SIEMENS

Data sheet 3RW44 43-2BC46



SIRIUS SOFT STARTER, VALUES WITH 690 V, 40 DEG., STANDARD: 203A, 200KW, INSIDE-DELTA CIRCUIT 3: ONLY UP TO 600V, 400-690 V AC, 230 V AC, CAGE CLAMP TERMINALS

| 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 |
| Equipment marking acc. to DIN EN 61346-2 | Q |
| Equipment marking acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | G |

| Power Electronics: | | |
|--|---|---|
| Product designation | | soft starters for high feature applications |
| Operating current | | |
| • at 40 °C Rated value | Α | 203 |
| ● at 50 °C Rated value | Α | 180 |
| • at 60 °C Rated value | Α | 156 |
| Operating current for three-phase motors at 3-phase root switching | | |
| • at 40 °C Rated value | Α | 352 |

| • at 50 °C Rated value | Α | 312 |
|--|----|---------|
| • at 60 °C Rated value | Α | 270 |
| Mechanical power output for three-phase motors | | |
| ● at 400 V | | |
| — at standard circuit at 40 °C Rated value | W | 110 000 |
| — at 3-phase root switching at 40 °C Rated | W | 200 000 |
| value | | |
| ● at 500 V | | |
| — at standard circuit at 40 °C Rated value | W | 132 000 |
| — at 3-phase root switching at 40 °C Rated | W | 250 000 |
| value | | |
| at 690 V at standard circuit at 40 °C Rated value | W | 200 000 |
| Operating frequency Rated value | Hz | 50 60 |
| Relative negative tolerance of the operating | % | -10 |
| frequency | | |
| Relative positive tolerance of the operating frequency | % | 10 |
| Operating voltage at standard circuit Rated value | V | 400 690 |
| 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 3-phase root switching Rated value | V | 400 600 |
| Relative negative tolerance of the operating voltage at 3-phase root switching | % | -15 |
| Relative positive tolerance of the operating voltage at 3-phase root switching | % | 10 |
| Minimum load in % of I_M | % | 8 |
| Adjustable motor current for motor overload protection minimum rated value | А | 40 |
| Continuous operating current in % of I_e at 40 °C | % | 115 |
| Active power loss at operating current at 40 °C during operation typical | W | 89 |
| Control electronics: | | |
| 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 with AC | | |
| • at 50 Hz Rated value | V | 230 |

| ● at 60 Hz Rated value | V | 230 |
|--|---|---------|
| Relative negative tolerance of the control supply voltage with AC at 60 Hz | % | -15 |
| Relative positive tolerance of the control supply voltage with AC at 60 Hz | % | 10 |
| Display version for fault signal | | Display |

| Mechanical data: | | |
|---|----|---|
| Width | mm | 210 |
| Height | mm | 230 |
| Depth | mm | 298 |
| Mounting type | | screw fixing |
| mounting position | | bei senkrechter Montageebene +/-90° drehbar, bei senkrechter Montageebene +/- 22,5° nach vorne und hinten kippbar |
| Required spacing with side-by-side mounting | | |
| ● upwards | mm | 100 |
| • at the side | mm | 5 |
| downwards | mm | 75 |
| Installation altitude at height above sea level | m | 5 000 |
| Cable 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 | spring-loaded 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-section for main contacts for box terminal using the front clamping point | |
| finely stranded with core end processing | 70 240 mm² |
| finely stranded without core end processing | 70 240 mm² |
| • stranded | 95 300 mm² |
| Type of connectable conductor cross-section for main contacts for box terminal using the back clamping point | |
| finely stranded with core end processing | 120 185 mm² |
| • finely stranded without core end processing | 120 185 mm² |
| • stranded | 120 240 mm² |
| Type of connectable conductor cross-section for main contacts for box terminal using both clamping points | |

| finely stranded with core end processing | min. 2x 50 mm², max. 2x 185 mm² |
|---|---------------------------------|
| finely stranded without core end processing | min. 2x 50 mm², max. 2x 185 mm² |
| • stranded | max. 2x 70 mm², max. 2x 240 mm² |
| Type of connectable conductor cross-section for | |
| AWG conductors for main contacts for box terminal | |
| using the back clamping point | 250 500 kcmil |
| using the front clamping point | 3/0 600 kcmil |
| using both clamping points | min. 2x 2/0, max. 2x 500 kcmil |
| Type of connectable conductor cross-section for DIN | |
| cable lug for main contacts | |
| finely stranded | 50 240 mm² |
| • stranded | 70 240 mm² |
| Type of connectable conductor cross-section for | |
| auxiliary contacts | |
| • solid | 2x (0.25 1.5 mm²) |
| finely stranded with core end processing | 2x (0.25 1.5 mm²) |
| Type of connectable conductor cross-section for | |
| AWG conductors | |
| • for main contacts | 2/0 500 kcmil |
| • for auxiliary contacts | 2x (24 16) |
| | |

| Ambient conditions: | | | |
|------------------------------------|----|---------|--|
| Ambient temperature | | | |
| during operation | °C | 60 | |
| during storage | °C | -25 +80 | |
| Derating temperature | °C | 40 | |
| Protection class IP | | IP00 | |

Certificates/ approvals:

General Product Approval

EMC

Declaration of Conformity













Test Certificates

Shipping Approval

Type Test
Certificates/Test
Report

Special Test Certificate









GL

Shipping Approval

other





Environmental Confirmations

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

• at 460/480 V

| — at standard circuit at 50 °C Rated value | metric hp | 125 |
|--|--------------|-----|
| — at 3-phase root switching at 50 °C Rated value | metric hp | 250 |
| | | |

• at 575/600 V

| — at standard circuit at 50 °C Rated value | metric | 150 |
|--|--------|-----|
| | hp | |
| — at 3-phase root switching at 50 °C Rated | metric | 300 |
| value | hp | |

Contact rating of the auxiliary contacts acc. to UL

B300 / R300

Further information

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW44432BC46

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

http://support.automation.siemens.com/WW/view/en/3RW44432BC46/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/index.aspx?attlD9=3RW44432BC46&lang=en







