

**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 load	360/72000h <sup>-1</sup>
Operate/release time max., DC coil	8/6ms
Bounce time max., DC coil, form A/form B	4/10ms

**Contact ratings**

Type	Contact	Load	Cycles
<b>IEC 61810</b>			
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 61810-1 (former 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>

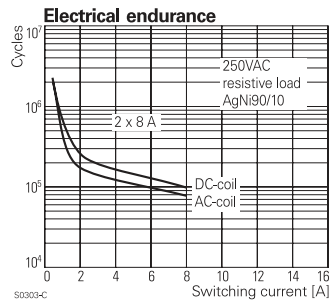
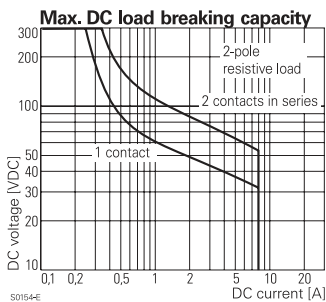
**EN60947-5-1**

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



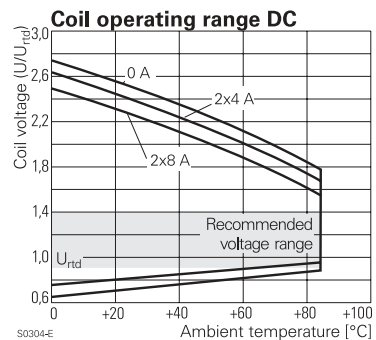
**Coil Data**

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

**Coil versions, DC coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil
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 +23°C  
Other coil voltages on request. 417



**Insulation Data**

<b>Initial dielectric strength</b>	
between open contacts	1000V <sub>rms</sub>
between contact and coil	5000V <sub>rms</sub>
between adjacent contacts	2500V <sub>rms</sub>
<b>Clearance/creepage</b>	
between contact and coil	≥10/10mm
between adjacent contacts	≥3/4mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 250V

**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](http://www.te.com/customersupport/rohssupportcenter)

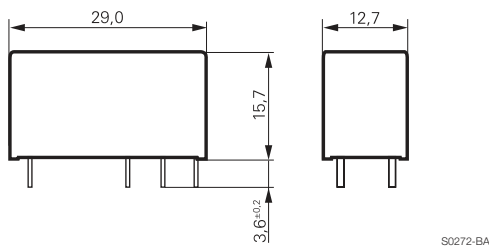
Ambient temperature	-40 to 85°C
Category of environmental protection	IEC 61810
	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional), form A/form B contact, 30 to 300Hz	20g/5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT, plug-in
Weight	13g
Resistance to soldering heat 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](#)

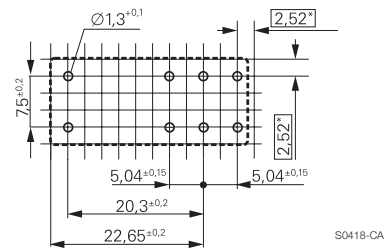
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

**Dimensions**



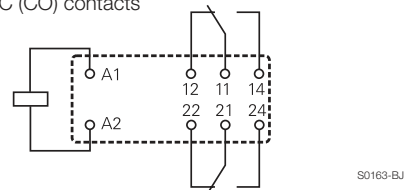
**PCB layout / terminal assignment**

Bottom view on solder pins

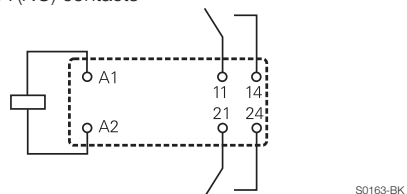


\*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

**2 form C (CO) contacts**



**2 form A (NO) contacts**



**Power PCB Relay RT2** (Continued)

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