



SIRIUS soft starter S12 205 A, 150 hp/460 V, 50 °C 200-460 V AC, 115 V AC Screw terminals !!! Phased-out product !!!  
Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5073-6AB14<<

| General technical data   |    |                          |
|--|----|--------------------------|
| product brand name   |    | SIRIUS                   |
| product feature  |    |                          |
| • integrated bypass contact system   |    | Yes                      |
| • thyristors   |    | Yes                      |
| product function   |    |                          |
| • intrinsic device protection  |    | Yes                      |
| • motor overload protection  |    | Yes                      |
| • evaluation of thermistor motor protection  |    | No                       |
| • external reset   |    | Yes                      |
| • adjustable current limitation  |    | Yes                      |
| • inside-delta circuit   |    | No                       |
| product component motor brake output   |    | No                       |
| insulation voltage rated value   | V  | 600                      |
| degree of pollution  |    | 3, acc. to IEC 60947-4-2 |
| reference code acc. to DIN EN 61346-2  |    | Q                        |
| reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750                               |    | G                        |
| Power Electronics  |    |                          |
| product designation  |    | Soft starter             |
| operational current  |    |                          |
| • at 40 °C rated value   | A  | 230                      |
| • at 50 °C rated value   | A  | 205                      |
| • at 60 °C rated value   | A  | 180                      |
| yielded mechanical performance for 3-phase motors  |    |                          |
| • at 230 V   |    |                          |
| — at standard circuit at 40 °C rated value   | W  | 75 000                   |
| • at 400 V   |    |                          |
| — at standard circuit at 40 °C rated value   | W  | 132 000                  |
| yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | hp | 60                       |
| operating frequency rated value  | Hz | 50 ... 60                |
| relative negative tolerance of the operating frequency   | %  | -10                      |
| relative positive tolerance of the operating frequency   | %  | 10                       |
| operating voltage at standard circuit rated value  | V  | 200 ... 460              |
| relative negative tolerance of the operating voltage at standard circuit                                       | %  | -15                      |
| relative positive tolerance of the operating voltage at  | %  | 10                       |

|   |    |   |
|---|----|---|
| <b>standard circuit</b>   |    |   |
| <b>minimum load [%]</b>   | %  | 20  |
| <b>adjustable motor current for motor overload protection minimum rated value</b>                                     | A  | 80  |
| <b>continuous operating current [% of I<sub>e</sub>] at 40 °C</b>   | %  | 115   |
| <b>power loss [W] at operational current at 40 °C during operation typical</b>  | W  | 90  |
| <b>Control circuit/ Control</b>   |    |   |
| <b>type of voltage of the control supply voltage</b>  |    | AC  |
| <b>control supply voltage frequency 1 rated value</b>   | Hz | 50  |
| <b>control supply voltage frequency 2 rated value</b>   | Hz | 60  |
| <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 1 at AC</b>   |    |   |
| • at 50 Hz rated value  | V  | 115   |
| • at 60 Hz rated value  | V  | 115   |
| <b>relative negative tolerance of the control supply voltage at AC at 50 Hz</b>                                       | %  | -15   |
| <b>relative positive tolerance of the control supply voltage at AC at 50 Hz</b>                                       | %  | 10  |
| <b>relative negative tolerance of the control supply voltage at AC at 60 Hz</b>                                       | %  | -15   |
| <b>relative positive tolerance of the control supply voltage at AC at 60 Hz</b>                                       | %  | 10  |
| <b>display version for fault signal</b>   |    | red   |
| <b>Mechanical data</b>  |    |   |
| <b>size of engine control device</b>  |    | S12   |
| <b>width</b>  | mm | 160   |
| <b>height</b>   | mm | 230   |
| <b>depth</b>  | mm | 278   |
| <b>fastening method</b>   |    | screw fixing  |
| <b>mounting position</b>  |    | With additional fan: With vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back Without additional fan: With vertical mounting surface +/-10° rotatable, with vertical mounting surface +/- 10° t |
| <b>required spacing with side-by-side mounting</b>  |    |   |
| • upwards   | mm | 100   |
| • at the side   | mm | 5   |
| • downwards   | mm | 75  |
| <b>wire length maximum</b>  | m  | 300   |
| <b>number of poles for main current circuit</b>   |    | 3   |
| <b>Connections/ Terminals</b>   |    |   |
| <b>type of electrical connection</b>  |    |   |
| • for main current circuit  |    | busbar connection   |
| • for auxiliary and control circuit   |    | screw-type terminals  |
| <b>number of NC contacts for auxiliary contacts</b>   |    | 0   |
| <b>number of NO contacts for auxiliary contacts</b>   |    | 2   |
| <b>number of CO contacts for auxiliary contacts</b>   |    | 1   |
| <b>type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point</b> |    |   |
| • finely stranded with core end processing  |    | 70 ... 240 mm²  |
| • finely stranded without core end processing   |    | 70 ... 240 mm²  |
| • stranded  |    | 95 ... 300 mm²  |
| <b>type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point</b>  |    |   |
| • finely stranded with core end processing  |    | 120 ... 185 mm²   |
| • finely stranded without core end processing   |    | 120 ... 185 mm²   |

|   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>• stranded</li> </ul>  |  | 120 ... 240 mm <sup>2</sup>  |
| <b>type of connectable conductor cross-sections for main contacts for box terminal using both clamping points</b> <ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> <li>• finely stranded without core end processing</li> <li>• stranded</li> </ul> |  | min. 2x 50 mm <sup>2</sup> , max. 2x 185 mm <sup>2</sup><br>min. 2x 50 mm <sup>2</sup> , max. 2x 185 mm <sup>2</sup><br>max. 2x 70 mm <sup>2</sup> , max. 2x 240 mm <sup>2</sup> |
| <b>type of connectable conductor cross-sections at AWG cables for main contacts for box terminal</b> <ul style="list-style-type: none"> <li>• using the back clamping point</li> <li>• using the front clamping point</li> <li>• using both clamping points</li> </ul>                    |  | 250 ... 500 kcmil<br>3/0 ... 600 kcmil<br>min. 2x 2/0, max. 2x 500 kcmil   |
| <b>type of connectable conductor cross-sections for DIN cable lug for main contacts</b> <ul style="list-style-type: none"> <li>• finely stranded</li> <li>• stranded</li> </ul>   |  | 50 ... 240 mm <sup>2</sup><br>70 ... 240 mm <sup>2</sup>   |
| <b>type of connectable conductor cross-sections for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> </ul>  |  | 2x (0.5 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> )   |
| <b>type of connectable conductor cross-sections at AWG cables</b> <ul style="list-style-type: none"> <li>• for main contacts</li> <li>• for auxiliary contacts</li> <li>• for auxiliary contacts finely stranded with core end processing</li> </ul>                                      |  | 2/0 ... 500 kcmil<br>2x (20 ... 14)<br>2x (20 ... 16)  |

| Ambient conditions   |    |   |
|--|----|---|
| <b>installation altitude at height above sea level</b>   | m  | 5 000   |
| <b>environmental category</b> <ul style="list-style-type: none"> <li>• during transport acc. to IEC 60721</li> <li>• during storage acc. to IEC 60721</li> <li>• during operation acc. to IEC 60721</li> </ul> |    | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)<br>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4<br>3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| <b>ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>  | °C | -25 ... +60   |
|  | °C | -40 ... +80   |
| <b>derating temperature</b>  | °C | 40  |
| <b>protection class IP on the front acc. to IEC 60529</b>  |    | IP00; IP20 with cover   |
| <b>touch protection on the front acc. to IEC 60529</b>   |    | finger-safe, for vertical contact from the front with cover   |

| Certificates/ approvals  |     |                                |
|--------------------------|-----|--------------------------------|
| General Product Approval | EMC | For use in hazardous locations |



|                           |                   |                   |       |
|---------------------------|-------------------|-------------------|-------|
| Declaration of Conformity | Test Certificates | Marine / Shipping | other |
|---------------------------|-------------------|-------------------|-------|



[Special Test Certificate](#)



[Confirmation](#)

| UL/CSA ratings                                     |  |  |
|--|--|--|
| yielded mechanical performance [hp] for 3-phase AC |  |  |

|  |    |             |
|--|----|-------------|
| <b>motor</b> <ul style="list-style-type: none"><li>● <b>at 220/230 V</b><ul style="list-style-type: none"><li>— at standard circuit at 50 °C rated value</li></ul></li><li>● <b>at 460/480 V</b><ul style="list-style-type: none"><li>— at standard circuit at 50 °C rated value</li></ul></li></ul> | hp | 75          |
|  | hp | 150         |
| <b>contact rating of auxiliary contacts according to UL</b>  |    | B300 / R300 |
| Further information  |    |             |

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

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

#### 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=3RW4073-6BB34>

#### Cax online generator

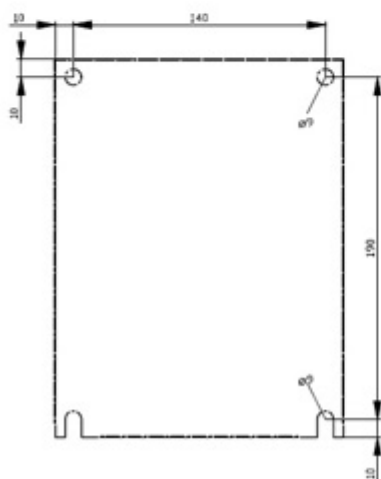
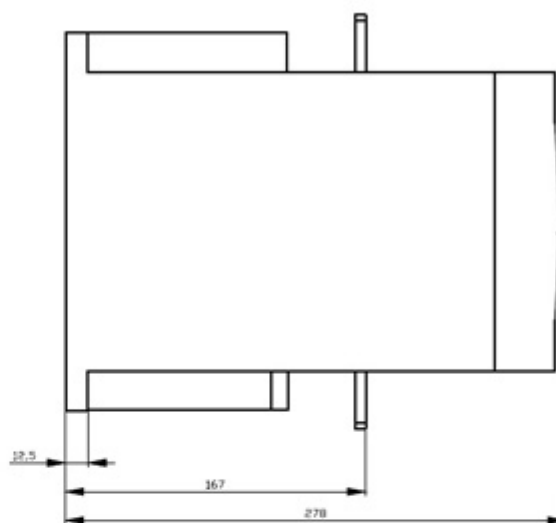
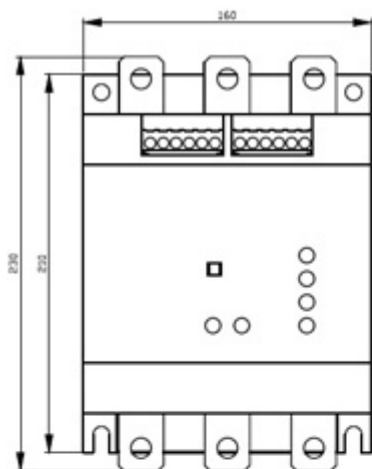
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4073-6BB34>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4073-6BB34>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RW4073-6BB34&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4073-6BB34&lang=en)





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