

Power PCB Relay RT2 DC and AC (for global markets)

- 2 pole 8A, 2 form C (CO) or 2 form A (NO) contacts
- DC or AC coil
- 5kV/10mm coil-contact, reinforced insulation
- Ambient temperature up to 85°C
- WG version: product in accordance to IEC60335-1
- Reflow version: for THR (Through-Hole Reflow) soldering process



Typical applications

Boiler control, timers, garage door control, POS automation, interface modules.

Approvals

VDE Cert. No. 40007571, UL E214025, cCSAus 1142018

Technical data of approved types on request.

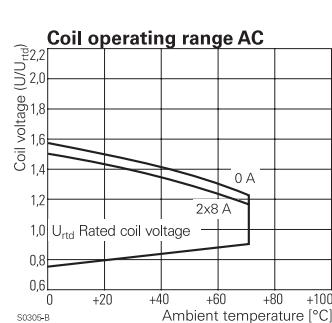
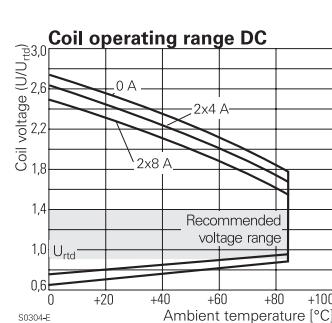
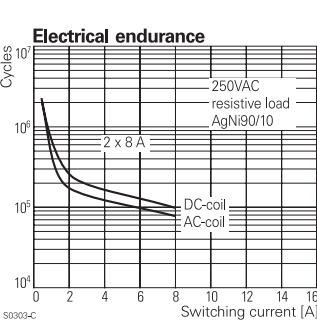
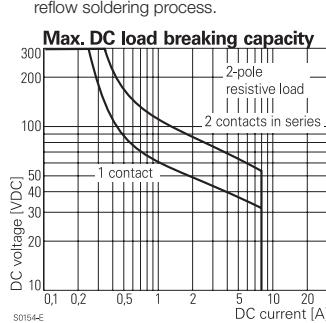
Contact Data

Contact arrangement	2 form C (CO) or 2 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A, UL: 10A
Limiting continuous current	8A, UL: 10A
Limiting making current, max. 4s, duty factor 10%	15A
Breaking capacity max.	2000VA
Contact material	AgNi 90/10, AgNi 90/10 gold plated, AgSnO ₂
Frequency of operation, with/without load	
DC coil	360/72000h ⁻¹
AC coil	360/36000h ⁻¹
Operate/release time max., DC coil	8/6ms
Bounce time max., DC coil, form A/form B	4/10ms
Electrical endurance	see electrical endurance graph ¹⁾

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
RT424 DC coil	C (CO)	8A, 250VAC, cosφ=1, 85°C	10x10 ³
RT444 AC coil	A (NO)	8A, 250VAC, cosφ=1, 70°C	50x10 ³
RT424 AC coil	C (CO)	8A, 250VAC, cosφ=1, 70°C	30x10 ³
UL 508			
RT424 DC coil	A/B (NO/NC)	10A, 250VAC, gen. purpose, 85°C	20x10 ³
RT424 DC coil	A/B (NO/NC)	1/2hp, 240VAC, 85°C	1x10 ³
RT424 DC coil	A/B (NO/NC)	Pilot duty, B300, R300, 85°C	6x10 ³
EN60947-5-1			
RTE24 DC coil	A/B (NO/NC)	AC15, 250VAC, 3A	6.050
RTE24 DC coil	A/B (NO/NC)	DC13, 24VDC, 2A	6.050
RTE24 DC coil	A/B (NO/NC)	DC13, 250VDC, 0.2A	6.050
EN60730-1			
RT424 DC coil	A/B (NO/NC)	6(2)A, 250VAC, 85°C	100x10 ³

1) For reflow solderable versions: actual contact performance may be influenced by the reflow soldering process.



Power PCB Relay RT2 DC and AC (for global markets) (Continued)
Insulation Data

Initial dielectric strength between open contacts	1000V _{rms}
between contact and coil	5000V _{rms}
between adjacent contacts	2500V _{rms}
Clearance/creepage between contact and coil	≥10/10mm
between adjacent contacts	≥3/4mm
Material group of insulation parts	IIIa
Tracking index of relay base reflow version	PTI 250V PTI 175V

Other Data (continued)

Terminal type reflow version	PCB-THT, plug-in PCB-THR
Mounting distance, AC coil	≥2.5mm
Weight	13g
Resistance to soldering heat THT, IEC 60068-2-20 RTII	THT, IEC 60068-2-20 270°C/10s
RTIII	260°C/5s
Resistance to soldering heat THR reflow soldering (for reflow version)	forced gas convection ⁴⁾ or vapour phase ⁵⁾ according EN61730
Packaging/unit	tube/20pcs., box/500pcs.

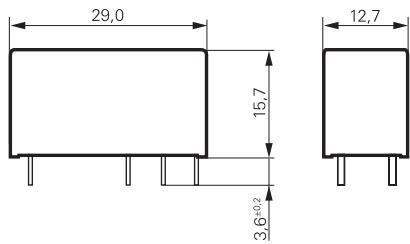
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

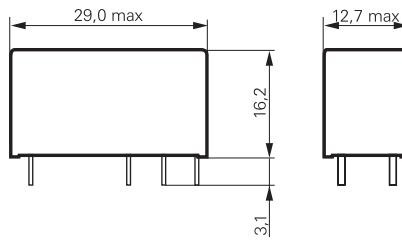
Resistance to heat and fire WG version or reflow version	according EN60335, par30
Ambient temperature	
DC coil	-40 to 85°C
AC coil	-40 to 70°C
AgSnO ₂ contacts	-40 to 70°C
Category of environmental protection, IEC 61810 standard version	RTII - flux proof, RTIII - wash tight
reflow version	RTII - flux proof
Vibration resistance (functional), form A/form B contact, 30 to 300Hz	20g/5g
Shock resistance (destructive)	100g

Dimensions

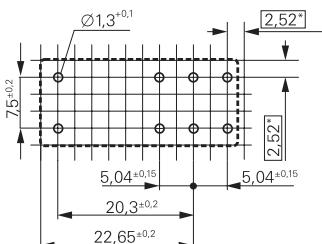
THT version



THR version (reflow solderable)


PCB layout / terminal assignment

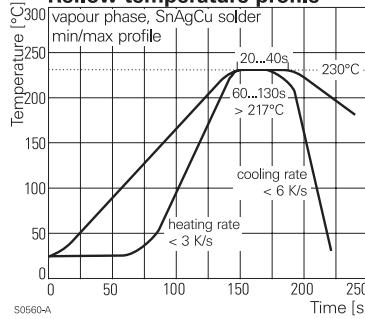
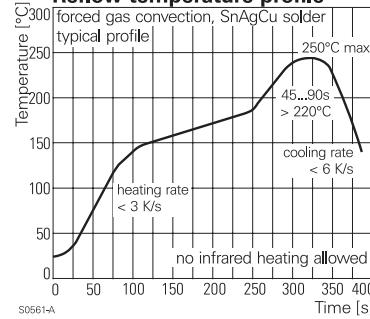
Bottom view on solder pins



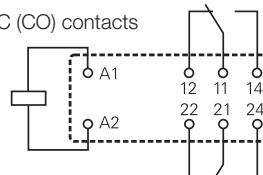
*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

Process conditions for Reflow soldering

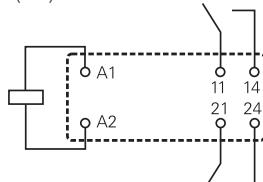
according to EN61760-1

Reflow temperature profile

Reflow temperature profile


2 form C (CO) contacts



2 form A (NO) contacts



Power PCB Relay RT2 DC and AC (for global markets) (Continued)

Product code structure

 Type
RT Power PCB Relay RT2

 Typical product code **RT** **4** **2** **4** **024**

Version

4 8A, pinning 5mm, flux proof
E 8A, pinning 5mm, wash tight (not for Reflow version)

Contact arrangement

2 2 form C (CO) contacts
4 2 form A (NO) contacts

Contact material

3 AgSnO
4 AgNi 90/10
5 AgNi 90/10 gold plated

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

Product code	Version	Contacts	Contact material	Coil	Version	Part number
RT423730	8A, pinning 5mm, flux proof	2 form C (CO) contacts	AgSnO	230VAC	Standard	4-1393243-3
RT424005			AgNi 90/10	5VDC		5-1393243-9
RT424006				6VDC		6-1393243-1
RT424012				12VDC		6-1393243-3
RT424012WG					IEC60335-1 compliant	7-1415538-8
RT424024				24VDC	Standard	6-1393243-8
RT424024WG					IEC60335-1 compliant	7-1415538-7
RT424048				48VDC	Standard	7-1393243-0
RT424060				60VDC		7-1393243-3
RT424110				110VDC		7-1393243-5
RT424524				24VAC		7-1393243-6
RT424615				115VAC		7-1393243-8
RT424730				230VAC		7-1393243-9
RT425003			AgNi 90/10 gold plated	3VDC		7-1415525-1
RT425005				5VDC		8-1393243-0
RT425012				12VDC		8-1393243-2
RT425024				24VDC		8-1393243-5
RT444012		2 form A (NO) contacts	AgNi 90/10	12VDC		9-1393243-7
RT444024				24VDC		9-1393243-9
RTE24005	8A, pinning 5mm, wash tight	2 form C (CO) contacts		5VDC		1393243-1
RTE24006				6VDC		1393243-2
RTE24012				12VDC		1393243-4
RTE24024				24VDC		1-1393243-0
RTE24048				48VDC		1-1393243-1
RTE24110				110VDC		1-1393243-4
RTE24524				24VAC		1-1393243-5
RTE24615				115VAC		1-1393243-7
RTE24730				230VAC		1-1393243-8
RTE25005			AgNi 90/10 gold plated	5VDC		1-1393243-9
RTE25012				12VDC		2-1393243-0
RTE25024				24VDC		2-1393243-1
RTE25524						2-1393243-4
RTE43009		2 form A (NO) contacts	AgSnO	9VDC		4-1415535-1
RTE44009			AgNi 90/10			3-1393243-1
RTE44730				230VAC		3-1393243-5

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

Other types on request.

Mouser Electronics

Authorized Distributor

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[TE Connectivity:](#)

[RTE44024](#)