

# **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 REG.-Nr. 6106, UL E214025, cCSAus 14385 Technical data of approved types on request

# Contact Data

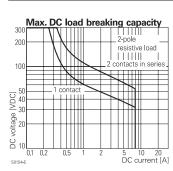
Contact Data	
Contact arrangement	2 form C (CO) or 2 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A, UL: 10A
Limiting continuous current	8A, UL: 10A
Limiting making current, max. 4s, duty	factor 10% 15A
Breaking capacity max.	2000VA
Contact material	AgNi 90/10
Frequency 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/for	m B 4/10ms

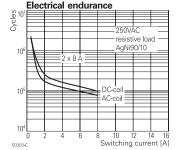
Contact ratings

Contaot ruting	10		
Туре	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>

#### Mechanical endurance

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





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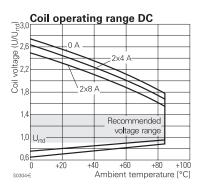
## Coil Data

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

### Coil versions, DC coil

COIL VELS	sions, DC CO				
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
005	5	3.5	0.5	62	403
006	6	4.2	0.6	90	400
009	9	6.3	0.9	200	400
012	12	8.4	1.2	360	400
024	24	16.8	2.4	1440	400
048	48	33.6	4.8	5520	417

All figures are given for coil without pre-energization, at ambient temperature +23°C. 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	

Datasheets 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>

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1



### **Other Data**

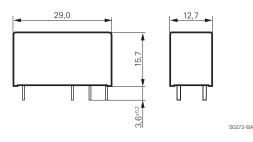
Material compliance: EU RoHS	/ELV, China RoHS, REACH, Halogen content			
refer to the Product Compliance Support Center a				
<u></u>	.te.com/customersupport/rohssupportcenter			
Ambient temperature	-40 to 85°C			
Category of environmental prote	ection			
IEC 61810	RTII - flux proof, RTIII - wash tight			
Vibration resistance (functional)	3			
form A/form B contact, 30 to	o 300Hz 20g/5g			
Shock resistance (destructive)	100g			
Terminal type	PCB-THT, plug-in			
Weight	13g			
Resistance to soldering heat T	HT, 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

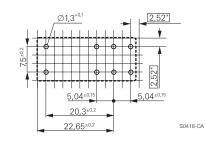
 NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

#### Dimensions



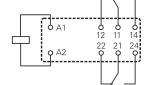
### PCB layout / terminal assignment

Bottom view on solder pins

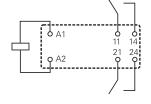


\*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

2 form C (CO) contacts



2 form A (NO) contacts



S0163-BK

S0163-BJ

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# Power PCB Relay RT2 (Continued)

Product	t code structure	Typical product code	RT	4	2	4	024	F
Туре								
R	Power PCB Relay RT2							
Version								
4	8A, pinning 5mm, flux proof							
E	8A, pinning 5mm, wash tight							
Contact a	arrangement							
2	2 form C (CO) contacts							
4	2 form A (NO) contacts							
Contact r	material							
4	AgNi 90/10							
Coil								
	Coil code: please refer to coil versions table							
Version								
F	Standard version							

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

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