

## **Electronics**

# **Power PCB Relay RT2**

- 2 pole 8 A, 2 CO or 2 NO contacts
- DC- or AC-coil
- Sensitive coil 400 mW
- **■** Reinforced insulation
- WG version: Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC) as per product date code 0413

### **Applications**

Domestic appliances, heating control, emergency lighting, modems



F0149-B

SCHRACK

## **Approvals**

VDE REG.-Nr. 6106, **c 31 us** E214025, Technical data of approved types on request

Contact data	
Contact configuration	2 CO or 2 NO
Contact set	single contact
Type of interruption	micro disconnection
Rated current	8 A, UL: 10 A
Rated voltage / max.switching voltage AC	240/400 VAC
Limiting continuous current	UL: 10 A
Maximum breaking capacity AC	2000 VA
Limiting making capacity, max 4 s, duty fact	or 10% 15 A
Contact material	AgNi 90/10, AgNi 90/10 gold plated, AgSnO2
Mechanical endurance DC coil	> 30 x 10 <sup>6</sup> cycles
AC coil	> 5 x 10 <sup>6</sup> cycles
Rated frequency of operation with / without le	nad 6 / 1200 min-1

Contac	t ratings	
Туре	Load	Cycles
RT424	8 A, 250 VAC, NO contact, 70°C, EN61810-1	100x10 <sup>3</sup>
RT444	6(3) A, 250 VAC, NO contact, 85°C; EN60730-1	100x10 <sup>3</sup>
RT424	6(2) A, 250 VAC, NO/NC contact, 85°C; EN60730-1	100x10 <sup>3</sup>
RT424	10 A, 250 VAC, CO contact, 70°C; General purpose, UL508	30x10 <sup>3</sup>
RT424	1/2hp @ 240 VAC, 1/4hp @ 120 VAC, UL508	
RT424	Pilot duty B300, UL508	

RT424	8 A, 30 VDC, General Purpose, UL508		
RT424	4 A, 230 VAC, cosφ=0.6, gas burner	150x1	$0^{3}$
•			
Coil da	ata		
Rated c	coil voltage range DC coil	5110 VDC	
	AC coil	24230 VAC	
Coil pov	wer DC coil	typ 400 mW	
	AC coil	typ 0.75 V/A	

Coil	versions,	DC-coil

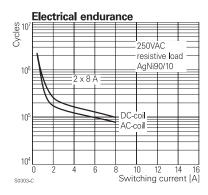
Coil insulation system according UL1446

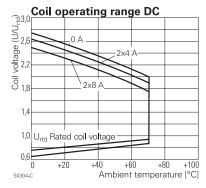
Operative range

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω	mW
005	5	3.5	0.5	62±10%	403
006	6	4.2	0.6	90±10%	400
012	12	8.4	1.2	360±10%	400
024	24	16.8	2.4	1440±10%	400
048	48	33.6	4.8	5520±10%	417
060	60	42.0	6.0	8570±12%	420
110	110	77.0	11.0	28800±12%	420
All figures are given for call without properties at applicat topoperature (0000)					

All figures are given for coil without preenergization, at ambient temperature +23°C Other coil voltages on request

Max. DC load breaking capacity 2-pole 200 resistive load contacts in series 100 [VDC] 40 30 voltage 0 2 10 0,5 5 10 20 DC current [A]





Datasheet Rev. EK1 Issued 2005/11 www.tycoelectronics.com www.schrackrelays.com

Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and

class F

processing information only to be used together with the 'Definitions' at schrackrelays.com in the 'Schrack' section.

Specifications subject to change.



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## Power PCB Relay RT2 (Continued)

Coil versions, AC-coil 50Hz

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	age resistance	
		50 Hz	50 Hz		50 Hz
	VAC	VAC	VAC	Ω	VA
524	24	18.0	3.6	350±10%	0.76
615	115	86.3	17.3	8100±15%	0.76
700	200	150.0	30.0	24350±15%	0.76
730	230	172.5	34.5	32500±15%	0.74
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All figures are given for coil without preenergization, at ambient temperature +23°C

Insulation	
Dielectric strength coil-contact circuit	5000 V <sub>rms</sub>
open contact circuit	1000 V <sub>rms</sub>
adjacent contact circuits	2500 V <sub>rms</sub>
Clearance / creepage coil-contact circuit	≥ 10 / 10 mm
adjacent contact circuits	≥ 3 / 4 mm
Material group of insulation parts	≥ IIIa
Tracking index of relay base	PTI 250 V
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	reinforced

open contact circuit functional adjacent contact circuits basic Rated insulation voltage 250 V 3

Pollution degree 2 400 V 240 V Rated voltage system Overvoltage category Ш

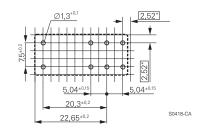
Ot	h	er	da	ta

Othor data	
RoHS - Directive 2002/95/EC	compliant as per product date code 0413
Flammability class according to UL94	V-0
For WG version: GWFI to IEC 60335-1	> 850°C
GWT to IEC 60335-1 current	≤ 0,2 A > 650°C
current	> 0,2 A > 750°C
Ambient temperature range	-40+70°C
Operate- / release time DC coil	typ 7 / 2 ms
Bounce time DC coil NO / NC contact	typ 1 / 3 ms
Vibration resistance (function) NO / NC contains	ct 20 / 5 g, 30 300 Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof, RTIII - wash tight
Mounting	pcb or on socket
Mounting distance DC / AC coils	0 mm
Resistance to soldering heat flux-proof version	n 270°C / 10 s
wash-tight version	on 260°C / 5 s
Relay weight	13 g
Packaging unit	20 / 500 pcs

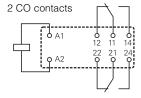
## Coil operating range AC l voltage (U/U<sub>rtd</sub>) 9'1 9'1 2x8 A 1,0 U<sub>rtd</sub> Rated coil voltage 0,8 0,6 +100 +20 +40 +60 +80 Ambient temperature [°C] S0305-B

## PCB layout / terminal assignment

Bottom view on solder pins



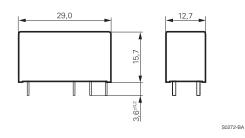
\*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.



S0163-BJ

Accessories	
For details see datasheet	accassorias RT

## **Dimensions**



2 NO contacts 6 A1 **γ** Α2

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# **Electronics**

## Power PCB Relay RT2 (Continued)

Product key	R T 4
Туре	
Version	
4 8 A, pinning 5 mm, flux proof E 8 A, pinning 5 mm, wash tight	
Contact configuration	
2 2 CO contacts	4 2 NO contacts
Contact material	
3 AgSnO <sub>2</sub>	
4 AgNi 90/10	5 AgNi 90/10 gold plated
Coil	
Coil code: please refer to coil versions table	
Version	
Blank Standard version	
WG Product in accordance with IEC 603	35-1 (domestic appliances)

Preferred types in bold print

Product key	Version	Contacts	Cont. material	Coil	Coil	Part number
RT424005	8 A	2 CO contacts	AgNi 90/10	DC-coil	5 VDC	5-1393243-9
RT424006	pinning 5 mm				6 VDC	6-1393243-1
RT424012	flux proof				12 VDC	6-1393243-3
RT424024					24 VDC	6-1393243-8
RT424048					48 VDC	7-1393243-0
RT424060					60 VDC	7-1393243-3
RT424110					110 VDC	7-1393243-5
RT424524				AC-coil	24 VAC	7-1393243-6
RT424615					115 VAC	7-1393243-8
RT424730					230 VAC	7-1393243-9
RT425005			AgNi 90/10	DC-coil	5 VDC	8-1393243-0
RT425012			gold plated		12 VDC	8-1393243-2
RT425024					24 VDC	8-1393243-5
RT425524				AC-coil	24 VAC	9-1393243-1
RT425615					115 VAC	9-1393243-2
RT425730					230 VAC	9-1393243-3
RT444012		2 NO contacts	AgNi 90/10	DC-coil	12 VDC	9-1393243-7
RT444024					24 VDC	9-1393243-9
RTE24005	8 A	2 CO contacts			5 VDC	0-1393243-1
RTE24006	pinning 5 mm				6 VDC	0-1393243-2
RTE24012	wash tight				12 VDC	0-1393243-4
RTE24024					24 VDC	1-1393243-0
RTE24048					48 VDC	1-1393243-1
RTE24060					60 VDC	1-1393243-3
RTE24110					110 VDC	1-1393243-4
RTE24524				AC-coil	24 VAC	1-1393243-5
RTE24615					115 VAC	1-1393243-7
RTE24730					230 VAC	1-1393243-8
RTE25005			AgNi 90/10	DC-coil	5 VDC	1-1393243-9
RTE25012			gold plated		12 VDC	2-1393243-0
RTE25024					24 VDC	2-1393243-1

'Schrack' section.