

Siemens  
EcoTech



SIRIUS soft starter 200-480 V 13 A, 110-250 V AC spring-type terminals Analog output



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SIRIUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| product category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Hybrid switching devices                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| product designation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Soft starter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| product type designation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3RW52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| manufacturer's article number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"><li>• of standard HMI module usable</li><li>• of high feature HMI module usable</li><li>• of communication module PROFINET standard usable</li><li>• of communication module PROFIBUS usable</li><li>• of communication module Modbus TCP usable</li><li>• of communication module Modbus RTU usable</li><li>• of communication module Ethernet/IP</li><li>• of circuit breaker usable at 400 V</li><li>• of circuit breaker usable at 500 V</li><li>• of circuit breaker usable at 400 V at inside-delta circuit</li><li>• of circuit breaker usable at 500 V at inside-delta circuit</li><li>• of the gG fuse usable up to 690 V</li><li>• of the gG fuse usable at inside-delta circuit up to 500 V</li><li>• of full range R fuse link for semiconductor protection usable up to 690 V</li><li>• of back-up R fuse link for semiconductor protection usable up to 690 V</li></ul> | <a href="#">3RW5980-0HS00</a><br><a href="#">3RW5980-0HF00</a><br><a href="#">3RW5980-0CS00</a><br><a href="#">3RW5980-0CP00</a><br><a href="#">3RW5980-0CT00</a><br><a href="#">3RW5980-0CR00</a><br><a href="#">3RW5980-0CE00</a><br><a href="#">3RV2032-4TA10; Type of coordination 1, Iq = 65 kA, CLASS 10</a><br><a href="#">3RV2032-4TA10; Type of coordination 1, Iq = 18 kA, CLASS 10</a><br><a href="#">3RV2032-4DA10; Type of coordination 1, Iq = 65 kA, CLASS 10</a><br><a href="#">3RV2032-4DA10; Type of coordination 1, Iq = 18 kA, CLASS 10</a><br><a href="#">3NA3820-6; Type of coordination 1, Iq = 65 kA</a><br><a href="#">3NA3820-6; Type of coordination 1, Iq = 65 kA</a><br><a href="#">3NE1815-0; Type of coordination 2, Iq = 65 kA</a><br><a href="#">3NE8017-1; Type of coordination 2, Iq = 65 kA</a> |
| General technical data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| starting voltage [%]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 30 ... 100 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| stopping voltage [%]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 50 %; non-adjustable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| start-up ramp time of soft starter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0 ... 20 s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| current limiting value [%] adjustable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 130 ... 700 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| certificate of suitability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"><li>• CE marking</li><li>• UL approval</li><li>• CSA approval</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Yes<br>Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| product component                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"><li>• HMI-High Feature</li><li>• is supported HMI-Standard</li><li>• is supported HMI-High Feature</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No<br>Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| product feature integrated bypass contact system                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| number of controlled phases                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| buffering time in the event of power failure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 100 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• for control circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 100 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>insulation voltage rated value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 600 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>degree of pollution</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3, acc. to IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>impulse voltage rated value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>blocking voltage of the thyristor maximum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1 600 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>service factor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>surge voltage resistance rated value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>maximum permissible voltage for protective separation</b> <ul style="list-style-type: none"> <li>• between main and auxiliary circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 600 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>shock resistance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>vibration resistance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 15 mm to 6 Hz; 2g to 500 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| utilization category according to IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | AC 53a                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>reference code according to IEC 81346-2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Substance Prohibitance (Date)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 02/15/2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>SVHC substance name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5<br>Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4                                                                                                                                                                                                                                                                                 |
| <b>Weight</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>product function</b> <ul style="list-style-type: none"> <li>• ramp-up (soft starting)</li> <li>• ramp-down (soft stop)</li> <li>• Soft Torque</li> <li>• adjustable current limitation</li> <li>• pump ramp down</li> <li>• intrinsic device protection</li> <li>• motor overload protection</li> <li>• evaluation of thermistor motor protection</li> <li>• inside-delta circuit</li> <li>• auto-RESET</li> <li>• manual RESET</li> <li>• remote reset</li> <li>• communication function</li> <li>• operating measured value display</li> <li>• error logbook</li> <li>• via software parameterizable</li> <li>• via software configurable</li> <li>• <b>PROFenergy</b></li> <li>• <b>firmware update</b></li> <li>• <b>removable terminal for control circuit</b></li> <li>• torque control</li> <li>• analog output</li> </ul> | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes; Electronic motor overload protection<br>No<br>Yes<br>Yes<br>Yes<br>Yes; By turning off the control supply voltage<br>Yes<br>Yes; Only in conjunction with special accessories<br>Yes; Only in conjunction with special accessories<br>No<br>Yes<br>Yes; in connection with the PROFINET Standard communication module<br>Yes<br>Yes<br>No<br>Yes; 4 ... 20 mA (default) / 0 ... 10 V (parameterizable with High Feature HMI) |
| <b>Power Electronics</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>operational current</b> <ul style="list-style-type: none"> <li>• at 40 °C rated value</li> <li>• at 50 °C rated value</li> <li>• at 60 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 13 A<br>11.5 A<br>10.5 A                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>operational current at inside-delta circuit</b> <ul style="list-style-type: none"> <li>• at 40 °C rated value</li> <li>• at 50 °C rated value</li> <li>• at 60 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 22.5 A<br>19.9 A<br>18.2 A                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>operating voltage</b> <ul style="list-style-type: none"> <li>• rated value</li> <li>• at inside-delta circuit rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 200 ... 480 V<br>200 ... 480 V                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>relative negative tolerance of the operating voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -15 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>relative positive tolerance of the operating voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>relative negative tolerance of the operating voltage at inside-delta circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -15 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>relative positive tolerance of the operating voltage at inside-delta circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>operating power for 3-phase motors</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 230 V at 40 °C rated value</li> <li>• at 230 V at inside-delta circuit at 40 °C rated value</li> <li>• at 400 V at 40 °C rated value</li> <li>• at 400 V at inside-delta circuit at 40 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3 kW<br>5.5 kW<br>5.5 kW<br>11 kW                                                                                                                                  |
| <b>Operating frequency 1 rated value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50 Hz                                                                                                                                                              |
| <b>Operating frequency 2 rated value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 60 Hz                                                                                                                                                              |
| <b>relative negative tolerance of the operating frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -10 %                                                                                                                                                              |
| <b>relative positive tolerance of the operating frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10 %                                                                                                                                                               |
| <b>adjustable motor current</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• at rotary coding switch on switch position 1</li> <li>• at rotary coding switch on switch position 2</li> <li>• at rotary coding switch on switch position 3</li> <li>• at rotary coding switch on switch position 4</li> <li>• at rotary coding switch on switch position 5</li> <li>• at rotary coding switch on switch position 6</li> <li>• at rotary coding switch on switch position 7</li> <li>• at rotary coding switch on switch position 8</li> <li>• at rotary coding switch on switch position 9</li> <li>• at rotary coding switch on switch position 10</li> <li>• at rotary coding switch on switch position 11</li> <li>• at rotary coding switch on switch position 12</li> <li>• at rotary coding switch on switch position 13</li> <li>• at rotary coding switch on switch position 14</li> <li>• at rotary coding switch on switch position 15</li> <li>• at rotary coding switch on switch position 16</li> <li>• minimum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5.5 A<br>6 A<br>6.5 A<br>7 A<br>7.5 A<br>8 A<br>8.5 A<br>9 A<br>9.5 A<br>10 A<br>10.5 A<br>11 A<br>11.5 A<br>12 A<br>12.5 A<br>13 A<br>5.5 A                       |
| <b>adjustable motor current</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• for inside-delta circuit at rotary coding switch on switch position 1</li> <li>• for inside-delta circuit at rotary coding switch on switch position 2</li> <li>• for inside-delta circuit at rotary coding switch on switch position 3</li> <li>• for inside-delta circuit at rotary coding switch on switch position 4</li> <li>• for inside-delta circuit at rotary coding switch on switch position 5</li> <li>• for inside-delta circuit at rotary coding switch on switch position 6</li> <li>• for inside-delta circuit at rotary coding switch on switch position 7</li> <li>• for inside-delta circuit at rotary coding switch on switch position 8</li> <li>• for inside-delta circuit at rotary coding switch on switch position 9</li> <li>• for inside-delta circuit at rotary coding switch on switch position 10</li> <li>• for inside-delta circuit at rotary coding switch on switch position 11</li> <li>• for inside-delta circuit at rotary coding switch on switch position 12</li> <li>• for inside-delta circuit at rotary coding switch on switch position 13</li> <li>• for inside-delta circuit at rotary coding switch on switch position 14</li> <li>• for inside-delta circuit at rotary coding switch on switch position 15</li> <li>• for inside-delta circuit at rotary coding switch on switch position 16</li> <li>• at inside-delta circuit minimum</li> </ul> | 9.5 A<br>10.4 A<br>11.3 A<br>12.1 A<br>13 A<br>13.9 A<br>14.7 A<br>15.6 A<br>16.5 A<br>17.3 A<br>18.2 A<br>19.1 A<br>19.9 A<br>20.8 A<br>21.7 A<br>22.5 A<br>9.5 A |
| <b>minimum load [%]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 15 %; Relative to smallest settable Ie                                                                                                                             |
| <b>power loss [W] for rated value of the current at AC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• at 40 °C after startup</li> <li>• at 50 °C after startup</li> <li>• at 60 °C after startup</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 16 W<br>15 W<br>15 W                                                                                                                                               |
| <b>power loss [W] at AC at current limitation 350 %</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                    |

|                                                                                                                                                                                                                                               |                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 40 °C during startup</li> <li>• at 50 °C during startup</li> <li>• at 60 °C during startup</li> </ul>                                                                                             | 210 W<br>178 W<br>161 W                                                                                                                                                        |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                               |                                                                                                                                                                                |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                          | AC                                                                                                                                                                             |
| <b>control supply voltage at AC</b>                                                                                                                                                                                                           |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                              | 110 ... 250 V<br>110 ... 250 V                                                                                                                                                 |
| <b>relative negative tolerance of the control supply voltage at AC at 50 Hz</b>                                                                                                                                                               | -15 %                                                                                                                                                                          |
| <b>relative positive tolerance of the control supply voltage at AC at 50 Hz</b>                                                                                                                                                               | 10 %                                                                                                                                                                           |
| <b>relative negative tolerance of the control supply voltage at AC at 60 Hz</b>                                                                                                                                                               | -15 %                                                                                                                                                                          |
| <b>relative positive tolerance of the control supply voltage at AC at 60 Hz</b>                                                                                                                                                               | 10 %                                                                                                                                                                           |
| <b>control supply voltage frequency</b>                                                                                                                                                                                                       | 50 ... 60 Hz                                                                                                                                                                   |
| <b>relative negative tolerance of the control supply voltage frequency</b>                                                                                                                                                                    | -10 %                                                                                                                                                                          |
| <b>relative positive tolerance of the control supply voltage frequency</b>                                                                                                                                                                    | 10 %                                                                                                                                                                           |
| <b>control supply current in standby mode rated value</b>                                                                                                                                                                                     | 30 mA                                                                                                                                                                          |
| <b>holding current in bypass operation rated value</b>                                                                                                                                                                                        | 75 mA                                                                                                                                                                          |
| <b>inrush current by closing the bypass contacts maximum</b>                                                                                                                                                                                  | 0.17 A                                                                                                                                                                         |
| inrush current peak at application of control supply voltage maximum                                                                                                                                                                          | 12.2 A                                                                                                                                                                         |
| duration of inrush current peak at application of control supply voltage                                                                                                                                                                      | 2.2 ms                                                                                                                                                                         |
| <b>design of the overvoltage protection</b>                                                                                                                                                                                                   | Varistor                                                                                                                                                                       |
| <b>design of short-circuit protection for control circuit</b>                                                                                                                                                                                 | 4 A gG fuse (Icu=1 kA), 6 A quick-acting fuse (Icu=1 kA), C1 miniature circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply |
| <b>Inputs/ Outputs</b>                                                                                                                                                                                                                        |                                                                                                                                                                                |
| <b>number of digital inputs</b>                                                                                                                                                                                                               | 1                                                                                                                                                                              |
| <b>number of digital outputs</b>                                                                                                                                                                                                              | 3                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• not parameterizable</li> </ul>                                                                                                                                                                       | 2                                                                                                                                                                              |
| <b>digital output version</b>                                                                                                                                                                                                                 | 2 normally-open contacts (NO) / 1 changeover contact (CO)                                                                                                                      |
| <b>number of analog outputs</b>                                                                                                                                                                                                               | 1                                                                                                                                                                              |
| <b>switching capacity current of the relay outputs</b>                                                                                                                                                                                        |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• at AC-15 at 250 V rated value</li> <li>• at DC-13 at 24 V rated value</li> </ul>                                                                                                                     | 3 A<br>1 A                                                                                                                                                                     |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                     |                                                                                                                                                                                |
| <b>mounting position</b>                                                                                                                                                                                                                      | +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface                                                                                   |
| <b>fastening method</b>                                                                                                                                                                                                                       | screw fixing                                                                                                                                                                   |
| <b>height</b>                                                                                                                                                                                                                                 | 275 mm                                                                                                                                                                         |
| <b>width</b>                                                                                                                                                                                                                                  | 170 mm                                                                                                                                                                         |
| <b>depth</b>                                                                                                                                                                                                                                  | 152 mm                                                                                                                                                                         |
| required spacing with side-by-side mounting                                                                                                                                                                                                   |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• forwards</li> <li>• backwards</li> <li>• upwards</li> <li>• downwards</li> <li>• at the side</li> </ul>                                                                                              | 10 mm<br>0 mm<br>100 mm<br>75 mm<br>5 mm                                                                                                                                       |
| <b>weight without packaging</b>                                                                                                                                                                                                               | 2.1 kg                                                                                                                                                                         |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                 |                                                                                                                                                                                |
| <b>type of electrical connection</b>                                                                                                                                                                                                          |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for control circuit</li> </ul>                                                                                                                                   | screw-type terminals<br>spring-loaded terminals                                                                                                                                |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                           |                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for main current circuit solid</li> </ul> | 2x (1.0 ... 2.5 mm²), 2x (2.5 ... 10 mm²)<br>2x (1.0 ... 2.5 mm²), 2x (2.5 ... 6.0 mm²)<br>2x (16 ... 12), 2x (14 ... 8)                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for control circuit solid</li> <li>• for control circuit finely stranded with core end processing</li> <li>• for AWG cables for control circuit solid</li> <li>• for AWG cables for control circuit finely stranded with core end processing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2x (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (24 ... 16)<br>2x (24 ... 16)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>wire length</b> <ul style="list-style-type: none"> <li>• between soft starter and motor maximum</li> <li>• at the digital inputs at AC maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 800 m<br>100 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>tightening torque</b> <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> <li>• for auxiliary and control contacts with screw-type terminals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2 ... 2.5 N·m<br>0.8 ... 1.2 N·m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>tightening torque [lbf·in]</b> <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> <li>• for auxiliary and control contacts with screw-type terminals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 18 ... 22 lbf·in<br>7 ... 10.3 lbf·in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Ambient conditions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| installation altitude at height above sea level maximum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5 000 m; Derating as of 1000 m, see catalog                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage and transport</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | -25 ... +60 °C; Please observe derating at temperatures of 40 °C or above<br>-40 ... +80 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>environmental category</b> <ul style="list-style-type: none"> <li>• during operation according to IEC 60721</li> <li>• during storage according to IEC 60721</li> <li>• during transport according to IEC 60721</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6<br>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4<br>2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)                                                                                                                                                                                                                                                                                                                                              |
| <b>Environmental footprint</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Global Warming Potential [CO2 eq] total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 185 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Global Warming Potential [CO2 eq] during manufacturing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 37.2 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| global warming potential [CO2 eq] during sales                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.66 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Global Warming Potential [CO2 eq] during operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 152 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Global Warming Potential [CO2 eq] after end of life                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -4.19 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Siemens Eco Profile (SEP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Siemens EcoTech                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Electromagnetic compatibility</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>EMC emitted interference</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | acc. to IEC 60947-4-2: Class A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Communication/ Protocol</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>communication module is supported</b> <ul style="list-style-type: none"> <li>• PROFINET standard</li> <li>• EtherNet/IP</li> <li>• Modbus RTU</li> <li>• Modbus TCP</li> <li>• PROFIBUS</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Yes<br>Yes<br>Yes<br>Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>manufacturer's article number</b> <ul style="list-style-type: none"> <li>• of circuit breaker usable for Standard Faults <ul style="list-style-type: none"> <li>— at 460/480 V according to UL</li> <li>— 60/480 V according to UL</li> <li>— at 460/480 V at inside-delta circuit according to UL</li> <li>— 60/480 V at inside-delta circuit according to UL</li> <li>— at 575/600 V according to UL</li> <li>— at 575/600 V at inside-delta circuit according to UL</li> </ul> </li> <li>• of the fuse <ul style="list-style-type: none"> <li>— usable for Standard Faults up to 575/600 V according to UL</li> <li>— usable for High Faults up to 575/600 V according to UL</li> <li>— usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li> <li>— usable for High Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul> </li> </ul> | Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA<br>Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; Iq max = 65 kA<br>Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA<br>Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; Iq max = 65 kA<br>Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA<br>Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA<br><br>Type: Class RK5 / K5, max. 50 A; Iq = 5 kA<br><br>Type: Class J / L, max. 50 A; Iq = 100 kA<br><br>Type: Class RK5 / K5, max. 50 A; Iq = 5 kA<br><br>Type: Class J / L, max. 50 A; Iq = 100 kA |
| <b>operating power [hp] for 3-phase motors</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

- at 200/208 V at 50 °C rated value
- at 220/230 V at 50 °C rated value
- at 460/480 V at 50 °C rated value
- at 200/208 V at inside-delta circuit at 50 °C rated value
- at 220/230 V at inside-delta circuit at 50 °C rated value
- at 460/480 V at inside-delta circuit at 50 °C rated value

2 hp  
3 hp  
7.5 hp  
5 hp  
5 hp  
10 hp

**contact rating of auxiliary contacts according to UL** R300-B300

Electrical Safety

**protection class IP on the front according to IEC 60529** IP20

**touch protection on the front according to IEC 60529** finger-safe, for vertical contact from the front

#### Approvals Certificates

##### General Product Approval



[Confirmation](#)



##### EMV

##### Test Certificates

##### Marine / Shipping



[KC](#)

[Type Test Certificates/Test Report](#)



##### Marine / Shipping

##### other

##### Environment



[Confirmation](#)

Siemens  
EcoTech



[Environmental Confirmations](#)

#### Further information

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=3RW5213-3AC14>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5213-3AC14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5213-3AC14>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW5213-3AC14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-3AC14&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5213-3AC14/char>

Characteristic: Installation altitude

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5213-3AC14&objecttype=14&gridview=view1>

Simulation Tool for Soft Starters (STS)

<https://support.industry.siemens.com/cs/ww/en/view/101494917>





