



SIRIUS soft starter 200-480 V 25 A, 110-250 V AC spring-type terminals  
Analog output

**product brand name**  
**product category**  
**product designation**  
**product type designation**  
**manufacturer's article number**

- of standard HMI module usable
- of high feature HMI module usable
- of communication module PROFINET standard usable
- of communication module PROFIBUS usable
- of communication module Modbus TCP usable
- of communication module Modbus RTU usable
- of communication module Ethernet/IP
- of circuit breaker usable at 400 V
- of circuit breaker usable at 500 V
- of circuit breaker usable at 400 V at inside-delta circuit
- of circuit breaker usable at 500 V at inside-delta circuit
- of the gG fuse usable up to 690 V
- of the gG fuse usable at inside-delta circuit up to 500 V
- of full range R fuse link for semiconductor protection usable up to 690 V
- of back-up R fuse link for semiconductor protection usable up to 690 V

SIRIUS  
Hybrid switching devices  
Soft starter  
3RW52

[3RW5980-0HS00](#)  
[3RW5980-0HF00](#)  
[3RW5980-0CS00](#)

[3RW5980-0CP00](#)  
[3RW5980-0CT00](#)  
[3RW5980-0CR00](#)  
[3RW5980-0CE00](#)

[3RV2032-4EA10](#); Type of coordination 1, I<sub>q</sub> = 65 kA, CLASS 10

[3RV2032-4EA10](#); Type of coordination 1, I<sub>q</sub> = 15 kA, CLASS 10

[3RV2032-4VA10](#); Type of coordination 1, I<sub>q</sub> = 65 kA, CLASS 10

[3RV2032-4VA10](#); Type of coordination 1, I<sub>q</sub> = 15 kA, CLASS 10

[3NA3822-6](#); Type of coordination 1, I<sub>q</sub> = 65 kA

[3NA3822-6](#); Type of coordination 1, I<sub>q</sub> = 65 kA

[3NE1817-0](#); Type of coordination 2, I<sub>q</sub> = 65 kA

[3NE8021-1](#); Type of coordination 2, I<sub>q</sub> = 65 kA

### 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>                       |  |
| • CE marking  | Yes  |
| • UL approval   | Yes  |
| • CSA approval  | Yes  |
| <b>product component</b>                                |  |
| • HMI-High Feature                                      | No   |
| • is supported HMI-Standard                             | Yes  |
| • is supported HMI-High Feature                         | Yes  |
| <b>product feature integrated bypass contact system</b> | Yes  |
| <b>number of controlled phases</b>                      | 3  |
| <b>trip class</b>                                       | CLASS 10A (default) / 10E / 20E; acc. to IEC 60947-4-2 |
| <b>buffering time in the event of power failure</b>     |  |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for control circuit</li> </ul>  | 100 ms  |
| <b>insulation voltage rated value</b>  | 100 ms  |
| <b>degree of pollution</b>   | 600 V   |
| <b>impulse voltage rated value</b>   | 3, acc. to IEC 60947-4-2  |
| <b>blocking voltage of the thyristor maximum</b>   | 6 kV  |
| <b>service factor</b>  | 1 600 V   |
| <b>surge voltage resistance rated value</b>  | 1   |
| <b>maximum permissible voltage for safe isolation</b>  | 6 kV  |
| <ul style="list-style-type: none"> <li>• between main and auxiliary circuit</li> </ul>   | 600 V   |
| <b>shock resistance</b>  | 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting                  |
| <b>vibration resistance</b>  | 15 mm to 6 Hz; 2g to 500 Hz   |
| utilization category according to IEC 60947-4-2  | AC 53a  |
| <b>reference code according to IEC 81346-2</b>   | Q   |
| <b>Substance Prohibitance (Date)</b>   | 02/15/2018  |
| <b>product function</b>  |   |
| <ul style="list-style-type: none"> <li>• ramp-up (soft starting)</li> <li>• ramp-down (soft stop)</li> <li>• Soft Torque</li> <li>• adjustable current limitation</li> <li>• pump ramp down</li> <li>• intrinsic device protection</li> <li>• motor overload protection</li> <li>• evaluation of thermistor motor protection</li> <li>• inside-delta circuit</li> <li>• auto-RESET</li> <li>• manual RESET</li> <li>• remote reset</li> <li>• communication function</li> <li>• operating measured value display</li> <li>• error logbook</li> <li>• via software parameterizable</li> <li>• via software configurable</li> <li>• <b>PROFInergy</b></li> </ul> | Yes   |
| <ul style="list-style-type: none"> <li>• <b>firmware update</b></li> <li>• <b>removable terminal for control circuit</b></li> <li>• torque control</li> <li>• analog output</li> </ul>   | Yes   |
|  | Yes   |
|  | Yes   |
|  | Yes   |
|  | Yes   |
|  | Yes   |
|  | Yes; Electronic motor overload protection                                       |
|  | No  |
|  | Yes   |
|  | Yes   |
|  | Yes   |
|  | Yes; By turning off the control supply voltage                                  |
|  | Yes   |
|  | Yes; Only in conjunction with special accessories                               |
|  | Yes; Only in conjunction with special accessories                               |
|  | No  |
|  | Yes   |
|  | Yes; in connection with the PROFINET Standard communication module              |
|  | Yes   |
|  | Yes   |
|  | No  |
|  | Yes; 4 ... 20 mA (default) / 0 ... 10 V (parameterizable with High Feature HMI) |

## Power Electronics

|  |                                     |
|--|-------------------------------------|
| <b>operational current</b>   |                                     |
| <ul style="list-style-type: none"> <li>• at 40 °C rated value</li> <li>• at 50 °C rated value</li> <li>• at 60 °C rated value</li> </ul>   | 25 A<br>22.3 A<br>19.6 A            |
| <b>operational current at inside-delta circuit</b>   |                                     |
| <ul style="list-style-type: none"> <li>• at 40 °C rated value</li> <li>• at 50 °C rated value</li> <li>• at 60 °C rated value</li> </ul>   | 43.3 A<br>39 A<br>33.9 A            |
| <b>operating voltage</b>   |                                     |
| <ul style="list-style-type: none"> <li>• rated value</li> <li>• at inside-delta circuit rated value</li> </ul>   | 200 ... 480 V<br>200 ... 480 V      |
| <b>relative negative tolerance of the operating voltage</b>  | -15 %                               |
| <b>relative positive tolerance of the operating voltage</b>  | 10 %                                |
| <b>relative negative tolerance of the operating voltage at inside-delta circuit</b>  | -15 %                               |
| <b>relative positive tolerance of the operating voltage at inside-delta circuit</b>  | 10 %                                |
| <b>operating power for 3-phase motors</b>  |                                     |
| <ul style="list-style-type: none"> <li>• at 230 V at 40 °C rated value</li> <li>• at 230 V at inside-delta circuit at 40 °C rated value</li> <li>• at 400 V at 40 °C rated value</li> <li>• at 400 V at inside-delta circuit at 40 °C rated value</li> </ul> | 5.5 kW<br>11 kW<br>11 kW<br>18.5 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                           | 11.5 A   |
| • at rotary coding switch on switch position 2                           | 12.4 A   |
| • at rotary coding switch on switch position 3                           | 13.3 A   |
| • at rotary coding switch on switch position 4                           | 14.2 A   |
| • at rotary coding switch on switch position 5                           | 15.1 A   |
| • at rotary coding switch on switch position 6                           | 16 A   |
| • at rotary coding switch on switch position 7                           | 16.9 A   |
| • at rotary coding switch on switch position 8                           | 17.8 A   |
| • at rotary coding switch on switch position 9                           | 18.7 A   |
| • at rotary coding switch on switch position 10                          | 19.6 A   |
| • at rotary coding switch on switch position 11                          | 20.5 A   |
| • at rotary coding switch on switch position 12                          | 21.4 A   |
| • at rotary coding switch on switch position 13                          | 22.3 A   |
| • at rotary coding switch on switch position 14                          | 23.2 A   |
| • at rotary coding switch on switch position 15                          | 24.1 A   |
| • at rotary coding switch on switch position 16                          | 25 A   |
| • minimum  | 11.5 A   |
| <b>adjustable motor current</b>  |  |
| • for inside-delta circuit at rotary coding switch on switch position 1  | 19.9 A   |
| • for inside-delta circuit at rotary coding switch on switch position 2  | 21.5 A   |
| • for inside-delta circuit at rotary coding switch on switch position 3  | 23 A   |
| • for inside-delta circuit at rotary coding switch on switch position 4  | 24.6 A   |
| • for inside-delta circuit at rotary coding switch on switch position 5  | 26.2 A   |
| • for inside-delta circuit at rotary coding switch on switch position 6  | 27.7 A   |
| • for inside-delta circuit at rotary coding switch on switch position 7  | 29.3 A   |
| • for inside-delta circuit at rotary coding switch on switch position 8  | 30.8 A   |
| • for inside-delta circuit at rotary coding switch on switch position 9  | 32.4 A   |
| • for inside-delta circuit at rotary coding switch on switch position 10 | 33.9 A   |
| • for inside-delta circuit at rotary coding switch on switch position 11 | 35.5 A   |
| • for inside-delta circuit at rotary coding switch on switch position 12 | 37.1 A   |
| • for inside-delta circuit at rotary coding switch on switch position 13 | 38.6 A   |
| • for inside-delta circuit at rotary coding switch on switch position 14 | 40.2 A   |
| • for inside-delta circuit at rotary coding switch on switch position 15 | 41.7 A   |
| • for inside-delta circuit at rotary coding switch on switch position 16 | 43.3 A   |
| • at inside-delta circuit minimum  | 19.9 A   |
| <b>minimum load [%]</b>  | 15 %; Relative to smallest settable I <sub>e</sub> |
| <b>power loss [W] for rated value of the current at AC</b>               |  |
| • at 40 °C after startup   | 20 W   |
| • at 50 °C after startup   | 19 W   |
| • at 60 °C after startup   | 18 W   |
| <b>power loss [W] at AC at current limitation 350 %</b>                  |  |
| • at 40 °C during startup  | 376 W  |
| • at 50 °C during startup  | 318 W  |
| • at 60 °C during startup  | 278 W  |

#### Control circuit/ Control

|  |    |
|--|----|
| <b>type of voltage of the control supply voltage</b> | AC |
| <b>control supply voltage at AC</b>                  |    |

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul> | 110 ... 250 V  |
| <b>relative negative tolerance of the control supply voltage at AC at 50 Hz</b>  | 110 ... 250 V  |
| <b>relative positive tolerance of the control supply voltage at AC at 50 Hz</b>  | -15 %  |
| <b>relative negative tolerance of the control supply voltage at AC at 60 Hz</b>  | 10 %   |
| <b>relative positive tolerance of the control supply voltage at AC at 60 Hz</b>  | -15 %  |
| <b>control supply voltage frequency</b>  | 10 %   |
| <b>relative negative tolerance of the control supply voltage frequency</b>       | 50 ... 60 Hz   |
| <b>relative positive tolerance of the control supply voltage frequency</b>       | -10 %  |
| <b>control supply current in standby mode rated value</b>                        | 10 %   |
| <b>holding current in bypass operation rated value</b>                           | 30 mA  |
| <b>inrush current peak at application of control supply voltage maximum</b>      | 75 mA  |
| <b>duration of inrush current peak at application of control supply voltage</b>  | 12.2 A   |
| <b>design of the overvoltage protection</b>                                      | 2.2 ms   |
| <b>design of short-circuit protection for control circuit</b>                    | Varistor   |
|  | 4 A gG fuse (I <sub>cu</sub> =1 kA), 6 A quick-acting fuse (I <sub>cu</sub> =1 kA), C1 miniature circuit breaker (I <sub>cu</sub> = 600 A), C6 miniature circuit breaker (I <sub>cu</sub> = 300 A); Is not part of scope of supply |

### Inputs/ Outputs

|   |   |
|---|---|
| <b>number of digital inputs</b>   | 1   |
| <b>number of digital outputs</b>  | 3   |
| <ul style="list-style-type: none"> <li>• not parameterizable</li> </ul>   | 2   |
| <b>digital output version</b>   | 2 normally-open contacts (NO) / 1 changeover contact (CO) |
| <b>number of analog outputs</b>   | 1   |
| <b>switching capacity current of the relay outputs</b>  |   |
| <ul style="list-style-type: none"> <li>• at AC-15 at 250 V rated value</li> <li>• at DC-13 at 24 V rated value</li> </ul> | 3 A   |
|   | 1 A   |

### Installation/ mounting/ dimensions

|  |  |
|--|--|
| <b>mounting position</b>   | +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface |
| <b>fastening method</b>  | screw fixing   |
| <b>height</b>  | 275 mm   |
| <b>width</b>   | 170 mm   |
| <b>depth</b>   | 152 mm   |
| <b>required spacing with side-by-side mounting</b>   |  |
| <ul style="list-style-type: none"> <li>• forwards</li> <li>• backwards</li> <li>• upwards</li> <li>• downwards</li> <li>• at the side</li> </ul> | 10 mm  |
|  | 0 mm   |
|  | 100 mm   |
|  | 75 mm  |
|  | 5 mm   |
| <b>weight without packaging</b>  | 2.1 kg   |

### Connections/ Terminals

|  |  |
|--|--|
| <b>type of electrical connection</b>   | screw-type terminals   |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for control circuit</li> </ul>  | spring-loaded terminals  |
| <b>type of connectable conductor cross-sections</b>  |  |
| <ul style="list-style-type: none"> <li>• for main contacts</li> <li>— solid</li> <li>— finely stranded with core end processing</li> <li>• at AWG cables for main current circuit solid</li> </ul>   | 2x (1.0 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )  |
|  | 2x (1.0 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6.0 mm <sup>2</sup> ) |
|  | 2x (16 ... 12), 2x (14 ... 8)  |
| <b>type of connectable conductor cross-sections</b>  |  |
| <ul style="list-style-type: none"> <li>• for control circuit solid</li> <li>• for control circuit finely stranded with core end processing</li> <li>• at AWG cables for control circuit solid</li> <li>• at AWG cables for control circuit finely stranded with core end processing</li> </ul> | 2x (0.25 ... 1.5 mm <sup>2</sup> )                                   |
|  | 2x (0.25 ... 1.5 mm <sup>2</sup> )                                   |
|  | 2x (24 ... 16)   |
|  | 2x (24 ... 16)   |
| <b>wire length</b>   |  |
| <ul style="list-style-type: none"> <li>• between soft starter and motor maximum</li> </ul>   | 800 m  |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• at the digital inputs at AC maximum</li> </ul>  | 100 m   |
| <b>tightening torque</b> <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> <li>• for auxiliary and control contacts with screw-type terminals</li> </ul>   | 2 ... 2.5 N·m<br>0.8 ... 1.2 N·m  |
| <b>tightening torque [lbf·in]</b> <ul style="list-style-type: none"> <li>• for main contacts with screw-type terminals</li> <li>• for auxiliary and control contacts with screw-type terminals</li> </ul>  | 18 ... 22 lbf·in<br>7 ... 10.3 lbf·in   |
| <b>Ambient conditions</b>  |   |
| installation altitude at height above sea level maximum  | 5 000 m; Derating as of 1000 m, see catalog   |
| <b>ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage and transport</li> </ul>  | -25 ... +60 °C; Please observe derating at temperatures of 40 °C or above<br>-40 ... +80 °C   |
| <b>environmental category</b> <ul style="list-style-type: none"> <li>• during operation according to IEC 60721</li> <li>• during storage according to IEC 60721</li> <li>• during transport according to IEC 60721</li> </ul>  | 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6<br>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4<br>2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)<br>acc. to IEC 60947-4-2: Class A   |
| <b>EMC emitted interference</b>  |   |
| <b>Communication/ Protocol</b>   |   |
| <b>communication module is supported</b> <ul style="list-style-type: none"> <li>• PROFINET standard</li> <li>• EtherNet/IP</li> <li>• Modbus RTU</li> <li>• Modbus TCP</li> <li>• PROFIBUS</li> </ul>  | Yes<br>Yes<br>Yes<br>Yes<br>Yes   |
| <b>UL/CSA ratings</b>  |   |
| <b>manufacturer's article number</b> <ul style="list-style-type: none"> <li>• of circuit breaker <ul style="list-style-type: none"> <li>— usable for Standard Faults at 460/480 V according to UL</li> <li>— usable for High Faults at 460/480 V according to UL</li> <li>— usable for Standard Faults at 460/480 V at inside-delta circuit according to UL</li> <li>— usable for High Faults at 460/480 V at inside-delta circuit according to UL</li> <li>— usable for Standard Faults at 575/600 V according to UL</li> <li>— usable for Standard Faults 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. 80 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. 80 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. 80 A; Iq = 5 kA<br>Siemens type: 3RV2742, max. 70 A or 3VA51, max. 80 A; Iq = 5 kA<br>Type: Class RK5 / K5, max. 100 A; Iq = 5 kA<br>Type: Class J / L, max. 100 A; Iq = 100 kA<br>Type: Class RK5 / K5, max. 100 A; Iq = 5 kA<br>Type: Class J / L, max. 100 A; Iq = 100 kA |
| <b>operating power [hp] for 3-phase motors</b> <ul style="list-style-type: none"> <li>• at 200/208 V at 50 °C rated value</li> <li>• at 220/230 V at 50 °C rated value</li> <li>• at 460/480 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> </ul>  | 5 hp<br>7.5 hp<br>15 hp<br>10 hp<br>10 hp<br>25 hp  |
| <b>contact rating of auxiliary contacts according to UL</b>  | R300-B300   |
| <b>Safety related data</b>   |   |
| <b>protection class IP on the front according to IEC</b>   | IP20  |

60529

touch protection on the front according to IEC 60529  
electromagnetic compatibility

finger-safe, for vertical contact from the front  
in accordance with IEC 60947-4-2

Certificates/ approvals

General Product Approval

EMC



[Confirmation](#)



Declaration of Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)



Marine / Shipping

other



[Confirmation](#)

Further information

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=3RW5215-3AC14>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5215-3AC14>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW5215-3AC14>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW5215-3AC14&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5215-3AC14&lang=en)

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

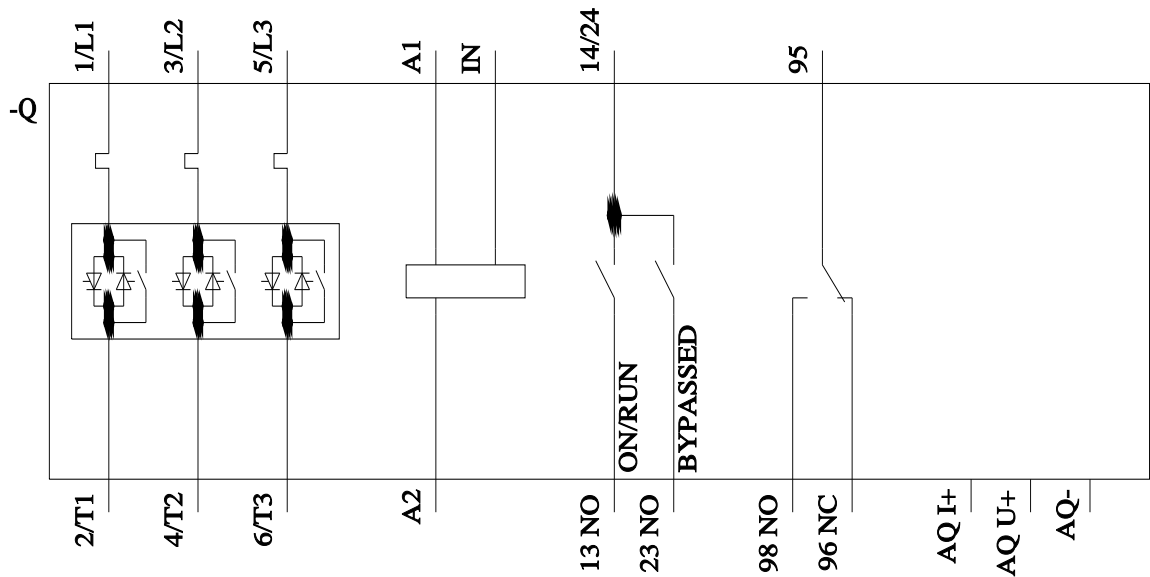
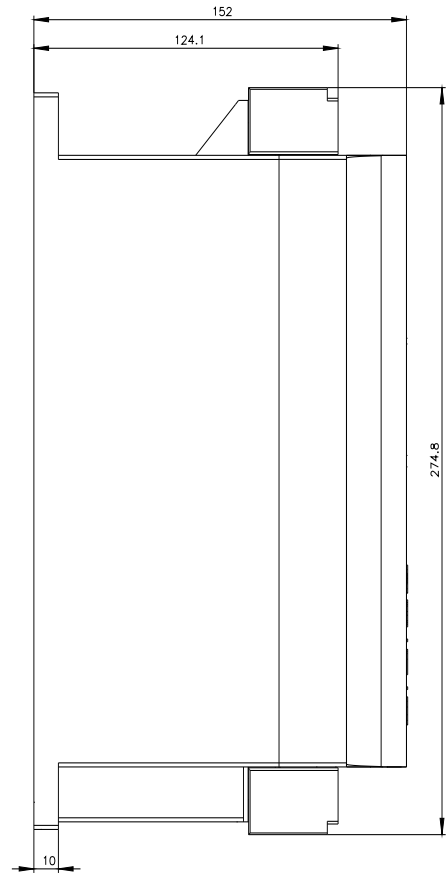
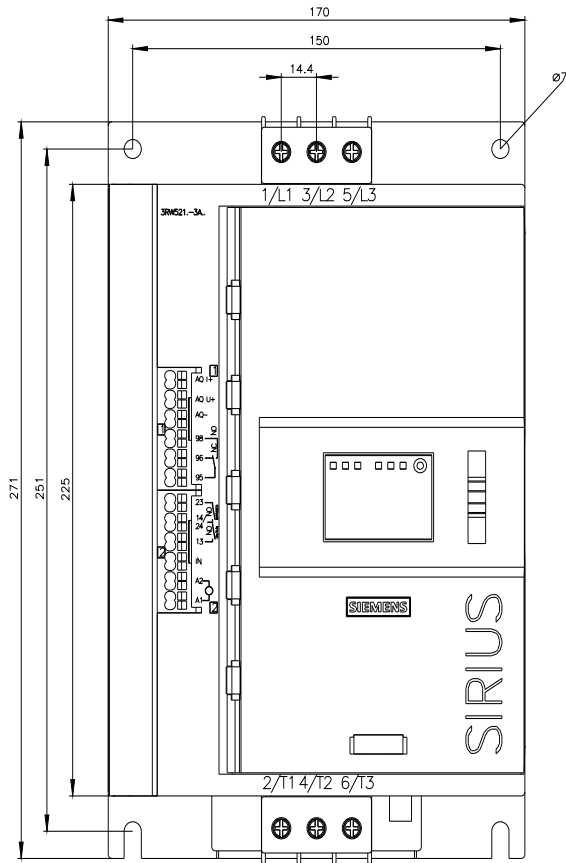
<https://support.industry.siemens.com/cs/ww/en/ps/3RW5215-3AC14/char>

Characteristic: Installation altitude

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5215-3AC14&objecttype=14&gridview=view1>

Simulation Tool for Soft Starters (STS)

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







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