



electronic timing relay, ON-delay, with semiconductor output, time range 0.05-100 s, 24-240 V AC/DC, 50/60 Hz, varistor for attenuation of the contactor coils integrated, spring-loaded terminal, can be snapped onto the front on contactors 3RT201 / 3RT202 and auxiliary contactors 3RH2

| | |
|---|--|
| 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 |
| consumed current | |
| • at 24 V | 24 mA |
| • at 240 V | 7 mA |
| protection class IP of the terminal | IP20 |
| shock resistance according to IEC 60068-2-27 | 15 g / 11 ms |
| vibration resistance according to IEC 60068-2-6 | 10 ... 59 Hz: 0.35 mm, 60 ... 150 Hz: 2 g |
| mechanical service life (operating cycles) typical | 100 000 000 |
| electrical endurance (operating cycles) at AC-15 at 230 V typical | 10 000 000 |
| electrical endurance (operating 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 % |
| recovery time | 50 ms |
| reference code according to IEC 81346-2 | K |
| active principle | electronic |
| relative repeat accuracy | 1 % |
| influence of the surrounding temperature | ±1 % |
| power supply influence | ±1 % |
| Substance Prohibitance (day/month/year) | 10/01/2009 |
| SVHC substance name | Lead CAS-No. 7439-92-1 Lead monoxide (lead oxide) CAS-No. 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5 Melamine CAS-No. 108-78-1 |
| Net Weight | 95 g |

| Product Function | |
|--|---------------|
| product function star-delta circuit | No |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC/DC |
| control supply voltage at AC | |
| • at 50 Hz rated value | 24 ... 240 V |
| • at 60 Hz rated value | 24 ... 240 V |
| 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 at DC rated value | 24 ... 240 V |
| 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 | Yes |
| • ON-delay/instantaneous contact | No |
| • passing make contact | No |
| • passing make contact/instantaneous contact | No |
| • OFF delay | No |
| 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 |

| | |
|--|--|
| <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 switched-on control signal | No |
| <ul style="list-style-type: none"> • retrotriggerable with switched-on 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 |
| Auxiliary circuit | |
| number of NC contacts | |
| <ul style="list-style-type: none"> • delayed switching | 0 |
| <ul style="list-style-type: none"> • instantaneous contact | 0 |
| number of NO contacts | |
| <ul style="list-style-type: none"> • delayed switching | 1 |
| <ul style="list-style-type: none"> • instantaneous contact | 0 |
| number of CO contacts | |
| <ul style="list-style-type: none"> • delayed switching | 0 |
| <ul style="list-style-type: none"> • instantaneous contact | 0 |
| operating frequency with 3RT2 contactor maximum | 2 500 1/h |
| Main circuit | |
| type of voltage | AC/DC |
| Inputs/ Outputs | |
| product function | |
| <ul style="list-style-type: none"> • non-volatile | No |
| Electromagnetic compatibility | |
| EMC immunity according to IEC 61812-1 | Environment A (industrial area) |
| conducted interference | |
| <ul style="list-style-type: none"> • due to burst according to IEC 61000-4-4 | 2 kV network connection / 1 kV control connection |
| <ul style="list-style-type: none"> • due to conductor-earth surge according to IEC 61000-4-5 | 2 kV |
| <ul style="list-style-type: none"> • due to conductor-conductor surge according to IEC 61000-4-5 | 1 kV |
| field-based interference according to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge according to IEC 61000-4-2 | 8 kV |
| Safety related data | |
| category according to EN 954-1 | none |
| 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 |
| type of insulation | Basic insulation |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection | spring-loaded terminals |
| <ul style="list-style-type: none"> • for auxiliary and control circuit | spring-loaded terminals |
| type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • solid | 0.5 ... 4 mm ² , 2x (0.5 ... 2.5 mm ²) |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) |
| <ul style="list-style-type: none"> • finely stranded without core end processing | 2x (0.5 ... 1.5 mm ²) |
| <ul style="list-style-type: none"> • for AWG cables solid | 2x (20 ... 14) |
| <ul style="list-style-type: none"> • for AWG cables stranded | 2x (20 ... 14) |
| connectable conductor cross-section | |
| <ul style="list-style-type: none"> • solid | 0.5 ... 4 mm ² |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 0.5 ... 2.5 mm ² |
| <ul style="list-style-type: none"> • finely stranded without core end processing | 0.25 ... 1.5 mm ² |
| 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 | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — downwards 0 mm — at the side 0 mm • for grounded parts <ul style="list-style-type: none"> — forwards 0 mm — backwards 0 mm — upwards 0 mm — at the side 0 mm — downwards 0 mm • for live parts <ul style="list-style-type: none"> — 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 | |
| <ul style="list-style-type: none"> • during operation -25 ... +60 °C • during storage -40 ... +85 °C • during transport -40 ... +85 °C | |
| relative humidity during operation | 0 ... 95 % |

Approvals Certificates

| | |
|--------------------|---------------------------------|
| Environment | General Product Approval |
|--------------------|---------------------------------|

[Environmental Confirmations](#)



| | |
|--------------------------|-----------------------------|
| Test Certificates | Maritime application |
|--------------------------|-----------------------------|

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| | |
|-----------------------------|--------------|
| Maritime application | other |
|-----------------------------|--------------|



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|----------------|
| Railway |
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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=3RA2811-2CW10>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2811-2CW10>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2811-2CW10>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2811-2CW10&lang=en





