## **SIEMENS**

Data sheet 3RP25 05-2BB30



TIME RELAY, MULTI-FUNCTION, 2 CO CONTACTS, 27 FUNCTIONS, 15 TIME SET. RANGES (1,3,10, 30,100) (S/MIN/HR), 24V AC/DC AT AC 50/60HZ, LED, SPRING-LOADED TERMINAL (PUSH-IN)

Figure similar

| Compared to sharing lighter                       |    |   |
|---|----|---|
| General technical data:                           |    | CIDILIC   |
| product brand name                                |    | SIRIUS  |
| Product designation                               |    | timing relay                                      |
| mounting position                                 |    | any   |
| Product function at the relay outputs Switchover  |    | Yes   |
| delayed/without delay                             |    |   |
| Product function non-volatile                     |    | No  |
| Product component                                 |    |   |
| Relay output                                      |    | Yes   |
| • semi-conductor output                           |    | No  |
| Installation altitude at height above sea level   | m  | 2 000   |
| maximum   |    |   |
| Ambient temperature                               |    |   |
| <ul><li>during operation</li></ul>                | °C | -25 +60   |
| during storage                                    | °C | -40 +85   |
| during transport                                  | °C | -40 <b>+</b> 85                                   |
| Relative humidity                                 |    |   |
| • during operation                                | %  | 15 70   |
| 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 BURST acc. to IEC 61000-4- |    | 2 kV network connection / 1 kV control connection |
| 4   |    |   |
| Conducted interference conductor-earth SURGE acc. |    | 2 kV  |
| to IEC 61000-4-5                                  |    |   |
| Conducted interference conductor-conductor SURGE  |    | 1 kV  |
| acc. to IEC 61000-4-5                             |    |   |

| 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 V/m                                      |
| Surge voltage resistance Rated value                   | V   | 4 000                                       |
| Active power loss total typical                        | W   | 2   |
| Reference code acc. to DIN 40719 extended              |     | К   |
| according to IEC 204-2 acc. to IEC 750                 |     |   |
| Reference code acc. to DIN EN 81346-2                  |     | K   |
| Category acc. to EN 954-1                              |     | none  |
| Protection against electrical shock                    |     | finger-safe                                 |
| Protection class IP                                    |     | IP20  |
| Mechanical service life (switching cycles) typical     |     | 10 000 000                                  |
| Electrical endurance (switching cycles) at AC-15 at    |     | 100 000                                     |
| 230 V typical  |     |   |
| Operating frequency with 3RT2 contactor maximum        | 1/h | 5 000                                       |
| Shock resistance acc. to IEC 60068-2-27                |     | 11g / 15 ms                                 |
| Relative repeat accuracy                               | %   | 1   |
| Recovery time  | ms  | 150   |
| Minimum ON period                                      | ms  | 35  |
| Degree of pollution                                    |     | 3   |
| Insulation voltage for overvoltage category III        | V   | 300   |
| according to IEC 60664 with degree of pollution 3      |     |   |
| Rated value  |     |   |
| Relative setting accuracy relating to full-scale value | %   | 5   |

| Switching Function:   |     |  |
|---|-----|--|
| Switching function  |     |  |
| ON-delay  | Yes |  |
| <ul> <li>ON-delay/instantaneous contact</li> </ul>                                  | Yes |  |
| <ul> <li>passing make contact</li> </ul>  | Yes |  |
| <ul> <li>passing make contact/instantaneous contact</li> </ul>                      | Yes |  |
| OFF delay   | Yes |  |
| <ul> <li>flashing asymmetrically starting with interval</li> </ul>                  | No  |  |
| <ul> <li>flashing asymmetrically starting with pulse</li> </ul>                     | No  |  |
| <ul> <li>flashing symmetrically starting with pulse</li> </ul>                      | Yes |  |
| <ul> <li>flashing symmetrically starting with<br/>pulse/instantaneous</li> </ul>    | Yes |  |
| <ul> <li>flashing symmetrically starting with interval</li> </ul>                   | Yes |  |
| <ul> <li>flashing symmetrically starting with<br/>interval/instantaneous</li> </ul> | Yes |  |
| • star-delta circuit  | Yes |  |
| <ul> <li>star-delta circuit with delay time</li> </ul>                              | No  |  |
| Switching function with control signal  |     |  |
| <ul> <li>additive ON delay</li> </ul>   | Yes |  |
| <ul> <li>passing break contact</li> </ul>   | Yes |  |

| OFF delay  | Yes |
|--|-----|
| • pulse-shaping  | Yes |
| OFF delay/instantaneous  | Yes |
| <ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>   | Yes |
| <ul> <li>passing break contact/instantaneous</li> </ul>  | Yes |
| <ul> <li>additive ON delay/instantaneous</li> </ul>  | Yes |
| ON-delay/OFF-delay   | Yes |
| <ul> <li>passing make contact</li> </ul>   | Yes |
| <ul> <li>passing make contact/instantaneous contact</li> </ul>                                 | Yes |
| • pulse delayed  | Yes |
| <ul> <li>pulse delayed/instantaneous</li> </ul>  | Yes |
| <ul><li>pulse-shaping/instantaneous</li></ul>  | Yes |
| Switching function of interval relay with control signal                                       |     |
| <ul> <li>retrotriggerable with deactivated control<br/>signal/instantaneous contact</li> </ul> | Yes |
| • retrotriggerable with activated control signal   | Yes |
| <ul> <li>retrotriggerable with activated control<br/>signal/instantaneous contact</li> </ul>   | Yes |
| <ul> <li>retriggerable with deactivated control signal</li> </ul>                              | Yes |
| Design of the control terminal non-floating  | Yes |

| Control circuit/ Control:                           |    |              |
|---|----|--------------|
| Adjustable time                                     | S  | 0.05 360 000 |
| Type of voltage of the control supply voltage       |    | AC/DC        |
| Control supply voltage frequency 1                  | Hz | 50 60        |
| Operating range factor control supply voltage rated |    |              |
| value   |    |              |
| • with AC   |    |              |
| — at 50 Hz  |    | 0.85 1.1     |
| — at 60 Hz  |    | 0.85 1.1     |
| • for DC  |    | 0.85 1.1     |
|   |    |              |

| Auxiliary circuit:                            |   |  |  |
|---|---|--|--|
| Contact reliability of the auxiliary contacts |   | one incorrect switching operation of 100 million |  |
|   |   | switching operations (17 V, 5 mA)                |  |
| Material of switching contacts                |   | AgSnO2   |  |
| Operating current of the auxiliary contacts   |   |  |  |
| ● at AC-15                                    |   |  |  |
| — at 24 V                                     | Α | 3  |  |
| — at 250 V                                    | Α | 3  |  |
| ● at DC-13                                    |   |  |  |
| — at 24 V                                     | Α | 1  |  |
| — at 125 V                                    | Α | 0.2  |  |
| — at 250 V                                    | Α | 0.1  |  |

| Design of the fuse link for short-circuit protection of the auxiliary switch required |   | fuse gL/gG: 4 A |
|---|---|-----------------|
| Thermal current   | Α | 5               |
| Switching capacity current  |   |                 |
| <ul> <li>with inductive load</li> </ul>   | Α | 0.01 3          |
| Number of NC contacts   |   |                 |
| <ul><li>delayed switching</li></ul>   |   | 0               |
| • instantaneous contact   |   | 0               |
| Number of NO contacts   |   |                 |
| delayed switching   |   | 0               |
| • instantaneous contact   |   | 0               |
| Number of CO contacts   |   |                 |
| <ul><li>delayed switching</li></ul>   |   | 2               |
| • instantaneous contact   |   | 0               |

| Mounting type                               |    | screw and snap-on mounting onto 35 mm standard |
|---|----|--|
|   |    | mounting rail                                  |
| Width                                       | mm | 22.5   |
| Height                                      | mm | 100  |
| Depth                                       | mm | 90   |
| Spacing required with side-by-side mounting |    |  |
| • upwards                                   | mm | 0  |
| • forwards                                  | mm | 0  |
| • at the side                               | mm | 0  |
| Backwards                                   | mm | 0  |
| • downwards                                 | mm | 0  |
| Spacing required for grounded parts         |    |  |
| Backwards                                   | mm | 0  |
| • at the side                               | mm | 0  |
| • upwards                                   | mm | 0  |
| • forwards                                  | mm | 0  |
| • downwards                                 | mm | 0  |
| Spacing required for live parts             |    |  |
| • downwards                                 | mm | 0  |
| Backwards                                   | mm | 0  |
| • at the side                               | mm | 0  |
| • forwards                                  | mm | 0  |
| • upwards                                   | mm | 0  |

| Connections/ Terminals:                               |   |
|---|---|
| Design of the electrical connection for auxiliary and | PUSH-IN connection (spring-loaded connection) |
| control current circuit                               |   |
| Type of connectable conductor cross-section           |   |

• solid

• finely stranded

- without core end processing

- with core end processing

• for AWG conductors

- solid

| 0.5 4 mm²             |  |
|-----------------------|--|
|                       |  |
| 0.5 4 mm <sup>2</sup> |  |
| 0.5 2.5 mm²           |  |
|                       |  |
| 20 12                 |  |

## Certificates/ approvals:

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

EAC



**Environmental Confirmations** 

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

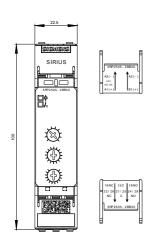
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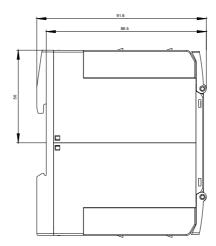
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RP25052BB30}$ 

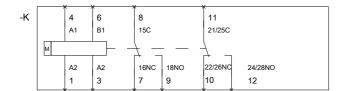
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RP25052BB30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RP25052BB30&lang=en">http://www.automation.siemens.com/bilddb/index.aspx?attID9=3RP25052BB30&lang=en</a>







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