



SIRIUS soft starter 200-600 V 32 A, 24 V AC/DC spring-type terminals Thermistor input

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| <b>product brand name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SIRIUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>product category</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Hybrid switching devices                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>product designation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Soft starter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>product type designation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3RW52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>manufacturer's article number</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• of standard HMI module usable</li> <li>• of high feature HMI module usable</li> <li>• of communication module PROFINET standard usable</li> <li>• of communication module PROFIBUS usable</li> <li>• of communication module Modbus TCP usable</li> <li>• of communication module Modbus RTU usable</li> <li>• of communication module Ethernet/IP</li> <li>• of circuit breaker usable at 400 V</li> <li>• of circuit breaker usable at 500 V</li> <li>• of circuit breaker usable at 400 V at inside-delta circuit</li> <li>• of circuit breaker usable at 500 V at inside-delta circuit</li> <li>• of the gG fuse usable up to 690 V</li> <li>• of the gG fuse usable at inside-delta circuit up to 500 V</li> <li>• of full range R fuse link for semiconductor protection usable up to 690 V</li> <li>• of back-up R fuse link for semiconductor protection usable up to 690 V</li> </ul> | <a href="#">3RW5980-0HS00</a><br><a href="#">3RW5980-0HF00</a><br><a href="#">3RW5980-0CS00</a><br><a href="#">3RW5980-0CP00</a><br><a href="#">3RW5980-0CT00</a><br><a href="#">3RW5980-0CR00</a><br><a href="#">3RW5980-0CE00</a><br><a href="#">3RV2032-4VA10; Type of coordination 1, Iq = 65 kA, CLASS 10</a><br><a href="#">3RV2032-4VA10; Type of coordination 1, Iq = 10 kA, CLASS 10</a><br><a href="#">3RV2032-4JA10; Type of coordination 1, Iq = 65 kA, CLASS 10</a><br><a href="#">3RV2032-4JA10; Type of coordination 1, Iq = 10 kA, CLASS 10</a><br><a href="#">3NA3824-6; Type of coordination 1, Iq = 65 kA</a><br><a href="#">3NA3824-6; Type of coordination 1, Iq = 65 kA</a><br><a href="#">3NE1818-0; Type of coordination 2, Iq = 65 kA</a><br><a href="#">3NE8022-1; Type of coordination 2, Iq = 65 kA</a> |

| General technical data                                                                                                                             |                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <b>starting voltage [%]</b>                                                                                                                        | 30 ... 100 %         |
| <b>stopping voltage [%]</b>                                                                                                                        | 50 %; non-adjustable |
| <b>start-up ramp time of soft starter</b>                                                                                                          | 0 ... 20 s           |
| <b>current limiting value [%] adjustable</b>                                                                                                       | 130 ... 700 %        |
| <b>certificate of suitability</b>                                                                                                                  |                      |
| <ul style="list-style-type: none"> <li>• CE marking</li> <li>• UL approval</li> <li>• CSA approval</li> </ul>                                      | Yes<br>Yes<br>Yes    |
| <b>product component</b>                                                                                                                           |                      |
| <ul style="list-style-type: none"> <li>• HMI-High Feature</li> <li>• is supported HMI-Standard</li> <li>• is supported HMI-High Feature</li> </ul> | No<br>Yes<br>Yes     |
| <b>product feature integrated bypass contact system</b>                                                                                            | Yes                  |
| <b>number of controlled phases</b>                                                                                                                 | 3                    |

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>buffering time in the event of power failure</b>          |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • for main current circuit                                   | 100 ms                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • for control circuit                                        | 100 ms                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>insulation voltage rated value</b>                        | 600 V                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>degree of pollution</b>                                   | 3, acc. to IEC 60947-4-2                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>impulse voltage rated value</b>                           | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>blocking voltage of the thyristor maximum</b>             | 1 600 V                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>service factor</b>                                        | 1                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>surge voltage resistance rated value</b>                  | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>maximum permissible voltage for protective separation</b> |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • between main and auxiliary circuit                         | 600 V                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>shock resistance</b>                                      | 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting                                                                                                                                                                                                                                                                                                                                                              |
| <b>vibration resistance</b>                                  | 15 mm to 6 Hz; 2 g to 500 Hz                                                                                                                                                                                                                                                                                                                                                                                                |
| utilization category according to IEC 60947-4-2              | AC 53a                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>reference code according to IEC 81346-2</b>               | Q                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Substance Prohibitance (Date)</b>                         | 02/15/2018                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>SVHC substance name</b>                                   | Lead CAS-No. 7439-92-1<br>Lead monoxide (lead oxide) CAS-No. 1317-36-8<br>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol CAS-No. 79-94-7<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5<br>Melamine CAS-No. 108-78-1<br>6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol CAS-No. 119-47-1<br>Dibutylbis(pentane-2,4-dionato-O,O')tin CAS-No. 22673-19-4<br>Diboron trioxide CAS-No. 1303-86-2 |
| <b>Net Weight</b>                                            | 2.3 kg                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>product function</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • ramp-up (soft starting)                                    | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • soft stopping                                              | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • Soft Torque                                                | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • adjustable current limitation                              | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • pump stop                                                  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • intrinsic device protection                                | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • motor overload protection                                  | Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)                                                                                                                                                                                                                                                                                                                           |
| • evaluation of thermistor motor protection                  | Yes; Type A PTC or Klaxon / Thermoclick                                                                                                                                                                                                                                                                                                                                                                                     |
| • inside-delta circuit                                       | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • auto-RESET                                                 | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • manual RESET                                               | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • remote reset                                               | Yes; By turning off the control supply voltage                                                                                                                                                                                                                                                                                                                                                                              |
| • communication function                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • operating measured value display                           | Yes; Only in conjunction with special accessories                                                                                                                                                                                                                                                                                                                                                                           |
| • error logbook                                              | Yes; Only in conjunction with special accessories                                                                                                                                                                                                                                                                                                                                                                           |
| • via software parameterizable                               | No                                                                                                                                                                                                                                                                                                                                                                                                                          |
| • via software configurable                                  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • <b>PROFInergy</b>                                          | Yes; in connection with the PROFINET Standard communication module                                                                                                                                                                                                                                                                                                                                                          |
| • <b>firmware update</b>                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • <b>removable terminal for control circuit</b>              | Yes                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • torque control                                             | No                                                                                                                                                                                                                                                                                                                                                                                                                          |
| • analog output                                              | No                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Power Electronics</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>operational current</b>                                   |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • at 40 °C rated value                                       | 32 A                                                                                                                                                                                                                                                                                                                                                                                                                        |
| • at 50 °C rated value                                       | 28.4 A                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • at 60 °C rated value                                       | 26 A                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>operational current at inside-delta circuit</b>           |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • at 40 °C rated value                                       | 55.4 A                                                                                                                                                                                                                                                                                                                                                                                                                      |
| • at 50 °C rated value                                       | 49 A                                                                                                                                                                                                                                                                                                                                                                                                                        |
| • at 60 °C rated value                                       | 45 A                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>operating voltage</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                             |
| • rated value                                                | 200 ... 600 V                                                                                                                                                                                                                                                                                                                                                                                                               |

|                                                                                     |               |
|-------------------------------------------------------------------------------------|---------------|
| • at inside-delta circuit rated value                                               | 200 ... 600 V |
| <b>relative negative tolerance of the operating voltage</b>                         | -15 %         |
| <b>relative positive tolerance of the operating voltage</b>                         | 10 %          |
| <b>relative negative tolerance of the operating voltage at inside-delta circuit</b> | -15 %         |
| <b>relative positive tolerance of the operating voltage at inside-delta circuit</b> | 10 %          |
| <b>operating power for 3-phase motors</b>                                           |               |
| • at 230 V at 40 °C rated value                                                     | 7.5 kW        |
| • at 230 V at inside-delta circuit at 40 °C rated value                             | 15 kW         |
| • at 400 V at 40 °C rated value                                                     | 15 kW         |
| • at 400 V at inside-delta circuit at 40 °C rated value                             | 22 kW         |
| • at 500 V at 40 °C rated value                                                     | 18.5 kW       |
| • at 500 V at inside-delta circuit at 40 °C rated value                             | 30 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                                      | 14 A          |
| • at rotary coding switch on switch position 2                                      | 15.2 A        |
| • at rotary coding switch on switch position 3                                      | 16.4 A        |
| • at rotary coding switch on switch position 4                                      | 17.6 A        |
| • at rotary coding switch on switch position 5                                      | 18.8 A        |
| • at rotary coding switch on switch position 6                                      | 20 A          |
| • at rotary coding switch on switch position 7                                      | 21.2 A        |
| • at rotary coding switch on switch position 8                                      | 22.4 A        |
| • at rotary coding switch on switch position 9                                      | 23.6 A        |
| • at rotary coding switch on switch position 10                                     | 24.8 A        |
| • at rotary coding switch on switch position 11                                     | 26 A          |
| • at rotary coding switch on switch position 12                                     | 27.2 A        |
| • at rotary coding switch on switch position 13                                     | 28.4 A        |
| • at rotary coding switch on switch position 14                                     | 29.6 A        |
| • at rotary coding switch on switch position 15                                     | 30.8 A        |
| • at rotary coding switch on switch position 16                                     | 32 A          |
| • minimum                                                                           | 14 A          |
| <b>adjustable motor current</b>                                                     |               |
| • for inside-delta circuit at rotary coding switch on switch position 1             | 24.2 A        |
| • for inside-delta circuit at rotary coding switch on switch position 2             | 26.3 A        |
| • for inside-delta circuit at rotary coding switch on switch position 3             | 28.4 A        |
| • for inside-delta circuit at rotary coding switch on switch position 4             | 30.5 A        |
| • for inside-delta circuit at rotary coding switch on switch position 5             | 32.6 A        |
| • for inside-delta circuit at rotary coding switch on switch position 6             | 34.6 A        |
| • for inside-delta circuit at rotary coding switch on switch position 7             | 36.7 A        |
| • for inside-delta circuit at rotary coding switch on switch position 8             | 38.8 A        |
| • for inside-delta circuit at rotary coding switch on switch position 9             | 40.9 A        |
| • for inside-delta circuit at rotary coding switch on switch position 10            | 43 A          |
| • for inside-delta circuit at rotary coding switch on switch position 11            | 45 A          |
| • for inside-delta circuit at rotary coding switch on switch position 12            | 47.1 A        |
| • for inside-delta circuit at rotary coding switch on switch position 13            | 49.2 A        |

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| <ul style="list-style-type: none"> <li>• for inside-delta circuit at rotary coding switch on switch position 14</li> <li>• for inside-delta circuit at rotary coding switch on switch position 15</li> <li>• for inside-delta circuit at rotary coding switch on switch position 16</li> <li>• at inside-delta circuit minimum</li> </ul> | 51.3 A<br>53.3 A<br>55.4 A<br>24.2 A                                                                                                                                                                                               |
| <b>minimum load [%]</b>                                                                                                                                                                                                                                                                                                                   | 15 %; Relative to smallest settable I <sub>e</sub>                                                                                                                                                                                 |
| <b>power loss [W] for rated value of the current at AC</b> <ul style="list-style-type: none"> <li>• at 40 °C after startup</li> <li>• at 50 °C after startup</li> <li>• at 60 °C after startup</li> </ul>                                                                                                                                 | 22 W<br>21 W<br>20 W                                                                                                                                                                                                               |
| <b>power loss [W] at AC at current limitation 350 %</b> <ul style="list-style-type: none"> <li>• at 40 °C during startup</li> <li>• at 50 °C during startup</li> <li>• at 60 °C during startup</li> </ul>                                                                                                                                 | 531 W<br>449 W<br>395 W                                                                                                                                                                                                            |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                    |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                      | AC/DC                                                                                                                                                                                                                              |
| <b>control supply voltage at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                                                                                                                                              | 24 V<br>24 V                                                                                                                                                                                                                       |
| <b>relative negative tolerance of the control supply voltage at AC at 50 Hz</b>                                                                                                                                                                                                                                                           | -20 %                                                                                                                                                                                                                              |
| <b>relative positive tolerance of the control supply voltage at AC at 50 Hz</b>                                                                                                                                                                                                                                                           | 20 %                                                                                                                                                                                                                               |
| <b>relative negative tolerance of the control supply voltage at AC at 60 Hz</b>                                                                                                                                                                                                                                                           | -20 %                                                                                                                                                                                                                              |
| <b>relative positive tolerance of the control supply voltage at AC at 60 Hz</b>                                                                                                                                                                                                                                                           | 20 %                                                                                                                                                                                                                               |
| <b>control supply voltage frequency</b>                                                                                                                                                                                                                                                                                                   | 50 ... 60 Hz                                                                                                                                                                                                                       |
| <b>relative negative tolerance of the control supply voltage frequency</b>                                                                                                                                                                                                                                                                | -10 %                                                                                                                                                                                                                              |
| <b>relative positive tolerance of the control supply voltage frequency</b>                                                                                                                                                                                                                                                                | 10 %                                                                                                                                                                                                                               |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                           | 24 V                                                                                                                                                                                                                               |
| <b>relative negative tolerance of the control supply voltage at DC</b>                                                                                                                                                                                                                                                                    | -20 %                                                                                                                                                                                                                              |
| <b>relative positive tolerance of the control supply voltage at DC</b>                                                                                                                                                                                                                                                                    | 20 %                                                                                                                                                                                                                               |
| <b>control supply current in standby mode rated value</b>                                                                                                                                                                                                                                                                                 | 160 mA                                                                                                                                                                                                                             |
| <b>holding current in bypass operation rated value</b>                                                                                                                                                                                                                                                                                    | 360 mA                                                                                                                                                                                                                             |
| <b>inrush current by closing the bypass contacts maximum</b>                                                                                                                                                                                                                                                                              | 0.75 A                                                                                                                                                                                                                             |
| inrush current peak at application of control supply voltage maximum                                                                                                                                                                                                                                                                      | 3.3 A                                                                                                                                                                                                                              |
| duration of inrush current peak at application of control supply voltage                                                                                                                                                                                                                                                                  | 12.1 ms                                                                                                                                                                                                                            |
| <b>design of the overvoltage protection</b>                                                                                                                                                                                                                                                                                               | Varistor                                                                                                                                                                                                                           |
| <b>design of short-circuit protection for control circuit</b>                                                                                                                                                                                                                                                                             | 4 A gG fuse (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 |
| <b>Inputs/ Outputs</b>                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                    |
| <b>number of digital inputs</b>                                                                                                                                                                                                                                                                                                           | 1                                                                                                                                                                                                                                  |
| <b>number of digital outputs</b> <ul style="list-style-type: none"> <li>• not parameterizable</li> </ul>                                                                                                                                                                                                                                  | 3<br>2                                                                                                                                                                                                                             |
| <b>digital output version</b>                                                                                                                                                                                                                                                                                                             | 2 normally-open contacts (NO) / 1 changeover contact (CO)                                                                                                                                                                          |
| <b>number of analog outputs</b>                                                                                                                                                                                                                                                                                                           | 0                                                                                                                                                                                                                                  |
| <b>switching capacity current of the relay outputs</b> <ul style="list-style-type: none"> <li>• at AC-15 at 250 V rated value</li> <li>• at DC-13 at 24 V rated value</li> </ul>                                                                                                                                                          | 3 A<br>1 A                                                                                                                                                                                                                         |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                    |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                  | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back                                                                                                           |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                   | screw fixing                                                                                                                                                                                                                       |

|                                                                               |                                                                                                                         |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>height</b>                                                                 | 275 mm                                                                                                                  |
| <b>width</b>                                                                  | 170 mm                                                                                                                  |
| <b>depth</b>                                                                  | 152 mm                                                                                                                  |
| required spacing with side-by-side mounting                                   |                                                                                                                         |
| • forwards                                                                    | 10 mm                                                                                                                   |
| • backwards                                                                   | 0 mm                                                                                                                    |
| • upwards                                                                     | 100 mm                                                                                                                  |
| • downwards                                                                   | 75 mm                                                                                                                   |
| • at the side                                                                 | 5 mm                                                                                                                    |
| <b>weight without packaging</b>                                               | 2.3 kg                                                                                                                  |
| <b>Connections/ Terminals</b>                                                 |                                                                                                                         |
| <b>type of electrical connection</b>                                          |                                                                                                                         |
| • for main current circuit                                                    | screw-type terminals                                                                                                    |
| • for control circuit                                                         | spring-loaded terminals                                                                                                 |
| <b>wire length for thermistor connection</b>                                  |                                                                                                                         |
| • with conductor cross-section = 0.5 mm <sup>2</sup> maximum                  | 50 m                                                                                                                    |
| • with conductor cross-section = 1.5 mm <sup>2</sup> maximum                  | 150 m                                                                                                                   |
| • with conductor cross-section = 2.5 mm <sup>2</sup> maximum                  | 250 m                                                                                                                   |
| <b>type of connectable conductor cross-sections</b>                           |                                                                                                                         |
| • for main contacts                                                           |                                                                                                                         |
| — solid                                                                       | 2x (1.0 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )                                                     |
| — finely stranded with core end processing                                    | 2x (1.0 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6.0 mm <sup>2</sup> )                                                    |
| • for AWG cables for main current circuit solid                               | 2x (16 ... 12), 2x (14 ... 8)                                                                                           |
| <b>type of connectable conductor cross-sections</b>                           |                                                                                                                         |
| • for control circuit solid                                                   | 2x (0.25 ... 1.5 mm <sup>2</sup> )                                                                                      |
| • for control circuit finely stranded with core end processing                | 2x (0.25 ... 1.5 mm <sup>2</sup> )                                                                                      |
| • for AWG cables for control circuit solid                                    | 2x (24 ... 16)                                                                                                          |
| • for AWG cables for control circuit finely stranded with core end processing | 2x (24 ... 16)                                                                                                          |
| <b>wire length</b>                                                            |                                                                                                                         |
| • between soft starter and motor maximum                                      | 800 m                                                                                                                   |
| • at the digital inputs at AC maximum                                         | 100 m                                                                                                                   |
| • at the digital inputs at DC maximum                                         | 1 000 m                                                                                                                 |
| <b>tightening torque</b>                                                      |                                                                                                                         |
| • for main contacts with screw-type terminals                                 | 2 ... 2.5 N·m                                                                                                           |
| • for auxiliary and control contacts with screw-type terminals                | 0.8 ... 1.2 N·m                                                                                                         |
| <b>tightening torque [lbf·in]</b>                                             |                                                                                                                         |
| • for main contacts with screw-type terminals                                 | 18 ... 22 lbf·in                                                                                                        |
| • for auxiliary and control contacts with screw-type terminals                | 7 ... 10.3 lbf·in                                                                                                       |
| <b>Ambient conditions</b>                                                     |                                                                                                                         |
| installation altitude at height above sea level maximum                       | 5 000 m                                                                                                                 |
| <b>ambient temperature</b>                                                    |                                                                                                                         |
| • during operation                                                            | -25 ... +60 °C; Please observe derating at temperatures of 40 °C or above                                               |
| • during storage and transport                                                | -40 ... +80 °C                                                                                                          |
| <b>environmental category</b>                                                 |                                                                                                                         |
| • during operation according to IEC 60721                                     | 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| • during storage according to IEC 60721                                       | 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4                 |
| • during transport according to IEC 60721                                     | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)                                                                             |
| <b>Electromagnetic compatibility</b>                                          |                                                                                                                         |
| <b>EMC emitted interference</b>                                               | acc. to IEC 60947-4-2: Class A                                                                                          |
| <b>Communication/ Protocol</b>                                                |                                                                                                                         |
| <b>communication module is supported</b>                                      |                                                                                                                         |
| • PROFINET standard                                                           | Yes                                                                                                                     |
| • EtherNet/IP                                                                 | Yes                                                                                                                     |
| • Modbus RTU                                                                  | Yes                                                                                                                     |
| • Modbus TCP                                                                  | Yes                                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
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| • PROFIBUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                            |                                                                                            |                                                          |                                                                                              |
| UL/CSA ratings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| manufacturer's article number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| <ul style="list-style-type: none"><li>• of circuit breaker usable for Standard Faults<ul style="list-style-type: none"><li>— at 460/480 V according to UL</li><li>— 60/480 V according to UL</li><li>— at 460/480 V at inside-delta circuit according to UL</li><li>— 60/480 V at inside-delta circuit according to UL</li><li>— at 575/600 V according to UL</li><li>— at 575/600 V at inside-delta circuit according to UL</li></ul></li><li>• of the fuse<ul style="list-style-type: none"><li>— usable for Standard Faults up to 575/600 V according to UL</li><li>— usable for High Faults up to 575/600 V according to UL</li><li>— usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li><li>— usable for High Faults at inside-delta circuit up to 575/600 V according to UL</li></ul></li></ul> |  | Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA<br>Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA<br>Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA<br>Siemens type: 3VA51, max. 60 A; Iq max = 65 kA<br>Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA<br>Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA<br><br>Type: Class RK5 / K5, max. 125 A; Iq = 5 kA<br><br>Type: Class J / L, max. 125 A; Iq = 100 kA<br><br>Type: Class RK5 / K5, max. 125 A; Iq = 5 kA<br><br>Type: Class J / L, max. 125 A; Iq = 100 kA |                                                                                            |                                                                                            |                                                          |                                                                                              |
| operating power [hp] for 3-phase motors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| <ul style="list-style-type: none"><li>• at 200/208 V at 50 °C rated value</li><li>• at 220/230 V at 50 °C rated value</li><li>• at 460/480 V at 50 °C rated value</li><li>• at 575/600 V at 50 °C rated value</li><li>• at 200/208 V at inside-delta circuit at 50 °C rated value</li><li>• at 220/230 V at inside-delta circuit at 50 °C rated value</li><li>• at 460/480 V at inside-delta circuit at 50 °C rated value</li><li>• at 575/600 V at inside-delta circuit at 50 °C rated value</li></ul>                                                                                                                                                                                                                                                                                                                                   |  | 7.5 hp<br>10 hp<br>20 hp<br>25 hp<br>15 hp<br>15 hp<br>30 hp<br>40 hp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                            |                                                                                            |                                                          |                                                                                              |
| contact rating of auxiliary contacts according to UL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | R300-B300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                            |                                                                                            |                                                          |                                                                                              |
| Electrical Safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| protection class IP on the front according to IEC 60529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | IP20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                            |                                                                                            |                                                          |                                                                                              |
| touch protection on the front according to IEC 60529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | finger-safe, for vertical contact from the front                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                            |                                                                                            |                                                          |                                                                                              |
| Approvals Certificates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| Environmental Product Declaration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| <ul style="list-style-type: none"><li>• global warming potential [CO2 eq] / during manufacturing</li><li>• global warming potential [CO2 eq] / during sales</li><li>• global warming potential [CO2 eq] / during operation</li><li>• global warming potential [CO2 eq] / after end of life</li><li>• global warming potential [CO2 eq] / total</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | 37.2 kg<br>0.66 kg<br>152 kg<br>-4.19 kg<br>185 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                            |                                                                                            |                                                          |                                                                                              |
| Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | General Product Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                            |                                                                                            |                                                          |                                                                                              |
| <div><div><a href="#">Environmental Con-<br/>firmations</a></div><div></div><div></div><div></div><div></div><div></div></div>                                                                                                                                                                                                                                                                         |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                            |                                                          |                                                                                              |
| General Product Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | EMV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Test Certificates                                                                          | Maritime application                                                                       |                                                          |                                                                                              |
| <br>EG-Konf.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |         | <br>RCM | <a href="#">Type Test Certi-<br/>ficates/Test Report</a> | <br>ABS |
| Maritime application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | other                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                            |                                                                                            |                                                          |                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <br>LRS |         | <a href="#">Confirmation</a>                             | <a href="#">Confirmation</a>                                                                 |



#### Further information

##### Information on the packaging

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

##### Information for data generation and storage

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

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

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

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5216-3TC05>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5216-3TC05>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW5216-3TC05&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5216-3TC05&lang=en)

##### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5216-3TC05>

##### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP='HAUPT'></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>)

##### Characteristic: Tripping characteristics, $I^2t$ , Let-through current

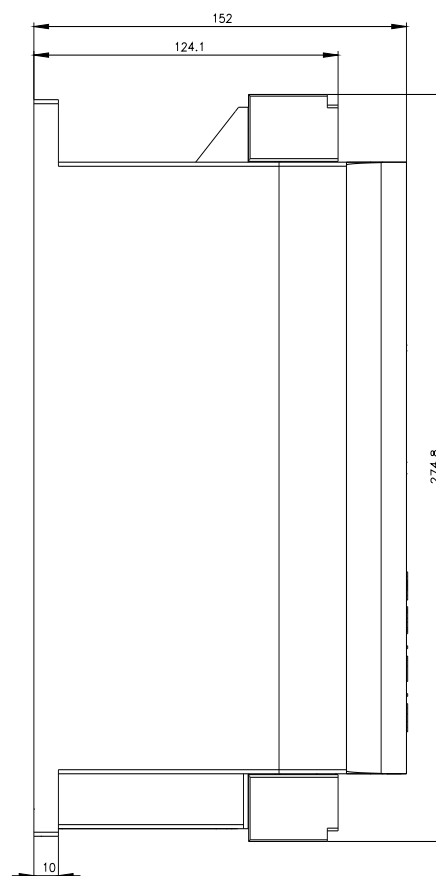
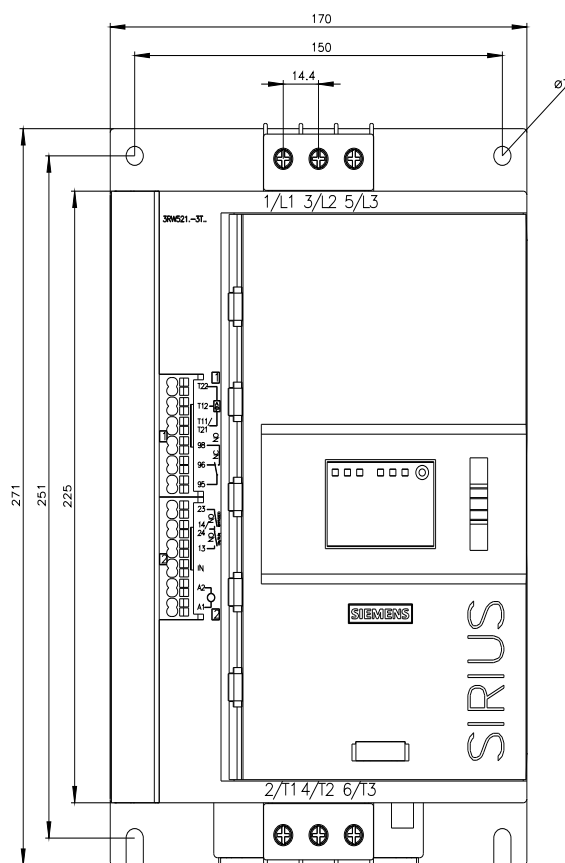
<https://support.industry.siemens.com/cs/ww/en/ps/3RW5216-3TC05/char>

##### Characteristic: Installation altitude

[https://www.automation.siemens.com/bilddb/index.aspx?gridview=view2&objkey=G\\_NSB0\\_XX\\_01704&showdetail=true&view=Search](https://www.automation.siemens.com/bilddb/index.aspx?gridview=view2&objkey=G_NSB0_XX_01704&showdetail=true&view=Search)

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

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





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4/4/2026 