

F0146-B

# **Power PCB Relay RPII/1**

- 1 pole 8/12/16A, 1 form C (CO) or 1 form A (NO) contact
- 4kV/8mm coil-contact
- Pinning 3.5 or 5mm (8/12A) and 5mm (16A)
- RoHS compliant (Directive 2011/65/EC)

Typical applications Power supplies, domestic appliances, heating control, installation



## Approvals

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

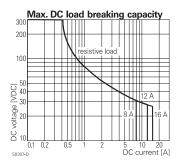
Contact Data	8 <b>A</b>	12A	16A		
Contact arrangement	1 form C (CO) or 1 form A (NO)				
Rated voltage 250VAC					
Max. switching voltage		400VAC			
Rated current	8A	12A	16A		
Limiting making current	16A	20A	25A		
Breaking capacity max.	2000VA	3000VA	4000VA		
Contact material	AgNi0.15	AgCdO	AgCdO		
Frequency of operation, with/without	out load	600/72000h <sup>-1</sup>			
Operate/release time typ.		8/2ms			
Bounce time typ., form A/form B		2/4ms			

## Contact ratings

Contact ratin	iga		
Туре	Contact	Load	Cycles
IEC61810			
RP310	A (NO)	16A, 250VAC resistive, 35°C	100x10 <sup>3</sup>
RP410/418	A (NO)	12A, 250VAC resistive, 35°C	100x10 <sup>3</sup>
RP410/418	C (CO)	10A, 250VAC resistive, 70°C	100x10 <sup>3</sup>
RP411/418	A (NO)	8A, 250VAC resistive, 35°C	100x10 <sup>3</sup>

Mechanical endurance

>30x10<sup>6</sup> operations



	Elec	trica	l en	dura	nce			_
Operations						250 resis	lac /ac stive lo	bad _
ර් 10 <sup>6</sup>		Á	X					
10 <sup>5</sup>			Χ		/ 8A	2 A =		16 A -
10								
10 <sup>4</sup>	0 '	2 4	1	3 8	3 1	0 1	2 1	4 16
รกรกอน	- ·	-		- '			curre	ent (A

## Coil Data

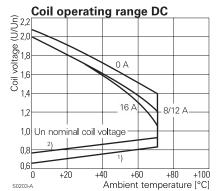
een Bata	
Coil voltage range	5 to 110VDC
Operative range, IEC 61810	2

### Coil versions, DC coil

COIL AGE		11			
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.



# Insulation Data

moulation Bata		
Initial dielectric strength		
between open contacts	1000V <sub>rms</sub>	
between contact and coil	4000V <sub>rms</sub>	
Clearance/creepage		
between contact and coil	≥8/8mm	
Material group of insulation parts	Illa	

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



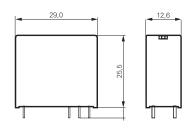
# Power PCB Relay RPII/1 (Continued)

# Other Data

e inor Bata	
Material compliance: EU RoHS/ELV	/, China RoHS, REACH, Halogen content
refer to the	e Product Compliance Support Center at
www.te.c	com/customersupport/rohssupportcenter
Ambient temperature	-40 to +70°C
Category of environmental protection	on
IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional),	
form A/form B, 30 to 300Hz	10/2g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Weight	18g
Resistance to soldering heat THT, I	EC 60068-2-20
flux proof version	270°C/10s
wash tight version	260°C/5s
Packaging/unit	tube/20 pcs., box/500 pcs.

#### Dimensions

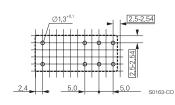


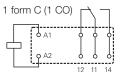


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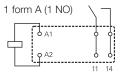
Bottom view on solder pins Dimensions in mm

## 16A, pinning 5 mm









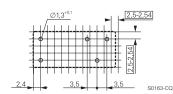
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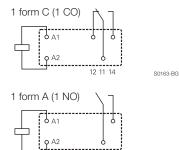
Product code structure		Тур	pical product code	RP	3	1	0	024
Туре			]					
<b>RP</b> Power PCB Relay RPII/1								
Version								
3 16A, flux proof	7	16A, wash tight						
4 8/12A, flux proof	8	8/12A, wash tight						
Contact arrangement						·		
1 1 form C contact (1 CO)	3	1 form A contact (1 NO)						
Contact material and pinning		· · ·						
1 AgNi0.15, 8A, pinning 5mm	0	AgCdO, 12/16A, pinning 5mm						
2 AgNi0.15, 8A, pinning 3.5mm	8	AgCdO, 12A, pinning 3.5mm						
Coil								
Coil code: please refer to coil versions table								

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### PCB layout / terminal assignment

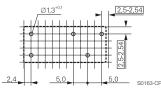
8/12A, pinning 3.5 mm

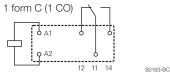


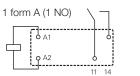


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# Power PCB Relay RPII/1 (Continued)

Product code	Version	Contract of the second of the	atContoct motorio	I Dimming	Ceil	Part number
		Contact arrangemer			Coil	
RP310012	16A, flux proof	1 form C (CO) contact	AgCdO	5mm 16A	12VDC	2-1393230-9
RP310024					24VDC	3-1393230-2
RP310048					48VDC	3-1393230-3
RP330012		1 form A (NO) contact			12VDC	4-1393230-7
RP330024					24VDC	4-1393230-9
RP330048					48VDC	5-1393230-1
RP410024	12A, flux proof	1 form C (CO) contact		5mm 8/12A	24VDC	8-1393230-2
RP411024	8A, flux proof		AgNi0.15			9-1393230-5
RP412024			Ŭ	3.5mm		1-1393231-2
RP418012	12A, flux proof		AgCdO		12VDC	2-1393231-5
RP418024					24VDC	2-1393231-8
RP438012		1 form A (NO) contact			12VDC	5-1393231-0
RP710012	16A, wash tight	1 form C (CO) contact		5mm 16A		7-1393231-2
RP710024					24VDC	7-1393231-5
RP730012		1 form A (NO) contact			12VDC	8-1393231-2
RP818012	12A, wash tight			3.5mm	1	1-1393232-7

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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Authorized Distributor

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**TE Connectivity:** 

RP838012 RP310010 RP811524 RP838020 RP419024 RP810024 RP818615