SIEMENS

## Product data sheet 3RP1576-2NM20

TIME RELAY, SOLID-STATE,
WITH STAR-DELTA FUNCTION,
1 NO CONTACT DELAYED,
1 NO CONTACT DELAYED 1 TIME DOMAIN 3...60 S
200...240V AC AND 380...440V AC SPRING TERMINAL

| 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 |
| **mounting position** | | any |
| **Supply voltage frequency** | | |
| • 1 / for auxiliary and control current circuit | | |
| • initial rated value | Hz | 50 |
| • final rated value | Hz | 60 |
| **Product function** | | |
| • star-delta circuit | | Yes |
| • with auxiliary voltage / pulse-shaping | | No |
| • at the relay outputs / changeover delayed/without delay | | No |
| **Product component / semi-conductor output** | | Yes |
| **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 |


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| | | |
|---|---|---|
| **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** | | K |
| **Item designation / according to DIN EN 61346-2** | | K |
| **Category / according to EN 954-1** | | none |
| **Protection against electrical shock** | | finger-safe |

## Switching Function:

| | | |
|---|---|---|
| **Switching function** | | |
| • slow-operating | | No |
| • making pulse contact | | No |
| • firmly clocked beginning with pulse | | No |
| • firmly clocked beginning with pause | | No |
| • relapse delayed | | No |
| • variably clocked start with impulse | | No |
| • impuls variably clocked start with pause | | No |
| • with auxiliary voltage | | |
| • in an additive way slow-operating | | No |
| • temporary line fault | | No |
| • relapse delayed | | No |
| • without auxiliary voltage / relapse delayed | | No |
| • slow-operating/instantaneous contact | | No |
| • with auxiliary voltage | | |
| • relapse delayed/instantaneous contact | | No |
| • slow-operating/relapse delayed/instantaneous contact | | No |
| • firmly clocked beginning with pause/instantaneous contact | | No |
| • making pulse contact/instantaneous contact | | No |
| • with auxiliary voltage | | |
| • temporary line fault/instantaneous contact | | No |
| • pulse modelling/instantaneous contact | | No |
| • slow-operating/instantaneous contact | | No |

## General details:

| | | |
|---|---|---|
| **Type of voltage / of the controlled supply voltage** | | AC |
| **Control supply voltage frequency** | | |
| • 1 | Hz | 50 … 60 |
| **Control supply voltage** | | |


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| | | |
|---|---|---|
| • 1 | | |
| • at 50 Hz | | |
| • for AC | V | 200 … 240 |
| • at 60 Hz | | |
| • for AC | V | 200 … 240 |
| • 2 | | |
| • at 50 Hz | | |
| • for AC | V | 380 … 440 |
| • at 60 Hz | | |
| • for AC | V | 380 … 440 |
| **Operating range factor control 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 | A | 3 |
| • at 250 V | A | 3 |
| • as normally open contact / for AC-15 | | |
| • at 24 V | A | 3 |
| • at 250 V | A | 3 |
| • at AC-15 | | |
| • maximum | A | 3 |
| • at DC-13 | | |
| • at 24 V | A | 1 |
| • at 125 V | A | 0.2 |
| • at 250 V | A | 0.1 |
| **Number of NC contacts / delayed switching** | | 0 |
| **Number of NC contacts / non-delayed** | | 0 |
| **Number of NO contacts / delayed switching** | | 1 |
| **Number of NO contacts / non-delayed** | | 1 |
| **Number of change-over switches / delayed switching** | | 0 |
| **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 |


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| | | |
|---|---|---|
| **Type of mounting** | | screw and snap-on mounting onto 35 mm standard mounting rail |

| **Installation/mounting/dimensions:** | | |
|---|---|---|
| **Width** | mm | 22.5 |
| **Height** | mm | 84 |
| **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 | | spring-loaded terminals |
| **Type of the connectable conductor cross-section / for auxiliary contacts / solid** | | 2x (0.25 ... 1.5 mm²) |
| **Conductor cross-section that can be connected / for auxiliary contact / solid** | | |
| • minimum | mm² | 0.25 |
| • maximum | mm² | 1.5 |
| **Type of the connectable conductor cross-section / for auxiliary contacts / finely stranded / with conductor end processing** | | 2x (0.25 ... 1.5 mm²) |
| **Conductor cross-section that can be connected / for auxiliary contact / finely stranded / with conductor end processing** | | |
| • minimum | mm² | 0.25 |


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| | | |
|---|---|---|
| • maximum | mm² | 1.5 |
| **Type of the connectable conductor cross-section / for auxiliary contacts / finely stranded / without conductor final cutting** | | 2x (0.25 ... 1.5 mm²) |
| **Conductor cross-section that can be connected / for auxiliary contact / finely stranded / without conductor final cutting** | | |
| • minimum | mm² | 0.25 |
| • maximum | mm² | 1.5 |
| **Type of the connectable conductor cross-section / for AWG conductors / for auxiliary contacts** | | 2x (24 ... 16) |
| **AWG number / as coded connectable conductor cross-section / for auxiliary contact** | | |
| • minimum | | 24 |
| • maximum | | 16 |

## Certificates/approvals:

| | | |
|---|---|---|
| **Verification of suitability** | | CE / UL / CSA |

| **General Product Approval** | | | | **Declaration of Conformity** | **Test Certificates** |
|---|---|---|---|---|---|
| CCC | CSA | GOST | UL | EG-Konf. | Special Test Certificate |

**Shipping Approval**

| | | | | | |
|---|---|---|---|---|---|
| BUREAU VERITAS | DNV | GL | PRS | RINA | RMRS |

**other**

| | | |
|---|---|---|
| Confirmation | other | 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/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/3RP1576-2NM20/all

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RP1576-2NM20


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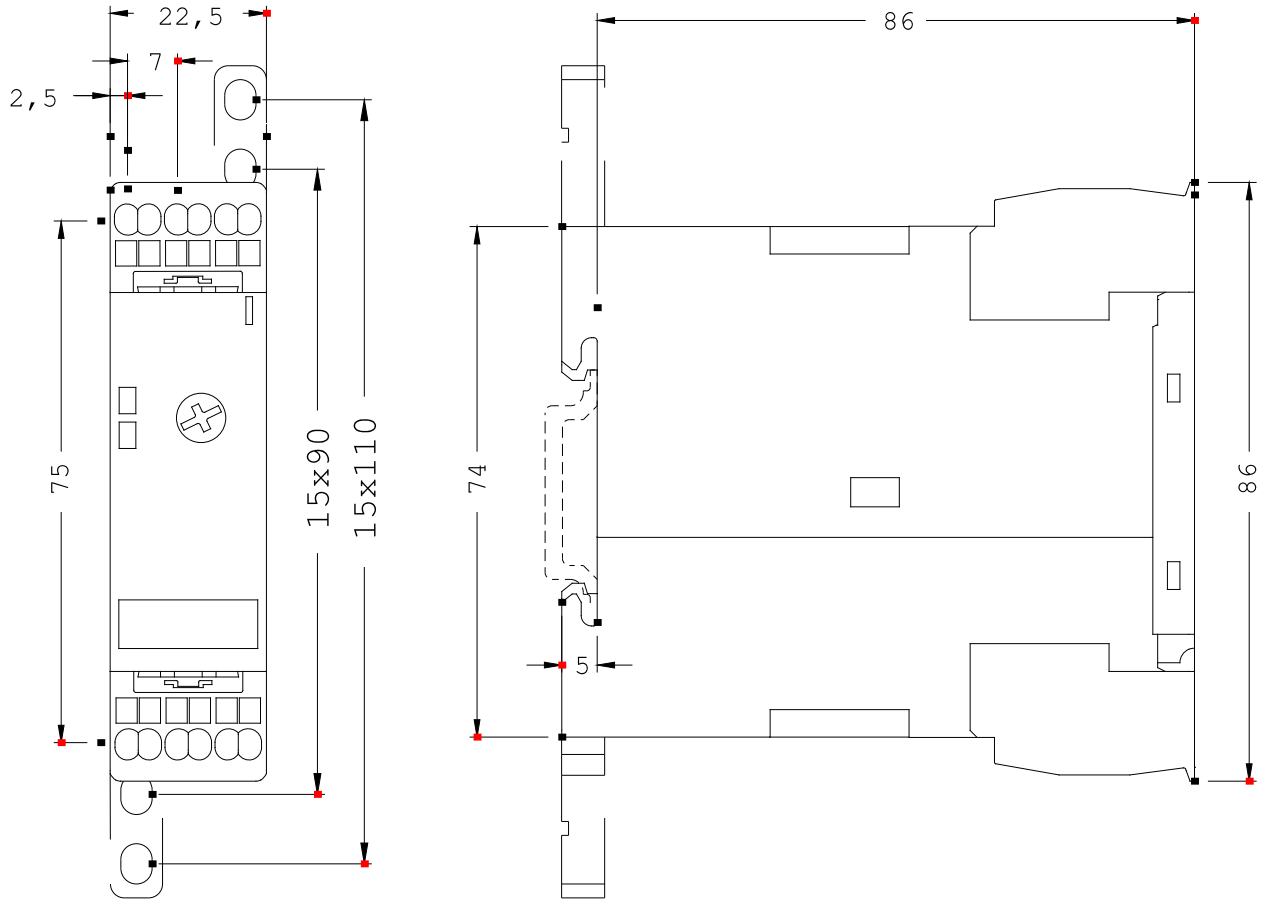


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