SIEMENS

## Data sheet 3RA2815-2FW10


Solid-state time-delayed auxiliary switch OFF delay without control signal Relay 1 NC + 1 NO 24...240 V AC/DC Time range 0.05...100 s Can be snapped on at the front For 3RT2 S00-S3 contactors and 3RH2 S00 contactor relays Spring-type terminal Varistor for attenuation of the contactor coil integrated

| | |
|---|---|
| **product brand name** | SIRIUS |
| **product designation** | Solid-state time-delay auxiliary switch |
| **product type designation** | 3RA28 |
| **General technical data** | |
| **size of contactor can be combined company-specific** | S00, S0, S2, S3 |
| product component semi-conductor output | No |
| **product extension required remote control** | No |
| **product extension optional remote control** | No |
| insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 300 V |
| **test voltage for isolation test** | 1.5 kV |
| **degree of pollution** | 3 |
| **surge voltage resistance rated value** | 4 kV |
| **test voltage for surge voltage test** | 4 800 V |
| protection class IP of the terminal | IP20 |
| shock resistance acc. to IEC 60068-2-27 | 15g / 11 ms |
| vibration resistance acc. to IEC 60068-2-6 | 10 ... 59 Hz: 0.35 mm, 60 ... 150 Hz: 2g |
| mechanical service life (switching cycles) typical | 10 000 000 |
| **mechanical service life (switching cycles)** | |
| ● with contactor 3R.2 of frame size S00 | 10 000 000 |
| ● with contactor 3R.2 of frame size S0 | 10 000 000 |
| ● with contactor 3R.2 of frame size S2 | 10 000 000 |
| ● with contactor 3R.2 of frame size S3 | 10 000 000 |
| electrical endurance (switching cycles) at AC-15 at 230 V typical | 100 000 |
| **electrical endurance (switching cycles)** | |
| ● with contactor 3R.2 of frame size S00 | 100 000 |
| ● with contactor 3R.2 of frame size S0 | 100 000 |
| ● with contactor 3R.2 of frame size S2 | 100 000 |
| ● with contactor 3R.2 of frame size S3 | 100 000 |
| **adjustable time** | 0.05 ... 100 s |
| **relative setting accuracy relating to full-scale value** | 15 % |
| **minimum ON period** | 200 ms |
| **recovery time** | 150 ms |
| **reference code acc. to IEC 81346-2** | K |
| **relative repeat accuracy** | 1 % |
| **Substance Prohibitance (Date)** | 01.10.2009 00:00:00 |
| **Product Function** | |

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|---|---|
| **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 | 24 ... 240 V |
| ● at 60 Hz | 24 ... 240 V |
| **control supply voltage frequency 1** | 50 ... 60 Hz |
| **control supply voltage 1** | |
| ● at DC | 24 ... 240 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** | |
| ● flashing symmetrically with interval start/instantaneous | No |
| ● flashing symmetrically with interval start | No |
| ● flashing symmetrically with pulse start/instantaneous | No |
| ● flashing symmetrically with pulse start | No |
| ● flashing asymmetrically with interval start | No |
| ● flashing asymmetrically with pulse start | No |
| **switching function** | |
| ● constant clock cycle with pulse start | No |
| ● constant clock cycle with interval start | No |
| **switching function** | |
| ● variably clocked with pulse start | No |
| ● variably clocked with interval start | No |
| **switching function** | |
| ● star-delta circuit with delay time | No |
| ● star-delta circuit | No |
| **switching function with control signal** | |
| ● additive ON-delay | No |
| ● passing break contact | No |
| ● passing break contact/instantaneous | No |
| ● OFF delay | No |
| ● OFF delay/instantaneous | No |
| ● pulse delayed | No |
| ● pulse delayed/instantaneous | No |
| ● pulse-shaping | No |
| ● pulse-shaping/instantaneous | No |
| ● additive ON-delay/instantaneous | No |
| ● ON-delay/OFF-delay | No |

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| ● ON-delay/OFF-delay/instantaneous | No |
| ● passing make contact | No |
| ● passing make contact/instantaneous contact | No |
| **switching function of interval relay with control signal** | |
| ● retrotriggerable with deactivated control signal/instantaneous contact | No |
| ● retrotriggerable with switched-on control signal | No |
| ● retrotriggerable with switched-on control signal/instantaneous contact | No |
| ● 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** | |
| **material of switching contacts** | AgNi |
| **number of NC contacts** | |
| ● delayed switching | 1 |
| **number of NO contacts** | |
| ● delayed switching | 1 |
| **operational current of auxiliary contacts at AC-15** | |
| ● maximum | 3 A |
| ● at 24 V | 3 A |
| ● at 250 V | 3 A |
| **operational current of auxiliary contacts as NC contact at AC-15** | |
| ● at 24 V | 3 A |
| ● at 250 V | 3 A |
| **operational current of auxiliary contacts as NO contact at AC-15** | |
| ● at 24 V | 3 A |
| ● at 250 V | 3 A |
| **operational current of auxiliary contacts at DC-13** | 1 ... 0.1 |
| **operational current of auxiliary contacts at DC-13** | |
| ● at 24 V | 1 A |
| ● at 125 V | 0.2 A |
| ● at 250 V | 0.1 A |
| **operating frequency with 3RT2 contactor maximum** | 2 500 1/h |
| **contact rating of auxiliary contacts according to UL** | B300 / R300 |
| **influence of the surrounding temperature** | ±1 % |
| **power supply influence** | ±1 % |
| **Main circuit** | |
| **type of voltage** | AC/DC |
| **Inputs/ Outputs** | |
| **product function** | |
| ● at the relay outputs switchover delayed/without delay | No |
| ● non-volatile | No |
| **Electromagnetic compatibility** | |
| EMC immunity acc. to IEC 61812-1 | Environment A (industrial area) |
| **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-based interference acc. to IEC 61000-4-3** | 10 V/m |
| **electrostatic discharge acc. to IEC 61000-4-2** | 8 kV |
| **Safety related data** | |
| **protection class IP on the front acc. to IEC 60529** | IP20 |

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| **type of insulation** | Basic insulation |
| **category acc. to EN 954-1** | none |
| **Connections/ Terminals** | |
| **product component removable terminal for auxiliary and control circuit** | Yes |
| type of electrical connection for auxiliary and control circuit | spring-loaded terminals |
| **type of connectable conductor cross-sections** | |
| ● solid | 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) |
| ● finely stranded without core end processing | 2x (0.5 ... 1.5 mm²) |
| ● at AWG cables solid | 2x (20 ... 14) |
| ● at AWG cables stranded | 2x (20 ... 14) |
| **connectable conductor cross-section** | |
| ● solid | 0.5 ... 4 mm² |
| ● finely stranded with core end processing | 0.5 ... 2.5 mm² |
| ● finely stranded without core end processing | 0.25 ... 1.5 mm² |
| **AWG number as coded connectable conductor cross section** | |
| ● solid | 20 ... 14 |
| ● stranded | 20 ... 14 |
| **Installation/ mounting/ dimensions** | |
| **mounting position** | any (like contactor) |
| **fastening method** | clip-on |
| **height** | 38 mm |
| **width** | 45 mm |
| **depth** | 74 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 | 0 mm |
| — backwards | 0 mm |
| — upwards | 0 mm |
| — at the side | 0 mm |
| — downwards | 0 mm |
| ● for live parts | |
| — forwards | 0 mm |
| — backwards | 0 mm |
| — upwards | 0 mm |
| — downwards | 0 mm |
| — at the side | 0 mm |
| **Ambient conditions** | |
| installation altitude at height above sea level maximum | 2 000 m |
| **ambient temperature** | |
| ● during operation | -25 ... +60 °C |
| ● during storage | -40 ... +85 °C |
| ● during transport | -40 ... +85 °C |
| relative humidity during operation | 0 ... 95 % |
| **Certificates/ approvals** | |

| **General Product Approval** | **Declaration of Conformity** |
|---|---|

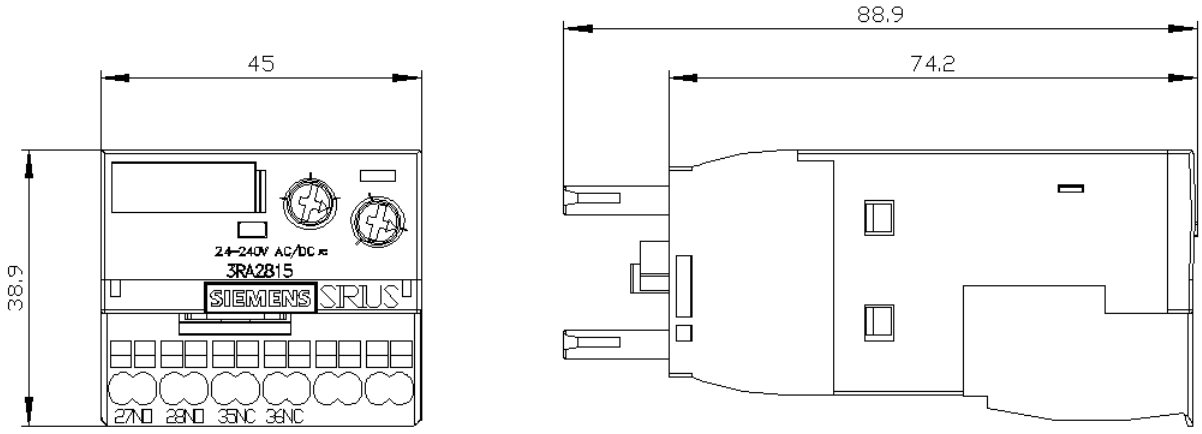
UK Declaration of Conformity

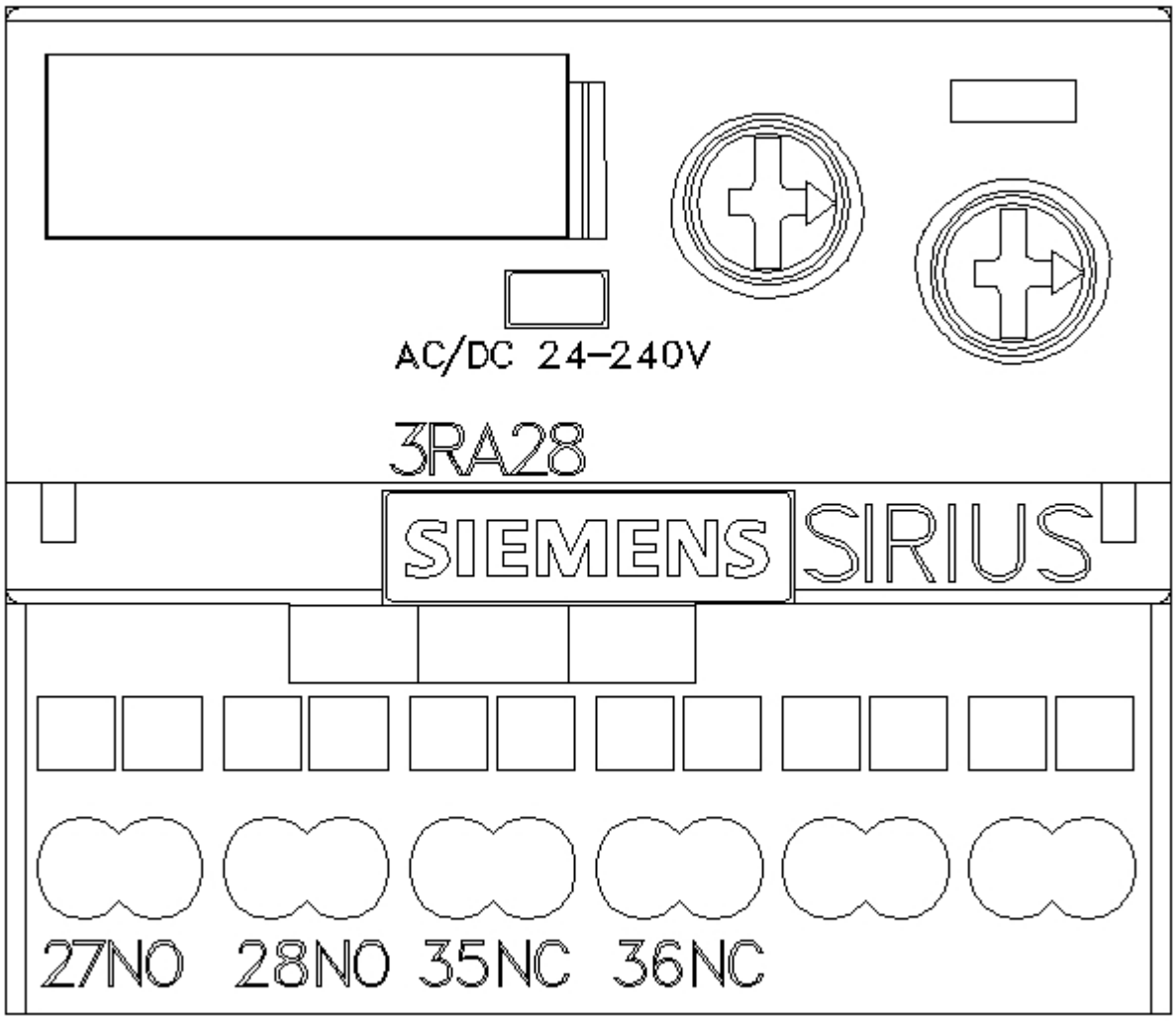
| Test Certificates | | Marine / Shipping | | | |
|---|---|---|---|---|---|
| Special Test Certific-ate | Type Test Certific-ates/Test Report | ABS | BUREAU VERITAS | LRS | PRS |

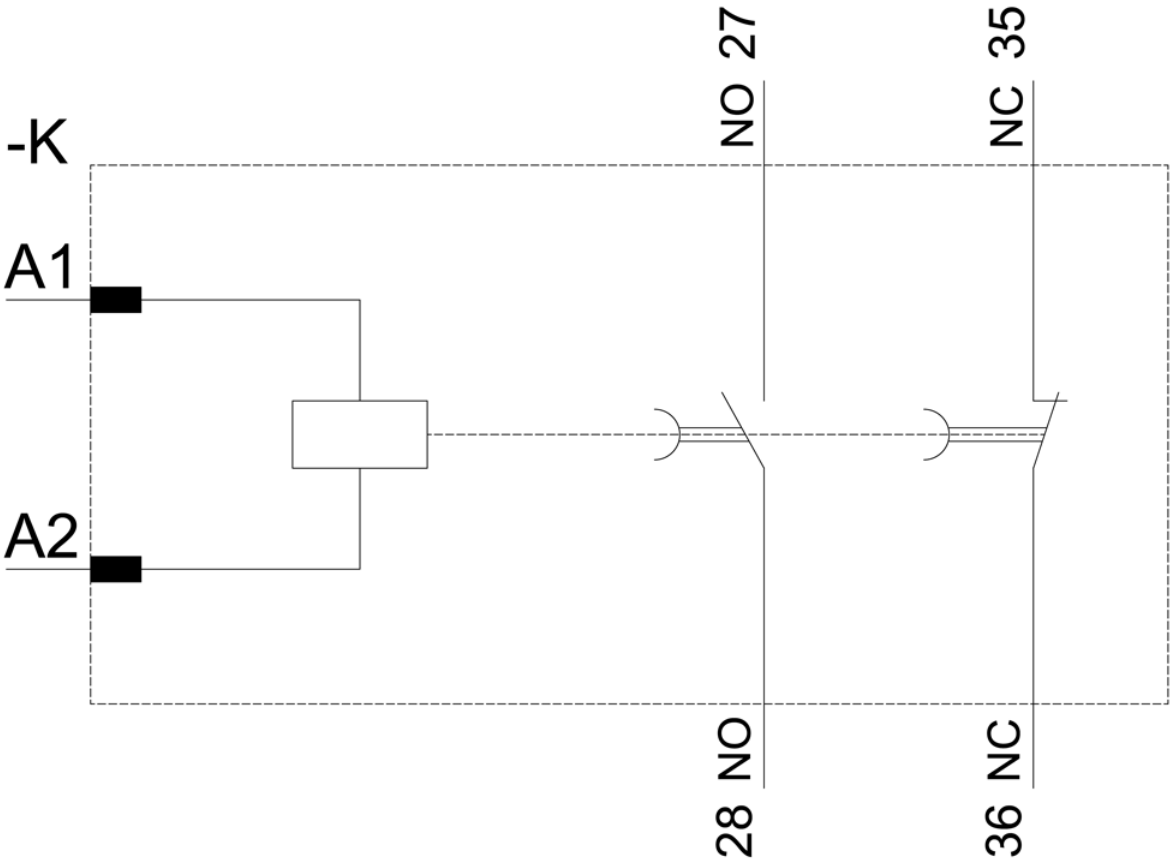
| Marine / Shipping | | | other | Railway |
|---|---|---|---|---|
| RINA | RMRS | DNV·GL | Confirmation | Vibration and Shock |

## 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=3RA2815-2FW10
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2815-2FW10
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RA2815-2FW10
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2815-2FW10&lang=en
**Characteristic: Derating**
https://support.industry.siemens.com/cs/ww/en/ps/3RA2815-2FW10/manual





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