SIEMENS

## Data sheet 3RW4435-6BC44

SIRIUS soft starter Values at 400 V, 40 °C standard: 134 A, 75 kW Inside-delta: 232 A, 132 kW 200-460 V AC, 230 V AC Screw terminals !!! Phased-out product !!! Successor is SIRIUS 3RW5, Preferred successor type is >>3RW5535-6HA14<<

| | | |
|---|---|---|
| **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 | | Yes |
| ● external reset | | Yes |
| ● adjustable current limitation | | Yes |
| ● inside-delta circuit | | Yes |
| **product component motor brake output** | | Yes |
| **insulation voltage rated value** | V | 690 |
| **degree of pollution** | | 3, acc. to IEC 60947-4-2 |
| **reference code according to EN 61346-2** | | Q |
| **reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750** | | G |
| **Power Electronics** | | |
| **product designation** | | Soft starter |
| **operational current** | | |
| ● at 40 °C rated value | A | 134 |
| ● at 50 °C rated value | A | 117 |
| ● at 60 °C rated value | A | 100 |
| **operational current for 3-phase motors at inside-delta circuit** | | |
| ● at 40 °C rated value | A | 232 |
| ● at 50 °C rated value | A | 203 |
| ● at 60 °C rated value | A | 173 |
| **yielded mechanical performance for 3-phase motors** | | |
| ● at 230 V | | |
| — at standard circuit at 40 °C rated value | kW | 37 |
| — at inside-delta circuit at 40 °C rated value | kW | 75 |
| ● at 400 V | | |
| — at standard circuit at 40 °C rated value | kW | 75 |
| — at inside-delta circuit at 40 °C rated value | kW | 132 |
| **yielded mechanical performance [hp] for 3-phase AC motor at 200/208 V at standard circuit at 50 °C rated value** | hp | 30 |
| **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 standard circuit** | % | 10 |
| **operating voltage at inside-delta circuit rated value** | V | 200 ... 460 |
| **relative negative tolerance of the operating voltage at inside-delta circuit** | % | -15 |
| **relative positive tolerance of the operating voltage at inside-delta circuit** | % | 10 |
| **minimum load [%]** | % | 8 |
| **adjustable motor current for motor overload protection minimum rated value** | A | 26 |
| **continuous operating current [% of Ie] at 40 °C** | % | 115 |
| **power loss [W] at operational current at 40 °C during operation typical** | W | 76 |
| **Control circuit/ Control** | | |
| **type of voltage of the control supply voltage** | | AC |
| **control supply voltage frequency 1 rated value** | Hz | 50 |
| **control supply voltage frequency 2 rated value** | Hz | 60 |
| **relative negative tolerance of the control supply voltage frequency** | % | -10 |
| **relative positive tolerance of the control supply voltage frequency** | % | 10 |
| **control supply voltage 1 at AC** | | |
| ● at 50 Hz rated value | V | 230 |
| ● at 60 Hz rated value | V | 230 |
| **relative negative tolerance of the control supply voltage at AC at 50 Hz** | % | -15 |
| **relative positive tolerance of the control supply voltage at AC at 50 Hz** | % | 10 |
| **relative negative tolerance of the control supply voltage at AC at 60 Hz** | % | -15 |
| **relative positive tolerance of the control supply voltage at AC at 60 Hz** | % | 10 |
| **display version for fault signal** | | Display |
| **Mechanical data** | | |
| **width** | mm | 170 |
| **height** | mm | 200 |
| **depth** | mm | 270 |
| **fastening method** | | screw fixing |
| **mounting position** | | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back |
| **required spacing with side-by-side mounting** | | |
| ● upwards | mm | 100 |
| ● at the side | mm | 5 |
| ● downwards | mm | 75 |
| **wire length maximum** | m | 500 |
| **number of poles for main current circuit** | | 3 |
| **Connections/ Terminals** | | |
| **type of electrical connection** | | |
| ● for main current circuit | | busbar connection |
| ● for auxiliary and control circuit | | screw-type terminals |
| **number of NC contacts for auxiliary contacts** | | 0 |
| **number of NO contacts for auxiliary contacts** | | 3 |
| **number of CO contacts for auxiliary contacts** | | 1 |
| **type of connectable conductor cross-sections for main contacts for box terminal using the front clamping point** | | |
| ● finely stranded with core end processing | | 16 ... 70 mm² |
| ● finely stranded without core end processing | | 16 ... 70 mm² |
| ● stranded | | 16 ... 70 mm² |
| **type of connectable conductor cross-sections for main contacts for box terminal using the back clamping point** | | |
| ● finely stranded with core end processing | | 16 ... 70 mm² |
| ● finely stranded without core end processing | | 16 ... 70 mm² |

| | | |
|---|---|---|
| ● stranded | | 16 ... 70 mm² |
| **type of connectable conductor cross-sections for main contacts for box terminal using both clamping points** | | |
| ● finely stranded with core end processing | | max. 1x 50 mm², 1x 70 mm² |
| ● finely stranded without core end processing | | max. 1x 50 mm², 1x 70 mm² |
| ● stranded | | max. 2x 70 mm² |
| **type of connectable conductor cross-sections for AWG cables for main contacts for box terminal** | | |
| ● using the back clamping point | | 6 ... 2/0 |
| ● using the front clamping point | | 6 ... 2/0 |
| ● using both clamping points | | max. 2x 1/0 |
| **type of connectable conductor cross-sections for DIN cable lug for main contacts** | | |
| ● finely stranded | | 16 ... 95 mm² |
| ● stranded | | 25 ... 120 mm² |
| **type of connectable conductor cross-sections for auxiliary contacts** | | |
| ● solid | | 2x (0.5 ... 2.5 mm²) |
| ● finely stranded with core end processing | | 2x (0.5 ... 1.5 mm²) |
| **type of connectable conductor cross-sections for AWG cables** | | |
| ● for main contacts | | 4 ... 250 kcmil |
| ● for auxiliary contacts | | 2x (20 ... 14) |
| ● for auxiliary contacts finely stranded with core end processing | | 2x (20 ... 16) |

## Ambient conditions

| | | |
|---|---|---|
| **installation altitude at height above sea level** | m | 5 000 |
| **environmental category** | | |
| ● during transport according to IEC 60721 | | 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) |
| ● during storage according to IEC 60721 | | 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 |
| ● during operation according to IEC 60721 | | 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| **ambient temperature** | | |
| ● during operation | °C | 60 |
| ● during storage | °C | -25 ... +80 |
| **derating temperature** | °C | 40 |
| **protection class IP on the front according to IEC 60529** | | IP00; IP20 with box terminal/cover |
| **touch protection on the front according to IEC 60529** | | finger-safe, for vertical contact from the front with box terminal/cover |

## Certificates/ approvals

**General Product Approval** | **EMC**

Confirmation

**Declaration of Conformity** | **Test Certificates** | **Marine / Shipping**

Type Test Certificates/Test Report | Special Test Certificate

**Marine / Shipping** | **other**

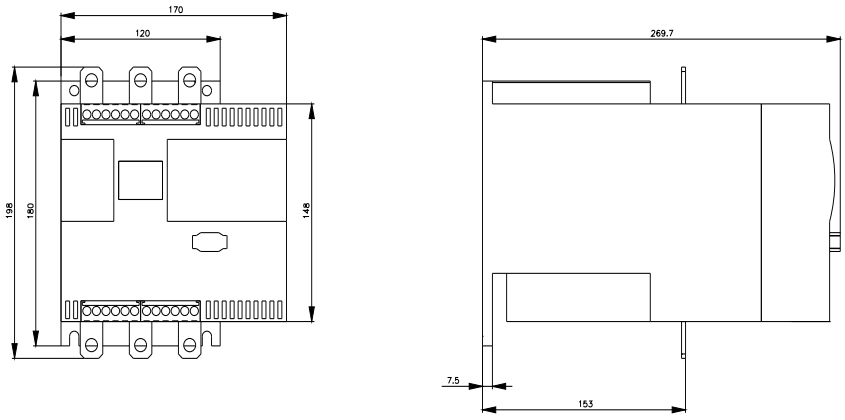
Confirmation

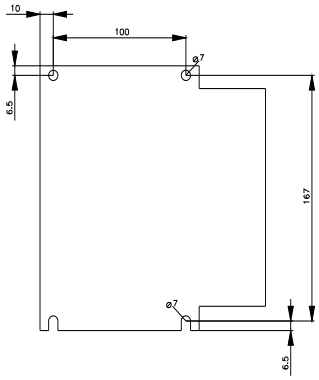
## UL/CSA ratings

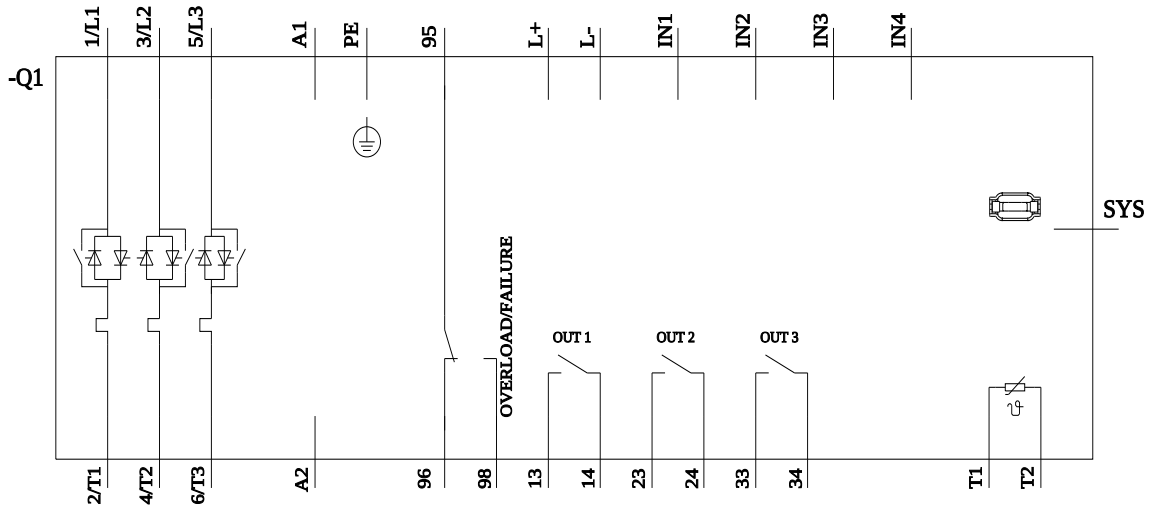
| | | |
|---|---|---|
| **yielded mechanical performance [hp] for 3-phase AC motor** | | |
| **• at 200/208 V** | | |
| — at inside-delta circuit at 50 °C rated value | hp | 60 |
| **• at 220/230 V** | | |
| — at standard circuit at 50 °C rated value | hp | 40 |
| — at inside-delta circuit at 50 °C rated value | hp | 75 |
| **• at 460/480 V** | | |
| — at standard circuit at 50 °C rated value | hp | 75 |
| — at inside-delta circuit at 50 °C rated value | hp | 150 |
| **contact rating of auxiliary contacts according to UL** | | B300 / R300 |

## Further information

**Siemens has decided to exit the Russian market (see here).**
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business
**Siemens is working on the renewal of the current EAC certificates.**
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).
**Simulation Tool for Soft Starters (STS)**
https://support.industry.siemens.com/cs/ww/en/view/101494917
**Information on the packaging**
https://support.industry.siemens.com/cs/ww/en/view/109813875
**Information- and Downloadcenter (Catalogs, Brochures,…)**
https://www.siemens.com/ic10
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4435-6BC44
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4435-6BC44
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RW4435-6BC44
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW4435-6BC44&lang=en



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