## SIEMENS

Data sheet
3RP15 31-1AP30


Timing relay, electronic Phase-out product! For further information, contact our sales department with OFF delay 1 CO contact, with aux. voltage 1 time range 0.5 s... 10 s $24,200 \ldots 240 \mathrm{~V} \mathrm{AC}$ and 24 V DC at $50 / 60 \mathrm{~Hz} \mathrm{AC}$ with LED, screw terminal

| General technical data: |  |  |
| :---: | :---: | :---: |
| product brandname |  | SIRIUS |
| Product designation |  | timing relay |
| Mounting position |  | any |
| Product function non-volatile |  | No |
| Product component <br> - Relay output <br> - semi-conductor output |  | Yes <br> No |
| Installation altitude at height above sea level maximum | m | 2000 |
| Ambient temperature <br> - during operation <br> - during storage <br> - during transport | ${ }^{\circ} \mathrm{C}$ ${ }^{\circ} \mathrm{C}$ ${ }^{\circ} \mathrm{C}$ | $\begin{aligned} & -25 \ldots+60 \\ & -40 \ldots+85 \\ & -40 \ldots+85 \end{aligned}$ |
| Relative humidity during operation | \% | $10 . .95$ |
| EMC emitted interference acc. to IEC 61812-1 |  | EN 61000-6-4(3) |
| 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 |


| Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5 |  | 2 kV |
| :---: | :---: | :---: |
| Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5 |  | 1 kV |
| Electrostatic discharge acc. to IEC 61000-4-2 |  | 4 kV contact discharge / 8 kV air discharge |
| Field-bound parasitic coupling acc. to IEC 61000-4-3 |  | $10 \mathrm{~V} / \mathrm{m}$ |
| Surge voltage resistance rated value | V | 4000 |
| Power loss [W] total typical | W | 2 |
| Equipment marking <br> - acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750 <br> - acc. to DIN EN 61346-2 <br> - acc. to DIN EN 81346-2 |  | K <br> K <br> K |
| Category acc. to EN 954-1 |  | none |
| Protection against electrical shock |  | finger-safe |
| Protection class IP |  | IP20 |
| Type of insulation |  | Basic insulation |
| Mechanical service life (switching cycles) typical |  | 10000000 |
| Electrical endurance (switching cycles) at AC-15 at 230 V typical |  | 100000 |
| Operating frequency with 3RT2 contactor maximum | 1/h | 5000 |
| Vibration resistance acc. to IEC 60068-2-6 |  | $10 \ldots 55 \mathrm{~Hz} / 0.35 \mathrm{~mm}$ |
| Shock resistance acc. to IEC 60068-2-27 |  | $11 \mathrm{~g} / 15 \mathrm{~ms}$ |
| Relative repeat accuracy | \% | 1 |
| Recovery time | ms | 150 |
| Minimum ON period | ms | 35 |
| Degree of pollution |  | 3 |
| Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | V | 300 |
| Relative setting accuracy relating to full-scale value | \% | 5 |
| Product extension required remote control |  | No |
| Product extension optional remote control |  | No |

## Switching Function:

## Switching function

- ON-delay
- ON-delay/instantaneous contact
- passing make contact
- passing make contact/instantaneous contact
- OFF delay
- flashing asymmetrically starting with interval
- flashing asymmetrically starting with pulse
- flashing symmetrically starting with pulse

No

| - flashing symmetrically starting with <br> pulse/instantaneous <br> - flashing symmetrically starting with interval <br> - flashing symmetrically starting with <br> interval/instantaneous <br> - star-delta circuit <br> - star-delta circuit with delay time |  | No |
| :--- | :--- | :--- |
| Switching function with control signal |  | No |
|  |  |  |

Operating range factor control supply voltage rated value

- at AC
- at 50 Hz
0.85 ... 1.1
- at 60 Hz
- at DC
0.85 ... 1.1
0.85 ... 1.1

| Auxiliary circuit: |  |  |
| :---: | :---: | :---: |
| Contact reliability of auxiliary contacts |  | one incorrect switching operation of 100 million switching operations ( $17 \mathrm{~V}, 5 \mathrm{~mA}$ ) |
| Material of switching contacts |  | AgSnO2 |
| Operating current of auxiliary contacts <br> - at AC-15 <br> — at 24 V <br> - at 250 V <br> - at DC-13 <br> — at 24 V <br> - at 125 V <br> - at 250 V | $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \\ & \mathrm{~A} \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \\ & 1 \\ & 0.2 \\ & 0.1 \end{aligned}$ |
| Influence of the surrounding temperature |  | $\pm 5$ \% |
| Power supply influence |  | $\pm 1$ \% |
| Test voltage for isolation test | kV | 2 |
| Design of the fuse link for short-circuit protection of the auxiliary switch required |  | fuse gL/gG: 4 A |
| Thermal current | A | 5 |
| Short-time current resistance (Icw) limited to 10 ms | A | 10 |
| Number of NC contacts <br> - delayed switching <br> - instantaneous contact |  | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |
| Number of NO contacts <br> - delayed switching <br> - instantaneous contact |  | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ |
| Number of CO contacts <br> - delayed switching <br> - instantaneous contact |  | $\begin{aligned} & 1 \\ & 0 \end{aligned}$ |
| Contact rating of auxiliary contacts according to UL |  | R300 / B300 |
| Installation/ mounting/ dimensions: |  |  |
| Mounting type |  | screw and snap-on mounting onto 35 mm standard mounting rail |
| Width | mm | 22.5 |
| Height | mm | 102 |
| Depth | mm | 91 |
| Required spacing with side-by-side mounting |  |  |



| General Product Approval |  | Declaration of <br> Conformity |
| :--- | :--- | :--- |
| Certificates |  |  |

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)
http://www.siemens.com/industrial-controls/catalogs
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP1531-1AP30

## Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP1531-1AP30
Service\&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RP1531-1AP30
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RP1531-1AP30\&lang=en

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