

F0150-B

## **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



Applications Domestic appliances, UPS

#### Approvals

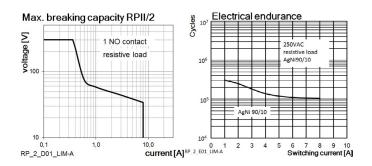
VDE Cert. No. 40025448, UL E214025 Technical data of approved types on request

## **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	3		
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>
UL61810-1 (for	merly UL5	i08)	
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 en	durance		
DC-coil version:		>20x10 <sup>6</sup> operations	
REM/bistable version:		>1x10 <sup>6</sup> operations	



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Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.



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

#### Coil versions, DC coil

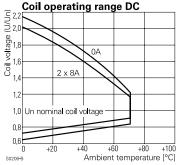
**Coil Data** 

	50113, 00 00				
Coil	Rated	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	Magnetisa	Magnetisation range		isation 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)

00111									
Coil Rated Resistance		Resistance	Magnetisat	ion range	Demagneti	sation 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°C. Other coil voltages on request.

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="http://relays.te.com/definitions">http://relays.te.com/definitions</a>

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1



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# Power PCB Relay RPII/2 (Continued)

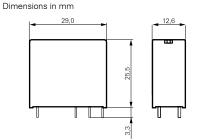
Insulation	
Initial dielectric strength	
coil-contact circuit	4000V <sub>rms</sub>
open contact circuit	1000V <sub>rms</sub>
adjacent contact circuits	2500Vrms
Clearance/creepage	
coil-contact circuit	≥8/8mm
Material group of insulation parts	Illa

## **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, IE	C 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

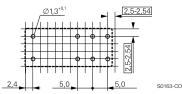


monostable and REM I (REM II version has 3 coil terminals)

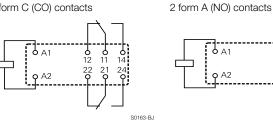
S0273-AB

#### PCB layout / terminal assignment

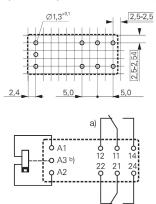
Bottom view on solder pins Dimensions in mm



2 form C (CO) contacts



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.

Prod	uct code structure			Typical product code	RP	4	2	4	024
Туре									
RP	Power PCB Relay RPII/2								
Versio 4	on 8A, flux proof	8	8A, wash tight			-			
Conta 2	act arrangement 2 form C (2 CO)	4	2 form A (2 NO)				_		
Conta 1	act material AgNi0.15 gold flashed	0	Discontinued: AgCdO <sup>2)</sup>	<b>4</b> AgNi 90/10					
Coil	Coil code: please refer to coil version	ons tal	ble						

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

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# Power PCB Relay RPII/2 (Continued)

Product Code	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.

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