SIEMENS

3RB3036-2UX1 Data sheet



OVERLOAD RELAY 12.5...50 A FOR MOTOR PROTECTION SIZE S2, CLASS 20E STAND-ALONE INSTALLATION MAIN CIRCUIT: STR.-THR. TRANSF. AUX. CIRCUIT: SPRING-T. TERM. MANUAL-**AUTOMATIC-RESET**

| Figure similar | |
|---------------------|----------------------------|
| product brand name | SIRIUS |
| Product designation | solid-state overload relay |

| General technical data: | | | | |
|--|-----|---|--|--|
| Active power loss total typical | W | 0.1 | | |
| Insulation voltage | | | | |
| with degree of pollution 3 Rated value | V | 690 | | |
| Shock resistance | | | | |
| • acc. to IEC 60068-2-27 | | 15g / 11 ms | | |
| Vibration resistance | | 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles | | |
| Surge voltage resistance Rated value | kV | 6 | | |
| Temperature compensation | °C | 6025 | | |
| Recovery time | | | | |
| after overload trip with automatic reset typical | min | 3 | | |
| after overload trip with remote-reset | min | 0 | | |
| after overload trip with manual reset | min | 0 | | |
| Size of contactor can be combined company-specific | | S2 | | |
| Type of assignment | | 2 | | |
| Protection class IP | | | | |
| • on the front | | IP20 | | |
| of the terminal | | IP20 | | |
| Type of protection | | II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p] | | |
| Equipment marking | | | | |
| • acc. to DIN EN 81346-2 | | F | | |

| Main circuit: | | |
|--|---|--|
| Number of poles for main current circuit | 3 | |

| for auxiliary contacts Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 at 24 V at 110 V at 125 V at 230 V Operating current of the auxiliary contacts at DC-13 at 24 V at 125 V at 20 V Operating current of the auxiliary contacts at DC-13 at 24 V at 60 V at 110 V at 125 V at 110 V at 25 V at 110 V at 125 V at 110 V at 125 V at 110 V at 125 V at 125 V at 120 V Class Design of the overload circuit breaker Response time of the ground fault protection in ms 1 000 | A directable assessment at the comment | ^ | 40.5 50 |
|--|---|----------|-----------------------------|
| Operating voltage | | А | 12.5 50 |
| Rated value | | | |
| Departing frequency Rated value | | V | 690 |
| Departing frequency Rated value | at AC-3 Rated value maximum | V | 690 |
| Operating current at AC-3 — at 400 V Rated value A 50 Soluminary circuit: | | Hz | 50 60 |
| ■ at AC-3 — at 400 V Rated value A 50 South So | | | |
| — at 400 ∨ Rated value A 50 auxiliary circuit: Number of NC contacts • for auxiliary contacts — Note Number of NO contacts • for auxiliary contacts 0 Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 ∨ • at 110 ∨ • at 125 ∨ • at 230 ∨ Operating current of the auxiliary contacts at DC-13 • at 24 ∨ • at 100 ∨ • at 25 ∨ • at 20 ∨ • at 20 ∨ • at 20 ∨ • at 125 ∨ • at 20 ∨ • at 20 ∨ • at 125 ∨ • at 20 ∨ • at 20 ∨ • at 125 ∨ • at 20 ∨ • at 125 ∨ • at 20 ∨ • at 100 ∨ • at 125 ∨ • at 110 ∨ • at 220 ∨ • at 100 ∨ • at 125 ∨ • at 20 ∨ A 0.3 • at 125 ∨ • at 100 ∨ • at 125 ∨ • at 200 ∨ A 0.11 **rotective and monitoring functions: **Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state **JUCSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 ∨ Rated value • at 600 ∨ Rated value A 50 • at 600 ∨ Rated value • at 600 ∨ Rated value A 50 | | | |
| Williary circuit: Number of NC contacts • for auxiliary contacts - Note Number of NO contacts • for auxiliary contacts 0 Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V A 4 • at 110 V A 4 • at 120 V A 4 • at 125 V A 4 • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V A 5 • at 25 V A 7 • at 25 V A 7 • at 25 V A 8 • at 20 V A 9 • at 25 V A 9 | | Α | 50 |
| Number of NC contacts | | , | |
| • for auxiliary contacts | | | |
| Note For contactor disconnection | | | |
| Number of NO contacts | | | |
| | | | for contactor disconnection |
| Note | | | |
| Number of CO contacts • for auxiliary contacts Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 20 V • at 125 V • at 20 V • at 10 V • at 110 V • at 125 V • at 20 V • at 20 V • at 110 V • at 20 V • at 110 V • at 20 V • at 125 V • at 100 V • at 20 V • at 20 V • at 20 V CLASS 20E Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 | for auxiliary contacts | | |
| • for auxiliary contacts Design of the auxillary switch Operating current of the auxillary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxillary contacts at DC-13 • at 24 V • at 25 V • at 20 V • at 20 V • at 20 V A Operating current of the auxillary contacts at DC-13 • at 24 V • at 60 V • at 110 V A • at 125 V • at 110 V A Outlier • at 110 V A Outlier • at 110 V A Outlier • at 20 V CLASS 20E Design of the overload circuit breaker Response time of the ground fault protection in settled state ■ CLASS 20E ■ In 1000 ■ | — Note | | for message "tripped" |
| Design of the auxiliary switch Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 25 V • at 20 V A A A 2 • at 60 V • at 110 V A A A 0.35 • at 125 V • at 20 V A 0.3 • at 125 V • at 110 V A 0.3 • at 125 V • at 110 V A 0.3 • at 125 V A 0.3 • at 125 V • at 100 V • at 125 V • at 100 V • at | Number of CO contacts | | |
| Operating current of the auxiliary contacts at AC-15 • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 110 V • at 125 V • at 60 V • at 110 V • at 125 V • at 110 V • at 125 V • at 100 V • at 120 V Cotective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value • at 600 V Rated value A 50 | for auxiliary contacts | | 0 |
| • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V • at 220 V • at 220 V Class • at 220 V Class • at 220 V Class Class 20E Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value • at 600 V Rated value A 50 | Design of the auxiliary switch | | integrated |
| • at 110 V • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 110 V • at 220 V A Output Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 100 V • at 110 V • at 125 V • at 110 V • at 125 V • at 125 V • at 120 V Operating current of the auxiliary contacts at DC-13 Output Operating current of the auxiliary contacts at DC-13 Operating current of the auxiliary cont | Operating current of the auxiliary contacts at AC-15 | | |
| • at 120 V • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 110 V • at 125 V • at 125 V • at 125 V • at 125 V • at 120 V Cotective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value • at 600 V Rated value A 4 4 4 4 4 4 4 4 4 4 4 50 A 50 | ● at 24 V | Α | 4 |
| • at 125 V • at 230 V Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V • at 110 V • at 125 V • at 125 V • at 125 V • at 220 V A O.3 • at 220 V A O.11 Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value • at 600 V Rated value A A A 4 4 4 4 4 50 A 50 | ● at 110 V | Α | 4 |
| at 230 V Operating current of the auxiliary contacts at DC-13 at 24 V at 60 V A at 110 V at 125 V at 220 V A Outline Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value at 600 V Rated value A A A A B A A B A B A B B | ● at 120 V | Α | 4 |
| Operating current of the auxiliary contacts at DC-13 • at 24 V • at 60 V A 0.55 • at 110 V A 0.3 • at 220 V A 0.11 Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 | ● at 125 V | Α | 4 |
| • at 24 V • at 60 V A 0.55 • at 110 V A 0.3 • at 125 V A 0.11 Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 A 0.55 A 0.3 A 0.11 CLASS 20E Belectronic ms 1 000 | ● at 230 V | Α | 3 |
| • at 60 V • at 110 V A 0.3 • at 125 V A 0.11 Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 0.3 A 0.11 CLASS 20E electronic ms 1 000 settled state | Operating current of the auxiliary contacts at DC-13 | | |
| at 110 V at 125 V A 0.3 at 220 V Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state JL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value at 600 V Rated value A 50 A 0.3 A 0.3 A 0.11 CLASS 20E Electronic ms 1 000 ms 50 A 50 | ● at 24 V | Α | 2 |
| at 125 V at 220 V A 0.3 A 0.11 Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value at 600 V Rated value A 50 at 600 V Rated value A 50 | ● at 60 V | Α | 0.55 |
| at 220 V A 0.11 Protective and monitoring functions: Trip class CLASS 20E Design of the overload circuit breaker Response time of the ground fault protection in settled state UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value at 600 V Rated value A 50 at 600 V Rated value A 50 | ● at 110 V | Α | 0.3 |
| at 220 V A 0.11 Protective and monitoring functions: Trip class CLASS 20E Design of the overload circuit breaker Response time of the ground fault protection in settled state UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value at 600 V Rated value A 50 at 600 V Rated value A 50 | ● at 125 V | Α | 0.3 |
| Protective and monitoring functions: Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state Design of the overload circuit breaker electronic ms 1 000 electronic ms 1 000 electronic elec | | Α | |
| Trip class Design of the overload circuit breaker Response time of the ground fault protection in settled state DL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 A 50 | | _ | |
| Design of the overload circuit breaker Response time of the ground fault protection in settled state ML/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 A 50 | | | OLACC 20F |
| Response time of the ground fault protection in settled state JL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value A 50 • at 600 V Rated value A 50 | - | | |
| Settled state JL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 • at 600 V Rated value | | mo | |
| JL/CSA ratings: Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 A 50 | Response time of the ground fault protection in settled state | IIIS | 1 000 |
| Full-load current (FLA) for three-phase AC motor • at 480 V Rated value • at 600 V Rated value A 50 A 50 | | | |
| at 480 V Rated value at 600 V Rated value A 50 A 50 | | | |
| • at 600 V Rated value A 50 | | A | 50 |
| | | | |
| Contact rating of the auxiliary contacts acc. to UL B600 / R300 | | Α | |
| | Contact rating of the auxiliary contacts acc. to UL | | B600 / R300 |

| Short-circuit: | | | | |
|---|--|----------------|--|--|
| Design of the fuse link | | | | |
| • for short-circuit protection of the main circuit | | | | |
| — required | | Fuse gG: 200 A | | |
| for short-circuit protection of the auxiliary switch required | | fuse gG: 6 A | | |

| nstallation/ mounting/ dimensions: | | | | |
|--|----|--------------------------|--|--|
| mounting position | | any | | |
| Mounting type | | stand-alone installation | | |
| Height | mm | 81 | | |
| Width | mm | 55 | | |
| Depth | mm | 109 | | |
| Required spacing | | | | |
| with side-by-side mounting | | | | |
| — forwards | mm | 0 | | |
| — Backwards | mm | 0 | | |
| — upwards | mm | 0 | | |
| — downwards | mm | 10 | | |
| — at the side | mm | 0 | | |
| for grounded parts | | | | |
| — forwards | mm | 10 | | |
| — Backwards | mm | 0 | | |
| — upwards | mm | 10 | | |
| — at the side | mm | 10 | | |
| — downwards | mm | 10 | | |
| • for live parts | | | | |
| — forwards | mm | 10 | | |
| — Backwards | mm | 0 | | |
| — upwards | mm | 10 | | |
| — downwards | mm | 10 | | |
| — at the side | mm | 10 | | |

| Connections/ Terminals: | | | |
|--|--|-------------------------------|--|
| Type of electrical connection | | | |
| for main current circuit | | straight-through transformers | |
| for auxiliary and control current circuit | | spring-loaded terminals | |
| Arrangement of electrical connectors for main current circuit | | Top and bottom | |
| Product function | | | |
| removable terminal for auxiliary and control | | Yes | |
| circuit | | | |
| Type of connectable conductor cross-section | | | |

| for auxiliary contacts | | |
|---|----|---|
| single or multi-stranded | | 1x (0,25 1,5 mm²), 2x (0,25 1,5 mm²) |
| finely stranded with core end processing | | 1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²) |
| finely stranded without core end | | 1x (0.25 1.5 mm²), 2x (0.25 1.5 mm²) |
| processing | | |
| for AWG conductors for auxiliary contacts | | 1x (24 16), 2x (24 16) |
| Design of screwdriver shaft | | Diameter 5 to 6 mm |
| Safety related data: | | |
| Proportion of dangerous failures | | |
| • with low demand rate acc. to SN 31920 | % | 35 |
| Protection against electrical shock | | finger-safe when touched vertically from front acc. to IEC 60529 |
| Mechanical data: | | |
| Size of overload relay | | S2 |
| Communication/ Protocol: | | |
| Protocol is supported | | |
| IO-Link protocol | | No |
| Type of voltage supply via input/output link master | | No |
| Ambient conditions: | | |
| Ambient conditions: Installation altitude at height above sea level | m | 2 000 |
| maximum | | 2 000 |
| Ambient temperature | | |
| during operation | °C | -25 +60 |
| during storage | °C | -40 + 80 |
| during transport | °C | -40 + 80 |
| Relative humidity during operation | % | 0 95 |
| Electromagnetic compatibility: | | |
| EMC emitted interference | | |
| • acc. to IEC 60947-1 | | CISPR 11, environment B (residential area) |
| EMI immunity acc. to IEC 60947-1 | | corresponds to degree of severity 3 |
| Conducted interference due to burst acc. to IEC | | 2 kV (power ports), 1 kV (signal ports) |
| 61000-4-4 | | |
| Conducted interference due to conductor-earth surge | | 2 kV (line to ground) |
| acc. to IEC 61000-4-5 | | |
| Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5 | | 1 kV (line to line) |
| Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6 | | 10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz |
| Field-bound parasitic coupling acc. to IEC 61000-4-3 | | 10 V/m |
| Electrostatic discharge acc. to IEC 61000-4-2 | | 6 kV contact discharge / 8 kV air discharge |
| Display: | | |

Display version

• for switching status

Slide switch

Certificates/ approvals:

| General Product Approval | For use in hazardous locations | Test Certificates | other | |
|--------------------------|--------------------------------|----------------------|---------------|----------------------|
| | | Town Tool | Carefinantian | English and a set of |







Type Test Certificates/Test Report

Confirmation

Environmental Confirmations

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=3RB30362UX1

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RB30362UX1/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB30362UX1&lang=en





