



Electronic timing relay OFF delay with control signal and semiconductor output 24...240 V AC/DC Time range 0.05...100 s can be snapped on at the front for contactors 3RT2 S00/S0 and auxiliary contactor 3RH2 S00 Spring-type terminal Varistor for attenuation of the contactor coils integrated

| | |
|---|--|
| product brand name | SIRIUS |
| product designation | function module |
| product type designation | 3RA28 |
| General technical data | |
| size of contactor can be combined company-specific | S00, S0 |
| product component semi-conductor output | Yes |
| 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 | 100 000 000 |
| electrical endurance (switching cycles) at AC-15 at 230 V typical | 10 000 000 |
| electrical endurance (switching cycles) | |
| • with contactor 3R.2 of frame size S00 | 10 000 000 |
| • with contactor 3R.2 of frame size S0 | 10 000 000 |
| adjustable time | 0.05 ... 100 s |
| relative setting accuracy relating to full-scale value | 15 % |
| minimum ON period | 35 ms |
| recovery time | 50 ms |
| reference code acc. to IEC 81346-2 | K |
| relative repeat accuracy | 1 % |
| Substance Prohibitance (Date) | 01.10.2009 00:00:00 |
| 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 | 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 |

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|--|---|
| operating range factor control supply voltage rated value at DC | |
| <ul style="list-style-type: none"> initial value full-scale value | 0.85 1.1 |
| operating range factor control supply voltage rated value at AC at 50 Hz | |
| <ul style="list-style-type: none"> initial value full-scale value | 0.85 1.1 |
| operating range factor control supply voltage rated value at AC at 60 Hz | |
| <ul style="list-style-type: none"> initial value full-scale value | 0.85 1.1 |
| design of the surge suppressor | with varistor |
| Switching Function | |
| switching function | |
| <ul style="list-style-type: none"> ON-delay ON-delay/instantaneous contact passing make contact passing make contact/instantaneous contact OFF delay | No No No No Yes |
| switching function | |
| <ul style="list-style-type: none"> flashing symmetrically with interval start/instantaneous flashing symmetrically with interval start flashing symmetrically with pulse start/instantaneous flashing symmetrically with pulse start flashing asymmetrically with interval start flashing asymmetrically with pulse start | No No No No No No |
| switching function | |
| <ul style="list-style-type: none"> constant clock cycle with pulse start constant clock cycle with interval start | No No |
| switching function | |
| <ul style="list-style-type: none"> variably clocked with pulse start variably clocked with interval start | No No |
| switching function | |
| <ul style="list-style-type: none"> star-delta circuit with delay time star-delta circuit | No No |
| switching function with control signal | |
| <ul style="list-style-type: none"> additive ON-delay passing break contact passing break contact/instantaneous OFF delay OFF delay/instantaneous pulse delayed pulse delayed/instantaneous pulse-shaping pulse-shaping/instantaneous additive ON-delay/instantaneous ON-delay/OFF-delay ON-delay/OFF-delay/instantaneous passing make contact passing make contact/instantaneous contact | No No No Yes No No No No No No No No No No No |
| switching function of interval relay with control signal | |
| <ul style="list-style-type: none"> retrotriggerable with deactivated control signal/instantaneous contact retrotriggerable with switched-on control signal retrotriggerable with switched-on control signal/instantaneous contact retriggerable with deactivated control signal | No No No No |
| design of the control terminal non-floating | Yes |




| Auxiliary circuit | |
|---|--|
| number of NO contacts | |
| <ul style="list-style-type: none"> • delayed switching | 1 |
| operating frequency with 3RT2 contactor maximum | 2 500 1/h |
| influence of the surrounding temperature | ±1 % |
| power supply influence | ±1 % |
| Main circuit | |
| type of voltage | AC/DC |
| Inputs/ Outputs | |
| product function | |
| <ul style="list-style-type: none"> • non-volatile | No |
| Electromagnetic compatibility | |
| EMC immunity acc. to IEC 61812-1 | Environment A (industrial area) |
| conducted interference | |
| <ul style="list-style-type: none"> • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 | 2 kV network connection / 1 kV control connection 2 kV 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 |
| 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 | |
| <ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing • at AWG cables solid • at AWG cables stranded | 0.5 ... 4 mm ² , 2x (0.5 ... 2.5 mm ²) 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 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 • finely stranded without core end processing | 0.5 ... 4 mm ² 0.5 ... 2.5 mm ² 0.25 ... 1.5 mm ² |
| AWG number as coded connectable conductor cross section | |
| <ul style="list-style-type: none"> • solid • stranded | 20 ... 14 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 | |
| <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 | 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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 | Test Certificates |
|---|--|--|
|  UL |  UK Declaration of Conformity  EG-Konf. | Special Test Certificate Type Test Certificates/Test Report |

Marine / Shipping



Marine / Shipping

other

Railway



[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=3RA2812-2DW10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2812-2DW10>

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

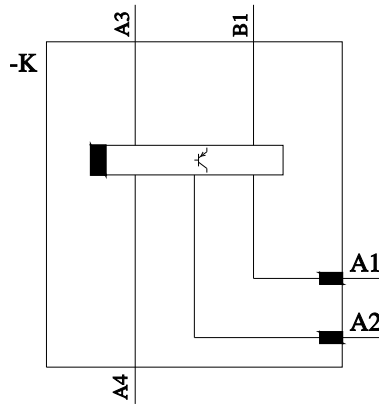
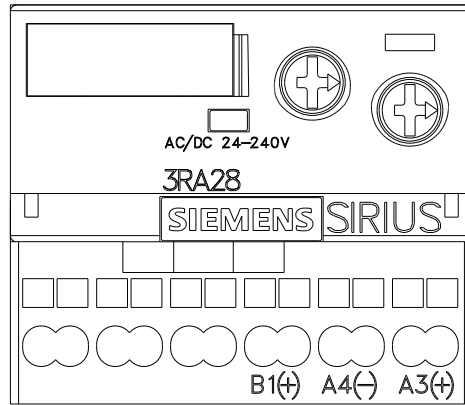
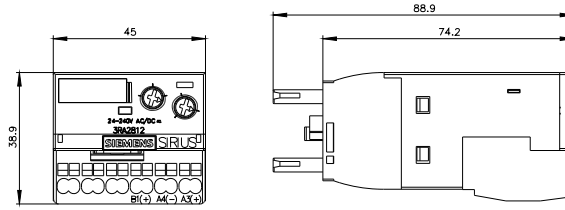
<https://support.industry.siemens.com/cs/ww/en/ps/3RA2812-2DW10>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2812-2DW10&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2812-2DW10/manual>



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