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 2002/95/EC)**



F0146-B

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

Approvals

VDE REG.-Nr. C894, UL E214025
Technical data of approved types on request

Contact Data

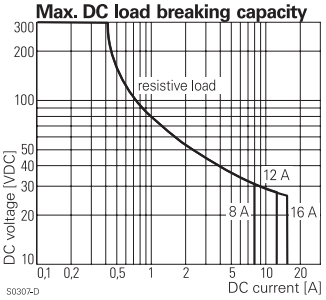
	8A	12A	16A
Contact arrangement	1 form C (CO) or 1 form A (NO)		
Rated voltage	250VAC		
Max. switching voltage	400VAC		
Rated current	8A	12A	16A
Limiting making current	16A	20A	25A
Breaking capacity max.	2000VA	3000VA	4000VA
Contact material	AgNi0.15	AgCdO	AgCdO
Frequency of operation, with/without load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

Contact ratings

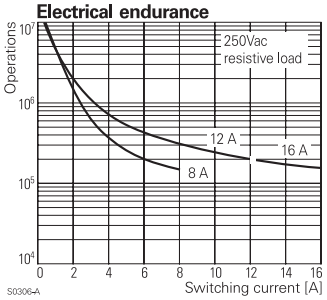
Type	Contact	Load	Cycles
IEC61810			
RP310	A (NO)	16A, 250VAC resistive, 35°C	100x10^3
RP410/418	A (NO)	12A, 250VAC resistive, 35°C	100x10^3
RP410/418	C (CO)	10A, 250VAC resistive, 70°C	100x10^3
RP411/418	A (NO)	8A, 250VAC resistive, 35°C	100x10^3

Mechanical endurance >30x10^6 operations

Max. DC load breaking capacity



Electrical endurance



Coil Data

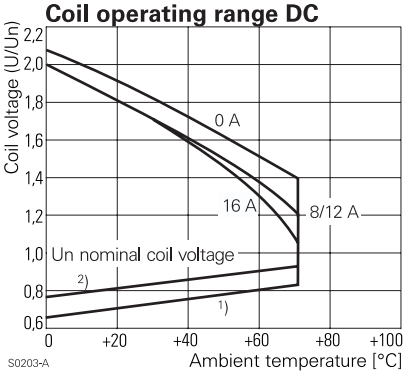
Coil voltage range	5 to 110VDC
Operative range, IEC 61810	2

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



Insulation Data

Initial dielectric strength	
between open contacts	1000V$_{rms}$
between contact and coil	4000V$_{rms}$
Clearance/creepage	
between contact and coil	≥8/8mm
Material group of insulation parts	IIIa

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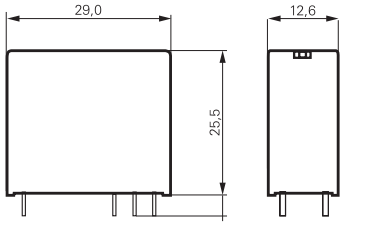
Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change.

Power PCB Relay RPII/1 (Continued)

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 protection 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, IEC 60068-2-20	
flux proof version	270°C/10s
wash tight version	260°C/5s
Packaging/unit	tube/20 pcs., box/500 pcs.

Dimensions
Dimensions in mm

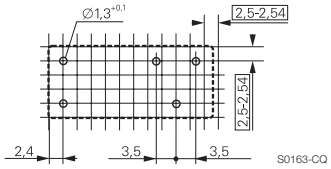


S0273-AA

PCB layout / terminal assignment

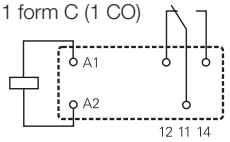
Bottom view on solder pins
Dimensions in mm

8/12A, pinning 3.5 mm



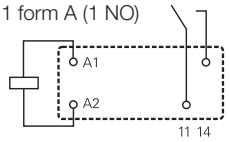
S0163-CQ

1 form C (1 CO)



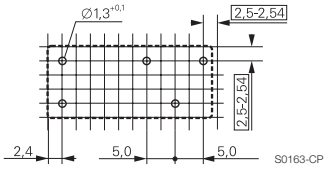
S0163-BG

1 form A (1 NO)



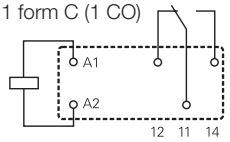
S0163-BH

8/12A, pinning 5 mm



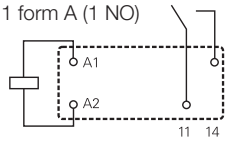
S0163-CP

1 form C (1 CO)



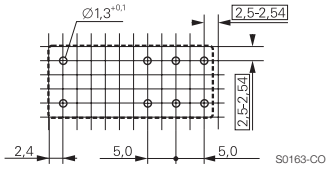
S0163-BC

1 form A (1 NO)



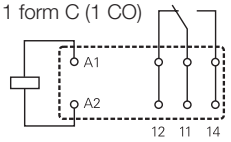
S0163-BD

16A, pinning 5 mm



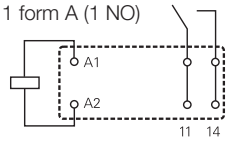
S0163-CO

1 form C (1 CO)



S0163-BE

1 form A (1 NO)



S0163-BF

Product code structure

Typical product code: **RP 3 1 0 024**

Type
RP 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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Power PCB Relay RPII/1 (Continued)

Product code	Version	Contact arrangement	Contact material	Pinning	Coil	Part number
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				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		1-1393232-7

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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