## SIEMENS

## **Product data sheet**

## 3RB3016-2NB0



OVERLOAD RELAY 0.32...1.25 A FOR MOTOR PROTECTION SIZE S00, CLASS 20 CONTACTOR ASS. MAIN CIRCUIT: SCREW CONN. AUX.CIRCUIT: SCREW CONN. MANUAL-AUTOM.-RESET

| General technical data:                                       |     |  |  |  |
|---|-----|--|--|--|
| Product brand name  |     | SIRIUS   |  |  |
| product designation   |     | solid-state overload relay   |  |  |
| Protection class IP / on the front                            |     | IP20   |  |  |
| Insulation voltage / with degree of pollution 3 / rated value | V   | 690  |  |  |
| Installation altitude / at a height over sea level / maximum  | m   | 2,000  |  |  |
| Ambient temperature   |     |  |  |  |
| during storage  | °C  | -40 80   |  |  |
| during transport  | °C  | -40 80   |  |  |
| during operating  | °C  | -25 60   |  |  |
| Relative humidity   |     |  |  |  |
| during operating phase  | / % | 95   |  |  |
| EMC immunity to interference                                  |     |  |  |  |
| according to IEC 60947-1                                      |     | corresponds to degree of severity 3  |  |  |
| EMC emitted interference                                      |     |  |  |  |
| according to IEC 60947-1                                      |     | CISPR 11, environment B (residential area)                                     |  |  |
| Conductor-bound parasitic coupling BURST                      |     |  |  |  |
| according to IEC 61000-4-4                                    |     | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 $$ |  |  |
| Conductor-bound parasitic coupling conductor-earth SURGE      |     |  |  |  |

| according to IEC 61000-4-5  |            | 2 kV (line to earth) corresponds to degree of severity 3 |  |  |
|---|------------|--|--|--|
| Conductor-bound parasitic coupling conductor-conductor<br>SURGE   |            |  |  |  |
| according to IEC 61000-4-5  |            | 1 kV (line to line) corresponds to degree of severity 3  |  |  |
| Electrostatic discharge   |            |  |  |  |
| according to IEC 61000-4-2  |            | 6 kV contact discharge / 8 kV air discharge              |  |  |
| Field-bound parasitic coupling  |            |  |  |  |
| according to IEC 61000-4-3  |            | 10 V/m   |  |  |
| Resistance against shock  |            | 15g / 11 ms  |  |  |
| Impulse voltage resistance / rated value  | kV         | 6  |  |  |
| Active power loss / total / typical   | W          | 0.05   |  |  |
| Item designation  |            |  |  |  |
| <ul> <li>according to DIN 40719 extendable after IEC 204-2 / according<br/>to IEC 750</li> </ul>          |            | F  |  |  |
| according to DIN EN 61346-2   |            | F  |  |  |
| Size of overload relay  |            | S00  |  |  |
| Size of the contactor / can be combined / company-specific  |            | S00  |  |  |
| type of protection  |            | PTB 09 ATEX 3001 Ex II (2) GD                            |  |  |
| Type of assignement   |            | 2  |  |  |
| Trip class  |            | CLASS 20   |  |  |
| Main circuit:   |            |  |  |  |
| Number of poles / for main current circuit  |            | 3  |  |  |
| Operating voltage / at AC-3 / rated value   |            | 5  |  |  |
| maximum   | V          | 690  |  |  |
| Operating current / at AC-3 / at 400 V  | . v        |  |  |  |
| rated value   | А          | 1.25   |  |  |
| Adjustable response current   | , <b>^</b> | 1.20   |  |  |
| of the current-dependent overload release   | А          | 0.32 1.25  |  |  |
| Service power / for three-phase servomotors / at 400 V / at 50 Hz   |            | 0.52 1.25  |  |  |
| • for AC three-phase  | kW         | 0.12 0.37  |  |  |
| Operating current / of the fuse link  |            | 0.12 0.57  |  |  |
| rated value   | А          | 6  |  |  |
|   | ,,         | 0  |  |  |
| Auxiliary circuit:  |            |  |  |  |
| Contact reliability / of the auxiliary contacts   |            | acceptability for PLC control (17 V, 5 mA)               |  |  |
| Number of NC contacts / for auxiliary contacts  |            | 1  |  |  |
|   |            |  |  |  |
| Number of NO contacts / for auxiliary contacts  |            | 1  |  |  |
| Number of NO contacts / for auxiliary contacts<br>Number of change-over switches / for auxiliary contacts |            | 0  |  |  |
| · ·   |            |  |  |  |

| • at 24 V  | А | 4   |
|------------|---|-----|
| • at 110 V | А | 4   |
| • at 120 V | А | 4   |
| • at 125 V | А | 4   |
| • at 230 V | А | 3   |
| • at DC-13 |   |     |
| • at 24 V  | А | 2   |
| • at 60 V  | А | 1   |
| • at 110 V | А | 0.3 |
| • at 125 V | А | 0.3 |
| • at 220 V | А | 1   |
|            |   |     |

## Short-circuit:

| Design of the fuse link / for short-circuit protection of the | fuse gL/gG: 6 A |
|---|-----------------|
| auxiliary switch / required                                   |                 |

| Installation/mounting/dimensions:                 |    |                 |  |
|---|----|-----------------|--|
| Built in orientation                              |    | any             |  |
| Type of mounting                                  |    | direct mounting |  |
| Width   | mm | 45              |  |
| Height  | mm | 64.7            |  |
| Depth   | mm | 72.5            |  |
| Distance, to be maintained, to the ranks assembly |    |                 |  |
| forwards  | mm | 0               |  |
| backwards   | mm | 0               |  |
| • upwards   | mm | 0               |  |
| downwards   | mm | 0               |  |
| • sidewards                                       | mm | 0               |  |
| Distance, to be maintained, to earthed part       |    |                 |  |
| forwards  | mm | 0               |  |
| backwards   | mm | 0               |  |
| • upwards   | mm | 0               |  |
| downwards   | mm | 0               |  |
| • sidewards                                       | mm | 6               |  |
| Distance, to be maintained, conductive elements   |    |                 |  |
| forwards  | mm | 0               |  |
| backwards   | mm | 0               |  |
| • upwards   | mm | 0               |  |
| downwards   | mm | 0               |  |
| • sidewards                                       | mm | 6               |  |

| 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   |                                      |                     |  |
| Product function / removable terminal for auxiliary and control circuit | -    | Yes  |                                      |                     |  |
| Type of the connectable conductor cross-section                         |      |  |                                      |                     |  |
| for main contacts   |      |  |                                      |                     |  |
| • solid   |      | 1x (0.5 4 mm²), 2x (0.5 1.5 mm²), 2x (0.75 4 mm²)                    |                                      |                     |  |
| • stranded  |      | 1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²), 1x (0.75 4 mm²), 2x (0.75 4 mm²) |                                      |                     |  |
| finely stranded   |      |  |                                      |                     |  |
| with conductor end processing   |      | 1x (0.5  | 2.5 mm²), 2x (0.5                    | 2.5 mm²)            |  |
| <ul> <li>for AWG conductors / for main contacts</li> </ul>              |      | 1x (20 12), 2x (20 12)   |                                      |                     |  |
| for auxiliary contacts  |      |  |                                      |                     |  |
| • solid   |      | 1x (0.5 4 mm²), 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)                  |                                      |                     |  |
| finely stranded   |      |  |                                      |                     |  |
| with conductor end processing   |      | 1x (0.5 1.5 mm²), 2x (0.5 1.5 mm²), 1x (0.5 2.5 mm²)                 |                                      |                     |  |
| <ul> <li>for AWG conductors / for auxiliary contacts</li> </ul>         |      | 1x (20 14), 2x (20 14)   |                                      |                     |  |
| Certificates/approvals:   |      |  |                                      |                     |  |
| Verification of suitability   |      | UL/CS  | A                                    |                     |  |
| • ATEX  |      | Yes  |                                      |                     |  |
| General Product Approval  |      |  | For use in<br>hazardous<br>locations | Test Certificates   |  |
| CQC CSA ROSTEST   |      |  | PTB                                  | <u>Manufacturer</u> |  |
| Shipping Approval   |      |  | other                                |                     |  |
| ABS GL LRS  | KMRS |  | <u>Manufacturer</u>                  |                     |  |
| UL/CSA ratings:   |      |  |                                      |                     |  |
| Contact rating designation / for auxiliary contacts / according to UL   |      | B600 / R300  |                                      |                     |  |
| Reliability figures:  |      |  |                                      |                     |  |
| Protection against electrical shock                                     |      | finger-safe  |                                      |                     |  |
|   |      | inger sale   |                                      |                     |  |

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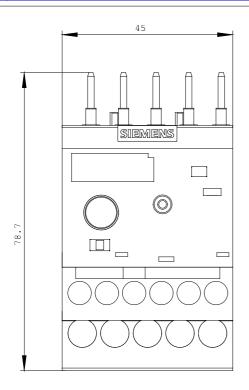
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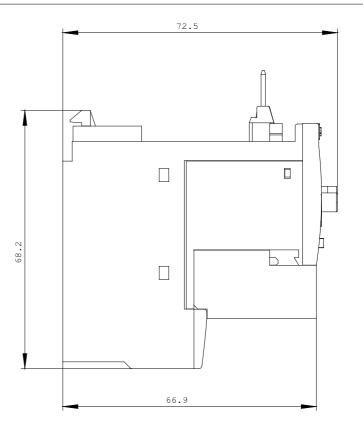
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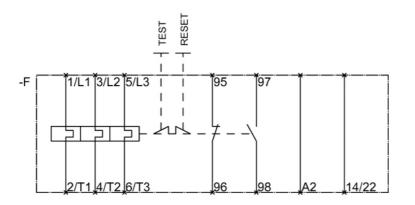
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RB3016-2NB0







last change:

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