

**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



F0150-B

**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

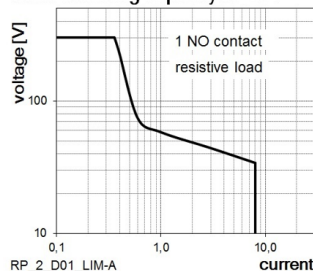
**Contact ratings**

Type	Contact	Load	Cycles
<b>IEC61810</b>			
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>
<b>UL61810-1 (formerly UL508)</b>			
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>

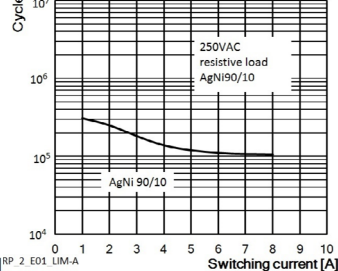
**Mechanical endurance**

DC-coil version: >20x10<sup>6</sup> operations  
REM/bistable version: >1x10<sup>6</sup> operations

**Max. breaking capacity RPII/2**



**Electrical endurance**



**Coil Data**

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

**Coil versions, DC coil**

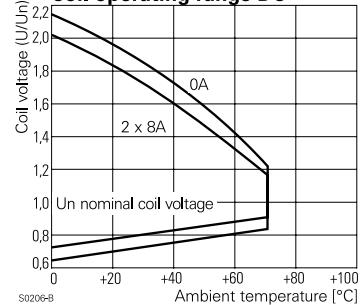
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$ <sup>1)</sup>	Rated power mW
005	5	3.5	0.5	54	500
006	6	4.2	0.6	68	500
012	12	8.4	1.2	270	500
024	24	16.8	2.4	1100 <sup>1)</sup>	500
048	48	33.6	4.8	4400 <sup>1)</sup>	500
060	60	42.0	6.0	6540 <sup>1)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

1) Coil resistance  $\pm 15\%$ .

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

Other coil voltages on request.

**Coil operating range DC**



**Coil versions, REM I (1 coil bistable/remance)**

Coil code	Rated voltage VDC	Resistance $\Omega \pm 15\%$	Magnetisation range MIN./Vdc MAX./Vdc	Demagnetisation range MIN./Vdc MAX./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/remance)**

Coil code	Rated voltage VDC	Resistance $\Omega \pm 15\%$	Magnetisation range MIN./Vdc MAX./Vdc	Demagnetisation range MIN./Vdc MAX./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.

**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	IIIa

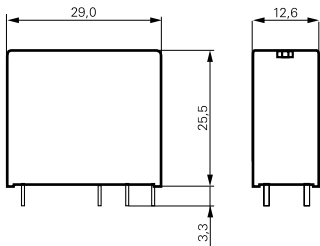
**Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/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

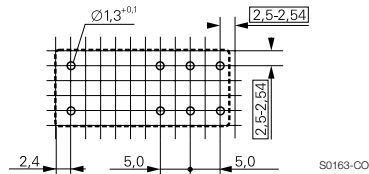


S0273-AB

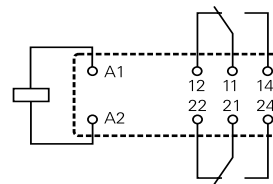
monostable and REM I (REM II version has 3 coil terminals)

**PCB layout / terminal assignment**

Bottom view on solder pins  
Dimensions in mm

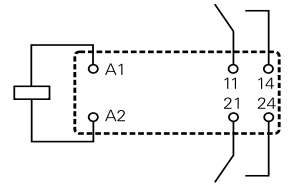


2 form C (CO) contacts



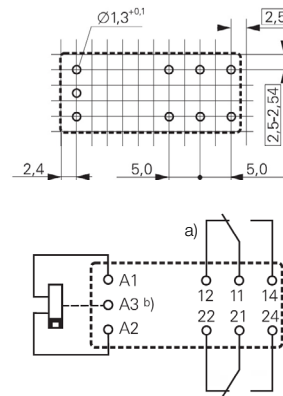
S0163-BJ

2 form A (NO) contacts



S0163-BK

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.

**Product code structure**

Typical product code

**RP 4 2 4 024**

**Type**

**RP** Power PCB Relay RPII/2

**Version**

**4** 8A, flux proof      **8** 8A, wash tight

**Contact arrangement**

**2** 2 form C (2 CO)      **4** 2 form A (2 NO)

**Contact material**

**1** AgNi0.15 gold flashed      **0** Discontinued: AgCdO<sup>2)</sup>      **4** AgNi 90/10

**Coil**

Coil code: please refer to coil versions table

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

**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.