SIEMENS

Data sheet 7PV1578-1BW30



Timing relay, electronic with star-delta (wye-delta) function 2 NO 7 time ranges 0.05 s...100 h 12-240 V AC/DC Screw terminal

| product brand name | SIRIUS | | | |
|---|---|--|--|--|
| product designation | timing relay | | | |
| design of the product | Star-delta (wye-delta) function | | | |
| product type designation | 7PV15 | | | |
| General technical data | | | | |
| product component 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 | 2.2 kV | | | |
| degree of pollution | 2 | | | |
| surge voltage resistance rated value | 4 000 V | | | |
| test voltage for surge voltage test | 4 800 V | | | |
| protection class IP | IP20 | | | |
| shock resistance according to IEC 60068-2-27 | 11g / 15 ms | | | |
| vibration resistance according to IEC 60068-2-6 | 10 55 Hz: 0.35 mm | | | |
| mechanical service life (operating cycles) typical | 10 000 000 | | | |
| electrical endurance (operating 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 %; +/- | | | |
| minimum ON period | 35 ms | | | |
| recovery time | 500 ms | | | |
| reference code according to IEC 81346-2 | К | | | |
| relative repeat accuracy | 2 %; +/- | | | |
| influence of the surrounding temperature | 2% in complete temperature range for the set duration | | | |
| power supply influence | 2% in complete voltage range for the set duration | | | |
| Substance Prohibitance (Date) | 05/01/2012 | | | |
| Control circuit/ Control | | | | |
| type of voltage of the control supply voltage | AC/DC | | | |
| control supply voltage 1 at AC | | | | |
| • at 50 Hz | 12 240 V | | | |
| • at 60 Hz | 12 240 V | | | |
| control supply voltage frequency 1 | 50 60 Hz | | | |
| control supply voltage 1 | | | | |
| • at DC | 12 240 V | | | |
| operating range factor control supply voltage rated 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 | |
| ON-delay | No |
| ON-delay/instantaneous contact | No |
| passing make contact | No |
| passing make contact/instantaneous contact | No |
| OFF delay | No |
| switching function | |
| flashing symmetrically with interval start/instantaneous | No |
| flashing symmetrically with interval start | No |
| • flashing symmetrically with pulse start/instantaneous | No |
| flashing symmetrically with pulse start | No |
| flashing asymmetrically with interval start | No |
| flashing asymmetrically with pulse start | No |
| switching function | |
| star-delta circuit with delay time | No |
| star-delta circuit | Yes |
| switching function with control signal | |
| additive ON-delay | No |
| passing break contact | No |
| passing break contact/instantaneous | No |
| OFF delay | No |
| OFF delay/instantaneous | No |
| pulse delayed | No |
| pulse delayed/instantaneous | No |
| pulse-shaping | No |
| pulse-shaping/instantaneous | No |
| additive ON-delay/instantaneous | No |
| ON-delay/OFF-delay | 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 switched-on control signal | No |
| retrotriggerable with switched-on control signal/instantaneous contact | No |
| retriggerable with deactivated control signal | No |
| design of the control terminal non-floating | No |
| 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 |
| • instantaneous contact | 0 |
| number of NO contacts | |
| delayed switching | 2 |
| • instantaneous contact | 0 |
| number of CO contacts | |
| delayed switching | 0 |
| • instantaneous contact | 0 |
| | |

| operational current of auxiliary contacts at AC-15 | | | |
|--|---|--|--|
| • maximum | 3 A | | |
| • at 24 V | 3 A | | |
| • at 250 V | 3 A | | |
| operational current of auxiliary contacts as NC contact at AC-15 | | | |
| • at 24 V | 3 A | | |
| ● at 250 V | 3 A | | |
| operational current of auxiliary contacts as NO contact at AC-15 | | | |
| • at 24 V | 3 A | | |
| • at 250 V | 3 A | | |
| operational current of auxiliary contacts at DC-13 | 1 0.01 | | |
| operational current of auxiliary contacts at DC-13 | | | |
| • at 24 V | 1 A | | |
| ● at 125 V | 0.22 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 | R150 / B300 | | |
| switching capacity current with inductive load | 0.01 3 A | | |
| Inputs/ Outputs | | | |
| product function | | | |
| at the relay outputs switchover delayed/without delay | No | | |
| non-volatile | No | | |
| Electromagnetic compatibility | | | |
| EMC immunity according to IEC 61812-1 | EN 61000-6-2 | | |
| conducted interference | | | |
| due to burst according to IEC 61000-4-4 | 2 kV network connection / 1 kV control connection | | |
| due to conductor-earth surge according to IEC 61000-4-5 | 2 kV | | |
| | | | |
| due to conductor-conductor surge according to IEC | 1 kV | | |
| due to conductor-conductor surge according to IEC 61000-4-5 | 1 kV | | |
| | 1 kV 10 V/m | | |
| 61000-4-5 | | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 | 10 V/m | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 | 10 V/m | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data | 10 V/m 4 kV contact discharge / 8 kV air discharge | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation none | | |
| 61000-4-5 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation category according to EN 954-1 Connections/ Terminals product component removable terminal for auxiliary and control circuit | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation none No | | |
| field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation category according to EN 954-1 Connections/ 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 | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation none No screw-type terminals 1x (0.2 2.5 mm²) | | |
| field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation category according to EN 954-1 Connections/ 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 • finely stranded with core end processing | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation none No screw-type terminals 1x (0.2 2.5 mm²) 1x (0.25 1.5 mm²) | | |
| field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 Safety related data type of insulation category according to EN 954-1 Connections/ 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 | 10 V/m 4 kV contact discharge / 8 kV air discharge Basic insulation none No screw-type terminals 1x (0.2 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.2 1.5 mm²) | | |
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| 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 | | | | |
| ambient temperature | | | | | |
| during operation | -25 +55 °C | | | | |
| during storage | -40 +70 °C | | | | |
| during transport | -40 +70 °C | | | | |
| relative humidity during operation | 15 85 % | | | | |
| Certificates/ approvals | | | | | |
| General Product Approval | | EMC | Declaration of Conformity | | |

Confirmation











Declaration of Conformity

Test Certificates other Environment



Type Test Certificates/Test Report

Confirmation

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=7PV1578-1BW30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=7PV1578-1BW30

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

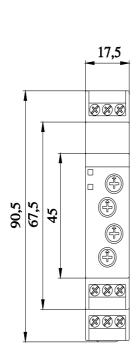
https://support.industry.siemens.com/cs/ww/en/ps/7PV1578-1BW30

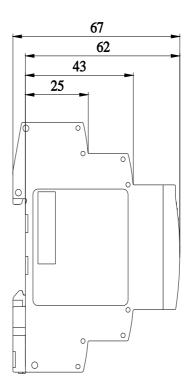
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=7PV1578-1BW30\&lang=en}}$

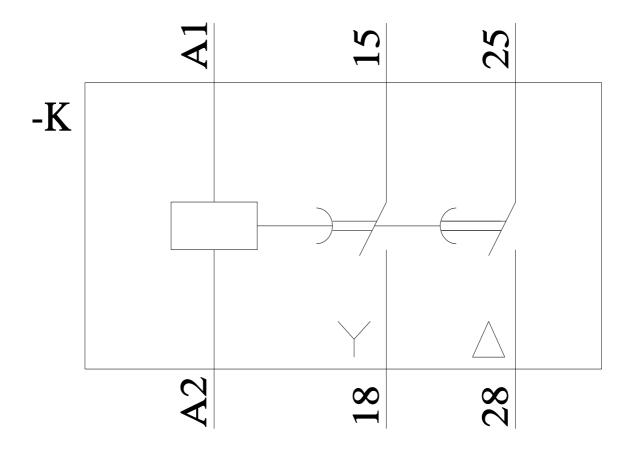
Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/7PV1578-1BW30/manual





Alle Bemassungswerte sind in Millimeter (mm) angegeben All dimensions are in millimeters (mm)



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