

**Power PCB Relay RT1** (Continued)

**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	IIIa
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 RT](#)

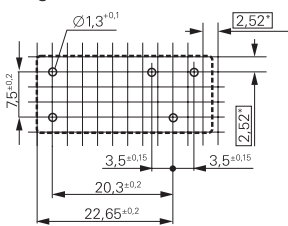
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

**PCB layout / terminal assignment**

Bottom view on solder pins

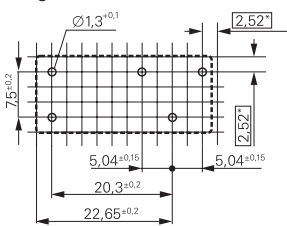
\*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

12A, pinning 3.5mm



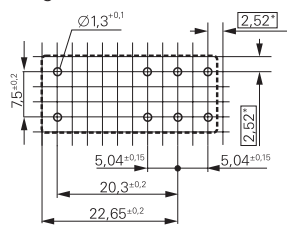
S0418-CB

12A, pinning 5mm



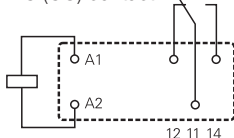
S0418-CN

16A, pinning 5mm



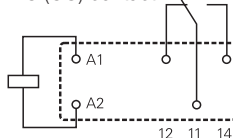
S0418-CA

1 form C (CO) contact



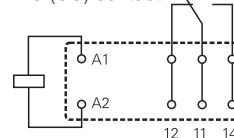
S0163-BG

1 form C (CO) contact



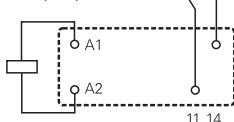
S0163-BC

1 form C (CO) contact



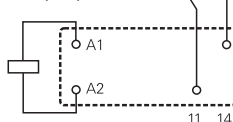
S0163-BE

1 form A (NO) contact



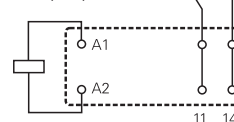
S0163-BH

1 form A (NO) contact



S0163-BD

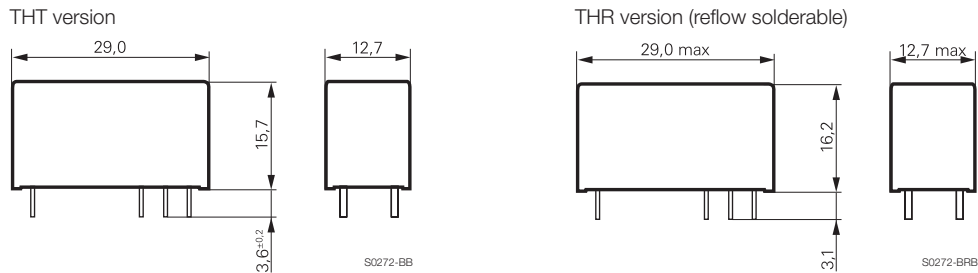
1 form A (NO) contact



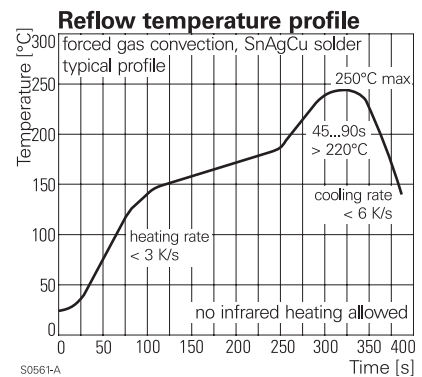
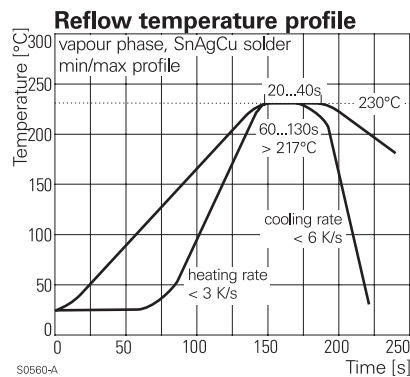
S0163-BF

**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
- 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

\*) Wash tight version on request

**Power PCB Relay RT1** (Continued)

Product code	Version	Contacts	Contact material	Coil	Version	Part number	
RT114009	12A, pinning 3.5mm, flux proof	1 form C (CO) contact	AgNi 90/10	9VDC	Standard	1393239-9	
RT114012				12VDC		1419108-1	
RT114012WG					IEC60335-1 compliant	7-1415538-6	
RT114024				24VDC	Standard	1-1393239-3	
RT114024WG					IEC60335-1 compliant	1415539-4	
RT114730				230VAC	Standard	1-1393239-9	
RT115024			AgNi 90/10 gold pl.	24VDC		2-1393239-1	
RT134012		1 form A (NO) contact	AgNi 90/10	12VDC		2-1393239-6	
RT134024				24VDC		3-1393239-0	
RT214012	12A, pinning 5mm, flux proof			1 form C (CO) contact	12VDC		5-1393239-4
RT214024					24VDC		5-1393239-5
RT214524		24VAC			5-1393239-9		
RT214730		230VAC			1419108-6		
RT314005	16A, pinning 5mm, flux proof			5VDC		9-1393239-1	
RT314006				6VDC		9-1393239-3	
RT314012				12VDC		9-1393239-5	
RT314012WG					IEC60335-1 compliant	8-1415535-6	
RT314024				24VDC	Standard	9-1393239-8	
RT314024WG					IEC60335-1 compliant	1415538-7	
RT314048				48VDC	Standard	1393240-1	
RT314730				230VAC		1393240-7	
RT315024			AgNi 90/10 gold pl.	24VDC		1-1393240-4	
RT334009WG		1 form A (NO) contact	AgNi 90/10	9VDC	IEC60335-1 compliant	3-1415538-1	
RT334012				12VDC	Standard	4-1393240-5	
RT334012WG					IEC60335-1 compliant	1-1415527-1	
RT334024					Standard	4-1393240-8	
RT334048				48VDC		5-1393240-0	
RTB14005	12A, pinning 3.5mm, wash tight	1 form C (CO) contact		5VDC		1-1393238-2	
RTB14012				12VDC		1-1393238-5	
RTB14024				24VDC		1-1393238-9	
RTB14524				24VAC		2-1393238-4	
RTD14005	16A, pinning 5mm, wash tight			5VDC		5-1393238-9	
RTD14012				12VDC		6-1393238-2	
RTD14024				24VDC		6-1393238-8	
RTD14048				48VAC		6-1393238-9	
RTD34012		1 form A (NO) contact		12VDC		3-1419108-5	
RTD34024				24VDC		3-1419108-8	

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