

# Power PCB Relay RT2 DC and AC (for Asia/Pacific markets)

**Coil Data** 

Coil

005

006

009

012

024

048

060

110

code

Coil voltage range

Operative range, IEC 61810

Coil versions, DC coil

Coil insulation system according UL

Rated

voltage

**VDC** 

5

6

9

12

24

48

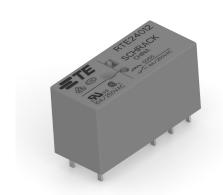
60

110

- 2 pole 8A, 2 form C (CO) or 2 form A (NO) contacts
- Sensitive coil 400mW
- 5kV/10mm coil-contact, reinforced insulation
- Ambient temperature 85°C
- WG version: product in accordance to IEC60335-1

Typical applications

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



Operate

voltage

VDČ

3.5

4.2

6.3

8.4

16.8

33.6

42.0

77.0



5 to 110VDC

2

class F

Coil

resistance

Ω±10%

62

90

200

360

1440

5520

8570 1)

28800 1)

Rated coil

power

mW

403

400

400

400

400

417

420

420

Release

voltage

**VDČ** 

0.5

0.6

0.9

1.2

2.4

4.8

6.0

11.0

## **Approvals**

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

CQC 20002275223, CQC 08001027262

Technical data of approved types on request.

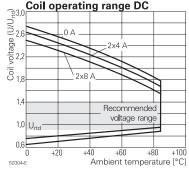
Contact Data	
Contact arrangement	2 form C (CO) or 2 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A, UL: 10A
Limiting continuous current	8A, UL: 10A
Limiting making current, max. 4s, duty	y factor 10% 15A
Breaking capacity max.	2000VA
Contact material	AgNi 90/10
Frequency of operation, with/without	load 360/72000h <sup>-1</sup>
Operate/release time max., DC coil	8/6ms
Bounce time max., DC coil, form A/fo	rm B 4/10ms

Contact ratings

Mechanical endurance

Contact rating	js		
Type	Contact	Load	Cycles
IEC 61810			
RT424 DC coil	C (CO)	8A, 250VAC, cosφ=1, 85°C	10x10 <sup>3</sup>
RT444 AC coil	A (NO)	8A, 250VAC, cosφ=1, 70°C	50x10 <sup>3</sup>
RT424 AC coil	C (CO)	8A, 250VAC, cosφ=1, 70°C	30x10 <sup>3</sup>
UL 508			
RT424 DC coil	A/B (NO/NC)	10A, 250VAC, gen. purpose, 85°C	20x10 <sup>3</sup>
RT424 DC coil	A/B (NO/NC)	1/2hp, 240VAC, 85°C	1x10 <sup>3</sup>
RT424 DC coil	A/B (NO/NC)	Pilot duty, B300, R300, 85°C	6x10 <sup>3</sup>
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 <sup>3</sup>

⊇2.6	_0 A
96	



1) Coil resistance ±12%. All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

1,0 O <sub>rtd</sub>	
0,6 0 +20 soso4-E	+40 +60 +80 +100 Ambient temperature [°C]
Insulation Data	
Insulation resistance	1000MΩ (at 500VDC)
Initial dielectric strength	
between open contacts	1000Vrms
between contact and coil	5000Vrms
between adjacent contacts	2500Vrms
Clearance/creepage	

11	/Iax. I	いし	10	au	Dreakii	ig cap	acity		LICC	uica	ii Cili	uuia	HUCE			
300		TV	П	Ш		TIIII		& 10 <sup>7</sup>								
200	+	$\forall$	ଐ	₩		_2-pole resistive	e load	S 107	_					250V		
100		Ν		$\setminus$	20	contacts	in series.	10 <sup>6</sup>	1					resist AgNis		ıd —
	+	Ħ		K					$\blacksquare$		2 x 8 /					
50 40 30		- 1 c	ont H	act ##					—/				-	H.,		
≥ 30	+	Ħ	Ħ	Ш		+		10 <sup>5</sup>				$\stackrel{\sim}{}$	DC-c			
voltage 20		Ħ	Ħ	Ш												
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0, 50154-E	,1 0,2		0,5		1 2		0 20 irrent [A]	S0303-C		۷ .	4 1	U				ent [A]

12-2020, Rev. 1220 www.te.com © 2014 Tyco Electronics Corporation, a TE Connectivity Ltd. company. Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

>30x10<sup>6</sup> operations

Catalog and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="http://relays.te.com/definitions">http://relays.te.com/definitions</a>

between contact and coil

Tracking index of relay base

between adjacent contacts

Material group of insulation parts

Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

≥ 10/10mm ≥ 3/4mm

Illa

PTI 250V



## Power PCB Relay RT2 DC and AC (for Asia/Pacific markets) (Continued)

#### **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 according EN60335, par30

Ambient temperature -40 to 85°C

Category of environmental protection

IEC 61810 RTII - flux proof, RTIII - wash tight

Vibration resistance (functional)

form A/form B contact, 30 to 300Hz 20g/5g

100g Shock resistance (destructive)

PCB-THT, plug-in Terminal type 13g

Weight Resistance to soldering heat THT, IEC 60068-2-20

RTII 270°C/10s 260°C/5s RTIII

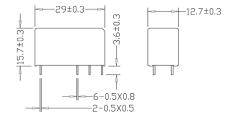
Packaging/unit tube/20pcs., box/500pcs

#### **Accessories**

Accessories Industrial Power Relay RT For details see datasheet

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.

#### **Outline Dimensions**

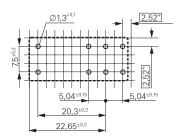


### Note:

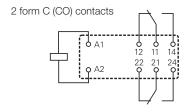
In case of no tolerance shown in outline dimension: outline dimension  $\leq 1$  mm, tolerance should be  $\pm 0.2$ mm; outline dimension >1 mm and  $\le$ 5mm, tolerance should be  $\pm 0.3$ mm; outline dimension >5mm, tolerance should be  $\pm 0.4$ mm;

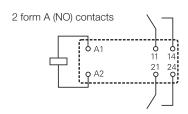
## PCB layout / terminal assignment

Bottom view on solder pins



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







# Power PCB Relay RT2 DC and AC (for Asia/Pacific markets) (Continued)

Produ	ıct co	de structure	Typical product code	RT	4	2	4	024	
Туре			· · · · · · · · · · · · · · · · · · ·						
	RT Po	ower PCB Relay RT2							
Versio	n								
	4 84	A, pinning 5mm, flux proof							
	<b>E</b> 8A	A, pinning 5mm, wash tight (not for Reflow version)							
Contac	ct arrai	ngement							
	<b>2</b> 2 f	form C (CO) contacts							
	<b>4</b> 2 f	form A (NO) contacts							
Contac	ct mate	erial							
	<b>3</b> Ag	gSnO							
	<b>4</b> Ag	gNi 90/10							
	<b>5</b> Ag	gNi 90/10 gold plated							
Coil									
	Coil co	ode: please refer to coil versions table							
Version	n								
	Blank	Standard version							
	WG	Product in accordance with IEC 60335-1 (domestic applia	nces)						
	R	Reflow solderable							

Product code	Version	Contact	Contact Material	Coil	Version	Part number
RT424005	8A,	2 form C (CO)	AgNi 90/10	5VDC	standard	1-1649329-0
RT424006	pinning 5 mm,	contacts		6VDC		1-1649329-1
RT424009	flux proof			9VDC		1-1649329-2
RT424012				12VDC		1-1649329-3
RT424012WG				12VDC	IEC 60335-1 compliant	8-1833003-5
RT424024				24VDC	standard	1-1649329-5
RT424048				48VDC		1-1649329-6
RT424060				60VDC		1-1649329-7
RT424110				110VDC		1-1649329-8
RT425005			AgNi 90/10	5VDC		4-1649329-6
RT425012			gold plated	12VDC		4-1649329-9
RT425024				24VDC		5-1649329-1
RT444012		2 form A (NO)	AgNi 90/10	12VDC		3-1649329-1
RT444024		contacts		24VDC		3-1649329-3
RTE24005	8A,	2 form C (CO)		5VDC		1649329-1
RTE24006	pinning 5 mm,	contacts		6VDC		1649329-2
RTE24012	wash tight			12VDC		1649329-4
RTE24024				24VDC		1649329-6
RTE24048				48VDC		1649329-7
RTE24060				60VDC		1649329-8
RTE24110				110VDC		1649329-9
RTE25005			AgNi 90/10	5VDC		3-1649329-7
RTE25012			gold plated	12VDC		4-1649329-0
RTE25024				24VDC		4-1649329-2
RTE44009		2 form A (NO)	AgNi 90/10	9VDC		2-1649329-1
RTE44012		contacts	-	12VDC		2-1649329-2
RTE44024				24VDC		2-1649329-4
RTE44048				48VDC		2-1649329-5

单击下面可查看定价,库存,交付和生命周期等信息

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