



Timing relay, electronic on-delay 2 change-over contacts, 7 time ranges 0.05 s...100 h 24 V AC/DC at 50/60 Hz AC with LED, screw terminal

|                                                                                                               |                                                      |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| product brand name                                                                                            | SIRIUS                                               |
| product designation                                                                                           | timing relay                                         |
| design of the product                                                                                         | slow-operating                                       |
| product type designation                                                                                      | 3RP25                                                |
| <b>General technical data</b>                                                                                 |                                                      |
| product component                                                                                             |                                                      |
| • relay output                                                                                                | Yes                                                  |
| • semi-conductor output                                                                                       | No                                                   |
| product extension required remote control                                                                     | No                                                   |
| product extension optional remote control                                                                     | No                                                   |
| power loss [W] maximum                                                                                        | 2 W                                                  |
| insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 300 V                                                |
| test voltage for isolation test                                                                               | 2.5 kV                                               |
| degree of pollution                                                                                           | 3                                                    |
| surge voltage resistance rated value                                                                          | 4 000 V                                              |
| shock resistance according to IEC 60068-2-27                                                                  | 11g / 15 ms                                          |
| vibration resistance according to IEC 60068-2-6                                                               | 10 ... 55 Hz / 0.35 mm                               |
| mechanical service life (operating cycles) typical                                                            | 10 000 000                                           |
| electrical endurance (operating cycles) at AC-15 at 230 V typical                                             | 100 000                                              |
| adjustable time                                                                                               | 0.05 s ... 100 h                                     |
| relative setting accuracy relating to full-scale value                                                        | 5 %; +/-                                             |
| thermal current                                                                                               | 5 A                                                  |
| recovery time                                                                                                 | 150 ms                                               |
| reference code according to IEC 81346-2                                                                       | K                                                    |
| relative repeat accuracy                                                                                      | 1 %; +/-                                             |
| influence of the surrounding temperature                                                                      | 1% in the whole temperature range to the set runtime |
| power supply influence                                                                                        | 1% in the whole voltage range to the set runtime     |
| Substance Prohibitance (Date)                                                                                 | 09/12/2014                                           |
| Weight                                                                                                        | 0.166 kg                                             |
| <b>Control circuit/ Control</b>                                                                               |                                                      |
| 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             |
| <b>operating range factor control supply voltage rated value at AC at 50 Hz</b>       |                 |
| • initial value                                                                       | 0.85            |
| • full-scale value                                                                    | 1.1             |
| <b>operating range factor control supply voltage rated value at AC at 60 Hz</b>       |                 |
| • initial value                                                                       | 0.85            |
| • full-scale value                                                                    | 1.1             |
| <b>inrush current peak</b>                                                            |                 |
| • at 24 V                                                                             | 2 A             |
| <b>duration of inrush current peak</b>                                                |                 |
| • at 24 V                                                                             | 1 ms            |
| <b>Switching Function</b>                                                             |                 |
| <b>switching function</b>                                                             |                 |
| • ON-delay                                                                            | Yes             |
| • ON-delay/instantaneous contact                                                      | No              |
| • passing make contact                                                                | No              |
| • passing make contact/instantaneous contact                                          | No              |
| • OFF delay                                                                           | No              |
| <b>switching function</b>                                                             |                 |
| • 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              |
| <b>switching function</b>                                                             |                 |
| • star-delta circuit with delay time                                                  | No              |
| • star-delta circuit                                                                  | No              |
| <b>switching function with control signal</b>                                         |                 |
| • 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/instantaneous                                                    | No              |
| • passing make contact                                                                | No              |
| • passing make contact/instantaneous contact                                          | No              |
| <b>switching function of interval relay with control signal</b>                       |                 |
| • retrotriggerable with deactivated control signal/instantaneous contact              | No              |
| • retrotriggerable with switched-on control signal                                    | No              |
| • retrotriggerable with switched-on control signal/instantaneous contact              | No              |
| • retriggrable with deactivated control signal                                        | No              |
| <b>Short-circuit protection</b>                                                       |                 |
| design of the fuse link for short-circuit protection of the auxiliary switch required | fuse gL/gG: 4 A |
| <b>Auxiliary circuit</b>                                                              |                 |
| <b>material of switching contacts</b>                                                 | AgSnO2          |
| <b>number of NC contacts</b>                                                          |                 |
| • delayed switching                                                                   | 0               |
| • instantaneous contact                                                               | 0               |
| <b>number of NO contacts</b>                                                          |                 |
| • delayed switching                                                                   | 0               |
| • instantaneous contact                                                               | 0               |

|                                                                               |                                                                                    |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>number of CO contacts</b>                                                  |                                                                                    |
| • delayed switching                                                           | 2                                                                                  |
| • instantaneous contact                                                       | 0                                                                                  |
| <b>operational current of auxiliary contacts at AC-15</b>                     |                                                                                    |
| • at 24 V                                                                     | 3 A                                                                                |
| • at 250 V                                                                    | 3 A                                                                                |
| <b>operational current of auxiliary contacts at DC-13</b>                     |                                                                                    |
| • at 24 V                                                                     | 1 A                                                                                |
| • at 125 V                                                                    | 0.2 A                                                                              |
| • at 250 V                                                                    | 0.1 A                                                                              |
| <b>operating frequency with 3RT2 contactor maximum</b>                        | 5 000 1/h                                                                          |
| <b>contact reliability of auxiliary contacts</b>                              | one incorrect switching operation of 100 million switching operations (17 V, 5 mA) |
| <b>contact rating of auxiliary contacts according to UL</b>                   | R300 / B300                                                                        |
| <b>switching capacity current with inductive load</b>                         | 0.01 ... 3 A                                                                       |
| <b>Inputs/ Outputs</b>                                                        |                                                                                    |
| <b>product function</b>                                                       |                                                                                    |
| • at the relay outputs switchover delayed/without delay                       | No                                                                                 |
| • non-volatile                                                                | No                                                                                 |
| <b>Electromagnetic compatibility</b>                                          |                                                                                    |
| EMC emitted interference according to IEC 61812-1                             | ambience A (industrial sector)                                                     |
| EMC immunity according to IEC 61812-1                                         | corresponds to degree of severity 3                                                |
| <b>conducted interference</b>                                                 |                                                                                    |
| • due to burst according to IEC 61000-4-4                                     | 2 kV network connection / 1 kV control connection                                  |
| • due to conductor-earth surge according to IEC 61000-4-5                     | 2 kV                                                                               |
| • due to conductor-conductor surge according to IEC 61000-4-5                 | 1 kV                                                                               |
| <b>field-based interference according to IEC 61000-4-3</b>                    | 10 V/m                                                                             |
| <b>electrostatic discharge according to IEC 61000-4-2</b>                     | 4 kV contact discharge / 8 kV air discharge                                        |
| <b>Safety related data</b>                                                    |                                                                                    |
| category according to EN 954-1                                                | none                                                                               |
| <b>Electrical Safety</b>                                                      |                                                                                    |
| <b>protection class IP on the front according to IEC 60529</b>                | IP20                                                                               |
| <b>type of insulation</b>                                                     | Basic insulation                                                                   |
| <b>Connections/ Terminals</b>                                                 |                                                                                    |
| <b>product component removable terminal for auxiliary and control circuit</b> | Yes                                                                                |
| type of electrical connection for auxiliary and control circuit               | screw-type terminals                                                               |
| <b>type of connectable conductor cross-sections</b>                           |                                                                                    |
| • solid                                                                       | 1x (0.5 ... 4.0 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )               |
| • finely stranded with core end processing                                    | 1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )                 |
| • for AWG cables solid                                                        | 1x (20 ... 12), 2x (20 ... 14)                                                     |
| • for AWG cables stranded                                                     | 1x (20 ... 12), 2x (20 ... 14)                                                     |
| <b>connectable conductor cross-section</b>                                    |                                                                                    |
| • solid                                                                       | 0.5 ... 4 mm <sup>2</sup>                                                          |
| • finely stranded with core end processing                                    | 0.5 ... 4 mm <sup>2</sup>                                                          |
| <b>AWG number as coded connectable conductor cross section</b>                |                                                                                    |
| • solid                                                                       | 20 ... 12                                                                          |
| • stranded                                                                    | 20 ... 14                                                                          |
| <b>tightening torque</b>                                                      | 0.6 ... 0.8 N·m                                                                    |
| <b>design of the thread of the connection screw</b>                           | M3                                                                                 |
| <b>Installation/ mounting/ dimensions</b>                                     |                                                                                    |
| <b>mounting position</b>                                                      | any                                                                                |
| <b>fastening method</b>                                                       | screw and snap-on mounting onto 35 mm DIN rail                                     |
| <b>height</b>                                                                 | 100 mm                                                                             |
| <b>width</b>                                                                  | 22.5 mm                                                                            |
| <b>depth</b>                                                                  | 90 mm                                                                              |
| <b>required spacing</b>                                                       |                                                                                    |
| • 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        |
| <b>ambient temperature</b>                              |                |
| • during operation                                      | -25 ... +60 °C |
| • during storage                                        | -40 ... +85 °C |
| • during transport                                      | -40 ... +85 °C |
| relative humidity during operation                      | 10 ... 95 %    |

#### Approvals Certificates

|                          |     |
|--------------------------|-----|
| General Product Approval | EMV |
|--------------------------|-----|



|     |                   |                   |
|-----|-------------------|-------------------|
| EMV | Test Certificates | Marine / Shipping |
|-----|-------------------|-------------------|

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[Type Test Certificates/Test Report](#)



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



[Confirmation](#)

[Environmental Confirmations](#)

#### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RP2525-1BB30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-1BB30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-1BB30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2525-1BB30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2525-1BB30&lang=en)

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-1BB30/manual>



