## SIEMENS

## Data sheet

## 3RW4074-2BB34



SIRIUS soft starter S12 248 A, 200 hp/460 V, 50 °C 200-460 V AC, 115 V AC spring-type terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5074-2AB14<<

| General technical data  |    |                          |
|---|----|--------------------------|
| product brand name  |    | SIRIUS                   |
| product feature   |    |                          |
| <ul> <li>integrated bypass contact system</li> </ul>  |    | Yes                      |
| • thyristors  |    | Yes                      |
| product function  |    |                          |
| intrinsic device protection   |    | 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 according to IEC 204-2 according to IEC 750                        |    | G                        |
| Power Electronics   |    |                          |
| product designation   |    | Soft starter             |
| operational current   |    |                          |
| • at 40 °C rated value  | А  | 280                      |
| • at 50 °C rated value  | А  | 248                      |
| • at 60 °C rated value  | А  | 215                      |
| yielded mechanical performance for 3-phase motors   |    |                          |
| • at 230 V  |    |                          |
| - at standard circuit at 40 °C rated value  | kW | 90                       |
| • at 400 V  |    |                          |
| - at standard circuit at 40 °C rated value  | kW | 160                      |
| yielded mechanical performance [hp] for 3-phase AC motor<br>at 200/208 V at standard circuit at 50 °C rated value | hp | 75                       |
| 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  | 200 460                  |
| relative negative tolerance of the operating voltage at<br>standard circuit                                       | %  | -15                      |
| relative positive tolerance of the operating voltage at standard circuit  | %  | 10                       |
| minimum load [%]  | %  | 20                       |
| adjustable motor current for motor overload protection<br>minimum rated value                                     | А  | 130                      |

|   | _  |   |
|---|----|---|
| continuous operating current [% of le] at 40 °C   | %  | 115   |
| power loss [W] at operational current at 40 °C during   | W  | 90  |
| operation typical   |    |   |
| Control circuit/ Control  |    |   |
| 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<br>frequency  | %  | -10   |
| relative positive tolerance of the control supply voltage<br>frequency  | %  | 10  |
| control supply voltage 1 at AC  |    |   |
| • at 50 Hz rated value  | V  | 115   |
| • at 60 Hz rated value  | V  | 115   |
| 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 positive tolerance of the control supply voltage at AC at 60 Hz  | %  | 10  |
| display version for fault signal  |    | red   |
| Mechanical data   |    |   |
| size of engine control device   |    | S12   |
| width   | mm | 160   |
| height  | mm | 230   |
| depth   | mm | 278   |
| fastening method  |    | screw fixing  |
| mounting position   |    | With additional fan: With vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° t |
| required spacing with side-by-side mounting   |    |   |
| • upwards   | mm | 100   |
| • at the side   | mm | 5   |
| <ul> <li>downwards</li> </ul>   | mm | 75  |
| wire length maximum   | m  | 300   |
| number of poles for main current circuit  |    | 3   |
| Connections/ Terminals  |    |   |
| type of electrical connection   |    |   |
| for main current circuit  |    | busbar connection   |
| <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 main<br>contacts for box terminal using the front clamping point |    |   |
| finely stranded with core end processing  |    | 70 240 mm²  |
| <ul> <li>finely stranded without core end processing</li> </ul>   |    | 70 240 mm <sup>2</sup>  |
| stranded  |    | 95 300 mm <sup>2</sup>  |
| type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point     |    |   |
| finely stranded with core end processing  |    | 120 185 mm²   |
| <ul> <li>finely stranded with one end processing</li> <li>finely stranded without core end processing</li> </ul>  |    | 120 185 mm <sup>2</sup>   |
| stranded  |    | 120 240 mm <sup>2</sup>   |
| type of connectable conductor cross-sections for main contacts for box terminal using both clamping points        |    |   |
| finely stranded with core end processing  |    | min. 2x 50 mm², max. 2x 185 mm²   |
| <ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul> |    | min. 2x 50 mm², max. 2x 185 mm²   |
| Intely stranded without core end processing     stranded  |    | max. 2x 70 mm², max. 2x 185 mm²<br>max. 2x 70 mm², max. 2x 240 mm²  |
| • stranged<br>type of connectable conductor cross-sections for AWG<br>cables for main contacts for box terminal   |    | max. 2x το mm , max. 2x 240 mm  |
| using the back clamping point   |    | 250 500 kcmil   |
|   |    |   |
| <ul> <li>using the front clamping point</li> </ul>  |    | 3/0 600 kcmil   |

| <ul> <li>using both clamp</li> </ul>  | ing points  |  |  | min. 2x 2/0, m  | ax. 2x 500 kcmil   |                                 |
|---|---|--|--|---|--|---------------------------------|
| type of connectable c<br>lug for main contacts  | onductor cross-sections   | s for DIN cable  |  |   |  |                                 |
| <ul> <li>finely stranded</li> </ul>   |   |  |  | 50 240 mm <sup>2</sup>  | 2  |                                 |
| stranded  |   |  |  | 70 240 mm <sup>2</sup>  |  |                                 |
|   | onductor cross-sections   | s for auxiliary  |  | 70 2 <del>4</del> 0 mm  |  |                                 |
| contacts  |   | s for auxiliary  |  |   |  |                                 |
| <ul> <li>solid</li> </ul>   |   |  |  | 2x (0.25 1.5  | mm²)   |                                 |
| <ul> <li>finely stranded w</li> </ul>   | ith core end processing   |  |  | 2x (0.25 1.5  | mm²)   |                                 |
| type of connectable c   | onductor cross-sections   | s for AWG  |  |   |  |                                 |
| cables  |   |  |  |   |  |                                 |
| <ul> <li>for main contacts</li> </ul>   | 5   |  |  | 2/0 500 kcm   | nil  |                                 |
| <ul> <li>for auxiliary containing</li> </ul>  | acts  |  |  | 2x (24 16)  |  |                                 |
| Ambient conditions  |   |  |  |   |  |                                 |
| installation altitude at  | height above sea level  |  | m  | 5 000   |  |                                 |
| environmental catego  | ry  |  |  |   |  |                                 |
| <ul> <li>during transport a</li> </ul>  | according to IEC 60721  |  |  | 2K2, 2C1, 2S1   | , 2M2 (max. fall height 0.3                                  | 3 m)                            |
| during storage according to IEC 60721   |   |  |  | 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2         |  |                                 |
|   |   |  |  | (sand must not get inside the devices), 1M4                         |  |                                 |
| <ul> <li>during operation</li> </ul>  | according to IEC 60721  |  |  |   | tion of ice, no condensation<br>st not get into the devices) |                                 |
| ambient temperature   |   |  |  |   |  |                                 |
| <ul> <li>during operation</li> </ul>  |   |  | °C   | -25 +60   |  |                                 |
| <ul> <li>during storage</li> </ul>  |   |  | °C   | -40 +80   |  |                                 |
| derating temperature  |   |  | °C   | 40  |  |                                 |
| protection class IP on  | the front according to I  | EC 60529   |  | IP00; IP20 wit  | h cover  |                                 |
| touch protection on th  | ne front according to IEC   | 60529  |  | finger-safe, for  | vertical contact from the                                    | front with cover                |
| Certificates/ approvals   |   |  |  |   |  |                                 |
| General Product App   | roval   |  |  |   |  | EMC                             |
|   | $\smile$  |  |  |   |  |                                 |
| CSA   | ccc   |  |  | UL  | LIIL   | RCM                             |
| CSA<br>Declaration of Con-<br>formity   | ccc<br>Test Certificates  | Marine / Shippi  | ng   | UL  | other  | RCM                             |
|   |   | Marine / Shippi  | ng   | UL  |  | RCM                             |
|   | ccc<br>Test Certificates<br>Special Test Certific-<br>ate   | Marine / Shippi  | ng   | UL  | other<br><u>Confirmation</u>                                 | RCM                             |
|   | Special Test Certific-  | Marine / Shippi  | ng   | UL  |  | RCM                             |
|   | Special Test Certific-  | Marine / Shippi  | ng   |   |  | RCM                             |
| formity   | Special Test Certific-  | Marine / Shippi  | ng   | UL  |  | RCM                             |
| formity   | Special Test Certific-  | Marine / Shippi  | ng   | UL<br>DIV-GL<br>DIV-GL<br>DIV-GL                                    |  | RCM                             |
| formity   | Special Test Certific-  | Marine / Shippi  | ng   | UL<br>DNV-GL<br>DNV-GL  |  | RCM                             |
| formity<br>EG-Konf.   | Special Test Certific-  | Lloyd's<br>Register<br>Lis   | ng   | UL  |  | RCM                             |
| formity<br>EG-Konf.   | Special Test Certific-<br>ate   | Lloyd's<br>Register<br>Lis   | ng   | UL<br>DIVIGL  |  | RCM                             |
| formity<br><b>EG-Konf.</b><br>UL/CSA ratings<br>yielded mechanical per<br>• at 220/230 V  | Special Test Certific-<br>ate   | LRS  | ng   | UL<br>UNV-GL<br>Eversileneev  |  | RCM                             |
| formity<br><b>EG-Konf.</b><br>UL/CSA ratings<br>yielded mechanical per<br>• at 220/230 V  | Special Test Certific-<br>ate   | LRS  |  | UL<br>UNV-GL<br>Ewsletower  |  | RCM                             |
| formity<br><b>EG-Konf.</b><br><b>UL/CSA ratings</b><br>yielded mechanical per<br>• at 220/230 V<br>— at standard<br>• at 460/480 V  | Special Test Certific-<br>ate   | LRS<br>ase AC motor  |  | UL<br>UL<br>100<br>200  |  | RCM                             |
| formity<br>EG-Konf.<br>UL/CSA ratings<br>yielded mechanical per<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard   | Special Test Certific-<br>ate   | ase AC motor<br>le   | hp   |   |  | RCM                             |
| formity<br>EG-Konf.<br>UL/CSA ratings<br>yielded mechanical per<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard   | Special Test Certific-<br>ate   | ase AC motor<br>le   | hp   | 200   |  | RCM                             |
| formity<br>EG-Konf.<br>UL/CSA ratings<br>yielded mechanical period<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided   | Special Test Certific-<br>ate<br>erformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian mark  | ase AC motor<br>le<br>to UL<br>ket (see here).   | hp   | 200<br>B300 / R300  |  | RCM                             |
| formity<br>EG-Konf.<br>UL/CSA ratings<br>yielded mechanical pe<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working o<br>Please contact your loc  | Special Test Certific-<br>ate   | ase AC motor<br>le<br>to UL<br>ket (see here).<br>s/siemens-wind-dor<br>rent EAC certifica<br>status of validity of  | hp<br>hp<br>wn-russian-br<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter              |  | RCM                             |
| formity<br>EG-Konf.<br>UL/CSA ratings<br>yielded mechanical pe<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working o<br>Please contact your loc<br>EAC relevant market (o  | Special Test Certific-<br>ate   | ase AC motor<br>le<br>to UL<br>ket (see here).<br>s/siemens-wind-dor<br>rent EAC certifica<br>status of validity of  | hp<br>hp<br>wn-russian-br<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter              | Confirmation   | RCM<br>ply these products to an |
| formity<br>EG-Konf.<br>UL/CSA ratings<br>yielded mechanical pe<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working of<br>Please contact your loc<br>EAC relevant market (of<br>Simulation Tool for So  | Special Test Certific-<br>ate   | ase AC motor<br>le<br>to UL<br>ket (see here).<br>e/siemens-wind-do<br>reent EAC certifica<br>status of validity of<br>EAEU member stat                                | hp<br>hp<br>wn-russian-br<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter              | Confirmation   | RCM<br>ply these products to an |
| formity<br>Formity<br>Formity<br>Formity<br>UL/CSA ratings<br>yielded mechanical pe<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working of<br>Please contact your loc<br>EAC relevant market (of<br>Simulation Tool for So<br>https://support.industry.<br>Information on the pai  | Special Test Certific-<br>ate<br>ate<br>arformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian marl<br>om/global/en/pressrelease<br>n the renewal of the curr<br>al Siemens office on the s<br>ther than the sanctioned i<br>oft Starters (STS)<br>siemens.com/cs/ww/en/vi<br>ckaging   | ase AC motor<br>le<br>to UL<br>ket (see here).<br>s/siemens-wind-dor<br>rent EAC certifica<br>status of validity of<br>EAEU member stat<br>iew/101494917               | hp<br>hp<br>wn-russian-br<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter              | Confirmation   | RCM<br>Ply these products to an |
| formity<br>Formity<br>Formity<br>FEG-Konf.<br>UL/CSA ratings<br>yielded mechanical pe<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working o<br>Please contact your loc<br>EAC relevant market (o<br>Simulation Tool for So<br>https://support.industry.<br>Information on the pai<br>https://support.industry.   | Special Test Certific-<br>ate<br>ate<br>arformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian marl<br>om/global/en/pressrelease<br>n the renewal of the curr<br>al Siemens office on the s<br>ther than the sanctioned I<br>off Starters (STS)<br>siemens.com/cs/ww/en/vi<br>ckaging<br>siemens.com/cs/ww/en/vi           | ase AC motor<br>le<br>to UL<br>ket (see here).<br>Semens-wind-dor<br>rent EAC certifica<br>status of validity of<br>EAEU member stat<br>iew/101494917<br>iew/109813875 | hp<br>hp<br>wn-russian-br<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter              | Confirmation   | RCM                             |
| formity<br>Formity<br>Formity<br>FEG-Konf.<br>UL/CSA ratings<br>yielded mechanical pe<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working o<br>Please contact your loc<br>EAC relevant market (o<br>Simulation Tool for So<br>https://support.industry.<br>Information on the pai<br>https://support.industry.   | Special Test Certific-<br>ate<br>ate<br>arformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian marl<br>om/global/en/pressrelease<br>n the renewal of the curr<br>al Siemens office on the s<br>ther than the sanctioned fo<br>ft Starters (STS)<br>siemens.com/cs/ww/en/vi<br>ckaging<br>siemens.com/cs/ww/en/vi<br>nloadcenter (Catalogs, F              | ase AC motor<br>le<br>to UL<br>ket (see here).<br>Semens-wind-dor<br>rent EAC certifica<br>status of validity of<br>EAEU member stat<br>iew/101494917<br>iew/109813875 | hp<br>hp<br>wn-russian-br<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter              | Confirmation   | RCM                             |
| formity<br>Formity<br>FG-Konf.<br>UL/CSA ratings<br>yielded mechanical period<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working of<br>Please contact your loce<br>EAC relevant market (of<br>Simulation Tool for So<br>https://support.industry,<br>Information- and Dow<br>https://www.siemens.co<br>Industry Mall (Online of                                     | Special Test Certific-<br>ate<br>erformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian mart<br>om/global/en/pressrelease<br>n the renewal of the curr<br>al Siemens office on the s<br>ther than the sanctioned I<br>off Starters (STS)<br>siemens.com/cs/ww/en/vi<br>ckaging<br>siemens.com/cs/ww/en/vi<br>nloadcenter (Catalogs, I<br>ordering system) | LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS   | hp<br>hp<br>wn-russian-bi<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter<br>Belarus). | Confirmation   | RCM                             |
| formity<br>Formity<br>FG-Konf.<br>UL/CSA ratings<br>yielded mechanical period<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working of<br>Please contact your loc<br>EAC relevant market (of<br>Simulation Tool for So<br>https://support.industry.<br>Information - and Dow<br>https://www.siemens.co<br>Industry Mall (Online of<br>https://mall.industry.siemens.co | Special Test Certific-<br>ate<br>ate<br>arformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian marl<br>om/global/en/pressrelease<br>n the renewal of the curr<br>al Siemens office on the s<br>ther than the sanctioned fo<br>fit Starters (STS)<br>siemens.com/cs/ww/en/vi<br>ckaging<br>siemens.com/cs/ww/en/vi<br>nloadcenter (Catalogs, F<br>om/ic10  | LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS   | hp<br>hp<br>wn-russian-bi<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter<br>Belarus). | Confirmation   | RCM                             |
| formity<br>Formity<br>FG-Konf.<br>UL/CSA ratings<br>yielded mechanical period<br>• at 220/230 V<br>— at standard<br>• at 460/480 V<br>— at standard<br>contact rating of auxil<br>Further information<br>Siemens has decided<br>https://press.siemens.co<br>Siemens is working of<br>Please contact your loce<br>EAC relevant market (of<br>Simulation Tool for So<br>https://support.industry,<br>Information- and Dow<br>https://www.siemens.co<br>Industry Mall (Online of                                     | Special Test Certific-<br>ate<br>erformance [hp] for 3-ph<br>circuit at 50 °C rated valu<br>circuit at 50 °C rated valu<br>iary contacts according<br>to exit the Russian mart<br>om/global/en/pressrelease<br>n the renewal of the curr<br>al Siemens office on the s<br>ther than the sanctioned I<br>off Starters (STS)<br>siemens.com/cs/ww/en/vi<br>ckaging<br>siemens.com/cs/ww/en/vi<br>nloadcenter (Catalogs, I<br>ordering system) | LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS<br>LIS   | hp<br>hp<br>wn-russian-bi<br>tes.<br>the EAC certi | 200<br>B300 / R300<br>Usiness<br>fication if you inter<br>Belarus). | Confirmation   | RCM                             |

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