

## **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
- Twin contacts available



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0150-B

Applications
Domestic appliances, UPS

**Approvals** 

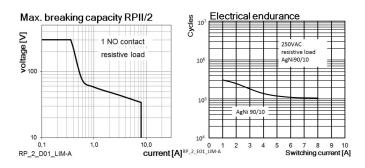
VDE Cert. No. 40025448, UL E214024

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 / without load	600 / 36000 h <sup>-1</sup>
Operate/release time typ.	9/3 ms
Bounce time typ., form A/form B	2/3 ms

Contact ratings

oontaot rating	•		
Туре	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>
UL508			
RP420	C (CO)	10A, 250 VAC, gen. purp, 70°C	6x10 <sup>3</sup>
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>
RP424	A (NO)	1/2 HP, 240 VAC, 70°C	6x10 <sup>3</sup>



### **Coil Data**

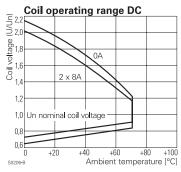
Coil voltage range	5 to 110VDC
Operative range, IEC 61810	2

Coil versions, DC coil

On versions, DO con							
Coil	Rated	Operate	Release	Coil	Rated coil		
code	voltage	voltage	voltage voltage resistanc		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)

OUII V	Our versions, ricivi i (i con bistable/remanence)						
Coil	Rated	Resistance	Magnetisation range		Demagnetisation range		
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)

	Coil Rated Resistance Magnetisation range Demagnetisation range							
Coil Rated Resistar		Resistance	Magnetisat	ion range	Demagnetisation range			
	code	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	$4000V_{rms}$
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

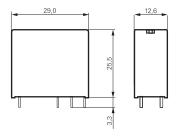
## **Other Data**

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

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**

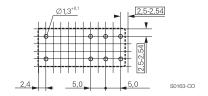
Dimensions in mm

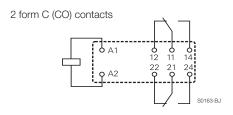


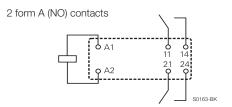
monostable and REM I (REM II version has 3 coil terminals)

#### PCB layout / terminal assignment

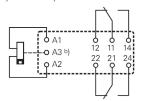
Bottom view on solder pins Dimensions in mm





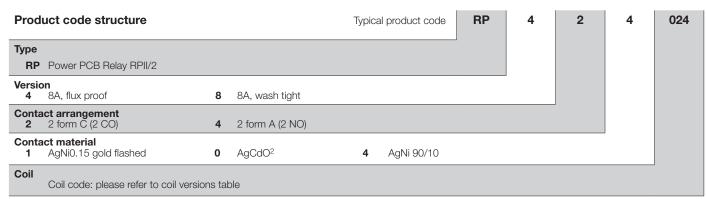


2 form C (CO) contacts (REM II version/ 2 coils)



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

b) for 2 coil version only



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
RP420006	Flux proof	2 form C (CO) contacts	AgCdO	monostable	6VDC	4-1393234-8
RP420012					12VDC	5-1393234-0
RP420024					24VDC	5-1393234-1
RP420048					48VDC	5-1393234-2
RP421012			AgNi0.15		12VDC	6-1393234-7
RP421024					24VDC	6-1393234-8
RP421110					110VDC	7-1393234-1
RP820012	Wash tight		AgCdO		12VDC	9-1393234-0
RP820024					24VDC	9-1393234-2
RP821012			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.

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# TE Connectivity:

RP420006 RP420615 RP420110 RP421048 RP820006 RP420524 RP821006 RP421615