



SIRIUS soft starter Values at 400 V, 40 °C standard:
 1214 A, 710 kW Inside-delta: 2103 A, 1200 kW 200-460
 V AC, 230 V AC Screw terminals !!! Phased-out product
 !!! Successor is SIRIUS 3RW5, Preferred successor
 type is >>3RW5558-6HA14<<

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 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 |
| Operating current | | |
| • at 40 °C rated value | A | 1 214 |
| • at 50 °C rated value | A | 1 076 |
| • at 60 °C rated value | A | 970 |
| Operating current for three-phase motors at inside-delta circuit | | |
| • at 40 °C rated value | A | 2 103 |
| • at 50 °C rated value | A | 1 864 |
| • at 60 °C rated value | A | 1 680 |
| Mechanical power output for three-phase motors | | |
| • at 230 V | | |
| — at standard circuit at 40 °C rated value | W | 400 000 |
| — at inside-delta circuit at 40 °C rated value | W | 710 000 |
| • at 400 V | | |
| — at standard circuit at 40 °C rated value | W | 710 000 |
| — at inside-delta circuit at 40 °C rated value | W | 1 200 000 |
| Yielded mechanical performance [hp] for three-phase AC motor at 200/208 V at standard circuit at 50 °C rated value | hp | 400 |
| 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 | 242 |
| Continuous operating current [% of I_e] at 40 °C | % | 115 |
| Power loss [W] at operating current at 40 °C during operation typical | W | 630 |

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 | 575 |
| Height | mm | 780 |
| Depth | mm | 292 |
| Mounting type | | 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 current 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 DIN cable lug for main contacts | | |
| • finely stranded | | 50 ... 240 mm ² |
| • stranded | | 70 ... 240 mm ² |
| Type of connectable conductor cross-sections for auxiliary contacts | | |

| | | |
|--|--|---|
| <ul style="list-style-type: none"> • solid • finely stranded with core end processing | | <p>2x (0.5 ... 2.5 mm²)</p> <p>2x (0.5 ... 1.5 mm²)</p> |
| Type of connectable conductor cross-sections at AWG conductors <ul style="list-style-type: none"> • for main contacts • for auxiliary contacts • for auxiliary contacts finely stranded with core end processing | | <p>2/0 ... 500 kcmil</p> <p>2x (20 ... 14)</p> <p>2x (20 ... 16)</p> |

Ambient conditions

| | | |
|--|---------------------|--|
| Installation altitude at height above sea level | m | 5 000 |
| Environmental category <ul style="list-style-type: none"> • during transport acc. to IEC 60721 • during storage acc. to IEC 60721 • during operation acc. to IEC 60721 | | <p>2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)</p> <p>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4</p> <p>3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</p> |
| Ambient temperature <ul style="list-style-type: none"> • during operation • during storage | <p>°C</p> <p>°C</p> | <p>60</p> <p>-25 ... +80</p> |
| Derating temperature | °C | 40 |
| Protection class IP | | IP00 |

Certificates/ approvals

| | | |
|--------------------------|-----|---------------------------|
| General Product Approval | EMC | Declaration of Conformity |
|--------------------------|-----|---------------------------|



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

[Miscellaneous](#)

[Special Test Certificate](#)



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



[Confirmation](#)

UL/CSA ratings

Yielded mechanical performance [hp] for three-phase AC motor

| | | |
|--|----|-------|
| <ul style="list-style-type: none"> • at 200/208 V <ul style="list-style-type: none"> — at inside-delta circuit at 50 °C rated value • at 220/230 V <ul style="list-style-type: none"> — at standard circuit at 50 °C rated value — at inside-delta circuit at 50 °C rated value • at 460/480 V <ul style="list-style-type: none"> — at standard circuit at 50 °C rated value — at inside-delta circuit at 50 °C rated value | hp | 700 |
| | hp | 450 |
| | hp | 850 |
| | hp | 950 |
| | hp | 1 700 |

Contact rating of auxiliary contacts according to UL

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,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

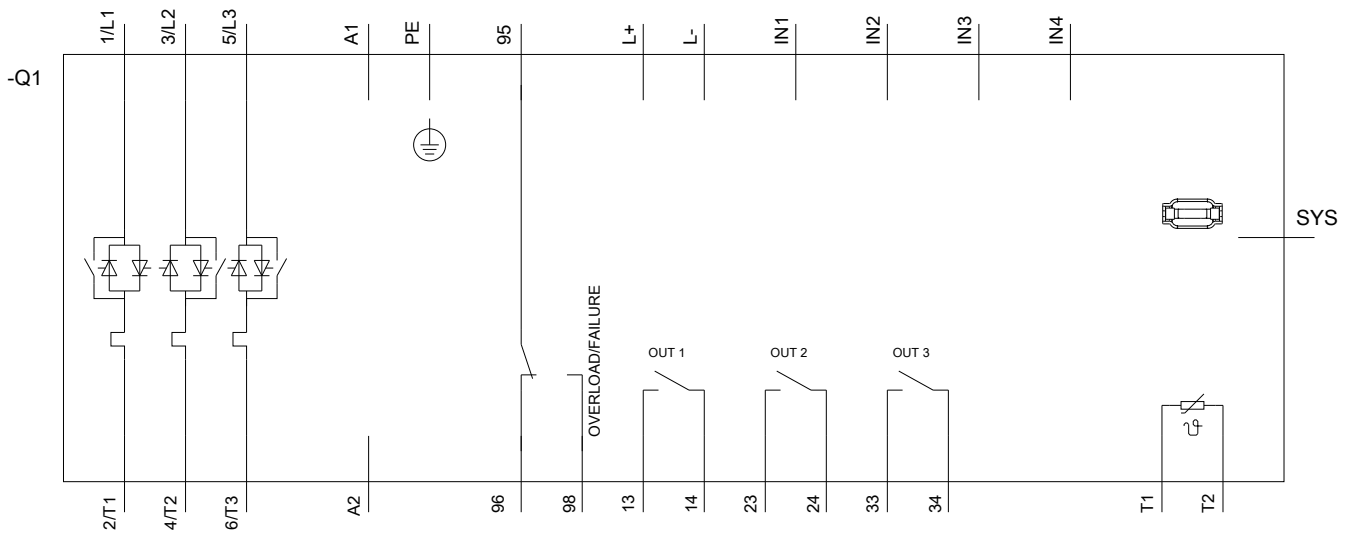
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW4466-6BC44>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW4466-6BC44>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RW4466-6BC44>



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