th></th></t<>  |  |    |                                |
| control supply voltage frequency 2 rated valueHz60relative negative tolerance of the control supply voltage<br>frequency%-10relative positive tolerance of the control supply voltage<br>frequency%10control supply voltage 1 at AC<br>• at 50 Hz rated valueV24e at 60 Hz rated valueV24relative positive tolerance of the control supply voltage at<br>AC at 50 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%-15AC at 50 Hz101010relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%10relative negative tolerance of the control supply voltage at<br>AC at 60 Hz%10control supply voltage 1 at DC rated valueV24relative negative tolerance of the control supply voltage at<br>DC%10control supply voltage 1 at DC rated valueV24relative positive tolerance of the control supply voltage at<br>DC%10control supply voltage 1 at DC rated valueV24relative positive tolerance of the control supply voltage at<br>DC%20relative positive tolerance of the control supply voltage  | type of voltage of the control supply voltage                |    |                                |
| relative negative tolerance of the control supply voltage       %       -10         relative positive tolerance of the control supply voltage       %       10         control supply voltage 1 at AC           • at 50 Hz rated value       V       24         • at 60 Hz rated value       V       24         relative negative tolerance of the control supply voltage at AC at 50 Hz       %       -15         relative positive tolerance of the control supply voltage at AC at 50 Hz       %       10         relative positive tolerance of the control supply voltage at AC at 50 Hz       %       10         relative positive tolerance of the control supply voltage at AC at 50 Hz       %       10         relative positive tolerance of the control supply voltage at AC at 60 Hz       %       10         relative positive tolerance of the control supply voltage at AC at 60 Hz       %       10         control supply voltage 1 at DC rated value       V       24         relative negative tolerance of the control supply voltage at DC       %       20         control supply voltage 1 at DC rated value       V       24         relative negative tolerance of the control supply voltage at DC       %       20         DC        20          display version for fault signal       r   |  |    |                                |
| frequency       it is it i              |  | -  |                                |
| frequencyIn Processioncontrol supply voltage 1 at ACV• at 50 Hz rated valueV• at 60 Hz rated valueV24relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%-15relative negative tolerance of the control supply voltage at<br>AC at 50 Hz%-15relative negative tolerance of the control supply voltage at<br>AC at 60 Hz%-15relative negative tolerance of the control supply voltage at<br>AC at 60 Hz%-15control supply voltage 1 at DC rated valueVV24relative positive tolerance of the control supply voltage at<br>DC%-15-15-15-15-16-15-17-15-18-15-19-15-10-15-10-15-10-15-11-15-12-15-15-15-15-15-15-15-15-15-15-15-15-15-15-15-15-15-15-15-16-15-17-15-18-15-19-15-10-15-11-15-11-15-12-15-13-20-14-20-15-20-16-20-17-20-18-20 <th>frequency</th> <th></th> <th></th>   | frequency  |    |                                |
| • at 50 Hz rated value       V       24         • at 60 Hz rated value       V       24         relative negative tolerance of the control supply 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 50 Hz       %       10         relative positive tolerance of the control supply voltage at AC at 60 Hz       %       11         relative positive tolerance of the control supply voltage at AC at 60 Hz       %       10         control supply voltage 1 at DC rated value       V       24         relative positive tolerance of the control supply voltage at DC       %       -20         relative positive tolerance of the control supply voltage at DC       %       20         relative positive tolerance of the control supply voltage at DC       %       20         relative positive tolerance of the control supply voltage at DC       %       20         display version for fault signal       red       %       20         display version for fault signal       mm       45         height       mm       45   | frequency  | %  | 10                             |
| • at 60 Hz rated value       V       24         relative negative tolerance of the control supply 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 negative tolerance of the control supply voltage at AC at 60 Hz       %       10         relative positive tolerance of the control supply voltage at AC at 60 Hz       %       10         control supply voltage 1 at DC rated value       V       24         relative positive tolerance of the control supply voltage at DC       %       -20         relative negative tolerance of the control supply voltage at DC       %       -20         relative positive tolerance of the control supply voltage at DC       %       20         relative positive tolerance of the control supply voltage at DC       %       20         relative positive tolerance of the control supply voltage at DC       %       20         mathematical data       %       20       20         size of engine control device       \$       \$         width       mm       45         height       mm       120  |  |    |                                |
| relative negative tolerance of the control supply voltage at<br>AC at 50 Hz       %       -15         relative positive tolerance of the control supply voltage at<br>AC at 50 Hz       %       10         relative negative tolerance of the control supply voltage at<br>AC at 60 Hz       %       -15         relative positive tolerance of the control supply voltage at<br>AC at 60 Hz       %       -15         relative positive tolerance of the control supply voltage at<br>AC at 60 Hz       %       10         control supply voltage 1 at DC rated value       V       24         relative positive tolerance of the control supply voltage at<br>DC       %       -20         relative positive tolerance of the control supply voltage at<br>DC       %       20         relative positive tolerance of the control supply voltage at<br>DC       %       20         relative positive tolerance of the control supply voltage at<br>DC       %       20         relative positive tolerance of the control supply voltage at<br>DC       %       20         display version for fault signal       red          size of engine control device       \$00       \$00         width       mm       45         height       mm       120  |  |    |                                |
| AC at 50 Hz       10         relative positive tolerance of the control supply voltage at       %       10         AC at 50 Hz       %       -15         relative negative tolerance of the control supply voltage at       %       10         AC at 60 Hz       %       10         relative positive tolerance of the control supply voltage at       %       10         AC at 60 Hz       10       0         control supply voltage 1 at DC rated value       V       24         relative negative tolerance of the control supply voltage at DC       %       -20         DC       0       -20       0         relative positive tolerance of the control supply voltage at DC       %       20         display version for fault signal       red       %       20         display version for fault signal       red       \$       \$         Mechanical data       \$       \$       \$       \$         width       mm       45       \$       \$       \$         height       mm       120       \$       \$       \$   |  |    |                                |
| AC at 50 Hz       Image: Strain 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 rated value       V       24         relative negative tolerance of the control supply voltage at DC       %       -20         relative negative tolerance of the control supply voltage at DC       %       20         relative positive tolerance of the control supply voltage at DC       %       20         relative positive tolerance of the control supply voltage at DC       %       20         methanical data       red       Mechanical data         size of engine control device       \$00       \$00         width       mm       45         height       mm       120   | AC at 50 Hz  |    |                                |
| AC at 60 Hz       III IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII   | AC at 50 Hz  |    |                                |
| AC at 60 Hz     V     24       control supply voltage 1 at DC rated value     V     24       relative negative tolerance of the control supply voltage at DC     %     -20       pc     %     20       display version for fault signal     red       Mechanical data     size of engine control device     \$00       width     mm     45       height     mm     120  | AC at 60 Hz  | _  | -15                            |
| relative negative tolerance of the control supply voltage at DC     %     -20       relative positive tolerance of the control supply voltage at DC     %     20       display version for fault signal     red       Mechanical data     size of engine control device     \$00       width     mm     45       height     mm     120  |  | %  | 10                             |
| DC     Image: Construct of the control supply voltage at DC     %     20       display version for fault signal     red       Mechanical data     size of engine control device     \$00       width     mm     45       height     mm     120  |  |    |                                |
| DC     Image: Constraint of the second |  | %  | -20                            |
| Mechanical data       size of engine control device     S00       width     mm     45       height     mm     120   |  | %  | 20                             |
| size of engine control deviceS00widthmm45heightmm120  |  |    | red                            |
| width     mm     45       height     mm     120   |  |    |                                |
| height mm 120   |  |    |                                |
|   |  |    |                                |
|   |  | -  | 120<br>150                     |
| fastening method screw and snap-on mounting   | depth  | mm |                                |
| 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   | required spacing with side-by-side mounting                  |    |                                |
| • upwards mm 60   | •  | mm |                                |
| at the side mm 15   |  |    |                                |
| downwards     mm     40   |  |    |                                |
| wire length maximum     m     300       number of poles for main current circuit     3  | 5  | m  |                                |
| Connections/ Terminals  |  |    |                                |
| type of electrical connection   |  |    |                                |
| for main current circuit     spring-loaded terminals  |  |    | spring-loaded terminals        |
| for auxiliary and control circuit     for auxiliary and control circuit   |  |    |                                |
| number of NC contacts for auxiliary contacts 0  | · · · · · · · · · · · · · · · · · · ·                        |    |                                |
| number of NO contacts for auxiliary contacts 1  |  |    | 1                              |
| number of CO contacts for auxiliary contacts 0  | number of CO contacts for auxiliary contacts                 |    | 0                              |
| type of connectable conductor cross-sections for main<br>contacts for box terminal using the front clamping point   | ••   |    |                                |
| • solid 2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 6 mm <sup>2</sup> )  | • solid  |    | 2x (1 2.5 mm²), 2x (2.5 6 mm²) |
| • finely stranded with core end processing 2x (1 2.5 mm <sup>2</sup> ), 2x (2.5 6 mm <sup>2</sup> )   | <ul> <li>finely stranded with core end processing</li> </ul> |    | 2x (1 2.5 mm²), 2x (2.5 6 mm²) |
| type of connectable conductor cross-sections for AWG cables for main contacts for box terminal  |  |    |                                |
| • using the front clamping point 2x (16 10)   | <ul> <li>using the front clamping point</li> </ul>           |    | 2x (16 10)                     |
| type of connectable conductor cross-sections for main<br>contacts   | ••   |    |                                |
| • solid 1 4 mm <sup>2</sup>   | • solid  |    | 1 4 mm²                        |
| • finely stranded with core end processing 1 2.5 mm <sup>2</sup>  | <ul> <li>finely stranded with core end processing</li> </ul> |    | 1 2.5 mm²                      |
| type of connectable conductor cross-sections for auxiliary contacts   | •••  |    |                                |
| • solid 2x (0.25 2.5 mm <sup>2</sup> )  | • solid  |    | 2x (0.25 2.5 mm²)              |
| • finely stranded with core end processing 2x (0.25 1.5 mm <sup>2</sup> )   |  |    |                                |
| type of connectable conductor cross-sections for AWG cables   |  |    | 2x (0.25 1.5 mm²)              |

| <ul> <li>for main contacts</li> </ul>   |  |                              | 16 12                  |  |  |
|---|--|------------------------------|------------------------|--|--|
| <ul> <li>for auxiliary contacts</li> </ul>  |  |                              | 2x (24 14)             |  |  |
| Ambient conditions  |  |                              | , , ,                  |  |  |
| installation altitude at height above sea level   |  | m                            | 5 000                  |  |  |
| environmental category  |  |                              |                        |  |  |
| <ul> <li>during transport according to IEC 60721</li> </ul>   |  |                              | 2K2, 2C1, 2S1          | , 2M2 (max. fall height (                              | 0.3 m)                                 |
| during storage according to IEC 60721   |  |                              |                        | asional condensation), 1<br>t get inside the devices)  |  |
| during operation according to IEC 60721   |  |                              |                        | tion of ice, no condensa<br>st not get into the device | tion), 3C3 (no salt mist),<br>es), 3M6 |
| ambient temperature   |  |                              |                        |  |  |
| <ul> <li>during operation</li> </ul>  |  | °C                           | -25 +60                |  |  |
| during storage  |  | °C                           | -40 +80                |  |  |
| derating temperature  |  | °C                           | 40                     |  |  |
| protection class IP on the front according to IEC   | C 60529  |                              | IP20                   |  |  |
| touch protection on the front according to IEC 6  | 60529  |                              | finger-safe, for       | vertical contact from th                               | e front                                |
| Certificates/ approvals   |  |                              |                        |  |  |
|   |  |                              |                        |  | FMO                                    |
| General Product Approval  | Confirmatio  | n                            |                        |  |  |
| General Product Approval  | Confirmatio  | n                            | UL.                    | EAC  |  |
|   | Confirmatio  |                              | UL.                    | EAC  | EMC<br>RCM                             |
|   |  | es othe<br>tific- M          | r<br>liscellaneousa Co | ERC  | RCM                                    |
| Declaration of Conformity<br>CECUK  | Test Certificate                                   | es othe<br>tific- M          |                        | ERC  | EMC<br>RCM                             |
| Declaration of Conformity<br>EG-Konf.   | Test Certificato<br>Type Test Cer<br>ates/Test Rep | es othe<br>tific- M          |                        | <b>ERC</b>   | EMC<br>RCM                             |
| Declaration of Conformity<br>CCC<br>Declaration of Conformity<br>CCC<br>EG-Konf.  | Test Certificato<br>Type Test Cer<br>ates/Test Rep | es othe<br>tific- M          |                        | Infirmation  | EMC                                    |
| Declaration of Conformity<br>CCC<br>Declaration of Conformity<br>CCC<br>UL/CSA ratings<br>UL/CSA ratings  | Test Certificato<br>Type Test Cer<br>ates/Test Rep | es othe<br>tific- M          |                        | ERC  | EMC                                    |
| Image: Second system       Image: Second system         Declaration of Conformity       Image: Second system         Image: Second system       Image: Second system         Image: S | Test Certificato<br>Type Test Cer<br>ates/Test Rep | es othe<br>rtific- M<br>port | liscellaneousa Co      | ERC  | EMC                                    |
| Image: Second system       Image: Second system         Declaration of Conformity       Image: Second system         Image: Second system       Image: Second system         Image: S | Test Certificato<br>Type Test Cer<br>ates/Test Rep | es othe<br>rtific- M<br>port | liscellaneousa Co      | ERC  | EMIC                                   |







