SIEMENS

Data sheet 3RP2505-1BW30



Timing relay, Multifunction 2 change-over contacts, 27 functions 7 time ranges (0.05 s...100 h) 12-240 V AC/DC at 50/60 Hz AC with LED, Screw terminal

| product brand name | SIRIUS |
|---|---|
| product designation | timing relay |
| design of the product | 27 functions |
| product type designation | 3RP25 |
| 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 | 2.5 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 |
| minimum ON period | 35 ms |
| recovery time | 250 ms |
| reference code according to IEC 81346-2 | К |
| 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 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1 |
| Weight | 0.172 kg |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | AC/DC |
| control supply voltage 1 at AC | |
| ● at 50 Hz | 12 240 V |
| • at 60 Hz | 12 240 V |
| control supply voltage frequency 1 | 50 60 Hz |

| control supply voltage 1 at DC operating range factor control supply voltage rated value at DC initial value full-scale value operating range factor control supply voltage rated value at AC at 50 Hz initial value full-scale value operating range factor control supply voltage rated value at AC at 60 Hz initial value initial value initial value full-scale value initial value full-scale value initial value full-scale value initial value of unitial value full-scale value initial value of unitial value of unitial value initial value of unitial value full-scale value initial value of unitial value | |
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| switching function of interval relay with control signal | |
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| | |
| signal/instantaneous contact | |
| • retrotriggerable with switched-on control signal Yes | |
| • retrotriggerable with switched-on control | |
| signal/instantaneous contact | |
| retriggerable with deactivated control signal Yes | |
| design of the control terminal non-floating Yes | |
| Short-circuit protection | |
| design of the fuse link for short-circuit protection of the auxiliary fuse gL/gG: switch required | |
| Auxiliary circuit | A |

| make the last control of t | A-0-00 |
|--|--|
| material of switching contacts | AgSnO2 |
| number of NC contacts | |
| delayed switching | 0 |
| instantaneous contact | 0 |
| number of NO contacts | |
| delayed switching | 0 |
| instantaneous contact | 0 |
| number of CO contacts | |
| delayed switching | 2 |
| instantaneous contact | 0 |
| operational current of auxiliary contacts at AC-15 | |
| • at 24 V | 3 A |
| • at 250 V | 3 A |
| operational current of auxiliary contacts at DC-13 | |
| • at 24 V | 1 A |
| • at 125 V | 0.2 A |
| • at 250 V | 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 |
| switching capacity current with inductive load | 0.01 3 A |
| Inputs/ Outputs | |
| product function | |
| at the relay outputs switchover delayed/without delay | Yes |
| • non-volatile | No |
| Electromagnetic compatibility | |
| 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 |
| conducted interference | |
| 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 |
| field-based interference according to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge according to IEC 61000-4-2 | 4 kV contact discharge / 8 kV air discharge |
| Safety related data | |
| category according to EN 954-1 | none |
| Electrical Safety | |
| protection class IP on the front according to IEC 60529 | IP20 |
| type of insulation | Basic insulation |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection for auxiliary and control circuit | screw-type terminals |
| type of connectable conductor cross-sections | , , , , , , , , , , , , , , , , , , , |
| solid | 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) |
| finely stranded with core end processing | 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) |
| for AWG cables solid | 1x (20 12), 2x (20 14) |
| • for AWG cables stranded | 1x (20 12), 2x (20 14) |
| connectable conductor cross-section | (), () |
| • solid | 0.5 4 mm² |
| finely stranded with core end processing | 0.5 4 mm² |
| AWG number as coded connectable conductor cross section | |
| • solid | 20 12 |
| | 20 12 |
| • stranded | |
| tightening torque | 0.6 0.8 N·m |
| design of the thread of the connection screw Installation/ mounting/ dimensions | M3 |
| 3 | 2014 |
| mounting position | any |
| fastening method | screw and snap-on mounting onto 35 mm DIN rail |

| height width depth | 100 mm 22.5 mm 90 mm | |
|---|----------------------------|-----|
| | 90 mm | |
| | | |
| required spacing | | |
| 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 | |
| ambient temperature | | |
| 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 | Toot Cortificates | Marina / Chinnina |
|-------|-------------------|-------------------|
| FINIA | Test Certificates | Marine / Shipping |

<u>KC</u>

Special Test Certificate

Type Test Certificates/Test Report







Marine / Shipping other Railway Environment







Confirmation

Confirmation

Environmental Confirmations

urther 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)

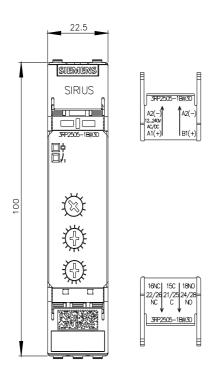
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP2505-1BW30

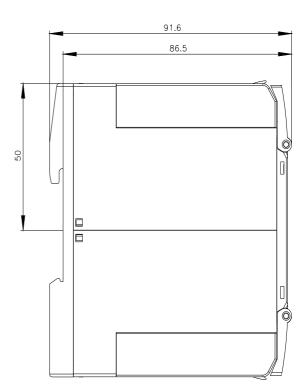
Cax online generator

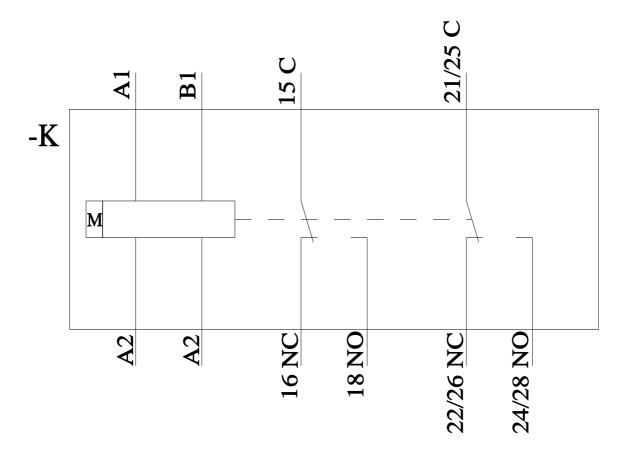
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP2505-1BW30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-1BW30 Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RP2505-1BW30/manual







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3RP25051BW30