



Overload relay 0.1...0.4 A Electronic For motor protection Size S0, Class 20  
 Contactor mounting Main circuit: Spring-type terminal Auxiliary circuit: Spring-type terminal Manual-Automatic-Reset

|                                                                                  |                                                                                                   |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| product brand name                                                               | SIRIUS                                                                                            |
| product designation                                                              | solid-state overload relay                                                                        |
| product type designation                                                         | 3RB3                                                                                              |
| <b>General technical data</b>                                                    |                                                                                                   |
| 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       | 0.1 W                                                                                             |
| • per pole                                                                       | 0.03 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 ungrounded star point between auxiliary and auxiliary circuit | 300 V                                                                                             |
| • in networks with grounded star point between auxiliary and auxiliary circuit   | 300 V                                                                                             |
| • in networks with ungrounded star point between main and auxiliary circuit      | 600 V                                                                                             |
| • in networks with grounded star point 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 <sup>2</sup> ; 10 cycles                                          |
| thermal current                                                                  | 0.4 A                                                                                             |
| recovery time after overload trip                                                |                                                                                                   |
| • with automatic reset typical                                                   | 3 min                                                                                             |
| • with remote-reset                                                              | 0 min                                                                                             |
| • with manual reset                                                              | 0 min                                                                                             |
| reference code according to IEC 81346-2                                          | F                                                                                                 |
| Substance Prohibitance (Date)                                                    | 10/01/2009                                                                                        |
| SVHC substance name                                                              | Lead monoxide (lead oxide) - 1317-36-8<br>6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1 |
| Net Weight                                                                       | 0.288 kg                                                                                          |
| <b>Ambient conditions</b>                                                        |                                                                                                   |
| 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 %                                                                                       |

|                                                                                     |                             |
|-------------------------------------------------------------------------------------|-----------------------------|
| <b>Main circuit</b>                                                                 |                             |
| number of poles for main current circuit                                            | 3                           |
| adjustable current response value current of the current-dependent overload release | 0.1 ... 0.4 A               |
| operating voltage                                                                   |                             |
| • rated value                                                                       | 690 V                       |
| • at AC-3e rated value maximum                                                      | 690 V                       |
| operating frequency rated value                                                     | 50 ... 60 Hz                |
| operational current rated value                                                     | 0.4 A                       |
| operational current at AC-3e at 400 V rated value                                   | 0.4 A                       |
| operating power                                                                     |                             |
| • for 3-phase motors at 400 V at 50 Hz                                              | 0.04 ... 0.09 kW            |
| • for AC motors at 500 V at 50 Hz                                                   | 0.04 ... 0.12 kW            |
| • for AC motors at 690 V at 50 Hz                                                   | 0.06 ... 0.18 kW            |
| <b>Auxiliary circuit</b>                                                            |                             |
| 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                      |
| <b>Protective and monitoring functions</b>                                          |                             |
| trip class                                                                          | CLASS 20E                   |
| design of the overload release                                                      | electronic                  |
| <b>UL/CSA ratings</b>                                                               |                             |
| full-load current (FLA) for 3-phase AC motor                                        |                             |
| • at 480 V rated value                                                              | 0.4 A                       |
| • at 600 V rated value                                                              | 0.4 A                       |
| contact rating of auxiliary contacts according to UL                                | B600 / R300                 |
| <b>Short-circuit protection</b>                                                     |                             |
| design of the fuse link                                                             |                             |
| • for short-circuit protection of the main circuit                                  |                             |
| — with type of coordination 1 required                                              | gG: 35 A, RK5: 3 A          |
| — with type of coordination 2 required                                              | gG: 4 A                     |
| • for short-circuit protection of the auxiliary switch required                     | fuse gG: 6 A                |
| <b>Installation/ mounting/ dimensions</b>                                           |                             |
| mounting position                                                                   | any                         |
| fastening method                                                                    | Contactor mounting          |
| height                                                                              | 109 mm                      |
| width                                                                               | 45 mm                       |
| depth                                                                               | 85 mm                       |
| <b>Connections/ Terminals</b>                                                       |                             |
| product component removable terminal for auxiliary and control circuit              | Yes                         |
| type of electrical connection                                                       |                             |
| • for main current circuit                                                          | spring-loaded terminals     |
| • for auxiliary and control circuit                                                 | spring-loaded terminals     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| arrangement of electrical connectors for main current circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Top and bottom                                                                                                                                                                                                                                                                  |                                                                                            |                                                                                                                                                                                                      |
| type of connectable conductor cross-sections for main contacts <ul style="list-style-type: none"><li>• solid</li><li>• stranded</li><li>• solid or stranded</li><li>• finely stranded with core end processing</li><li>• finely stranded without core end processing</li></ul>                                                                                                                                                                                                                                                                                                                                                          | 1x (1 ... 10 mm²)<br>1x 10 mm²<br>1x (1 ... 10 mm²)<br>1x (1 ... 6 mm²)<br>1x (1 ... 6 mm²)                                                                                                                                                                                     |                                                                                            |                                                                                                                                                                                                      |
| type of connectable conductor cross-sections <ul style="list-style-type: none"><li>• for auxiliary contacts<ul style="list-style-type: none"><li>— solid</li><li>— solid or stranded</li><li>— finely stranded with core end processing</li><li>— finely stranded without core end processing</li></ul></li><li>• for AWG cables for auxiliary contacts</li></ul>                                                                                                                                                                                                                                                                       | 2x (0.25 ... 1.5 mm²)<br>2x (0,25 ... 1,5 mm²)<br>2x (0.25 ... 1.5 mm²)<br>2x (0.25 ... 1.5 mm²)<br>1x (24 ... 16), 2x (24 ... 16)                                                                                                                                              |                                                                                            |                                                                                                                                                                                                      |
| design of screwdriver shaft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Diameter 5 to 6 mm                                                                                                                                                                                                                                                              |                                                                                            |                                                                                                                                                                                                      |
| size of the screwdriver tip                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Pozidriv PZ 2                                                                                                                                                                                                                                                                   |                                                                                            |                                                                                                                                                                                                      |
| Electrical Safety                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
| protection class IP on the front according to IEC 60529                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | IP20                                                                                                                                                                                                                                                                            |                                                                                            |                                                                                                                                                                                                      |
| touch protection on the front according 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 <ul style="list-style-type: none"><li>• due to burst according to IEC 61000-4-4</li><li>• due to conductor-earth surge according to IEC 61000-4-5</li><li>• due to conductor-conductor surge according to IEC 61000-4-5</li><li>• due to high-frequency radiation according to IEC 61000-4-6</li></ul>                                                                                                                                                                                                                                                                                                           | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3<br>2 kV (line to earth) corresponds to degree of severity 3<br>1 kV (line to line) corresponds to degree of severity 3<br><br>10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz |                                                                                            |                                                                                                                                                                                                      |
| field-based interference according to IEC 61000-4-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10 V/m                                                                                                                                                                                                                                                                          |                                                                                            |                                                                                                                                                                                                      |
| electrostatic discharge according to IEC 61000-4-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 6 kV contact discharge / 8 kV air discharge                                                                                                                                                                                                                                     |                                                                                            |                                                                                                                                                                                                      |
| Display                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
| display version for switching status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Slide switch                                                                                                                                                                                                                                                                    |                                                                                            |                                                                                                                                                                                                      |
| Approvals Certificates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
| General Product Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
| EMV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
| <div><div><br/>CCC</div><div></div><div><br/>EG-Konf.</div><div><br/>UL</div><div></div><div><br/>RCM</div></div> |                                                                                                                                                                                                                                                                                 |                                                                                            |                                                                                                                                                                                                      |
| EMV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | For use in hazardous locations                                                                                                                                                                                                                                                  | Test Certificates                                                                          | Maritime application                                                                                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <br>ATEX                                                                                                                                                                                     | <a href="#">Special Test Certificate</a>                                                   | <a href="#">Type Test Certificates/Test Report</a>                                                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                 |                                                                                            | <br>ABS <br>BUREAU VERITAS |
| Maritime application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                 | other                                                                                      |                                                                                                                                                                                                      |
| <br>DNV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <br>LRS                                                                                                                                                                                      | <br>PRS | <br>RINA <br>产品合格<br>QC PASS |
| Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                 | <a href="#">Confirmation</a>                                                               |                                                                                                                                                                                                      |

## Further information

### Information on the packaging

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

### Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

### 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=3RB3026-2RE0>

### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RB3026-2RE0>

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

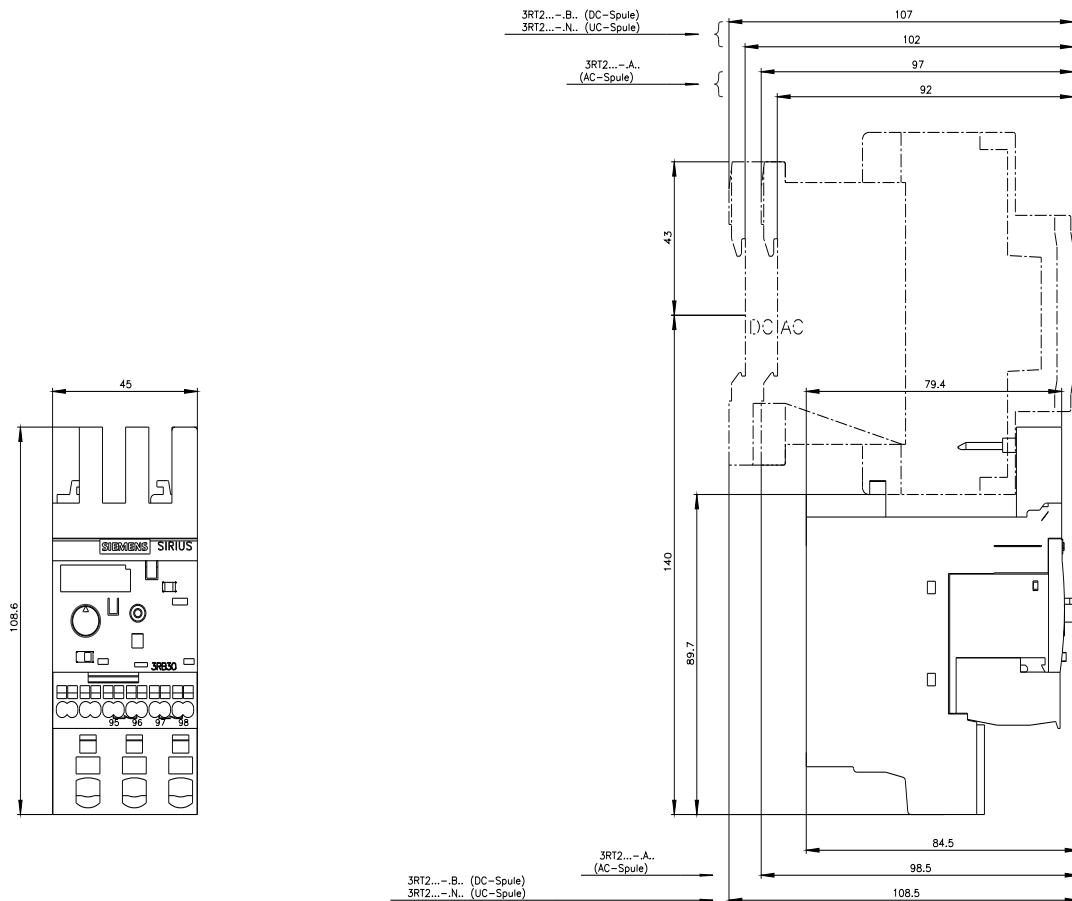
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RB3026-2RE0&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3026-2RE0&lang=en)

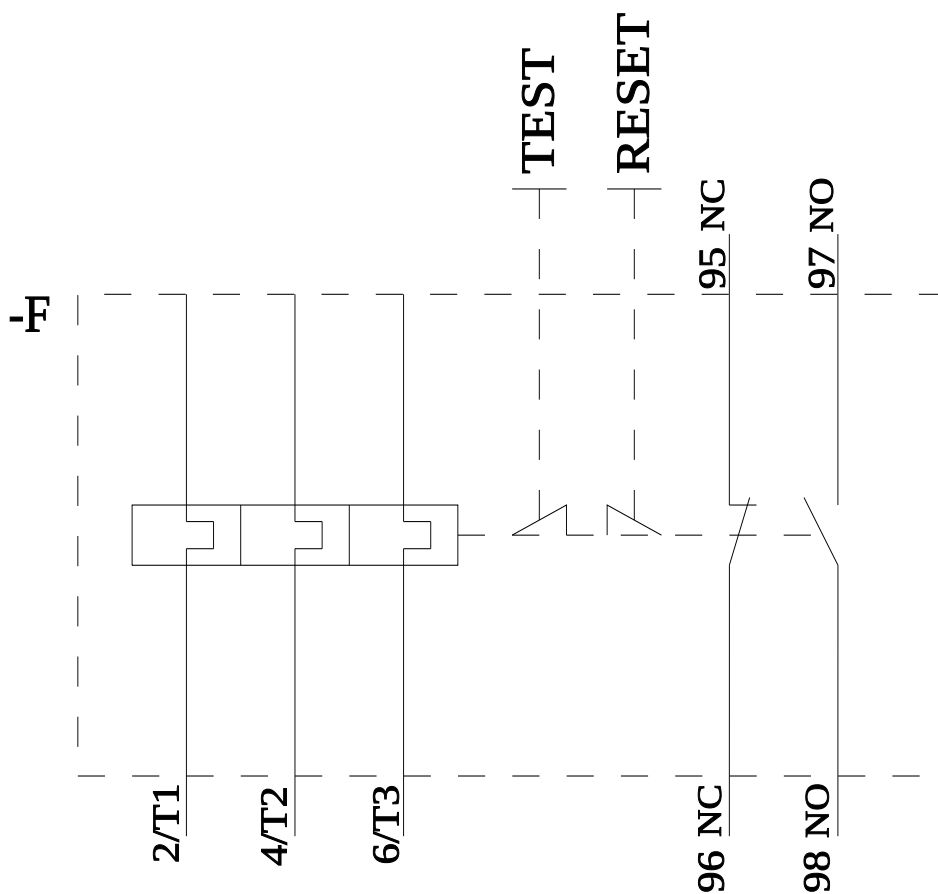
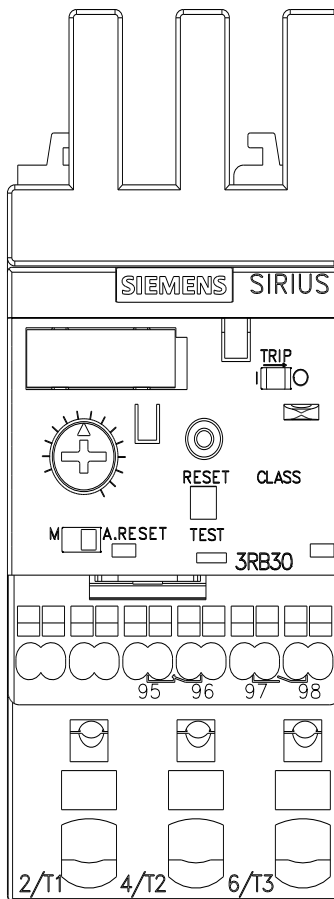
### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3026-2RE0>

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP=)





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