

Siemens  
EcoTech



SIRIUS soft starter 200-600 V 143 A, 24 V AC/DC Screw terminals Analog output



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| 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 400 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="#">3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10</a><br><a href="#">3VA2325-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10</a><br><a href="#">3NA3244-6; Type of coordination 1, Iq = 65 kA</a><br><a href="#">3NA3244-6; Type of coordination 1, Iq = 65 kA</a><br><a href="#">3NE1227-0; Type of coordination 2, Iq = 65 kA</a><br><a href="#">3NE3334-0B; 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><li>• for control circuit</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 100 ms<br>100 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1 800 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>service factor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>surge voltage resistance rated value</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>maximum permissible voltage for protective separation</b><br>• between main and auxiliary circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 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>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5<br>6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1<br>Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4                                                                                                                                                        |
| <b>Weight</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6.6 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>product function</b><br>• ramp-up (soft starting)<br>• ramp-down (soft stop)<br>• Soft Torque<br>• adjustable current limitation<br>• pump ramp down<br>• intrinsic device protection<br>• motor overload protection<br>• evaluation of thermistor motor protection<br>• inside-delta circuit<br>• auto-RESET<br>• manual RESET<br>• remote reset<br>• communication function<br>• operating measured value display<br>• error logbook<br>• via software parameterizable<br>• via software configurable<br>• <b>PROFInergy</b><br>• <b>firmware update</b><br>• <b>removable terminal for control circuit</b><br>• torque control<br>• analog output | 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><br>• at 40 °C rated value<br>• at 50 °C rated value<br>• at 60 °C rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 143 A<br>128 A<br>118 A                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>operational current at inside-delta circuit</b><br>• at 40 °C rated value<br>• at 50 °C rated value<br>• at 60 °C rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 248 A<br>222 A<br>204 A                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>operating voltage</b><br>• rated value<br>• at inside-delta circuit rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 200 ... 600 V<br>200 ... 600 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><br>• at 230 V at 40 °C rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 37 kW                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <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> <li>• at 500 V at 40 °C rated value</li> <li>• at 500 V at inside-delta circuit at 40 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 75 kW<br>75 kW<br>132 kW<br>90 kW<br>160 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>                                                                                                                                                                                                                                                                                                                                                                                                                                         | 68 A<br>73 A<br>78 A<br>83 A<br>88 A<br>93 A<br>98 A<br>103 A<br>108 A<br>113 A<br>118 A<br>123 A<br>128 A<br>133 A<br>138 A<br>143 A<br>68 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> | 118 A<br>126 A<br>135 A<br>144 A<br>152 A<br>161 A<br>170 A<br>178 A<br>187 A<br>196 A<br>204 A<br>213 A<br>222 A<br>230 A<br>239 A<br>248 A<br>118 A |
| <b>minimum load [%]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 15 %; Relative to smallest settable I <sub>e</sub>                                                                                                    |
| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 55 W<br>50 W<br>47 W                                                                                                                                  |

|                                                                                 |                                                                                                                                                                                |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>power loss [W] at AC at current limitation 350 %</b>                         |                                                                                                                                                                                |
| • at 40 °C during startup                                                       | 2 127 W                                                                                                                                                                        |
| • at 50 °C during startup                                                       | 1 807 W                                                                                                                                                                        |
| • at 60 °C during startup                                                       | 1 605 W                                                                                                                                                                        |
| <b>Control circuit/ Control</b>                                                 |                                                                                                                                                                                |
| <b>type of voltage of the control supply voltage</b>                            | AC/DC                                                                                                                                                                          |
| <b>control supply voltage at AC</b>                                             |                                                                                                                                                                                |
| • at 50 Hz rated value                                                          | 24 V                                                                                                                                                                           |
| • at 60 Hz rated value                                                          | 24 V                                                                                                                                                                           |
| <b>relative negative tolerance of the control supply voltage at AC at 50 Hz</b> | -20 %                                                                                                                                                                          |
| <b>relative positive tolerance of the control supply voltage at AC at 50 Hz</b> | 20 %                                                                                                                                                                           |
| <b>relative negative tolerance of the control supply voltage at AC at 60 Hz</b> | -20 %                                                                                                                                                                          |
| <b>relative positive tolerance of the control supply voltage at AC at 60 Hz</b> | 20 %                                                                                                                                                                           |
| <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 voltage at DC rated value</b>                                 | 24 V                                                                                                                                                                           |
| <b>relative negative tolerance of the control supply voltage at DC</b>          | -20 %                                                                                                                                                                          |
| <b>relative positive tolerance of the control supply voltage at DC</b>          | 20 %                                                                                                                                                                           |
| <b>control supply current in standby mode rated value</b>                       | 160 mA                                                                                                                                                                         |
| <b>holding current in bypass operation rated value</b>                          | 380 mA                                                                                                                                                                         |
| <b>inrush current by closing the bypass contacts maximum</b>                    | 7.6 A                                                                                                                                                                          |
| inrush current peak at application of control supply voltage maximum            | 3.3 A                                                                                                                                                                          |
| duration of inrush current peak at application of control supply voltage        | 12.1 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                                                                                                                                                                              |
| • not parameterizable                                                           | 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>                          |                                                                                                                                                                                |
| • at AC-15 at 250 V rated value                                                 | 3 A                                                                                                                                                                            |
| • at DC-13 at 24 V rated value                                                  | 1 A                                                                                                                                                                            |
| <b>Installation/ mounting/ dimensions</b>                                       |                                                                                                                                                                                |
| <b>mounting position</b>                                                        | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back                                                       |
| <b>fastening method</b>                                                         | screw fixing                                                                                                                                                                   |
| <b>height</b>                                                                   | 306 mm                                                                                                                                                                         |
| <b>width</b>                                                                    | 185 mm                                                                                                                                                                         |
| <b>depth</b>                                                                    | 203 mm                                                                                                                                                                         |
| required spacing with side-by-side mounting                                     |                                                                                                                                                                                |
| • forwards                                                                      | 10 mm                                                                                                                                                                          |
| • backwards                                                                     | 0 mm                                                                                                                                                                           |
| • upwards                                                                       | 100 mm                                                                                                                                                                         |
| • downwards                                                                     | 75 mm                                                                                                                                                                          |
| • at the side                                                                   | 5 mm                                                                                                                                                                           |
| <b>weight without packaging</b>                                                 | 6.6 kg                                                                                                                                                                         |
| <b>Connections/ Terminals</b>                                                   |                                                                                                                                                                                |
| <b>type of electrical connection</b>                                            |                                                                                                                                                                                |
| • for main current circuit                                                      | busbar connection                                                                                                                                                              |

|                                                                |                                                                                                                         |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| • for control circuit                                          | screw-type terminals                                                                                                    |
| <b>width of connection bar maximum</b>                         | 25 mm                                                                                                                   |
| <b>type of connectable conductor cross-sections</b>            |                                                                                                                         |
| • for DIN cable lug for main contacts stranded                 | 2x (16 ... 95 mm <sup>2</sup> )                                                                                         |
| • for DIN cable lug for main contacts finely stranded          | 2x (25 ... 120 mm <sup>2</sup> )                                                                                        |
| <b>type of connectable conductor cross-sections</b>            |                                                                                                                         |
| • for control circuit solid                                    | 1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )                                                    |
| • for control circuit finely stranded with core end processing | 1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )                                                    |
| • for AWG cables for control circuit solid                     | 1x (20 ... 12), 2x (20 ... 14)                                                                                          |
| <b>wire length</b>                                             |                                                                                                                         |
| • between soft starter and motor maximum                       | 800 m                                                                                                                   |
| • at the digital inputs at AC maximum                          | 100 m                                                                                                                   |
| • at the digital inputs at DC maximum                          | 1 000 m                                                                                                                 |
| <b>tightening torque</b>                                       |                                                                                                                         |
| • for main contacts with screw-type terminals                  | 10 ... 14 N·m                                                                                                           |
| • for auxiliary and control contacts with screw-type terminals | 0.8 ... 1.2 N·m                                                                                                         |
| <b>tightening torque [lbf·in]</b>                              |                                                                                                                         |
| • for main contacts with screw-type terminals                  | 89 ... 124 lbf·in                                                                                                       |
| • for auxiliary and control contacts with screw-type terminals | 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>                                     |                                                                                                                         |
| • during operation                                             | -25 ... +60 °C; Please observe derating at temperatures of 40 °C or above                                               |
| • during storage and transport                                 | -40 ... +80 °C                                                                                                          |
| <b>environmental category</b>                                  |                                                                                                                         |
| • during operation according to IEC 60721                      | 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| • during storage according to IEC 60721                        | 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4                 |
| • during transport according to IEC 60721                      | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)                                                                             |
| <b>Environmental footprint</b>                                 |                                                                                                                         |
| global warming potential [CO2 eq] total                        | 296 kg                                                                                                                  |
| global warming potential [CO2 eq] during manufacturing         | 67.7 kg                                                                                                                 |
| global warming potential [CO2 eq] during sales                 | 1.84 kg                                                                                                                 |
| global warming potential [CO2 eq] during operation             | 242 kg                                                                                                                  |
| global warming potential [CO2 eq] after end of life            | -15.7 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>                       |                                                                                                                         |
| • PROFINET standard                                            | Yes                                                                                                                     |
| • EtherNet/IP                                                  | Yes                                                                                                                     |
| • Modbus RTU                                                   | Yes                                                                                                                     |
| • Modbus TCP                                                   | Yes                                                                                                                     |
| • PROFIBUS                                                     | Yes                                                                                                                     |
| <b>UL/CSA ratings</b>                                          |                                                                                                                         |
| <b>manufacturer's article number</b>                           |                                                                                                                         |
| • <b>of circuit breaker usable for Standard Faults</b>         |                                                                                                                         |
| — at 460/480 V according to UL                                 | Siemens type: 3VA52, max. 250 A; Iq = 10 kA                                                                             |
| — 60/480 V according to UL                                     | Siemens type: 3VA52, max. 250 A; Iq max = 65 kA                                                                         |
| — at 460/480 V at inside-delta circuit according to UL         | Siemens type: 3VA52, max. 250 A; Iq = 10 kA                                                                             |
| — 60/480 V at inside-delta circuit according to UL             | Siemens type: 3VA52, max. 250 A; Iq max = 65 kA                                                                         |
| — at 575/600 V according to UL                                 | Siemens type: 3VA52, max. 250 A; Iq = 10 kA                                                                             |
| — at 575/600 V at inside-delta circuit according to UL         | Siemens type: 3VA52, max. 250 A; Iq = 10 kA                                                                             |
| • <b>of the fuse</b>                                           |                                                                                                                         |
| — usable for Standard Faults up to 575/600 V according to UL   | Type: Class RK5 / K5, max. 350 A; Iq = 10 kA                                                                            |
| — usable for High Faults up to 575/600 V according to UL       | Type: Class J / L, max. 350 A; Iq = 100 kA                                                                              |

|                                                                                      |                                                             |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------|
| — usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL | Type: Class RK5 / K5, max. 350 A; Iq = 10 kA                |
| — usable for High Faults at inside-delta circuit up to 575/600 V according to UL     | Type: Class J / L, max. 350 A; Iq = 100 kA                  |
| <b>operating power [hp] for 3-phase motors</b>                                       |                                                             |
| • at 200/208 V at 50 °C rated value                                                  | 40 hp                                                       |
| • at 220/230 V at 50 °C rated value                                                  | 40 hp                                                       |
| • at 460/480 V at 50 °C rated value                                                  | 100 hp                                                      |
| • at 575/600 V at 50 °C rated value                                                  | 125 hp                                                      |
| • at 200/208 V at inside-delta circuit at 50 °C rated value                          | 75 hp                                                       |
| • at 220/230 V at inside-delta circuit at 50 °C rated value                          | 75 hp                                                       |
| • at 460/480 V at inside-delta circuit at 50 °C rated value                          | 150 hp                                                      |
| • at 575/600 V at inside-delta circuit at 50 °C rated value                          | 200 hp                                                      |
| <b>contact rating of auxiliary contacts according to UL</b>                          | R300-B300                                                   |
| <b>Electrical Safety</b>                                                             |                                                             |
| <b>protection class IP on the front according to IEC 60529</b>                       | IP00; IP20 with cover                                       |
| <b>touch protection on the front according to IEC 60529</b>                          | finger-safe, for vertical contact from the front with cover |
| <b>Approvals Certificates</b>                                                        |                                                             |
| <b>General Product Approval</b>                                                      | <b>EMV</b>                                                  |



|                    |                                                    |                             |
|--------------------|----------------------------------------------------|-----------------------------|
| <b>EMV</b>         | <b>Test Certificates</b>                           | <b>Maritime application</b> |
| <a href="#">KC</a> | <a href="#">Type Test Certificates/Test Report</a> |                             |
|                    |                                                    |                             |
| <b>other</b>       | <b>Environment</b>                                 |                             |



[Confirmation](#)



[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

##### 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=3RW5235-6AC05>

##### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5235-6AC05>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5235-6AC05>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW5235-6AC05&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5235-6AC05&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5235-6AC05/char>

##### Characteristic: Installation altitude

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5235-6AC05&objecttype=14&gridview=view1>

##### Simulation Tool for Soft Starters (STS)

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





