# **SIEMENS**

Product data sheet 3RP1505-1BP30



TIME RELAY,
MULTI-FUNCTION 2 CHANGEOVER,
16 FUNCTIONS,
15 TIME SETTING RANGES AC 24/200... 240 V AND DC 24V,
WITH LED, SCREW CONNECTION

| General technical details:  |    |              |
|---|----|--------------|
| Product brand name  |    | SIRIUS       |
| product designation   |    | timing relay |
| Protection class IP / on the front                                |    | IP40         |
| Protection class IP / of the terminal                             |    | IP20         |
| Built in orientation  |    | any          |
| Supply voltage frequency  |    |              |
| <ul> <li>1 / for auxiliary and control current circuit</li> </ul> |    |              |
| initial rated value   | Hz | 50           |
| final rated value   | Hz | 60           |
| Product function  |    |              |
| star-delta circuit  |    | Yes          |
| with auxiliary voltage / pulse-shaping                            |    | Yes          |
| at the relay outputs / changeover delayed/without delay           |    | Yes          |
| Product component / semi-conductor output                         |    | No           |
| Product extension / optional / remote control                     |    | No           |
| Product extension / strictly required / remote control            |    | No           |
| Installation altitude / at a height over sea level / maximum      | m  | 2,000        |
| Ambient temperature   |    |              |
| during storage  | °C | -40 85       |

| during operating  | °C | -25 60  |
|---|----|---|
| during transport  | °C | -40 85  |
| Relative humidity   |    |   |
| during operating phase  | %  | 15 70   |
| Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4                       |    | 2 kV network connection / 1 kV control connection |
| Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5       |    | 2 kV  |
| Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5   |    | 1 kV  |
| Electrostatic discharge / according to IEC 61000-4-2  |    | 4 kV contact discharge / 8 kV air discharge       |
| Field-bound parasitic coupling / according to IEC 61000-4-3                                 |    | 10 V/m  |
| Resistance against vibration  |    | 10 55 Hz / 0.35 mm                                |
| Impulse voltage resistance / rated value  | V  | 4,000   |
| Insulation voltage / rated value  | V  | 300   |
| Active power loss / total / typical   | W  | 2   |
| Item designation / according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 |    | К   |
| Item designation / according to DIN EN 61346-2  |    | К   |
| Category / according to EN 954-1  |    | none  |
| Protection against electrical shock   |    | finger-safe                                       |

| Switching Function:                                       |     |
|---|-----|
| Switching function  |     |
| slow-operating  | Yes |
| making pulse contact                                      | No  |
| firmly clocked beginning with pulse                       | No  |
| firmly clocked beginning with pause                       | Yes |
| relapse delayed   | Yes |
| variably clocked start with impulse                       | No  |
| impuls variably clocked start with pause                  | No  |
| with auxiliary voltage                                    |     |
| <ul> <li>in an additive way slow-operating</li> </ul>     | Yes |
| temporary line fault                                      | Yes |
| relapse delayed   | Yes |
| without auxiliary voltage / relapse delayed               | No  |
| slow-operating/instantaneous contact                      | Yes |
| with auxiliary voltage                                    |     |
| relapse delayed/instantaneous contact                     | Yes |
| slow-operating/relapse delayed/instantaneous contact      | Yes |
| firmly clocked beginning with pause/instantaneous contact | Yes |

| making pulse contact/instantaneous contact   | Yes |
|--|-----|
| with auxiliary voltage                       |     |
| • temporary line fault/instantaneous contact | Yes |
| • pulse modelling/instantaneous contact      | Yes |
| slow-operating/instantaneous contact         | Yes |

| General details:                                   |    |          |
|--|----|----------|
| Type of voltage / of the controlled supply voltage |    | AC/DC    |
| Control supply voltage frequency                   |    |          |
| •1   | Hz | 50 60    |
| Control supply voltage                             |    |          |
| •1   |    |          |
| • at 50 Hz / for AC / rated value                  | V  | 24       |
| • at 60 Hz / for AC / rated value                  | V  | 24       |
| for DC / rated value                               | V  | 24       |
| • 2  |    |          |
| • at 50 Hz   |    |          |
| • for AC   | V  | 200 240  |
| • at 60 Hz   |    |          |
| • for AC   | V  | 200 240  |
| Working range factor supply voltage rated value    |    |          |
| • at 50 Hz   |    |          |
| • for AC   |    | 0.85 1.1 |
| • at 60 Hz   |    |          |
| • for AC   |    | 0.85 1.1 |
| • for DC   |    | 0.85 1.1 |

#### Auxiliary circuit: Operating current / of auxiliary contacts • as normally closed contact / for AC-15 • at 24 V 3 Α • at 250 V 3 Α • as normally open contact / for AC-15 • at 24 V 3 Α • at 250 V 3 Α • at AC-15 • maximum 3 Α • at DC-13 • at 24 V Α 1 • at 125 V Α 0.2 • at 250 V 0.1

| Number of NC contacts / delayed switching          | 0 |
|--|---|
| Number of NC contacts / non-delayed                | 0 |
| Number of NO contacts / delayed switching          | 0 |
| Number of NO contacts / non-delayed                | 0 |
| Number of change-over switches / delayed switching | 2 |
| Number of change-over switches / non-delayed       | 0 |
|  |   |

| Short-circuit:  |  |  |
|---|--|--|
| Design of the fuse link / for short-circuit protection of the auxiliary switch / required | fuse gL/gG: 4 A  |  |
| Type of mounting  | screw and snap-on mounting onto 35 mm standard mounting rail |  |

| Installation/mounting/dimensions:                 |    |      |
|---|----|------|
| Width   | mm | 22.5 |
| Height  | mm | 102  |
| Depth   | mm | 91   |
| Distance, to be maintained, to the ranks assembly |    |      |
| • upwards   | mm | 0    |
| • forwards  | mm | 0    |
| • sidewards                                       | mm | 0    |
| backwards   | mm | 0    |
| • downwards                                       | mm | 0    |
| Distance, to be maintained, to earthed part       |    |      |
| backwards   | mm | 0    |
| • sidewards                                       | mm | 0    |
| • upwards   | mm | 0    |
| • forwards  | mm | 0    |
| • downwards                                       | mm | 0    |
| Distance, to be maintained, conductive elements   |    |      |
| • downwards                                       | mm | 0    |
| backwards   | mm | 0    |
| • sidewards                                       | mm | 0    |
| • forwards  | mm | 0    |
| • upwards   | mm | 0    |

| Connections:                              |                      |  |
|---|----------------------|--|
| Design of the snap-on socket base         | none                 |  |
| Design of the electrical connection       |                      |  |
| • jumper socket                           | No                   |  |
| for auxiliary and control current circuit | screw-type terminals |  |

| Type of the connectable conductor cross-section / for auxiliary contacts / solid   |     | 0.5 4 mm2, 2x (0.5 2.5 mm2)   |
|--|-----|-------------------------------|
| Conductor cross section that can be connected / for auxiliary contacts / solid   |     |                               |
| • minimum  | mm² | 0.5                           |
| • maximum  | mm² | 4                             |
| Type of the connectable conductor cross-section / for auxiliary contacts / finely stranded / with conductor end processing |     | 0.5 2.5 mm2, 2x (0.5 1.5 mm2) |
| Conductor cross-section that can be connected / for auxiliary contact / stranded wire / with conductor end processing      |     |                               |
| • minimum  | mm² | 0.5                           |
| • maximum  | mm² | 2.5                           |
| Type of the connectable conductor cross-section / for AWG conductors / for auxiliary contacts                              |     | 2x (20 14)                    |
| AWG number / as coded connectable conductor cross-section / for auxiliary contact  |     |                               |
| • minimum  |     | 20                            |
| • maximum  |     | 14                            |
|  |     |                               |

# Certificates/approvals:

Verification of suitability CE / UL / CSA

#### General Product Approval Test Certificates

CQC



**ROSTEST** 



Manufacturer

#### **Shipping Approval**









PRS



### **Shipping Approval**





Manufacturer

other

## **Further information:**

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

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

#### Industry Mall (Online ordering system)

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

#### CAx-Online-Generator

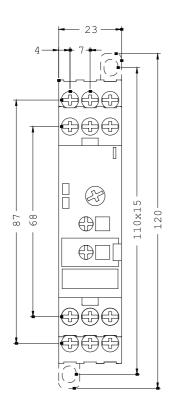
http://www.siemens.com/cax

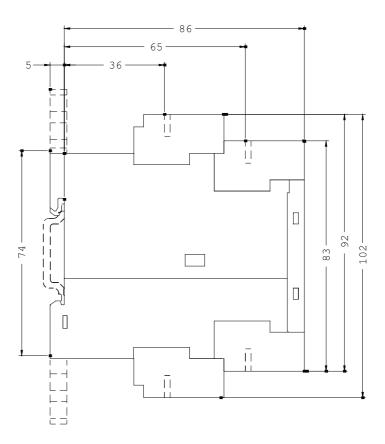
#### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RP1505-1BP30/all

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RP1505-1BP30}$ 





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