# SIEMENS

## **Product data sheet**

## 3RW4024-1BB15



SIRIUS SOFT STARTER, S0, 12.5A, 7.5KW/500V, 40 DEGR., AC 400-600V, AC/DC 110-230V, SCREW TERMINALS

| General details:   |   |
|--|---|
| Product brand name   | SIRIUS                                  |
| Product equipment  |   |
| <ul> <li>integrated bridging contact system</li> </ul>   | Yes                                     |
| thyristors   | Yes                                     |
| Product function   |   |
| intrinsic device protection  | Yes                                     |
| motor overload protection  | Yes                                     |
| <ul> <li>evaluation of thermal resistor motor protection</li> </ul>                              | No                                      |
| reset external   | Yes                                     |
| adjustable current limitation  | Yes                                     |
| inside-delta circuit   | No                                      |
| Product component / outlet for enine brake   | No                                      |
| Item designation   |   |
| according to DIN EN 61346-2  | Q                                       |
| <ul> <li>according to DIN 40719 extendable after IEC 204-2 / according<br/>to IEC 750</li> </ul> | G                                       |
| Power Electronics:   |   |
| product designation  | soft starters for standard applications |
|  |   |

Operating current

| • at 40 °C / rated value  | А  | 12.5    |
|---|----|---------|
| • at 50 °C / rated value  | А  | 11      |
| • at 60 °C / rated value  | А  | 10      |
| Emitted mechanical power / for three-phase servomotors                                | -  |         |
| • at 400 V / at standard switching / at 40 °C   |    |         |
| rated value   | W  | 5,500   |
| $\bullet$ at 500 V / at standard switching / at 40 $^{\circ}\text{C}$                 |    |         |
| rated value   | W  | 7,500   |
| 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 / with standard circuit / rated value                               | V  | 400 600 |
| Relative negative tolerance / of the operating voltage / with standard circuit        | %  | -15     |
| Relative positive tolerance / of the operating voltage / with standard circuit        | %  | 10      |
| Minimum load in % of I_M  | %  | 20      |
| Adjustable rated current / of the motor / for motor overload protection / minimum     | A  | 5       |
| Continuous operating current in % of I_e / at 40°C                                    | %  | 115     |
| Active power loss / at operating current / at 40°C / during operating phase / typical | W  | 2       |

| Control electronics:   |    |         |
|--|----|---------|
| Type of voltage / of the controlled supply voltage                                 |    | AC/DC   |
| 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 50 Hz / for AC                                     | V  | 110 230 |
| Control supply voltage / 1 / at 60 Hz / for AC                                     | V  | 110 230 |
| Relative negative tolerance / of the control supply voltage / at 60<br>Hz / for AC | %  | -15     |
| Relative positive tolerance / of the control supply voltage / at 60<br>Hz / for AC | %  | 10      |
| Control supply voltage / 1 / for DC  | V  | 110 230 |
| Relative negative tolerance / of the control supply voltage / for DC               | %  | -15     |
| Relative positive tolerance / of the control supply voltage / for DC               | %  | 10      |

| Type of display / for fault signal   |    | red  |
|--|----|--|
| Mechanical design:   |    |  |
| Size of the engine control device  |    | S0   |
| Width  | mm | 45   |
| Height   | mm | 125  |
| Depth  | mm | 155  |
| Type of mounting   |    | screw and snap-on mounting   |
| Built in orientation   |    | With additional fan: With vertical mounting surface +/-<br>90° rotatable, with vertical mounting surface +/- 22.5°<br>tiltable to the front and back Without additional fan:<br>With vertical mounting surface +/-10° rotatable, with<br>vertical mounting surface +/- 10° t |
| Distance, to be maintained, to the ranks assembly  |    |  |
| • upwards  | mm | 60   |
| • sidewards  | mm | 15   |
| downwards  | mm | 40   |
| Altitude of installation site / at a height over sea level   | m  | 5,000  |
| Cable length / maximum   | m  | 300  |
| Number of poles / for main current circuit   |    | 3  |
| Electrical connections:  |    |  |
| Design of the electrical connection  |    |  |
| for main current circuit   |    | screw-type terminals   |
| <ul> <li>for auxiliary and control current circuit</li> </ul>  |    | screw-type terminals   |
| Number of NC contacts / for auxiliary contacts   |    | 0  |
| Number of NO contacts / for auxiliary contacts   |    | 2  |
| Number of change-over switches / for auxiliary contacts  |    | 1  |
| Type of the connectable conductor cross section / for main contacts / for box terminal / when using the front clamping point |    |  |
| • solid  |    | 2x (1.5 2.5 mm2), 2x (2.5 6 mm2), max. 1x 10 mm2   |
| <ul> <li>finel</li> <li>y stranded / with conductor end processing</li> </ul>  |    | 2x (1.5 2.5 mm2), 2x (2.5 6 mm2)   |
| Type of the connectable conductor cross-section / for AWG conductors / for main contacts / for box terminal                  |    |  |
| • when using the front c lamping point   |    | 1x 8, 2x (16 10)   |
| Type of the connectable conductor cross-section  |    |  |
| for auxiliary contacts   |    |  |
|  |    | 2x (0.5 2.5 mm2)   |
| • solid  |    |  |
| <ul> <li>solid</li> <li>finely stranded / with conductor end processing</li> </ul>   |    | 2x (0.5 1.5 mm2)   |

| <ul> <li>finely stranded / with wire end proc<br/>essing</li> </ul> |    | 2x (20 16) |
|---|----|------------|
| Ambient conditions:   |    |            |
| Ambient temperature   |    |            |
| during operating  | °C | -25 60     |
| during storage  | °C | -40 80     |
| Derating temperature  | °C | 40         |
| Protection class IP   |    | IP20       |

| Certificates/app | provals:   |                     |     |                                      |                   |
|------------------|------------|---------------------|-----|--------------------------------------|-------------------|
| General Product  | t Approval |                     |     | For use in<br>hazardous<br>locations | Test Certificates |
| <u>CQC</u>       | (SA)       | ROSTEST             |     | <u>DEKRA EXAM,</u><br><u>DMT</u>     | Manufacturer      |
| Shipping Approv  | val        |                     |     | other                                |                   |
|                  | GL         | Lloyd's<br>Kegister | PRS | Manufacturer                         |                   |

| UL/CSA ratings   |    |     |
|--|----|-----|
| yielded mechanical performance (hp) / for three-phase squirrel cage motors |    |     |
| • at 460/480 V / at standard circuit                                       |    |     |
| • at 50 °C / rated v<br>alue   | hp | 7.5 |
| • at 575/600 V / at standard circuit                                       |    |     |
| • at 50 °C / rated v<br>alue   | hp | 10  |

### Further information:

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

#### Industry Mall (Online ordering system)

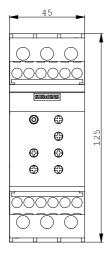
http://www.siemens.com/industrial-controls/mall

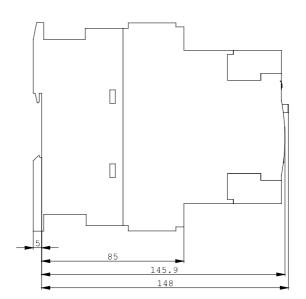
#### CAx-Online-Generator

http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RW4024-1BB15/all

#### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RW4024-1BB15







last change:

Aug 22, 2011