

Overload relay 0.1...0.4 A for motor protection size S00, CLASS 10E contactor mounting Main circuit: spring-type term. Aux. circuit: spring-type term. Manual/Auto RESET



| | |
|--|----------------------------|
| Product brand name | SIRIUS |
| Product designation | solid-state overload relay |
| Product type designation | 3RB3 |
| General technical data | |
| Size of overload relay | S00 |
| Size of contactor can be combined company-specific | S00 |
| Power loss [W] total typical | 0.1 W |
| Insulation voltage with degree of pollution 3 rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| <ul style="list-style-type: none"> • in networks with grounded star point between auxiliary and auxiliary circuit | 300 V |
| <ul style="list-style-type: none"> • in networks with grounded star point between auxiliary and auxiliary circuit | 300 V |
| <ul style="list-style-type: none"> • in networks with grounded star point between main and auxiliary circuit | 600 V |
| <ul style="list-style-type: none"> • in networks with grounded star point between main and auxiliary circuit | 690 V |
| Protection class IP | |

| | |
|--|--|
| <ul style="list-style-type: none"> • on the front • of the terminal | IP20 IP20 |
| Vibration resistance | 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles |
| Thermal current | 0.4 A |
| Recovery time | |
| <ul style="list-style-type: none"> • after overload trip with automatic reset typical • after overload trip with remote-reset • after overload trip with manual reset | 3 min 0 min 0 min |
| Type of protection | II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p] |
| Protection against electrical shock | finger-safe |
| Equipment marking acc. to DIN EN 81346-2 | F |

| Ambient conditions | |
|--|--|
| Ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage • during transport | -25 ... +60 °C -40 ... +80 °C -40 ... +80 °C |
| Temperature compensation | 60 ... -25 °C |

| Main circuit | |
|--|------------------|
| Number of poles for main current circuit | 3 |
| Adjustable pick-up value current of the current-dependent overload release | 0.1 ... 0.4 A |
| Operating voltage | |
| <ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum | 690 V 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating current rated value | 0.4 A |
| Operating power for three-phase motors at 400 V at 50 Hz | 0.04 ... 0.09 kW |

| Auxiliary circuit | |
|--|----------------------------------|
| Design of the auxiliary switch | integrated |
| Number of NC contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts — Note | 1 for contactor disconnection |
| Number of NO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts — Note | 1 for message "tripped" |
| Number of CO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 0 |
| Operating current of auxiliary contacts at AC-15 | |
| <ul style="list-style-type: none"> • at 24 V • at 110 V | 4 A 4 A |

| | |
|---|--------|
| • at 120 V | 4 A |
| • at 125 V | 4 A |
| • at 230 V | 3 A |
| Operating 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 three-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 |

Short-circuit protection

| | |
|---|--------------------|
| 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 assignment 2 required | gG: 4 A |
| • for short-circuit protection of the auxiliary switch required | fuse gG: 6 A |

Installation/ mounting/ dimensions

| | |
|------------------------------|-----------------|
| Mounting position | any |
| Mounting type | direct mounting |
| Height | 72 mm |
| Width | 45 mm |
| Depth | 90 mm |
| Required spacing | |
| • with side-by-side mounting | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 0 mm |
| — downwards | 0 mm |
| — at the side | 0 mm |
| • for grounded parts | |
| — forwards | 6 mm |
| — Backwards | 0 mm |

| | |
|------------------|------|
| — upwards | 0 mm |
| — at the side | 6 mm |
| — downwards | 0 mm |
| • for live parts | |
| — forwards | 6 mm |
| — Backwards | 0 mm |
| — upwards | 0 mm |
| — downwards | 0 mm |
| — at the side | 6 mm |

Connections/Terminals

| | |
|--|------------------------------------|
| Product function | |
| • removable terminal for auxiliary and control circuit | Yes |
| Type of electrical connection | |
| • for main current circuit | spring-loaded terminals |
| • for auxiliary and control current circuit | spring-loaded terminals |
| Arrangement of electrical connectors for main current circuit | Top and bottom |
| Type of connectable conductor cross-sections | |
| • for main contacts | |
| — solid | 1x (0.5 ... 4 mm ²) |
| — single or multi-stranded | 1x (0,5 ... 4 mm ²) |
| — finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²) |
| — finely stranded without core end processing | 1x (0.5 ... 2.5 mm ²) |
| • at AWG conductors for main contacts | 1x (20 ... 12) |
| Type of connectable conductor cross-sections | |
| • for auxiliary contacts | |
| — solid | 2x (0.25 ... 1.5 mm ²) |
| — single or multi-stranded | 2x (0,25 ... 1,5 mm ²) |
| — finely stranded with core end processing | 2x (0.25 ... 1.5 mm ²) |
| — finely stranded without core end processing | 2x (0.25 ... 1.5 mm ²) |
| • at AWG conductors for auxiliary contacts | 1x (24 ... 16), 2x (24 ... 16) |
| Design of screwdriver shaft | Diameter 5 to 6 mm |
| Size of the screwdriver tip | Pozidriv PZ 2 |

Communication/ Protocol

| | |
|--|----|
| Type of voltage supply via input/output link master | No |
|--|----|

Electromagnetic compatibility

| | |
|---|---|
| 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 | EMC | For use in hazardous locations |
|--------------------------|-----|--------------------------------|



CCC



CSA



UL



C-Tick



ATEX

| | | |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|



EG-Konf.

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS



LRS

| | |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



PRS



RINA



RMRS



DNV-GL

[Environmental Confirmations](#)

[Confirmation](#)

Further information

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

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB3016-1RE0>

Cax online generator

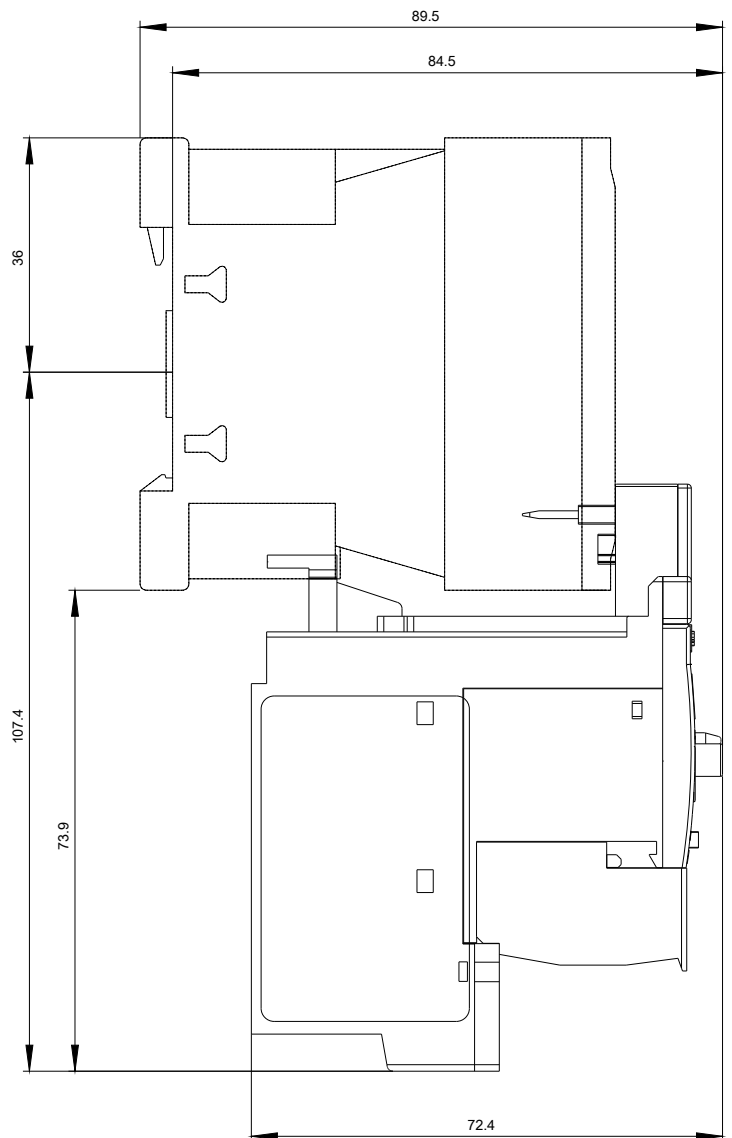
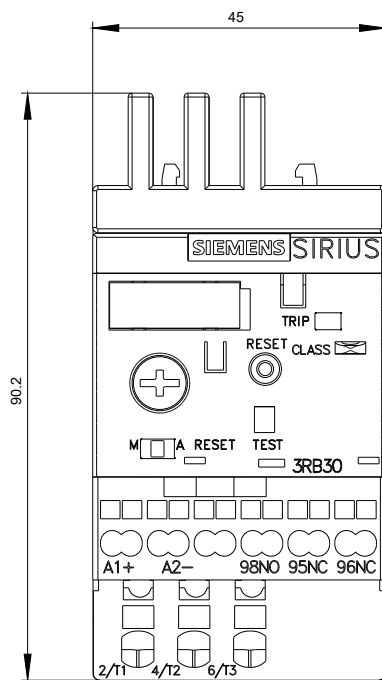
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB3016-1RE0>

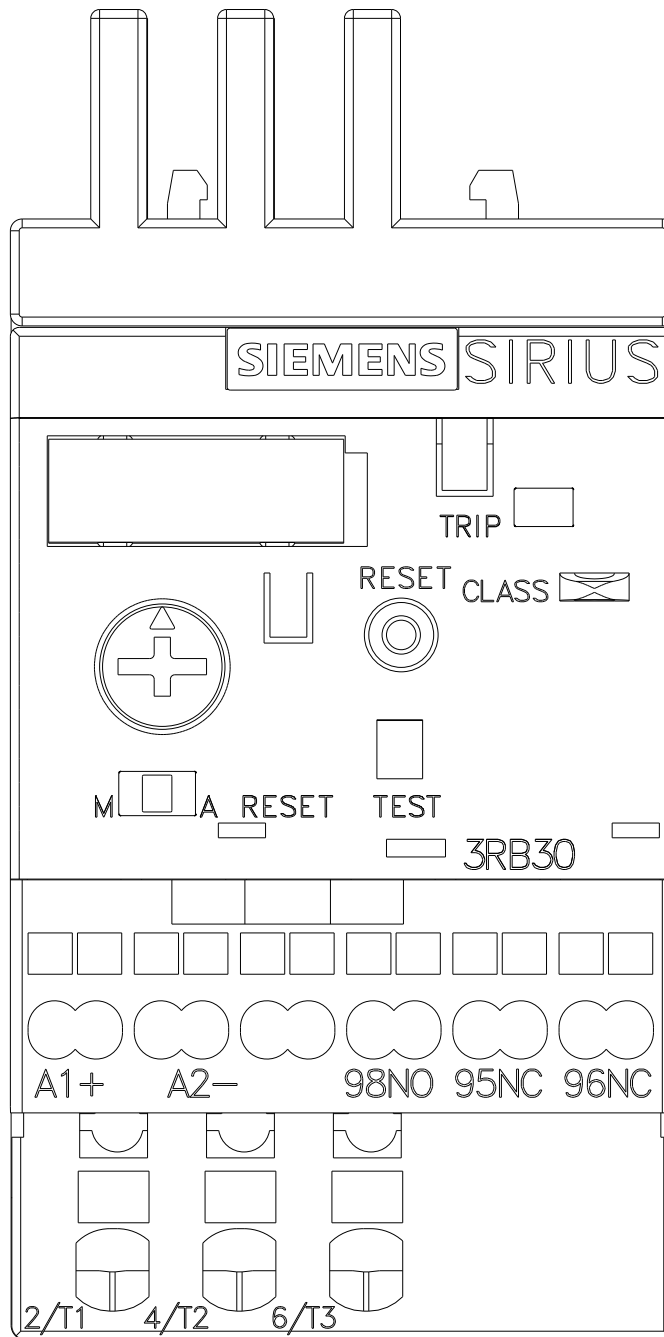
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

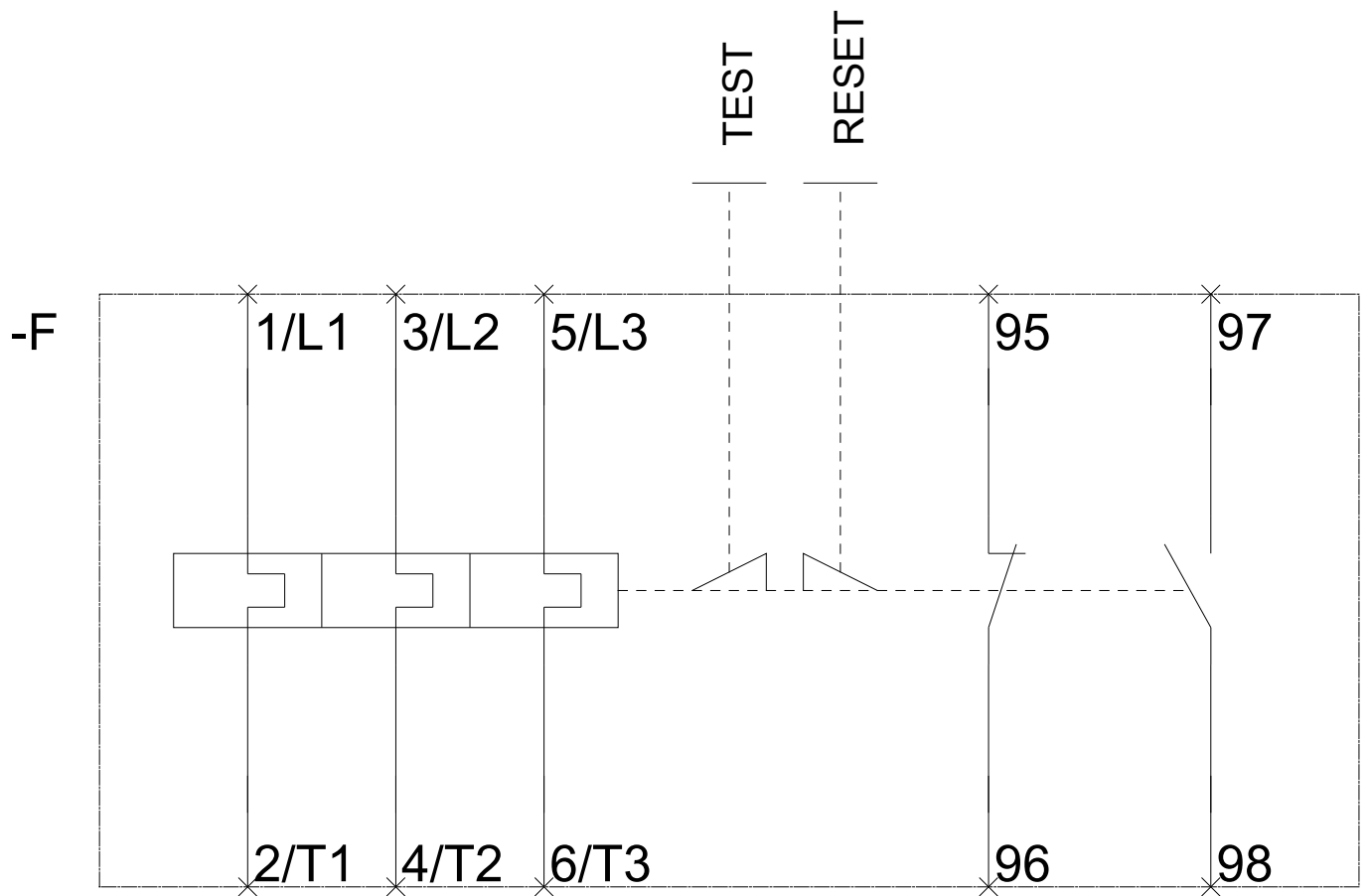
<https://support.industry.siemens.com/cs/ww/en/ps/3RB3016-1RE0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB3016-1RE0&lang=en







last modified:

08/07/2017