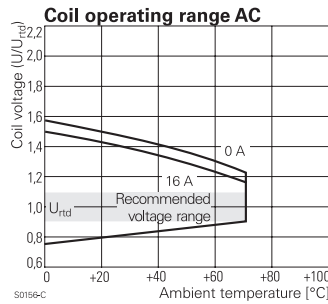
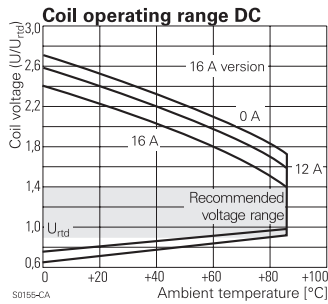


**Power PCB Relay RT1** (Continued)



Other coil voltages on request.

**Insulation Data**

|                                    |                      |
|------------------------------------|----------------------|
| Initial dielectric strength        |                      |
| between open contacts              | 1000V <sub>rms</sub> |
| between contact and coil           | 5000V <sub>rms</sub> |
| Clearance/creepage                 |                      |
| between contact and coil           | ≥10/10mm             |
| Material group of insulation parts | IIla                 |
| Tracking index of relay base       | PTI 250V             |
| reflow version                     | PTI 175V             |

**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

|                                                 |                                       |
|-------------------------------------------------|---------------------------------------|
| Resistance to heat and fire                     |                                       |
| WG version or Reflow version                    | according EN60335, par30              |
| Ambient temperature                             |                                       |
| DC coil                                         | -40 to 85°C                           |
| AC coil                                         | -40 to 70°C                           |
| Category of environmental protection, IEC 61810 |                                       |
| standard version                                | RTII - flux proof, RTIII - wash tight |
| reflow version                                  | RTII - flux proof                     |
| Vibration resistance (functional)               |                                       |

|                                    |        |
|------------------------------------|--------|
| form A/form B contact, 30 to 500Hz | 20g/5g |
| Shock resistance (destructive)     | 100g   |

**Other Data** (continued)

|                                       |                                                                   |
|---------------------------------------|-------------------------------------------------------------------|
| Terminal type                         |                                                                   |
| standard version                      | PCB-THT, plug-in                                                  |
| reflow version                        | PCB-THR                                                           |
| Mounting distance                     | AC coil: ≥2.5mm                                                   |
| Weight                                | 14g                                                               |
| Resistance to soldering heat          | THT, IEC 60068-2-20                                               |
| RTII                                  | 270°C/10s                                                         |
| RTIII                                 | 260°C/5s                                                          |
| Resistance to soldering heat          | THR                                                               |
| reflow soldering (for reflow version) | forced gas convection <sup>4)</sup> or vapour phase <sup>5)</sup> |
| temperature profile                   | according EN61730                                                 |
| Packaging/unit                        | tube/20 pcs., box/500 pcs.                                        |
| 4) infrared heating not allowed       |                                                                   |
| 5) recommended fluid LS/230           |                                                                   |

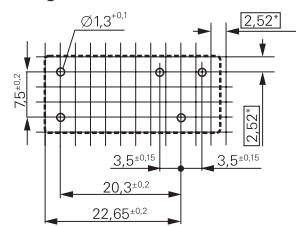
**Accessories**

For details see datasheet [Accessories Industrial Power Relay RT1](#)  
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

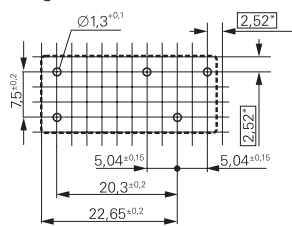
**PCB layout / terminal assignment**

Bottom view on solder pins

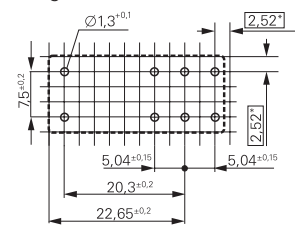
12A, pinning 3.5mm



12A, pinning 5mm

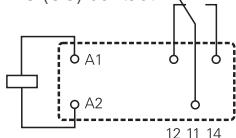


16A, pinning 5mm

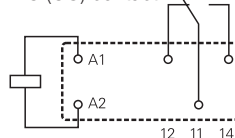


\*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

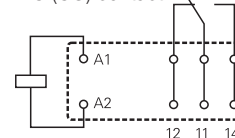
1 form C (CO) contact



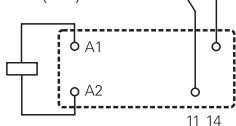
1 form C (CO) contact



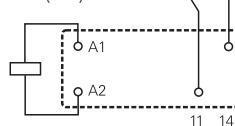
1 form C (CO) contact



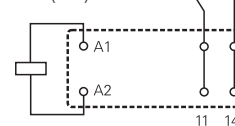
1 form A (NO) contact



1 form A (NO) contact

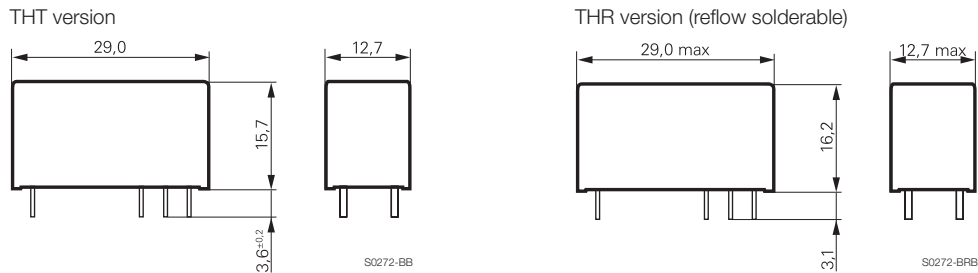


1 form A (NO) contact

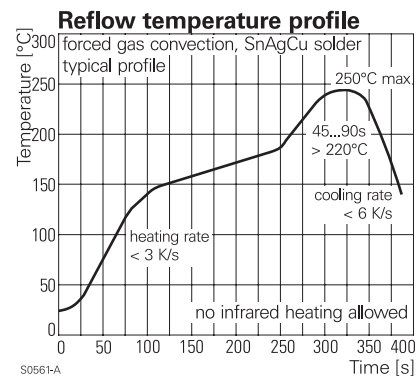
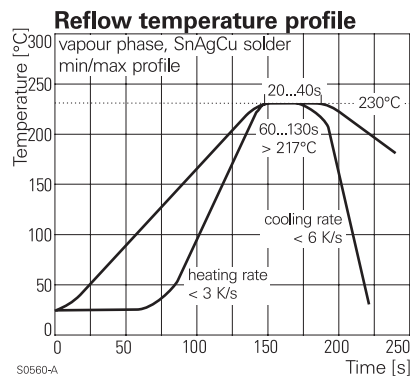


**Power PCB Relay RT1 (Continued)**

**Dimensions**



**Process conditions for Reflow soldering**  
according to EN61760-1



**Product code structure**

Typical product code

**RT 3 1 4 024**

**Type**

**RT** Power PCB Relay RT1

**Version**

- 1** 12A, pinning 3.5mm, flux proof
- 2** 12A, pinning 5mm, flux proof
- 3** 16A, pinning 5mm, flux proof
- B** 12A, pinning 3.5mm, wash tight
- C** 12A, pinning 5mm, wash tight
- D** 16A, pinning 5mm, wash tight

**Contact arrangement**

- 1** 1 form C (CO) contact
- 3** 1 form A (NO) contact

**Contact material**

- 4** AgNi 90/10
- 5** AgNi 90/10 gold plated (for type RT31.)

**Coil**

Coil code: please refer to coil versions table

**Version**

- Blank** Standard version
- WG** Product in accordance with IEC 60335-1 (domestic appliances)
- R** Reflow solderable

**Power PCB Relay RT1** (Continued)

| Product code | Version              | Contacts      | Contact material    | Coil   | Version              | Part number |
|--------------|----------------------|---------------|---------------------|--------|----------------------|-------------|
| RT114009     | 12A,                 | 1 form C (CO) | AgNi 90/10          | 9VDC   | Standard             | 1393239-9   |
| RT114012     | pinning 3.5mm,       | 1 form C (CO) |                     | 12VDC  |                      | 1419108-1   |
| RT114012WVG  | flux proof           | 1 form C (CO) |                     | 12VDC  | IEC60335-1 compliant | 7-1415538-6 |
| RT114024     |                      | 1 form C (CO) |                     | 24VDC  | Standard             | 1-1393239-3 |
| RT114024WVG  |                      | 1 form C (CO) |                     | 24VDC  | IEC60335-1 compliant | 1415539-4   |
| RT114730     |                      | 1 form C (CO) |                     | 230VAC | Standard             | 1-1393239-9 |
| RT115024     |                      | 1 form C (CO) | AgNi 90/10 gold pl. | 24VDC  |                      | 2-1393239-1 |
| RT134012     |                      | 1 form A (NO) | AgNi 90/10          | 12VDC  |                      | 2-1393239-6 |
| RT134024     |                      | 1 form A (NO) |                     | 24VDC  |                      | 3-1393239-0 |
| RT214012     | 12A,                 | 1 form C (CO) |                     | 12VDC  |                      | 5-1393239-4 |
| RT214024     | pinning 5mm,         | 1 form C (CO) |                     | 24VDC  |                      | 5-1393239-5 |
| RT214524     | flux proof           | 1 form C (CO) |                     | 24VAC  |                      | 5-1393239-9 |
| RT214730     |                      | 1 form C (CO) |                     | 230VAC |                      | 1419108-6   |
| RT314005     | 16A,                 | 1 form C (CO) |                     | 5VDC   |                      | 9-1393239-1 |
| RT314006     | pinning 5mm,         | 1 form C (CO) |                     | 6VDC   |                      | 9-1393239-3 |
| RT314009     | flux proof           | 1 form C (CO) |                     | 9VDC   |                      | 9-1393239-4 |
| RT314012     |                      | 1 form C (CO) |                     | 12VDC  |                      | 9-1393239-5 |
| RT314012R    |                      | 1 form C (CO) |                     | 12VDC  | Reflow solderable    | 4-1415543-6 |
| RT314012WVG  |                      | 1 form C (CO) |                     | 12VDC  | IEC60335-1 compliant | 8-1415535-6 |
| RT314018     |                      | 1 form C (CO) |                     | 18VDC  | Standard             | 9-1393239-7 |
| RT314024     |                      | 1 form C (CO) |                     | 24VDC  |                      | 9-1393239-8 |
| RT314024WVG  |                      | 1 form C (CO) |                     | 24VDC  | IEC60335-1 compliant | 1415538-7   |
| RT314048     |                      | 1 form C (CO) |                     | 48VDC  | Standard             | 1393240-1   |
| RT314060     |                      | 1 form C (CO) |                     | 60VDC  |                      | 1-1649328-7 |
| RT314110     |                      | 1 form C (CO) |                     | 110VDC |                      | 1393240-3   |
| RT314524     |                      | 1 form C (CO) |                     | 24VAC  |                      | 1393240-4   |
| RT314548     |                      | 1 form C (CO) |                     | 48VAC  |                      | 1393240-5   |
| RT314615     |                      | 1 form C (CO) |                     | 115VAC |                      | 1393240-6   |
| RT314730     |                      | 1 form C (CO) |                     | 230VAC |                      | 1393240-7   |
| RT314730WVG  |                      | 1 form C (CO) |                     | 230VAC | IEC60335-1 compliant | 4-1415538-0 |
| RT315024     |                      | 1 form C (CO) | AgNi 90/10 gold pl. | 24VDC  | Standard             | 1-1393240-4 |
| RT334009WVG  |                      | 1 form A (NO) | AgNi 90/10          | 9VDC   | IEC60335-1 compliant | 3-1415538-1 |
| RT334012     |                      | 1 form A (NO) |                     | 12VDC  | Standard             | 4-1393240-5 |
| RT334012WVG  |                      | 1 form A (NO) |                     | 12VDC  | IEC60335-1 compliant | 1-1415527-1 |
| RT334024     |                      | 1 form A (NO) |                     | 24VDC  | Standard             | 4-1393240-8 |
| RT334048     |                      | 1 form A (NO) |                     | 48VDC  |                      | 5-1393240-0 |
| RTB14005     | 12A,                 | 1 form C (CO) |                     | 5VDC   |                      | 1-1393238-2 |
| RTB14012     | pinning 3.5mm,       | 1 form C (CO) |                     | 12VDC  |                      | 1-1393238-5 |
| RTB14024     | wash tight           | 1 form C (CO) |                     | 24VDC  |                      | 1-1393238-9 |
| RTB14524     |                      | 1 form C (CO) |                     | 24VAC  |                      | 2-1393238-4 |
| RTB34012     |                      | 1 form A (NO) |                     | 12VDC  |                      | 3-1393238-0 |
| RTC14024     | 12A, 5mm, wash tight | 1 form C (CO) |                     | 24VDC  |                      | 5-1393238-0 |
| RTD14005     | 16A,                 | 1 form C (CO) |                     | 5VDC   |                      | 5-1393238-9 |
| RTD14012     | pinning 5mm,         | 1 form C (CO) |                     | 12VDC  |                      | 6-1393238-2 |
| RTD14024     | wash tight           | 1 form C (CO) |                     | 24VDC  |                      | 6-1393238-8 |
| RTD14048     |                      | 1 form C (CO) |                     | 48VDC  |                      | 6-1393238-9 |

This list represents the most common types and does not show all variants covered by this datasheet.  
Other types on request