



Timing relay, electronic ansprechverzögert 1 change-over contact 24 V AC/DC, 200 to 127 V AC at 50/60 Hz AC 0.05 s to 100 h Overall width 45 mm Spring-type terminal

| | |
|---|------------------------|
| product brand name | SIRIUS |
| product designation | timing relay |
| design of the product | slow-operating |
| product type designation | 3RP20 |
| General technical data | |
| 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 kV |
| degree of pollution | 3 |
| surge voltage resistance rated value | 4 000 V |
| 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 |
| adjustable time | 0.05 ... 100 s |
| relative setting accuracy relating to full-scale value | 5 %; +/- |
| thermal current | 5 A |
| recovery time | 150 ms |
| reference code acc. to IEC 81346-2 | K |
| relative repeat accuracy | 1 %; +/- |
| influence of the surrounding temperature | ±5 % |
| power supply influence | ±1 % |
| Substance Prohibitance (Date) | 01.05.2012 |
| Control circuit/ Control | |
| 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 2 at AC | |
| • at 50 Hz | 100 ... 127 V |
| • at 60 Hz | 100 ... 127 V |
| control supply voltage frequency 1 | 50 ... 60 Hz |
| control supply voltage 1 | |

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| <ul style="list-style-type: none"> • at DC rated value | 24 V |
| 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 |

Switching Function

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| switching function <ul style="list-style-type: none"> • ON-delay • ON-delay/instantaneous contact • passing make contact • passing make contact/instantaneous contact • OFF delay | Yes No No No No |
| 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"> • 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/instantaneous • passing make contact • passing make contact/instantaneous contact | No No No 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 |

Short-circuit protection

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|---|-----------------|
| 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 | AgSnO2 |
| number of NC contacts delayed switching | 0 |
| number of NO contacts delayed switching | 0 |
| number of CO contacts delayed switching | 1 |
| operational current of auxiliary contacts at AC-15 | |

| | |
|--|---|
| <ul style="list-style-type: none"> • at 24 V • at 250 V | 3 A 3 A |
| operational current of auxiliary contacts at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V • at 125 V • at 250 V | 1 A 0.2 A 0.1 A |
| operating frequency with 3RT2 contactor maximum | 5 000 1/h |
| contact reliability of auxiliary contacts | one incorrect switching operation of 100 million switching operations (17 V, 5 mA) |
| contact rating of auxiliary contacts according to UL | R300 / B300 |
| Inputs/ Outputs | |
| product function | |
| <ul style="list-style-type: none"> • non-volatile | No |
| Electromagnetic compatibility | |
| EMC emitted interference acc. to IEC 61812-1 | EN 61000-6-4(3) |
| EMC immunity acc. to IEC 61812-1 | EN 61000-6-2 |
| 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 | 4 kV contact discharge / 8 kV air discharge |
| Safety related data | |
| protection class IP on the front acc. to IEC 60529 | IP20 |
| touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front |
| type of insulation | Basic insulation |
| category acc. to EN 954-1 | none |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | No |
| 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 | 2x (0,25 ... 2,5 mm ²) 2 x (0.25 ... 1.5 mm ²) 2x (0.25 ... 2.5 mm ²) 2x (24 ... 14) 2x (24 ... 14) |
| connectable conductor cross-section | |
| <ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing | 0.3 ... 2.5 mm ² 0.3 ... 1.5 mm ² 2.5 ... 2.5 mm ² |
| AWG number as coded connectable conductor cross section | |
| <ul style="list-style-type: none"> • solid • stranded | 24 ... 14 24 ... 14 |
| Installation/ mounting/ dimensions | |
| mounting position | any |
| fastening method | screw and snap-on mounting onto 35 mm standard mounting rail |
| height | 57 mm |
| width | 45 mm |
| depth | 73 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 | 0 mm 0 mm 0 mm 0 mm 0 mm |

| | |
|------------------|------|
| — 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

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|---|----------------|
| 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 | 10 ... 95 % |

Certificates/ approvals

| General Product Approval | EMC | Declaration of Conformity |
|--|--|---|
|  CCC |  UL |  EAC |
| |  RCM | Miscellaneous |
| | |  EG-Konf. |

Test Certificates Marine / Shipping

[Type Test Certificates/Test Report](#)



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=3RP2025-2AQ30>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2025-2AQ30>

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

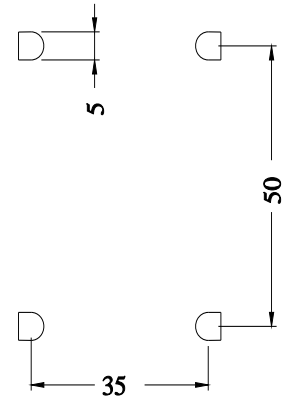
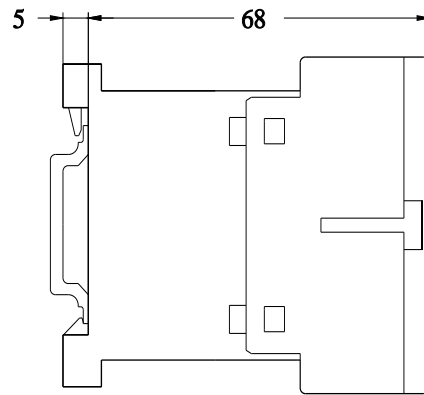
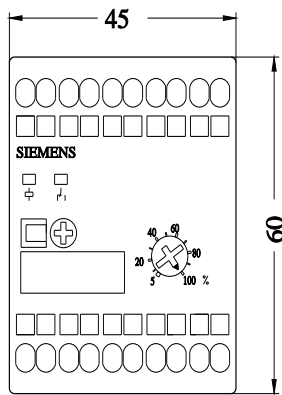
<https://support.industry.siemens.com/cs/ww/en/ps/3RP2025-2AQ30>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP2025-2AQ30&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RP2025-2AQ30/manual>



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