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
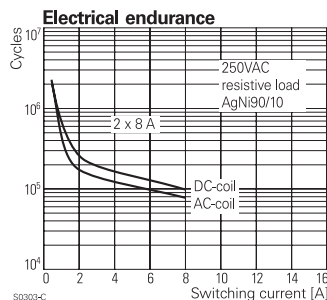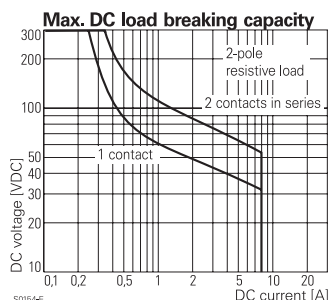Technical data of approved types on request

Contact Data

Contact 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^{-1}
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
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

Mechanical endurance	>30x10^6 operations

Max. DC load breaking capacity

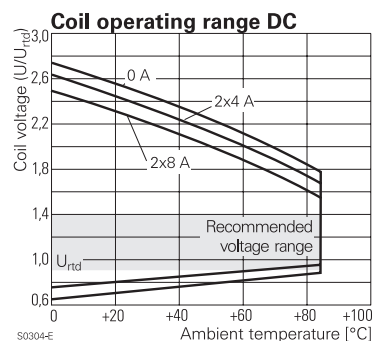**Electrical endurance**

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 power 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.

Coil operating range DC

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	PTI 250V

Power PCB Relay RT2 (Continued)

Other Data

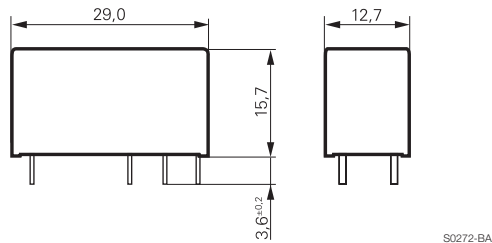|	
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-40 to 85°C
Category of environmental protection IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (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

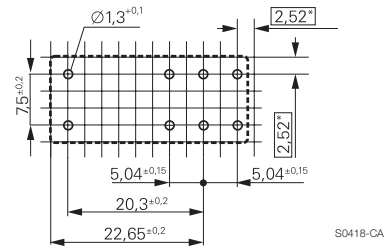For details see datasheet   Accessories Industrial Power Relay RT

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.
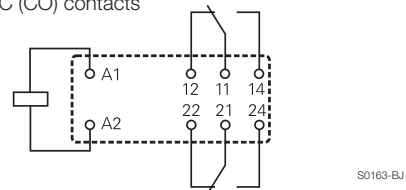
Dimensions

29,0   12,7   15,7   3,6±0,2

S0272-BA

PCB layout / terminal assignment

Bottom view on solder pins

Ø1,3+0,1   2,52*
7,5±0,2   2,52*
5,04±0,15   5,04±0,15
20,3+0,2
22,65±0,2

S0418-CA

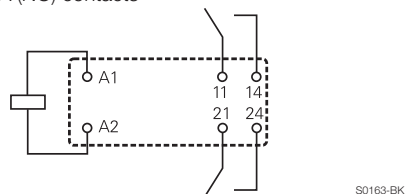*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

2 form C (CO) contacts

A1   A2   12 11 14   22 21 24

S0163-BJ

2 form A (NO) contacts

A1   A2   11 14   21 24

S0163-BK

2

Power PCB Relay RT2 (Continued)

Product code structure

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

Type
RT Power PCB Relay RT2

Version
4 8A, pinning 5mm, flux proof
E 8A, pinning 5mm, wash tight

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

Contact 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

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.