

Power PCB Relay RT1 (Continued)

Insulation Data

Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	5000V _{rms}
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

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 ⁴⁾ or vapour phase ⁵⁾
temperature profile	according EN61730
Packaging/unit	tube/20 pcs., box/500 pcs.
4) infrared heating not allowed	
5) recommended fluid LS/230	

Accessories

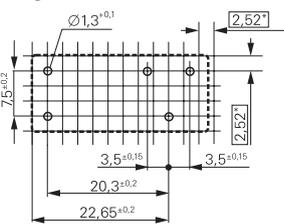
For details see datasheet [Accessories Industrial Power Relay RT](#)
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

PCB layout / terminal assignment

Bottom view on solder pins

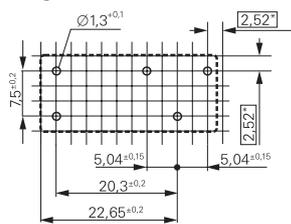
*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

12A, pinning 3.5mm



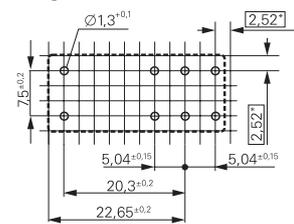
S0418-CB

12A, pinning 5mm



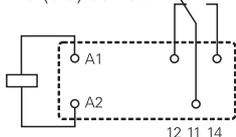
S0418-CN

16A, pinning 5mm



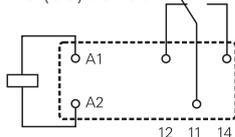
S0418-CA

1 form C (CO) contact



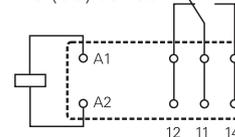
S0163-BG

1 form C (CO) contact



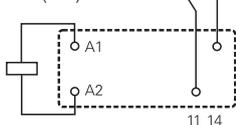
S0163-BC

1 form C (CO) contact



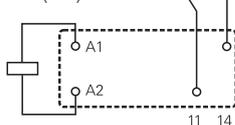
S0163-BE

1 form A (NO) contact



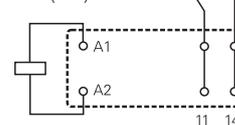
S0163-BH

1 form A (NO) contact



S0163-BD

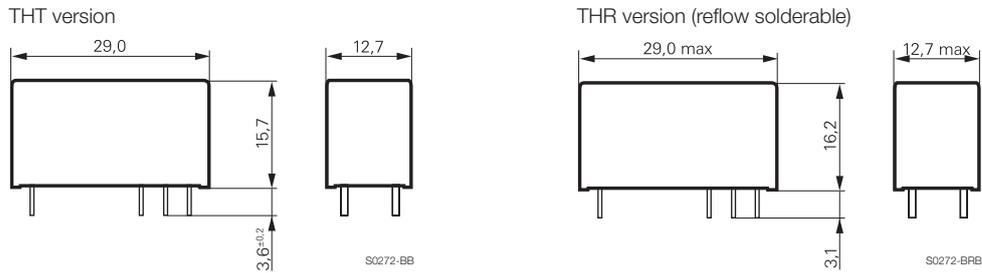
1 form A (NO) contact



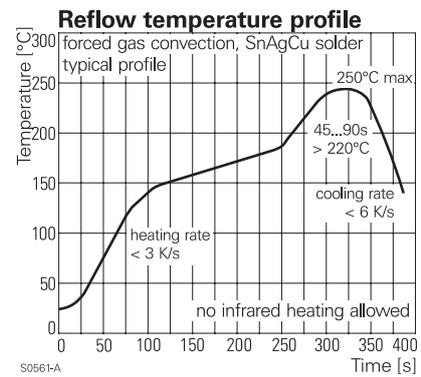
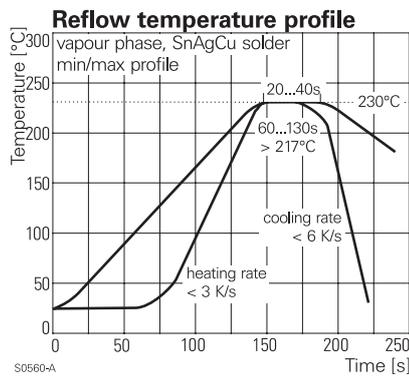
S0163-BF

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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 1 1 form C (CO) contact 3 1 form A (NO) contact
Contact material	<ul style="list-style-type: none"> 4 AgNi 90/10 5 AgNi 90/10 gold plated (for type RT31.)
Coil	Coil code: please refer to coil versions table
Version	<ul style="list-style-type: none"> 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				24VDC	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