

Solid-state time-delayed Auxiliary switch block can be snapped on at the front Time range 0.5...10 s 24 V AC/DC 1 NO + 1 NC, OFF delay Size S00 !!! Phased-out product !!! Successor is SIRIUS 3RA2 Preferred successor type is >>3RA2815-1FW10<<



Figure similar

| | |
|--|------------------|
| Product brand name | SIRIUS |
| Product designation | auxiliary switch |
| Product type designation | 3RT19 |
| General technical data | |
| Size of contactor can be combined company-specific | S00 |
| Product component | No |
| • semi-conductor output | |
| Product extension required remote control | No |
| Product extension optional remote control | No |
| Degree of pollution | 3 |
| Surge voltage resistance rated value | 4 000 V |
| Protection class IP | IP20 |
| • of the terminal | |
| Shock resistance | 11g / 15 ms |
| • acc. to IEC 60068-2-27 | |
| Mechanical service life (switching cycles) | 10 000 000 |
| • typical | |

| | |
|---|--------------|
| Electrical endurance (switching cycles) | |
| • at AC-15 at 230 V typical | 100 000 |
| Adjustable time | 0.5 ... 10 s |
| Relative setting accuracy relating to full-scale value | 15 % |
| Minimum ON period | 200 ms |
| Recovery time | 150 ms |
| Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 | K |
| Reference code acc. to DIN EN 81346-2 | K |
| Reference code acc. to DIN EN 61346-2 | K |
| Relative repeat accuracy | 1 % |

Product Function

| | |
|--|----|
| Product function star-delta circuit | No |
|--|----|

Control circuit/ Control

| | |
|---|---------------|
| Type of voltage of the control supply voltage | AC/DC |
| Control supply voltage 1 at AC | |
| • at 50 Hz rated value | 24 V |
| • at 60 Hz rated value | 24 V |
| Control supply voltage frequency 1 | 50 ... 60 Hz |
| Control supply voltage 1 | |
| • at DC rated value | 24 V |
| Operating range factor control supply voltage rated value at DC | |
| • initial value | 0.85 |
| • Full-scale value | 1.1 |
| Operating range factor control supply voltage rated value at AC at 50 Hz | |
| • initial value | 0.85 |
| • Full-scale value | 1.1 |
| Operating range factor control supply voltage rated value at AC at 60 Hz | |
| • initial value | 0.85 |
| • Full-scale value | 1.1 |
| Design of the surge suppressor | with varistor |

Switching Function

| | |
|--|-----|
| Switching function | |
| • ON-delay | No |
| • ON-delay/instantaneous contact | No |
| • passing make contact | No |
| • passing make contact/instantaneous contact | No |
| • OFF delay | Yes |
| Switching function | |

| | |
|--|----|
| <ul style="list-style-type: none"> • flashing symmetrically starting with interval/instantaneous | No |
| <ul style="list-style-type: none"> • flashing symmetrically starting with interval | No |
| <ul style="list-style-type: none"> • flashing symmetrically starting with pulse/instantaneous | No |
| <ul style="list-style-type: none"> • flashing symmetrically starting with pulse | No |
| <ul style="list-style-type: none"> • flashing asymmetrically starting with interval | No |
| <ul style="list-style-type: none"> • flashing asymmetrically starting with pulse | No |
| Switching function | |
| <ul style="list-style-type: none"> • fixed clock cycle beginning with pulse | No |
| <ul style="list-style-type: none"> • fixed clock cycle beginning with interval | No |
| Switching function | |
| <ul style="list-style-type: none"> • variably clocked start with impulse | No |
| <ul style="list-style-type: none"> • variably clocked start with interval | No |
| Switching function | |
| <ul style="list-style-type: none"> • star-delta circuit with delay time | No |
| <ul style="list-style-type: none"> • star-delta circuit | No |
| Switching function with control signal | |
| <ul style="list-style-type: none"> • additive ON delay | No |
| <ul style="list-style-type: none"> • passing break contact | No |
| <ul style="list-style-type: none"> • passing break contact/instantaneous | No |
| <ul style="list-style-type: none"> • OFF delay | No |
| <ul style="list-style-type: none"> • OFF delay/instantaneous | No |
| <ul style="list-style-type: none"> • pulse delayed | No |
| <ul style="list-style-type: none"> • pulse delayed/instantaneous | No |
| <ul style="list-style-type: none"> • pulse-shaping | No |
| <ul style="list-style-type: none"> • pulse-shaping/instantaneous | No |
| <ul style="list-style-type: none"> • additive ON delay/instantaneous | No |
| <ul style="list-style-type: none"> • ON-delay/OFF-delay | No |
| <ul style="list-style-type: none"> • ON-delay/OFF-delay/instantaneous | No |
| <ul style="list-style-type: none"> • passing make contact | No |
| <ul style="list-style-type: none"> • passing make contact/instantaneous contact | No |
| Switching function of interval relay with control signal | |
| <ul style="list-style-type: none"> • retrotriggerable with deactivated control signal/instantaneous contact | No |
| <ul style="list-style-type: none"> • retrotriggerable with activated control signal | No |
| <ul style="list-style-type: none"> • retrotriggerable with activated control signal/instantaneous contact | No |
| <ul style="list-style-type: none"> • retriggerable with deactivated control signal | No |
| Design of the control terminal non-floating | No |
| Short-circuit protection | |
| Design of the fuse link | |

- for short-circuit protection of the auxiliary switch required

fuse gL/gG: 4 A

Auxiliary circuit

| | |
|---|-------|
| Number of NC contacts | |
| • delayed switching | 1 |
| • instantaneous contact | 0 |
| Number of NO contacts | |
| • delayed switching | 1 |
| • instantaneous contact | 0 |
| Number of CO contacts | |
| • delayed switching | 0 |
| • instantaneous contact | 0 |
| Operating current of auxiliary contacts at AC-15 | |
| • maximum | 3 A |
| Operating current of auxiliary contacts as NC contact at AC-15 | |
| • at 24 V | 3 A |
| • at 250 V | 3 A |
| Operating current of auxiliary contacts as NO contact at AC-15 | |
| • at 24 V | 3 A |
| • at 250 V | 3 A |
| Operating current of auxiliary contacts at DC-13 | |
| • at 24 V | 1 A |
| • at 125 V | 0.2 A |
| • at 250 V | 0.1 A |

Inputs/ Outputs

| | |
|---|----|
| Product function | |
| • at the relay outputs Switchover delayed/without delay | No |
| • non-volatile | No |

Electromagnetic compatibility

| | |
|---|---|
| EMI immunity | |
| • acc. to IEC 61812-1 | EN 61000-6-2 |
| Conducted interference | |
| • due to burst acc. to IEC 61000-4-4 | 2 kV network connection / 1 kV control connection |
| • due to conductor-earth surge acc. to IEC 61000-4-5 | 2 kV |
| • due to conductor-conductor surge acc. to IEC 61000-4-5 | 1 kV |
| Field-bound parasitic coupling acc. to IEC 61000-4-3 | 10 V/m |
| Electrostatic discharge acc. to IEC 61000-4-2 | 4 kV contact discharge / 8 kV air discharge |

| Safety related data | |
|-------------------------------------|------------------|
| Protection against electrical shock | finger-safe |
| Type of insulation | Basic insulation |
| Category acc. to EN 954-1 | none |

| Connections/Terminals | |
|--|--|
| Product function <ul style="list-style-type: none"> removable terminal for auxiliary and control circuit | No |
| Type of electrical connection <ul style="list-style-type: none"> for auxiliary and control current circuit | screw-type terminals |
| Type of connectable conductor cross-sections <ul style="list-style-type: none"> solid finely stranded with core end processing at AWG conductors solid at AWG conductors stranded | 1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) 2x (20 ... 14) 2x (20 ... 14) |
| Connectable conductor cross-section <ul style="list-style-type: none"> solid finely stranded with core end processing | 0.5 ... 4 m ² 0.5 ... 2.5 m ² |
| AWG number as coded connectable conductor cross section <ul style="list-style-type: none"> solid stranded | 18 ... 14 18 ... 14 |

| Installation/ mounting/ dimensions | |
|--|--|
| Mounting position | any |
| Mounting type | clip-on |
| Height | 38 mm |
| Width | 45 mm |
| Depth | 75 mm |
| Required spacing <ul style="list-style-type: none"> with side-by-side mounting <ul style="list-style-type: none"> forwards Backwards upwards downwards at the side for grounded parts <ul style="list-style-type: none"> forwards Backwards upwards at the side downwards | 0 m 0 m 0 m 0 m 0 m 0 m 0 m 0 m 0 m 0 m |




- for live parts
 - forwards 0 m
 - Backwards 0 m
 - upwards 0 m
 - downwards 0 m
 - at the side 0 m



Ambient conditions

| | |
|--|-------------|
| Installation altitude at height above sea level | |
| <ul style="list-style-type: none"> • maximum | 2 000 m |
| Relative humidity | |
| <ul style="list-style-type: none"> • during operation | 15 ... 95 % |

Certificates/approvals

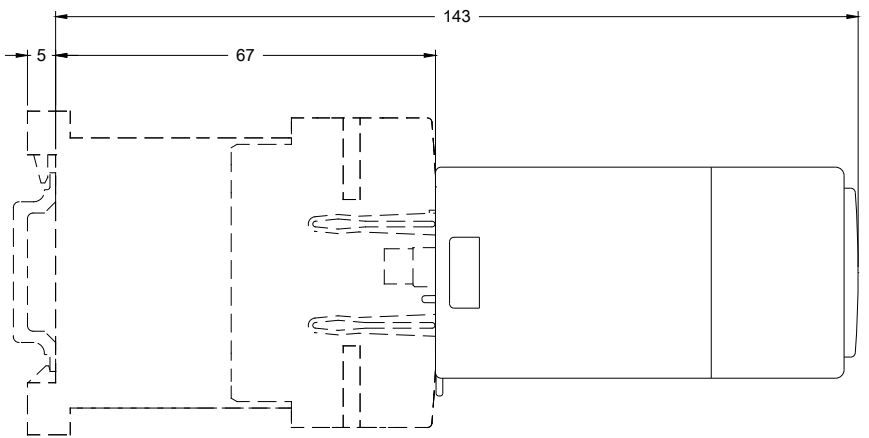
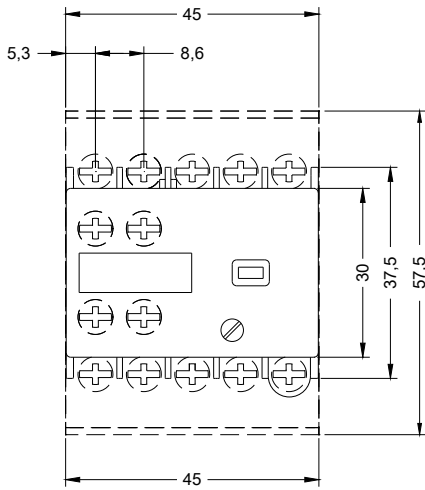
| | | |
|--|--|---|
| General Product Approval | Functional Safety/Safety of Machinery | Declaration of Conformity |
|  CCC |  CSA |  UL |
|  EAC | |  EG-Konf. |
| | | Type Examination Certificate |

| | | |
|----------------------------------|--|---|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
| Miscellaneous | Special Test Certificate | Type Test Certificates/Test Report |
| | |  ABS |
| | |  PRS |
| | |  RINA |

| | | |
|---|---|--|
| Marine / Shipping | other | Railway |
|  RMRS |  DNV-GL DNVGL.COM/AF | Confirmation |
| | | Miscellaneous |
| | | Special Test Certificate |

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=3RT1916-2FJ21>
- Cax online generator**
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1916-2FJ21>
- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1916-2FJ21>



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