



SIRIUS soft starter 200-480 V 143 A, 110-250 V AC 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 <a href="#">3RW5980-0HS00</a></li><li>• of high feature HMI module usable <a href="#">3RW5980-0HF00</a></li><li>• of communication module PROFINET standard usable <a href="#">3RW5980-0CS00</a></li><li>• of communication module PROFIBUS usable <a href="#">3RW5980-0CP00</a></li><li>• of communication module Modbus TCP usable <a href="#">3RW5980-0CT00</a></li><li>• of communication module Modbus RTU usable <a href="#">3RW5980-0CR00</a></li><li>• of communication module Ethernet/IP <a href="#">3RW5980-0CE00</a></li><li>• of circuit breaker usable at 400 V <a href="#">3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10</a></li><li>• of circuit breaker usable at 400 V at inside-delta circuit <a href="#">3VA2325-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10</a></li><li>• of the gG fuse usable up to 690 V <a href="#">3NA3244-6; Type of coordination 1, Iq = 65 kA</a></li><li>• of the gG fuse usable at inside-delta circuit up to 500 V <a href="#">3NA3244-6; Type of coordination 1, Iq = 65 kA</a></li><li>• of full range R fuse link for semiconductor protection usable up to 690 V <a href="#">3NE1227-0; Type of coordination 2, Iq = 65 kA</a></li><li>• of back-up R fuse link for semiconductor protection usable up to 690 V <a href="#">3NE3334-0B; Type of coordination 2, Iq = 65 kA</a></li></ul> |
| 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 Yes</li><li>• UL approval Yes</li><li>• CSA approval Yes</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| product component                                | <ul style="list-style-type: none"><li>• HMI-High Feature No</li><li>• is supported HMI-Standard Yes</li><li>• is supported HMI-High Feature Yes</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 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 100 ms</li><li>• for control circuit 100 ms</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| insulation voltage rated value                   | 600 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| degree of pollution                              | 3, acc. to IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| impulse voltage rated value                      | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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| <b>blocking voltage of the thyristor maximum</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1 400 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| utilization category according to IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | AC 53a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>reference code according to IEC 81346-2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Substance Prohibitance (Date)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 02/15/2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>SVHC substance name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5<br>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7<br>1,6,7,8,9,14,15,16,17,17,18,18-<br>Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene<br>("Dechlorane Plus"™) covering any of its individual anti- and syn-isomers or<br>any combination thereof - -<br>Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4<br>Dodecamethylcyclohexasiloxane (D6) - 540-97-6 |
| <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 ... 480 V<br>200 ... 480 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>relative negative tolerance of the operating voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -15 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>relative positive tolerance of the operating voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>relative negative tolerance of the operating voltage at inside-delta circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -15 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>relative positive tolerance of the operating voltage at inside-delta circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>operating power for 3-phase motors</b><br>• at 230 V at 40 °C rated value<br>• at 230 V at inside-delta circuit at 40 °C rated value<br>• at 400 V at 40 °C rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 37 kW<br>75 kW<br>75 kW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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|--------------------------------------------------------------------------|----------------------------------------------------|
| • at 400 V at inside-delta circuit at 40 °C rated value                  | 132 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>                                          |                                                    |
| • at rotary coding switch on switch position 1                           | 68 A                                               |
| • at rotary coding switch on switch position 2                           | 73 A                                               |
| • at rotary coding switch on switch position 3                           | 78 A                                               |
| • at rotary coding switch on switch position 4                           | 83 A                                               |
| • at rotary coding switch on switch position 5                           | 88 A                                               |
| • at rotary coding switch on switch position 6                           | 93 A                                               |
| • at rotary coding switch on switch position 7                           | 98 A                                               |
| • at rotary coding switch on switch position 8                           | 103 A                                              |
| • at rotary coding switch on switch position 9                           | 108 A                                              |
| • at rotary coding switch on switch position 10                          | 113 A                                              |
| • at rotary coding switch on switch position 11                          | 118 A                                              |
| • at rotary coding switch on switch position 12                          | 123 A                                              |
| • at rotary coding switch on switch position 13                          | 128 A                                              |
| • at rotary coding switch on switch position 14                          | 133 A                                              |
| • at rotary coding switch on switch position 15                          | 138 A                                              |
| • at rotary coding switch on switch position 16                          | 143 A                                              |
| • minimum                                                                | 68 A                                               |
| <b>adjustable motor current</b>                                          |                                                    |
| • for inside-delta circuit at rotary coding switch on switch position 1  | 118 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 2  | 126 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 3  | 135 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 4  | 144 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 5  | 152 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 6  | 161 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 7  | 170 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 8  | 178 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 9  | 187 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 10 | 196 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 11 | 204 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 12 | 213 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 13 | 222 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 14 | 230 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 15 | 239 A                                              |
| • for inside-delta circuit at rotary coding switch on switch position 16 | 248 A                                              |
| • at inside-delta circuit minimum                                        | 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>               |                                                    |
| • at 40 °C after startup                                                 | 55 W                                               |
| • at 50 °C after startup                                                 | 50 W                                               |
| • at 60 °C after startup                                                 | 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                                            |

| Control circuit/ Control                                                 |                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type of voltage of the control supply voltage                            | AC                                                                                                                                                                                                                                 |
| control supply voltage at AC                                             |                                                                                                                                                                                                                                    |
| • at 50 Hz                                                               | 110 ... 250 V                                                                                                                                                                                                                      |
| • at 60 Hz                                                               | 110 ... 250 V                                                                                                                                                                                                                      |
| relative negative tolerance of the control supply voltage at AC at 50 Hz | -15 %                                                                                                                                                                                                                              |
| relative positive tolerance of the control supply voltage at AC at 50 Hz | 10 %                                                                                                                                                                                                                               |
| relative negative tolerance of the control supply voltage at AC at 60 Hz | -15 %                                                                                                                                                                                                                              |
| relative positive tolerance of the control supply voltage at AC at 60 Hz | 10 %                                                                                                                                                                                                                               |
| control supply voltage frequency                                         | 50 ... 60 Hz                                                                                                                                                                                                                       |
| relative negative tolerance of the control supply voltage frequency      | -10 %                                                                                                                                                                                                                              |
| relative positive tolerance of the control supply voltage frequency      | 10 %                                                                                                                                                                                                                               |
| control supply current in standby mode rated value                       | 30 mA                                                                                                                                                                                                                              |
| holding current in bypass operation rated value                          | 75 mA                                                                                                                                                                                                                              |
| inrush current by closing the bypass contacts maximum                    | 2.5 A                                                                                                                                                                                                                              |
| inrush current peak at application of control supply voltage maximum     | 12.2 A                                                                                                                                                                                                                             |
| duration of inrush current peak at application of control supply voltage | 2.2 ms                                                                                                                                                                                                                             |
| design of the overvoltage protection                                     | Varistor                                                                                                                                                                                                                           |
| design of short-circuit protection for control circuit                   | 4 A gG fuse (I <sub>cu</sub> =1 kA), 6 A quick-acting fuse (I <sub>cu</sub> =1 kA), C1 miniature circuit breaker (I <sub>cu</sub> = 600 A), C6 miniature circuit breaker (I <sub>cu</sub> = 300 A); Is not part of scope of supply |
| Inputs/ Outputs                                                          |                                                                                                                                                                                                                                    |
| number of digital inputs                                                 | 1                                                                                                                                                                                                                                  |
| • number of digital outputs                                              | 3                                                                                                                                                                                                                                  |
| • number of digital outputs not parameterizable                          | 2                                                                                                                                                                                                                                  |
| digital output version                                                   | 2 normally-open contacts (NO) / 1 changeover contact (CO)                                                                                                                                                                          |
| number of analog outputs                                                 | 1                                                                                                                                                                                                                                  |
| switching capacity current of the relay outputs                          |                                                                                                                                                                                                                                    |
| • at AC-15 at 250 V rated value                                          | 3 A                                                                                                                                                                                                                                |
| • at DC-13 at 24 V rated value                                           | 1 A                                                                                                                                                                                                                                |
| Installation/ mounting/ dimensions                                       |                                                                                                                                                                                                                                    |
| mounting position                                                        | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back                                                                                                           |
| fastening method                                                         | screw fixing                                                                                                                                                                                                                       |
| height                                                                   | 306 mm                                                                                                                                                                                                                             |
| width                                                                    | 185 mm                                                                                                                                                                                                                             |
| depth                                                                    | 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                                                                                                                                                                                                                               |
| weight without packaging                                                 | 6.6 kg                                                                                                                                                                                                                             |
| Connections/ Terminals                                                   |                                                                                                                                                                                                                                    |
| type of electrical connection                                            |                                                                                                                                                                                                                                    |
| • for main current circuit                                               | busbar connection                                                                                                                                                                                                                  |
| • for control circuit                                                    | screw-type terminals                                                                                                                                                                                                               |
| width of connection bar maximum                                          | 25 mm                                                                                                                                                                                                                              |
| type of connectable conductor cross-sections                             |                                                                                                                                                                                                                                    |
| • for DIN cable lug for main contacts stranded                           | 2x (16 ... 95 mm²)                                                                                                                                                                                                                 |
| • for DIN cable lug for main contacts finely stranded                    | 2x (25 ... 120 mm²)                                                                                                                                                                                                                |
| type of connectable conductor cross-sections                             |                                                                                                                                                                                                                                    |
| • for control circuit solid                                              | 1x (0.5 ... 4.0 mm²), 2x (0.5 ... 2.5 mm²)                                                                                                                                                                                         |
| • for control circuit finely stranded with core end processing           | 1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)                                                                                                                                                                                         |

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| <ul style="list-style-type: none"> <li>• for AWG cables for control circuit solid</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1x (20 ... 12), 2x (20 ... 14)                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>wire length</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• between soft starter and motor maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 800 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at the digital inputs at AC maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 100 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>tightening torque</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10 ... 14 N·m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• for auxiliary and control contacts with screw-type terminals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.8 ... 1.2 N·m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>tightening torque [lbf·in]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 89 ... 124 lbf·in                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• for auxiliary and control contacts with screw-type terminals</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 7 ... 10.3 lbf·in                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Ambient conditions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| installation altitude at height above sea level maximum                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5 000 m; Derating as of 1000 m, see catalog                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ambient temperature</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | -25 ... +60 °C; Please observe derating at temperatures of 40 °C or above                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• during storage and transport</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -40 ... +80 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>environmental category</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• during operation according to IEC 60721</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6                                                                                                                                                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• during storage according to IEC 60721</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4                                                                                                                                                                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• during transport according to IEC 60721</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>EMC emitted interference</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | acc. to IEC 60947-4-2: Class A                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Communication/ Protocol</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>communication module is supported</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• PROFINET standard</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• EtherNet/IP</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• Modbus RTU</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• Modbus TCP</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• PROFIBUS</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>manufacturer's article number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• of circuit breaker usable for Standard Faults <ul style="list-style-type: none"> <li>— at 460/480 V according to UL</li> <li>— 60/480 V according to UL</li> <li>— at 460/480 V at inside-delta circuit according to UL</li> <li>— 60/480 V at inside-delta circuit according to UL</li> <li>— at 575/600 V according to UL</li> <li>— at 575/600 V at inside-delta circuit according to UL</li> </ul> </li> <li>• of the fuse <ul style="list-style-type: none"> <li>— usable for Standard Faults up to 575/600 V according to UL</li> <li>— usable for High Faults up to 575/600 V according to UL</li> <li>— usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li> <li>— usable for High Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul> </li> </ul> | Siemens type: 3VA52, max. 250 A; Iq = 10 kA<br>Siemens type: 3VA52, max. 250 A; Iq max = 65 kA<br>Siemens type: 3VA52, max. 250 A; Iq = 10 kA<br>Siemens type: 3VA52, max. 250 A; Iq max = 65 kA<br>Siemens type: 3VA52, max. 250 A; Iq = 10 kA<br>Siemens type: 3VA52, max. 250 A; Iq = 10 kA<br><br>Type: Class RK5 / K5, max. 350 A; Iq = 10 kA<br>Type: Class J / L, max. 350 A; Iq = 100 kA<br>Type: Class RK5 / K5, max. 350 A; Iq = 10 kA<br>Type: Class J / L, max. 350 A; Iq = 100 kA |
| <b>operating power [hp] for 3-phase motors</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• at 200/208 V at 50 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 40 hp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 220/230 V at 50 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 40 hp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 460/480 V at 50 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100 hp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <ul style="list-style-type: none"> <li>• at 200/208 V at inside-delta circuit at 50 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 75 hp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 220/230 V at inside-delta circuit at 50 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 75 hp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 460/480 V at inside-delta circuit at 50 °C rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 150 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



[Confirmation](#)



|                          |     |                   |                   |
|--------------------------|-----|-------------------|-------------------|
| General Product Approval | EMV | Test Certificates | Marine / Shipping |
|--------------------------|-----|-------------------|-------------------|



[KC](#)

[Type Test Certificates/Test Report](#)



|                   |       |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



[Confirmation](#)

#### Further information

Information on the packaging

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

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5235-6AC14>

Cax online generator

<http://support.automation.siemens.com/VW/CAXorder/default.aspx?lang=en&mlfb=3RW5235-6AC14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5235-6AC14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW5235-6AC14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5235-6AC14&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5235-6AC14/char>

Characteristic: Installation altitude

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5235-6AC14&objecttype=14&gridview=view1>

Simulation Tool for Soft Starters (STS)

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







