



Timing relay, electronic on-delay 2 change-over contacts, 7 time ranges  
0.05 s...100 h 12-240 V AC/DC at 50/60 Hz AC with LED, screw terminal

|   |  |
|---|--|
| <b>product brand name</b>   | SIRIUS   |
| <b>product designation</b>  | timing relay   |
| <b>design of the product</b>  | slow-operating                                       |
| <b>product type designation</b>   | 3RP25  |
| <b>General technical data</b>   |  |
| <b>product component</b>  |  |
| • relay output  | Yes  |
| • semi-conductor output   | No   |
| <b>product extension required remote control</b>  | No   |
| <b>product extension optional remote control</b>  | No   |
| <b>power loss [W] maximum</b>   | 2 W  |
| insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 300 V  |
| <b>test voltage for isolation test</b>  | 2.5 kV   |
| <b>degree of pollution</b>  | 3  |
| <b>surge voltage resistance rated value</b>   | 4 000 V  |
| <b>protection class IP</b>  | IP20   |
| shock resistance acc. to IEC 60068-2-27   | 11g / 15 ms  |
| vibration resistance acc. to IEC 60068-2-6  | 10 ... 55 Hz / 0.35 mm                               |
| mechanical service life (switching cycles) typical  | 10 000 000   |
| electrical endurance (switching cycles) at AC-15 at 230 V typical   | 100 000  |
| <b>adjustable time</b>  | 0.05 s ... 100 h                                     |
| <b>relative setting accuracy relating to full-scale value</b>   | 5 %; +/-   |
| <b>thermal current</b>  | 5 A  |
| <b>recovery time</b>  | 250 ms   |
| <b>reference code acc. to IEC 81346-2</b>   | K  |
| <b>relative repeat accuracy</b>   | 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     |
| <b>Substance Prohibitance (Date)</b>  | 12.09.2014   |
| <b>Control circuit/ Control</b>   |  |
| <b>type of voltage of the control supply voltage</b>  | AC/DC  |
| <b>control supply voltage 1 at AC</b>   |  |
| • at 50 Hz  | 12 ... 240 V   |
| • at 60 Hz  | 12 ... 240 V   |
| <b>control supply voltage frequency 1</b>   | 50 ... 60 Hz   |
| <b>control supply voltage 1</b>   |  |
| • at DC   | 12 ... 240 V   |
| <b>operating range factor control supply voltage rated</b>  |  |

|  |  |
|--|--|
| <b>value at DC</b>   |  |
| <ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>  | 0.8<br>1.1   |
| <b>operating range factor control supply voltage rated value at AC at 50 Hz</b>  |  |
| <ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>  | 0.8<br>1.1   |
| <b>operating range factor control supply voltage rated value at AC at 60 Hz</b>  |  |
| <ul style="list-style-type: none"> <li>initial value</li> <li>full-scale value</li> </ul>  | 0.8<br>1.1   |
| <b>inrush current peak</b>   |  |
| <ul style="list-style-type: none"> <li>at 24 V</li> <li>at 240 V</li> </ul>  | 0.3 A<br>5 A   |
| <b>duration of inrush current peak</b>   |  |
| <ul style="list-style-type: none"> <li>at 24 V</li> <li>at 240 V</li> </ul>  | 0.3 ms<br>0.5 ms   |
| <b>Switching Function</b>  |  |
| <b>switching function</b>  |  |
| <ul style="list-style-type: none"> <li>ON-delay</li> <li>ON-delay/instantaneous contact</li> <li>passing make contact</li> <li>passing make contact/instantaneous contact</li> <li>OFF delay</li> </ul>  | Yes<br>No<br>No<br>No<br>No  |
| <b>switching function</b>  |  |
| <ul style="list-style-type: none"> <li>flashing symmetrically with interval start/instantaneous</li> <li>flashing symmetrically with interval start</li> <li>flashing symmetrically with pulse start/instantaneous</li> <li>flashing symmetrically with pulse start</li> <li>flashing asymmetrically with interval start</li> <li>flashing asymmetrically with pulse start</li> </ul>  | No<br>No<br>No<br>No<br>No<br>No   |
| <b>switching function</b>  |  |
| <ul style="list-style-type: none"> <li>star-delta circuit with delay time</li> <li>star-delta circuit</li> </ul>   | No<br>No   |
| <b>switching function with control signal</b>  |  |
| <ul style="list-style-type: none"> <li>additive ON-delay</li> <li>passing break contact</li> <li>passing break contact/instantaneous</li> <li>OFF delay</li> <li>OFF delay/instantaneous</li> <li>pulse delayed</li> <li>pulse delayed/instantaneous</li> <li>pulse-shaping</li> <li>pulse-shaping/instantaneous</li> <li>additive ON-delay/instantaneous</li> <li>ON-delay/OFF-delay/instantaneous</li> <li>passing make contact</li> <li>passing make contact/instantaneous contact</li> </ul> | No<br>No<br>No<br>No<br>No<br>No<br>No<br>No<br>No<br>No<br>No<br>No<br>No |
| <b>switching function of interval relay with control signal</b>  |  |
| <ul style="list-style-type: none"> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> <li>retrotriggerable with switched-on control signal</li> <li>retrotriggerable with switched-on control signal/instantaneous contact</li> <li>retriggerable with deactivated control signal</li> </ul>  | No<br>No<br>No<br>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>   | AgSnO <sub>2</sub>   |
| number of NC contacts delayed switching                                       | 0  |
| number of NO contacts delayed switching                                       | 0  |
| number of CO contacts delayed switching                                       | 2  |
| <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 acc. to IEC 61812-1                                  | ambience A (industrial sector)   |
| EMC immunity acc. to IEC 61812-1  | corresponds to degree of severity 3  |
| <b>conducted interference</b>   |  |
| • 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   |
| <b>field-based interference acc. to IEC 61000-4-3</b>                         | 10 V/m   |
| <b>electrostatic discharge acc. to IEC 61000-4-2</b>                          | 4 kV contact discharge / 8 kV air discharge  |
| <b>Safety related data</b>  |  |
| <b>protection class IP on the front acc. to IEC 60529</b>                     | IP20   |
| <b>type of insulation</b>   | Basic insulation   |
| <b>category acc. to EN 954-1</b>  | none   |
| <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> )                 |
| • at AWG cables solid   | 1x (20 ... 12), 2x (20 ... 14)   |
| • at 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 standard mounting 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 %    |

#### Certificates/ approvals

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



|                           |                   |                   |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



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



[Confirmation](#)

#### 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=3RP2525-1BW30>

Cax online generator

<http://support.automation.siemens.com/WWW/CAXorder/default.aspx?lang=en&mlfb=3RP2525-1BW30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2525-1BW30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RP2525-1BW30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2525-1BW30&lang=en)

Characteristic: Derating



