

# **Power PCB Relay RT2**

- 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

Typical applications

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







### **Approvals**

VDE Cert. No. 40007571, UL E214025, cCSAus 1142018 CQC 18002197247 (monostable), CQC 20002275223 (China production), CQC 08001027262 (China production)

Technical data of approved types on request

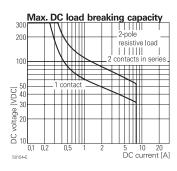
Contact Data	
Contact arrangement	2 form C (CO) or 2 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A, UL: 10A
Limiting continuous current	8A, UL: 10A
Limiting making current, max. 4s, duty	factor 10% 15A
Breaking capacity max.	2000VA
Contact material	AgNi 90/10
Frequency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

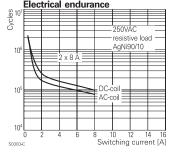
Contact ratings

Ourtact rating	3		
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	$30x10^3$
UL 61810-1 (fo	rmer 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>

Mechanical endurance

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

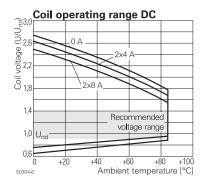




Coil Data		
Coil voltage range	5 to 110VDC	
Operative range, IEC 61810	2	
Coil insulation system according UL	class F	

Coil vers	ions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	
	VDC	VDC	VDC	Ω±10%	
005	5	3.5	0.5	62	power
006	6	4.2	0.6	90	mW
009	9	6.3	0.9	200	403
012	12	8.4	1.2	360	400
024	24	16.8	2.4	1440	400
048	48	33.6	4.8	5520	400

All figures are given for coil without pre-energization, at ambient temperature  $\pm 23^{\circ}Q_{00}$ 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>
between adjacent contacts	2500V <sub>rms</sub>
Clearance/creepage	
between contact and coil	≥10/10mm
between adjacent contacts	≥ 3/4mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI 250V

03-2022, Rev. 0322 www.te.com © 2011 Tyco Electronics Corporation, a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section. Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

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



## Power PCB Relay RT2 (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

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
Shock resistance (destructive)

Terminal type

PCB-THT, plug-in
Weight

13g

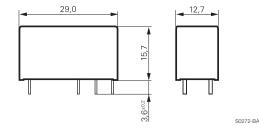
Resistance to soldering heat THT, IEC 60068-2-20

RTII 270°C/10s
RTIII 260°C/5s
Packaging/unit tube/20pcs., box/500pcs.

#### **Accessories**

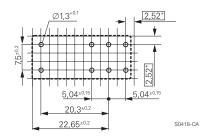
For details see datasheet Accessories Industrial Power Relay RT NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

#### **Dimensions**

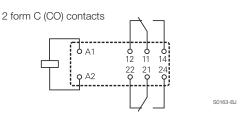


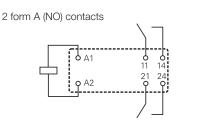
### PCB layout / terminal assignment

Bottom view on solder pins



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

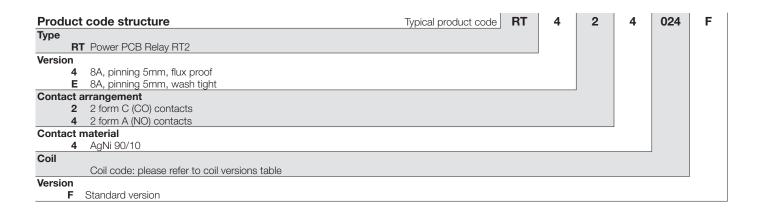




S0163-BK



# Power PCB Relay RT2 (Continued)



Product code	Version	Contacts	Contact material	Coil	Part number
RT424005F	8A,	2 form C (CO)	AgNi 90/10	5VDC	1-1419108-6
RT424012F	pinning 5mm,	contacts		12VDC	2-1393237-8
RT424024F	flux proof			24VDC	1-1419108-7
RT444012F		2 form A (NO)		12VDC	1-1419108-9
RT444024F		contacts		24VDC	2-1419108-0
RTE24005F	8A,	2 form C (CO)		5VDC	4-1419108-0
RTE24006F	pinning 5mm,	contacts		6VDC	6-1393227-5
RTE24009F	wash tight			9VDC	3-1393237-0
RTE24012F				12VDC	3-1393237-1
RTE24024F				24VDC	3-1393237-3
RTE24048F				48VDC	3-1393237-4
RTE44012F		2 form A (NO)		12VDC	4-1419108-2
RTE44024F		contacts		24VDC	3-1393237-5

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

Other types on request