SIEMENS

Data sheet 3RB3026-1SB0



Overload relay 3...12 A Electronic For motor protection Size S0, Class 10E Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

| product brand name | SIRIUS | |
|---|--|--|
| product designation | solid-state overload relay | |
| product type designation | 3RB3 | |
| General technical data | | |
| size of overload relay | S0 | |
| size of contactor can be combined company-specific | S0 | |
| power loss [W] for rated value of the current at AC in hot operating state | 0.6 W | |
| • per pole | 0.2 W | |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V | |
| surge voltage resistance rated value | 6 kV | |
| maximum permissible voltage for protective separation in networks with grounded star point | | |
| between auxiliary and auxiliary circuit | 300 V | |
| between auxiliary and auxiliary circuit | 300 V | |
| between main and auxiliary circuit | 600 V | |
| between main and auxiliary circuit | 690 V | |
| shock resistance | 15g / 11 ms | |
| • according to IEC 60068-2-27 | 15g / 11 ms; Signaling contact 97 / 98 in position "Tripped": 9g / 11 ms | |
| vibration resistance | 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles | |
| thermal current | 12 A | |
| type of protection according to ATEX directive 2014/34/EU | Ex II (2) G [Ex e] [Ex d] [Ex px]; Ex II (2) D [Ex t] [Ex p] | |
| certificate of suitability according to ATEX directive 2014/34/EU | PTB 09 ATEX 3001 | |
| reference code according to IEC 81346-2 | F | |
| Substance Prohibitance (Date) | 10/01/2009 | |
| Ambient conditions | | |
| installation altitude at height above sea level maximum | 2 000 m | |
| ambient temperature | | |
| during operation | -25 +60 °C | |
| during storage | -40 +80 °C | |
| during transport | -40 +80 °C | |
| temperature compensation | -25 +60 °C | |
| relative humidity during operation | 10 95 % | |
| Main circuit | | |
| number of poles for main current circuit | 3 | |
| adjustable current response value current of the current- dependent overload release | 3 12 A | |
| operating voltage | | |
| • rated value | 690 V | |
| at AC-3e rated value maximum | 690 V | |
| operating frequency rated value | 50 60 Hz | |

| | 12.1 |
|--|--|
| operational current rated value | 12 A |
| operational current at AC-3e at 400 V rated value | 12 A |
| operating power | |
| • for 3-phase motors at 400 V at 50 Hz | 1.5 5.5 kW |
| for AC motors at 500 V at 50 Hz | 1.5 5.5 kW |
| for AC motors at 690 V at 50 Hz | 2.2 7.5 kW |
| Auxiliary circuit | |
| design of the auxiliary switch | integrated |
| number of NC contacts for auxiliary contacts | 1 |
| • note | for contactor disconnection |
| number of NO contacts for auxiliary contacts | 1 |
| • note | for message "tripped" |
| number of CO contacts for auxiliary contacts | 0 |
| operational current of auxiliary contacts at AC-15 | |
| • at 24 V | 4 A |
| • at 110 V | 4 A |
| ● at 120 V | 4 A |
| • at 125 V | 4 A |
| • at 230 V | 3 A |
| operational current of auxiliary contacts at DC-13 | |
| • at 24 V | 2 A |
| ● at 60 V | 0.55 A |
| • at 110 V | 0.3 A |
| • at 125 V | 0.3 A |
| ● at 220 V | 0.11 A |
| Protective and monitoring functions | |
| trip class | CLASS 10E |
| design of the overload release | electronic |
| UL/CSA ratings | |
| full-load current (FLA) for 3-phase AC motor | |
| • at 480 V rated value | 12 A |
| at 600 V rated value | 12 A |
| contact rating of auxiliary contacts according to UL | B600 / R300 |
| Short-circuit protection | |
| design of the fuse link | |
| for short-circuit protection of the main circuit | 0.004 PM5 45 4 |
| — with type of coordination 1 required | gG: 63 A, RK5: 45 A |
| — with type of assignment 2 required | gG: 50 A, J: 45 A |
| for short-circuit protection of the auxiliary switch required | fuse gG: 6 A |
| Installation/ mounting/ dimensions | |
| mounting position | any Contactor was in the contactor of th |
| fastening method | Contactor mounting |
| height | 87 mm |
| width | 45 mm |
| depth | 84 mm |
| Connections/ Terminals | Van |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection | |
| for main current circuit | screw-type terminals |
| for auxiliary and control circuit | screw-type terminals |
| arrangement of electrical connectors for main current circuit | Top and bottom |
| type of connectable conductor cross-sections for main contacts | |
| • solid | 2x (1 2.5 mm²), 2x (2.5 10 mm²) |
| • stranded | 2x 10 mm² |
| solid or stranded | 1x (1 10 mm²), 2x (1 10 mm²) |
| finely stranded with core end processing | 1x (1 6 mm²), 2 x (1 6 mm²), 1x 10 mm² |
| type of connectable conductor cross-sections | |
| for auxiliary contacts | |
| — solid | 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) |
| | |

| General Product Approval | | EMC | |
|---|---|-----|--|
| Certificates/ approvals | | | |
| display version for switching status | Slide switch | | |
| Display | | | |
| electrostatic discharge according to IEC 61000-4-2 | 6 kV contact discharge / 8 kV air discharge | | |
| field-based interference according to IEC 61000-4-3 | 10 V/m | | |
| due to high-frequency radiation according to IEC 61000- 4-6 | 10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz | | |
| due to conductor-conductor surge according to IEC 61000-4-5 | 1 kV (line to line) corresponds to degree of severity 3 | | |
| due to conductor-earth surge according to IEC 61000-4-5 | 2 kV (line to earth) corresponds to degree of severity 3 | | |
| due to burst according to IEC 61000-4-4 | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 | | |
| conducted interference | | | |
| Electromagnetic compatibility | | | |
| type of voltage supply via input/output link master | No | | |
| Communication/ Protocol | | | |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front | | |
| protection class IP on the front according to IEC 60529 | IP20 | | |
| afety related data | | | |
| of the auxiliary and control contacts | M3 | | |
| • for main contacts | M4 | | |
| design of the thread of the connection screw | | | |
| size of the screwdriver tip | Pozidriv PZ 2 | | |
| design of screwdriver shaft | Diameter 5 to 6 mm | | |
| for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals | 0.8 1.2 N·m | | |
| tightening torque | 2 2.5 N·m | | |
| for AWG cables for auxiliary contacts | 1x (20 14), 2x (20 14) | | |
| — finely stranded with core end processing | 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) | | |
| — solid or stranded | 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) | | |





Confirmation







For use in hazardous locations

Declaration of Conformity

Test Certificates

Marine / Shipping







Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping



egistei







Confirmation

other

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3026-1SB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3026-1SB0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RB3026-1SB0

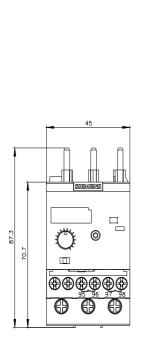
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RB3026-1SB0&lang=en

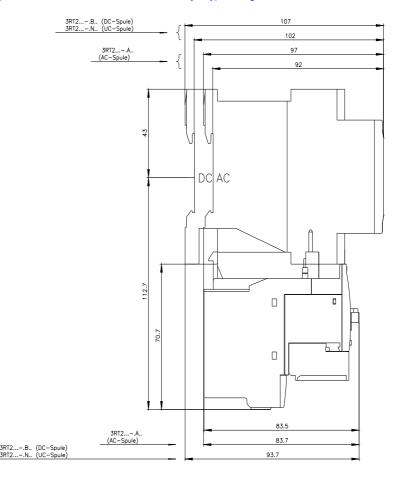
Characteristic: Tripping characteristics, I²t, Let-through current

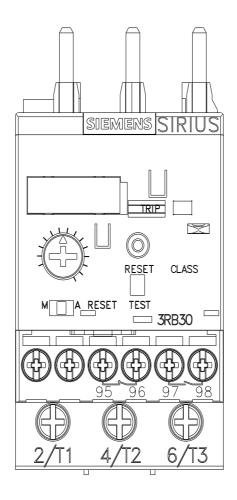
https://support.industry.siemens.com/cs/ww/en/ps/3RB3026-1SB0/char

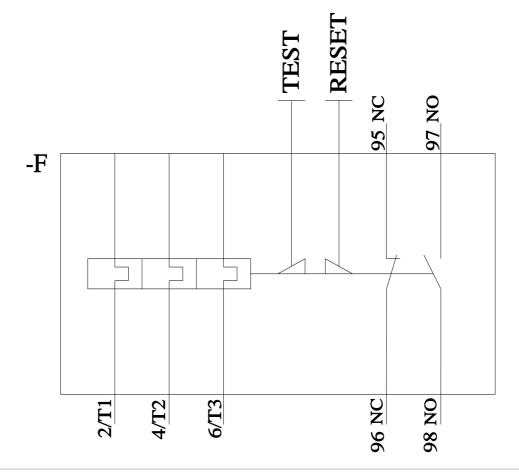
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3026-1SB0&objecttype=14&gridview=view1









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