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**

F0150-B

Applications
Domestic appliances, UPS

Approvals

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

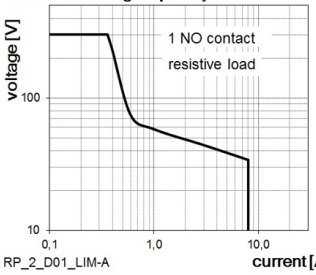
Contact Data

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^{-1}
Frequency of operation without load DC-/REM-coil	36000/18000 h^{-1}
Operate/release time typ.	9/3 ms
Bounce time typ., form A/form B	2/3 ms

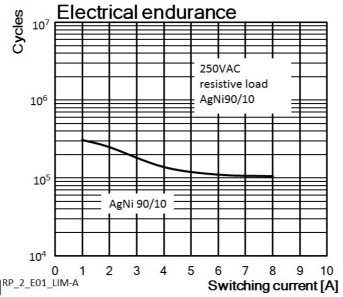
Contact ratings

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

Max. breaking capacity RPII/2



Electrical endurance



Coil Data

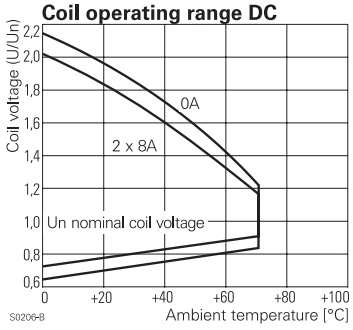
Coil voltage range	5 to 110VDC
Operative range, IEC 61810	2

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%[1)]	Rated coil 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[1)]	500
048	48	33.6	4.8	4400[1)]	500
060	60	42.0	6.0	6540[1)]	500
110	110	77.0	11.0	23100[1)]	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 operating range DC



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

Coil code	Rated voltage VDC	Resistance Ω±15%	Magnetisation range MIN./ Vdc	Magnetisation range MAX./Vdc	Demagnetisation range MIN./ Vdc	Demagnetisation range 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/remanence)

Coil code	Rated voltage VDC	Resistance Ω±15%	Magnetisation range MIN./ Vdc	Magnetisation range MAX./Vdc	Demagnetisation range MIN./ Vdc	Demagnetisation range 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.

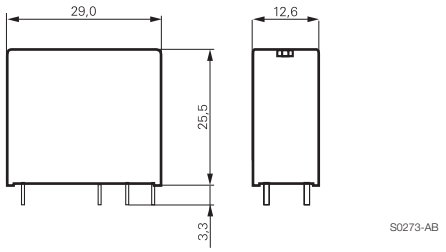
Power PCB Relay RPII/2 (Continued)

Insulation	
Initial dielectric strength	
coil-contact circuit	4000V_{rms}
open contact circuit	1000V_{rms}
adjacent contact circuits	2500V_{rms}
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/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

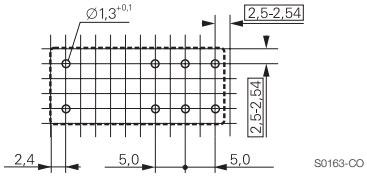
Dimensions in mm



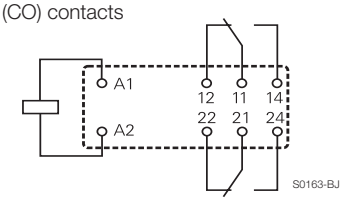
monostable and REM I (REM II version has 3 coil terminals)

PCB layout / terminal assignment

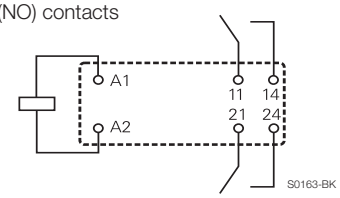
Bottom view on solder pins
Dimensions in mm



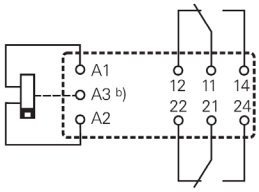
2 form C (CO) contacts



2 form A (NO) contacts



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

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[2)]
- **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.

Mouser Electronics

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TE Connectivity:

RP421024 RP421012 RP420F24