SIEMENS

Data sheet 3RB3026-1QB0



Overload relay 6...25 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 | 1.2 W | | |
| • per pole | 0.4 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 safe isolation 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 | | |
| • acc. 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 | 25 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 acc. to IEC 81346-2 | F | | |
| Substance Prohibitance (Date) | 01.10.2009 | | |
| 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 | 6 25 A | | |
| operating voltage | | | |

| • rated value | 600 V | | |
|---|---------------------------------|--|--|
| | 690 V | | |
| operating frequency rated value operational current rated value | 50 60 Hz | | |
| • | 25 A | | |
| operating power | 0 44100 | | |
| • for 3-phase motors at 400 V at 50 Hz | 3 11 kW | | |
| • for AC motors at 500 V at 50 Hz | 4 15 kW | | |
| • for AC motors at 690 V at 50 Hz | 5.5 22 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 | 25 A | | |
| at 600 V rated value | 25 A | | |
| contact rating of auxiliary contacts according to UL | B600 / R300 | | |
| Short-circuit protection | 2000710000 | | |
| | | | |
| design of the fuse link | | | |
| for short-circuit protection of the main circuit | **O: 405 A DIVE: 400 A | | |
| — with type of coordination 1 required | gG: 125 A, RK5: 100 A | | |
| — with type of assignment 2 required | gG: 63 A, J: 100 A | | |
| for short-circuit protection of the auxiliary switch required | fuse gG: 6 A | | |
| Installation/ mounting/ dimensions | | | |
| mounting position | any | | |
| fastening method | Contactor mounting | | |
| | Contactor mounting 87 mm | | |
| height width | 45 mm | | |
| | 84 mm | | |
| depth Connections/Torminals | THILL TO | | |
| Connections/ Terminals | Voc | | |
| 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) | | |
| | · | | |

| | 4 (4 0 %) 0 (4 0 | 2) 4 40 2 | | | |
|--|---|-----------|-------------------------------------|--|--|
| — finely stranded with core end processing | 1x (1 6 mm²), 2 x (1 6 mm²), 1x 10 mm² | | | | |
| at AWG cables for main contacts | 1x (16 8), 2x (16 8) | | | | |
| type of connectable conductor cross-sections | | | | | |
| for auxiliary contacts | 4 (0.5 | 0.5 | | | |
| — solid | 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) | | | | |
| — solid or stranded | 1x (0,5 4 mm²), 2x (0,5 2,5 mm²) | | | | |
| — finely stranded with core end processing | 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) | | | | |
| at AWG cables for auxiliary contacts | 1x (20 14), 2x (20 14) | | | | |
| tightening torque | 0.05N | | | | |
| for main contacts with screw-type terminals | 2 2.5 N·m | | | | |
| for auxiliary contacts with screw-type terminals | 0.8 1.2 N·m | | | | |
| design of screwdriver shaft | Diameter 5 to 6 mm | | | | |
| size of the screwdriver tip | Pozidriv PZ 2 | | | | |
| design of the thread of the connection screw | | | | | |
| • for main contacts | M4 | | | | |
| of the auxiliary and control contacts | M3 | | | | |
| Safety related data | | | | | |
| protection class IP on the front acc. to IEC 60529 | IP20 | | | | |
| touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front | | | | |
| Communication/ Protocol | | | | | |
| type of voltage supply via input/output link master | No | | | | |
| Electromagnetic compatibility | | | | | |
| conducted interference | | | | | |
| • due to burst acc. to IEC 61000-4-4 | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 | | | | |
| due to conductor-earth surge acc. to IEC 61000-4-5 | 2 kV (line to earth) corresponds to degree of severity 3 | | | | |
| due to conductor-conductor surge acc. to IEC 61000-4-5 | 1 kV (line to line) corresponds to degree of severity 3 | | | | |
| 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-based interference 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 | | EMC | For use in hazard- ous locations | | |













Declaration of Conformity

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>







Marine / Shipping

other





Confirmation

Further information

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=3RB3026-1QB0

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RB3026-1QB02-1QB026-1QB026-1QB02-1$

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$

https://support.industry.siemens.com/cs/ww/en/ps/3RB3026-1QB0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

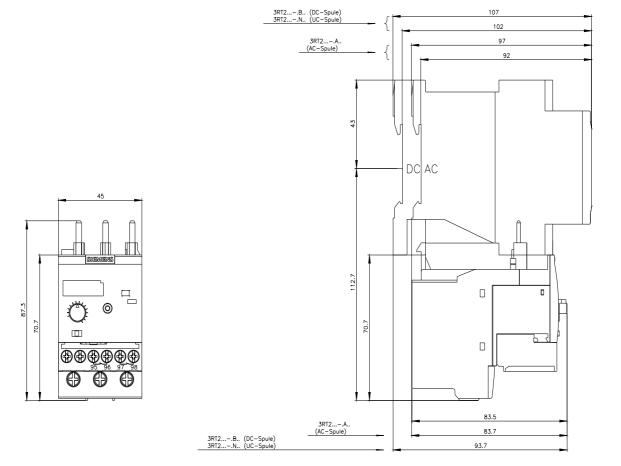
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3026-1QB0&lang=en

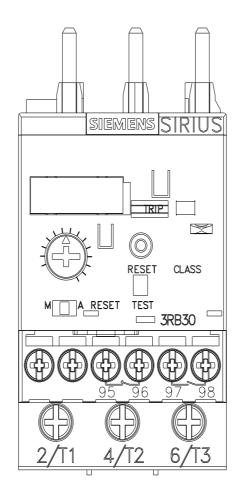
Characteristic: Tripping characteristics, I2t, Let-through current

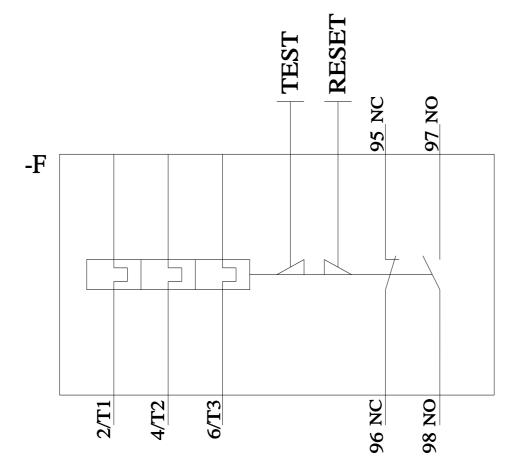
https://support.industry.siemens.com/cs/ww/en/ps/3RB3026-1QB0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RB3026-1QB0&objecttype=14&gridview=view1







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