# **SIEMENS**

**Data sheet** 3RP1513-1AQ30



Timing relay, electronic Phased-out product !!! For further information, please contact our sales department ansprechverzögert 1 change-over contact, 1 time range 5 s...100 s 24 AC, 100...127 V and 24 V DC at 50/60 Hz AC with LED, Screw terminal

product brand name product designation product type designation SIRIUS timing relay 3RP15

## General technical data product component

| <ul><li>relay output</li></ul>            |  |
|---|--|
| <ul> <li>semi-conductor output</li> </ul> |  |

product extension optional remote control power loss [W] maximum

product extension required remote control

insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value

test voltage for isolation test

degree of pollution

surge voltage resistance rated value

protection class IP

shock resistance according to IEC 60068-2-27 vibration resistance according to IEC 60068-2-6 mechanical service life (operating cycles) typical electrical endurance (operating cycles) at AC-15 at

230 V typical

adjustable time

relative setting accuracy relating to full-scale value

thermal current recovery time

reference code according to IEC 81346-2

relative repeat accuracy

influence of the surrounding temperature

power supply influence **Substance Prohibitance (Date)** 

Yes

No

No

No

2 W

300 V

2 kV

3

4 000 V

IP20

11g / 15 ms

10 ... 55 Hz / 0.35 mm

10 000 000

100 000

5 ... 100 s

5 A 150 ms

Κ

1 %

±5 %

±1 %

05/28/2009

## Control circuit/ Control

### type of voltage of the control supply voltage control supply voltage 1 at AC

• at 50 Hz rated value

• at 60 Hz rated value

#### control supply voltage 2 at AC

• at 50 Hz at 60 Hz

control supply voltage frequency 1

control supply voltage 1

• at DC rated value

operating range factor control supply voltage rated

AC/DC

24 V

24 V

100 ... 127 V 100 ... 127 V

50 ... 60 Hz

24 V

| value at DC  |                 |
|--|-----------------|
| • initial value  | 0.85            |
| • full-scale value   | 1.1             |
| operating range factor control supply voltage rated value at AC at 50 Hz                       |                 |
| • initial value  | 0.85            |
| • full-scale value   | 1.1             |
| operating range factor control supply voltage rated value at AC at 60 Hz                       |                 |
| • initial value  | 0.85            |
| full-scale value   | 1.1             |
| Switching Function   |                 |
| switching function   | V               |
| ON-delay     ON delay/instantaneous centact  | Yes             |
| ON-delay/instantaneous contact     passing make contact  | No<br>No        |
| passing make contact     passing make contact/instantaneous contact                            | No              |
| <ul><li>passing make contact/instantaneous contact</li><li>OFF delay</li></ul>                 | No              |
| switching function   | INU             |
| flashing symmetrically with interval   | No              |
| start/instantaneous  |                 |
| <ul> <li>flashing symmetrically with interval start</li> </ul>                                 | No              |
| <ul> <li>flashing symmetrically with pulse<br/>start/instantaneous</li> </ul>                  | No              |
| <ul> <li>flashing symmetrically with pulse start</li> </ul>                                    | No              |
| <ul> <li>flashing asymmetrically with interval start</li> </ul>                                | No              |
| <ul> <li>flashing asymmetrically with pulse start</li> </ul>                                   | No              |
| switching function   |                 |
| star-delta circuit with delay time   | No              |
| star-delta circuit     witching function with control circuit.                                 | No              |
| switching function with control signal   | No              |
| <ul><li>additive ON-delay</li><li>passing break contact</li></ul>                              | No              |
| passing break contact/     passing break contact/instantaneous                                 | No              |
| OFF delay  | No              |
| OFF delay/instantaneous  | No              |
| • pulse delayed  | No              |
| <ul><li>pulse delayed/instantaneous</li></ul>  | No              |
| • pulse-shaping  | No              |
| <ul><li>pulse-shaping/instantaneous</li></ul>  | No              |
| <ul> <li>additive ON-delay/instantaneous</li> </ul>  | No              |
| <ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>   | No              |
| <ul> <li>passing make contact</li> </ul>   | No              |
| <ul> <li>passing make contact/instantaneous contact</li> </ul>                                 | No              |
| switching function of interval relay with control signal                                       |                 |
| retrotriggerable with deactivated control<br>signal/instantaneous contact                      | No              |
| retrotriggerable with switched-on control signal   | No              |
| <ul> <li>retrotriggerable with switched-on control<br/>signal/instantaneous contact</li> </ul> | No              |
| retriggerable with deactivated control signal  | No              |
| Short-circuit protection   |                 |
| design of the fuse link for short-circuit protection of the                                    | fuse gL/gG: 4 A |
| auxiliary switch required  | 1030 gDgO. 474  |
| Auxiliary circuit  | 1.0.00          |
| material of switching contacts   | AgSnO2          |
| number of NC contacts  | 0               |
| delayed switching     instantaneous contact  | 0               |
| number of NO contacts  |                 |
| delayed switching  | 0               |
| instantaneous contact  | 0               |
| number of CO contacts  |                 |
| delayed switching  | 1               |
|  |                 |

| <ul> <li>instantaneous contact</li> </ul>   | 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  |
| Inputs/ Outputs   |  |
| product function  |  |
| non-volatile  | No   |
| Electromagnetic compatibility   |  |
| EMC emitted interference according to IEC 61812-1   | EN 61000-6-4(3)  |
| EMC immunity according to IEC 61812-1   | EN 61000-6-2   |
| conducted interference  | LIT 0 : 500 0 E  |
| due to burst according to IEC 61000-4-4   | 2 kV network connection / 1 kV control connection  |
| due to builst according to IEC 6 1000-4-4      due to conductor-earth surge according to IEC  | 2 kV   |
| 61000-4-5   | LIV  |
| due to conductor-conductor surge according to IEC   | 1 kV   |
| 61000-4-5   |  |
| 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   |  |
| protection class IP on the front according to IEC   | IP20   |
| 60529   |  |
| type of insulation  | Basic insulation   |
| category according to EN 954-1  | none   |
| Connections/ Terminals  |  |
|   |  |
|   | Yes  |
| product component removable terminal for auxiliary and control circuit  | Yes  |
| product component removable terminal for auxiliary  | Yes screw-type terminals   |
| product component removable terminal for auxiliary and control circuit  |  |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit  |  |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections • solid   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded  | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • at AWG cables solid  • at AWG cables stranded connectable conductor cross-section   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid  | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14)  2x (20 14)  0.5 4 mm²  |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • at AWG cables solid  • at AWG cables stranded connectable conductor cross-section  • solid  • finely stranded with core end processing  AWG number as coded connectable conductor cross   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m  |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m  |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm   |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm                                     |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm                                     |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm                                     |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²  20 14  20 14  0.8 1.2 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  83 mm  22.5 mm  91 mm                          |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)  1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)  2x (20 14)  2x (20 14)  0.5 4 mm²  0.5 2.5 mm²  20 14  20 14  0.8 1.2 N·m  M3  any  screw and snap-on mounting onto 35 mm DIN rail  83 mm  22.5 mm  91 mm                          |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections  • solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid • stranded tightening torque design of the thread of the connection screw  Installation/ mounting/ dimensions  mounting position fastening method height width depth required spacing • with side-by-side mounting — forwards — backwards | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm 91 mm  0 mm 0 mm 0 mm                     |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm 91 mm  0 mm 0 mm 0 mm 0 mm                |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm 91 mm  0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm |
| product component removable terminal for auxiliary and control circuit type of electrical connection for auxiliary and control circuit type of connectable conductor cross-sections   | screw-type terminals  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 2x (20 14) 2x (20 14)  0.5 4 mm² 0.5 2.5 mm²  20 14 20 14 0.8 1.2 N·m M3  any screw and snap-on mounting onto 35 mm DIN rail 83 mm 22.5 mm 91 mm  0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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                                     |            |
| <ul> <li>during operation</li> </ul>                    | -25 +60 °C |
| <ul> <li>during storage</li> </ul>                      | -40 +85 °C |
| <ul> <li>during transport</li> </ul>                    | -40 +85 °C |
| relative humidity during operation                      | 10 95 %    |
| Certificates/ approvals                                 |            |



Confirmation









**EMC** 

**Declaration of Conformity** 

**General Product Approval** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other

Railway





Confirmation

Miscellaneous

Special Test Certific-<u>ate</u>

## **Further information**

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=3RP1513-1AQ30

Cax online generator

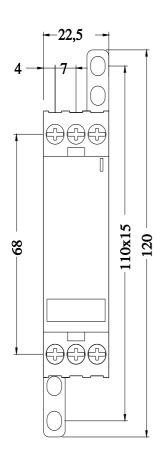
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RP1513-1AQ30

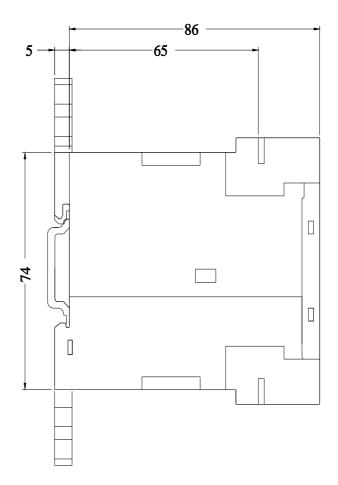
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RP1513-1AQ30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP1513-1AQ30&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RP1513-1AQ30/manual





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