

## **Power PCB Relay RPII/2**

- 2 pole 8 A, 2 form C (CO) or 2 form A (NO) contacts
- 4 kv/8 mm coil contact



R<sub>2</sub> (N)

**Approvals** 

**Applications** 

Domestic appliances, UPS

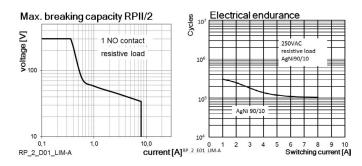
VDE Cert. No. 40025448, UL E214025

Technical data of approved types on request

Contact Data	
Contact configuration	2 form C (CO) or
	2 form A (NO)
Rated voltage / max.switching voltage AC	250 VAC
Max. switching voltage	400 VAC
Rated current	8 A (UL: 10A)
Limiting making capacity, max 4 s, duty factor 10%	14 A
Breaking capacity max.	2000 VA
Contact material	AgNi 90/10
	AgNi0.15 gold flashed
Frequency of operation with load	600 h <sup>-1</sup>
Frequency of operation without load DC-/REM-coil	36000/18000 h <sup>-1</sup>
Operate/release time typ.	9/3 ms
Bounce time typ., form A/form B	2/3 ms

**Contact ratings** 

Contact rating	5					
Type	Contact	Load	Cycles			
IEC61810						
RP421	A (NO)	8A, 250 VAC, resistive, 35°C	100x10 <sup>3</sup>			
RP424 DC-coil	A (NO)	8A, 250 VAC, resistive, 35°C	100x10 <sup>3</sup>			
RP424 DC-coil	C (CO)	5A, 250 VAC, resistive, 70°C	20x10 <sup>3</sup>			
RP424 DC-coil	A (NO)	8A, 250 VAC, resistive, 70°C	30x10 <sup>3</sup>			
RP424 REM	A (NO)	8A, 250 VAC, resistive, 35°C	50x10 <sup>3</sup>			
UL61810-1 (for	UL61810-1 (formerly UL508)					
RP421	C (CO)	8A, 250 VAC, gen. purp, 40°C	6x10 <sup>3</sup>			
RP424	A (NO)	10A, 250 VAC, gen. purp, 65°C	30x10 <sup>3</sup>			
RP424	C (CO)	8A, 250 VAC, gen. purp, 70°C	6x10 <sup>3</sup>			
Mechanical endurance						
DC-coil version:		>20x10 <sup>6</sup> operations				
REM/bistable ve	ersion:	>1x10 <sup>6</sup> operations				



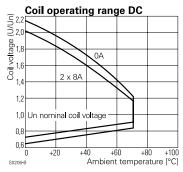
Coil DataCoil voltage range5 to 110VDCOperative range, IEC 618102

Coil versions. DC coil

OUII VCIC	Con versions, DO con							
Coil	Rated	Operate	Operate Release Coil		Rated coil			
code voltage		voltage	voltage	resistance	power			
	VDC	VDC	VDC	$\Omega \pm 10\%^{1)}$	mW			
005	5	3.5	0.5	54	500			
006	6	4.2	0.6	68	500			
012	12	8.4	1.2	270	500			
024	24	16.8	2.4	1100 <sup>1)</sup>	500			
048	48	33.6	4.8	4400 <sup>1)</sup>	500			
060	60	42.0	6.0	6540 <sup>1)</sup>	500			
110	110	77.0	11.0	23100 <sup>1)</sup>	500			

1) Coil resistance ±15%.

All figures are given for coil without pre-energization, at ambient temperature +20°C. Other coil voltages on request.



Coil versions, REM I (1 coil bistable/remanence)

Coil	Rated	Resistance	Magnetisation range		Demagnetisation rang		
code	voltage	Ω±15%	MIN./ Vdc	MAX./Vdc	MIN./ Vdc	MAX./Vdc	
	VDC						
A12	12	115	9	18	3	4.8	
A24	24	460	18	36	6	9.6	
A48	48	1748	36	72	12	19.2	

Coil versions, REM II (2 coil bistable/remanence)

	Con versions, Tielvin (2 con bistable/remailence)							
Coil Rated		Rated	Resistance	Magnetisation range		Demagnetisation ran		
code voltage		voltage	$\Omega \pm 15\%$	MIN./ Vdc	MAX./Vdc	MIN./ Vdc	MAX./Vdc	
		VDC						
	F05	5	20	3.7	7.5	3.7	6	
	F12	12	105	9	18	9	14.4	
	F24	24	460	18	36	18	28.8	

All figures are given for coil without pre-energization, at ambient temperature  $+20^{\circ}$ C. Other coil voltages on request.



## Power PCB Relay RPII/2 (Continued)

Insulation	
Initial dielectric strength	
coil-contact circuit	4000V <sub>rms</sub>
open contact circuit	1000V <sub>rms</sub>
adjacent contact circuits	2500V <sub>rms</sub>
Clearance/creepage	
coil-contact circuit	≥8/8mm
Material group of insulation parts	Illa

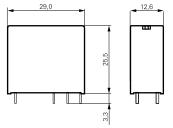
### **Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

<u> </u>	http://customersupport/forissupporteenter			
Ambient temperature	-40 to +70°C			
Category of environmental				
IEC 61810	RTII - flux proof, RTIII - wash tight			
Vibration resistance (functional),				
form A/form B, 30 to 150Hz	11/1.5g			
Shock resistance (destructive)	100g			
Terminal type	PCB-THT			
Resistance to soldering heat THT, IEC 60068-2-20				
flux-proof version	270°C / 10s			
wash-tight version	260°C / 5s			
Relay weight	18g			
Packaging unit	tube/20 pcs., box/500 pcs.			
	•			

#### **Dimensions**

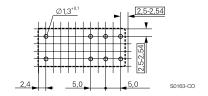
Dimensions in mm

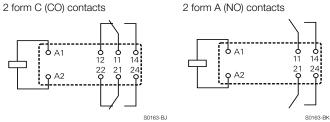


monostable and REM I (REM II version has 3 coil terminals)

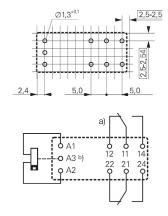
#### PCB layout / terminal assignment

Bottom view on solder pins Dimensions in mm





2 form C (CO) contacts (REM II version/ 2 coils)



a) Indicated contact position during or after coil energization with reset voltage.

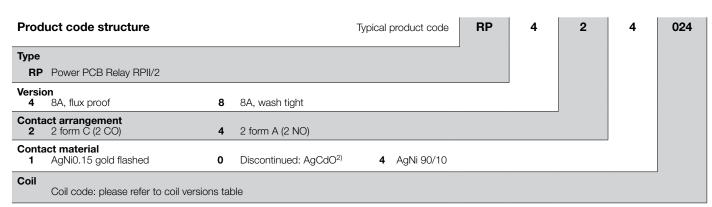
b) For 2 coil version only

A2-A3 is set coil

A1-A3 is reset coil

A1&A2 always same polarity, A3 opposite polarity.

Current direction not important.



2) AgCdO contacts are discontinued and replaced with AgNi contacts (see PCN E-18-003947)



# Power PCB Relay RPII/2 (Continued)

<b>Product Code</b>	Version	Contacts	Cont. Material	Coil Version	Coil	Part Number
RP421012	Flux proof	2 form C (CO) contacts	AgNi0.15	monostable	12VDC	6-1393234-7
RP421024					24VDC	6-1393234-8
RP421110					110VDC	7-1393234-1
RP821012	Wash tight		AgNi0.15		12VDC	1393845-4
RP821024					24VDC	1393845-5
RP424005	Flux proof		AgNi 90/10		5VDC	6-1415546-2
RP424006					6VDC	6-1415546-3
RP424012					12VDC	6-1415546-4
RP424024					24VDC	6-1415546-5
RP424048					48VDC	6-1415546-6
RP424060					60VDC	6-1415546-7
RP424110					110VDC	6-1415546-8
RP424A12				REM I	12VDC	6-1415546-9
RP424A24					24VDC	7-1415546-0
RP424A48					48VDC	7-1415546-1
RP424F12				REM II	12VDC	7-1415546-2
RP424F24					24VDC	7-1415546-3
RP444012		2 form A (NO) contacts		monostable	12VDC	7-1415546-4
RP444024					24VDC	7-1415546-5
RP824006	Wash tight	2 form C (CO) contacts			6VDC	7-1415546-6
RP824012					12VDC	7-1415546-7
RP824024					24VDC	7-1415546-8
RP824048					48VDC	7-1415546-9
RP824060					60VDC	8-1415546-0
RP844024		2 form A (NO) contacts			24VDC	6-1415546-1

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

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

RP424048 RP424F12 RP424024