SIEMENS

## Data sheet 3RP1505-1AW30


Timing relay, Multifunction Phased-out product !!! For further information, please contact our sales department 1 change-over contact, 8 functions 15 time ranges (0.05 s-100 h) 24...240 V AC/DC at 50/60 Hz AC with LED, Screw terminal

| | |
|---|---|
| **Product brand name** | SIRIUS |
| **Product designation** | timing relay |
| **Product type designation** | 3RP15 |

| General technical data | |
|---|---|
| **Product component** | |
| • Relay output | Yes |
| • semi-conductor output | No |
| **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** | 2 kV |
| **Degree of pollution** | 3 |
| **Surge voltage resistance rated value** | 4 000 V |
| **Protection class IP** | 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 |
| **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** | 150 ms |
| **Reference code acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750** | K |
| **Reference code acc. to DIN EN 81346-2** | K |
| **Reference code acc. to DIN EN 61346-2** | K |
| **Relative repeat accuracy** | 1 % |

## Control circuit/ Control

| | |
|---|---|
| **Type of voltage of the control supply voltage** | AC/DC |
| **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 1** | |
| • at DC | 24 ... 240 V |
| **Operating range factor control supply voltage rated value at DC** | |
| • initial value | 0.7 |
| • Full-scale value | 1.1 |
| **Operating range factor control supply voltage rated value at AC at 50 Hz** | |
| • initial value | 0.8 |
| • Full-scale value | 1.1 |
| **Operating range factor control supply voltage rated value at AC at 60 Hz** | |
| • initial value | 0.8 |
| • Full-scale value | 1.1 |

## Switching Function

| | |
|---|---|
| **Switching function** | |
| • ON-delay | Yes |
| • ON-delay/instantaneous contact | No |
| • passing make contact | Yes |
| • passing make contact/instantaneous contact | No |

| | |
|---|---|
| • OFF delay | No |
| **Switching function** | |
| • flashing symmetrically starting with interval/instantaneous | No |
| • flashing symmetrically starting with interval | Yes |
| • flashing symmetrically starting with pulse/instantaneous | No |
| • flashing symmetrically starting with pulse | No |
| • flashing asymmetrically starting with interval | No |
| • flashing asymmetrically starting with pulse | No |
| **Switching function** | |
| • star-delta circuit with delay time | No |
| • star-delta circuit | No |
| **Switching function with control signal** | |
| • additive ON delay | Yes |
| • passing break contact | Yes |
| • passing break contact/instantaneous | No |
| • OFF delay | Yes |
| • OFF delay/instantaneous | No |
| • pulse delayed | No |
| • pulse delayed/instantaneous | No |
| • pulse-shaping | Yes |
| • 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 |
| **Switching function of interval relay with control signal** | |
| • retrotriggerable with deactivated control signal/instantaneous contact | No |
| • retrotriggerable with activated control signal | No |
| • retrotriggerable with activated control signal/instantaneous contact | No |
| • retriggerable with deactivated control signal | No |
| **Design of the control terminal non-floating** | Yes |

## Short-circuit protection

| | |
|---|---|
| **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 |
| **Operating current of auxiliary contacts at AC-15** | |
| • at 24 V | 3 A |
| • at 250 V | 3 A |
| **Operating 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 |
| **Influence of the surrounding temperature** | ±5 % |
| **Power supply influence** | ±1 % |

## Inputs/ Outputs

| | |
|---|---|
| **Product function** | |
| • non-volatile | No |

## Electromagnetic compatibility

| | |
|---|---|
| **EMI immunity** | |
| • acc. to IEC 61812-1 | EN 61000-6-2 |
| **Conducted interference** | |
| • 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 |
| **Field-bound parasitic coupling 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 against electrical shock** | finger-safe |
| **Type of insulation** | Basic insulation |
| **Category acc. to EN 954-1** | none |

## Connections/ Terminals

| | |
|---|---|
| **Product function** | |
| • removable terminal for auxiliary and control circuit | Yes |
| **Type of electrical connection** | |

| | |
|---|---|
| • for auxiliary and control current 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 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²) |
| • at AWG conductors solid | 2x (20 ... 14) |
| • at AWG conductors stranded | 2x (20 ... 14) |
| **Connectable conductor cross-section** | |
| • solid | 0.5 ... 4 mm² |
| • finely stranded with core end processing | 0.5 ... 2.5 mm² |
| **AWG number as coded connectable conductor cross section** | |
| • solid | 20 ... 14 |
| • stranded | 20 ... 14 |
| **Tightening torque** | 0.8 ... 1.2 N·m |
| **Design of the thread of the connection screw** | M3 |

## Installation/ mounting/ dimensions

| | |
|---|---|
| **Mounting position** | any |
| **Mounting type** | screw and snap-on mounting onto 35 mm standard mounting rail |
| **Height** | 102 mm |
| **Width** | 22.5 mm |
| **Depth** | 91 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 |
| **Relative humidity** | |
| • during operation | 10 ... 95 % |

## Certificates/ approvals

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

| Declaration of Conformity | Test Certificates | Marine / Shipping | | | |
|---|---|---|---|---|---|
| Miscellaneous | Type Test Certificates/Test Report | BUREAU VERITAS | LRS | PRS | RINA |

| Marine / Shipping | | other | | Railway |
|---|---|---|---|---|
| RMRS | DNV·GL DNVGL.COM/AF | Confirmation | Miscellaneous | Special Test Certificate |

## Further information

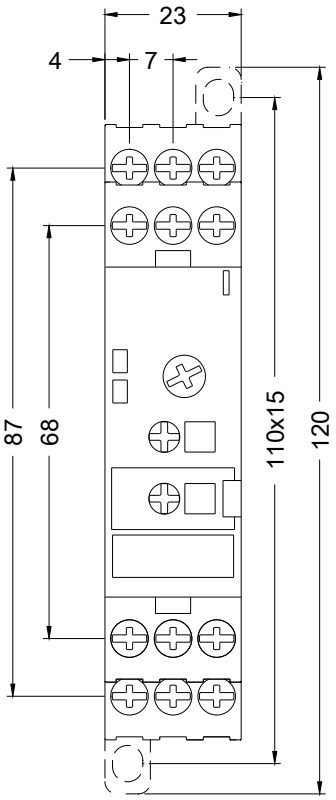
**Information- and Downloadcenter (Catalogs, Brochures,…)**
www.siemens.com/ic10

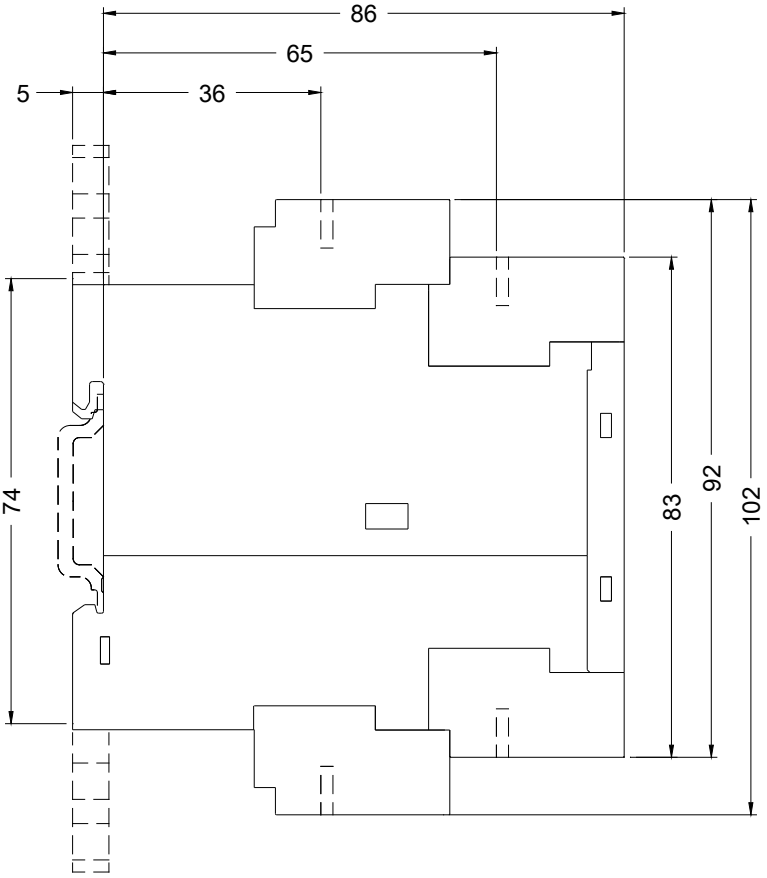
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP1505-1AW30

**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1505-1AW30

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RP1505-1AW30

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1505-1AW30&lang=en

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