

Power PCB Relay RP11/1

- 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



F0146-B

Approvals

VDE Cert. No. 40025448, UL E214025 (VDE and UL for AgNi 90/10 in preparation)

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,
		AgNi 90/10	AgNi 90/10
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

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

Coil Data

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

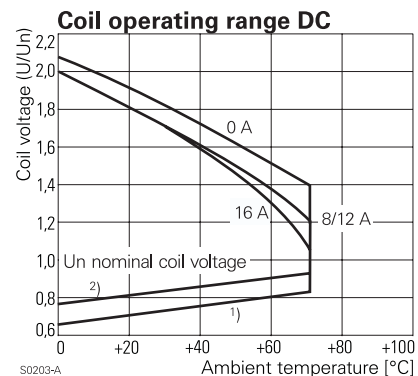
Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%^{(1)}$	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 $\pm 15\%$.

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

Other coil voltages on request.



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

Power PCB Relay RP11/1 (Continued)

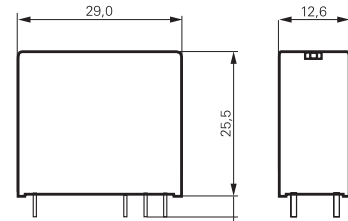
Other Data

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	RTII - flux proof, RTIII - wash tight
IEC 61810	
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

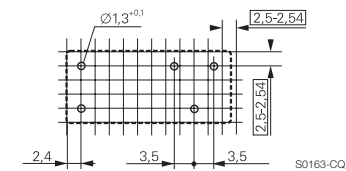
Dimensions in mm



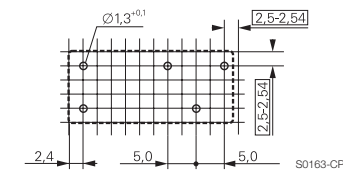
S0273-AA

PCB layout / terminal assignment

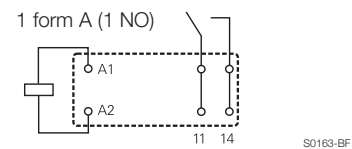
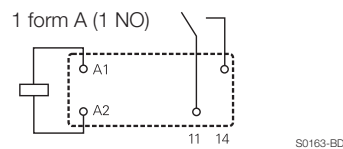
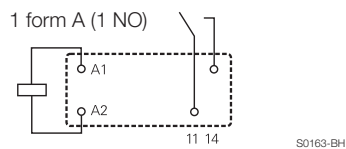
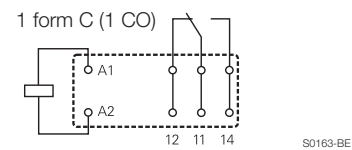
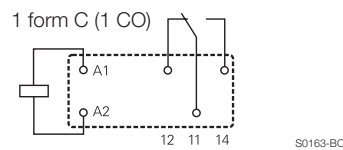
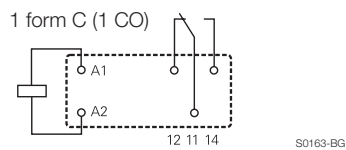
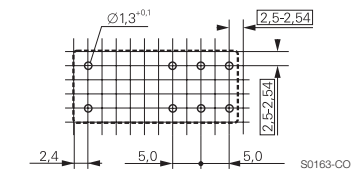
8/12A, pinning 3.5 mm



8/12A, pinning 5 mm



16A, pinning 5 mm



Product code structure

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

Type			
RP Power PCB Relay RP11/1			
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)
5	1 form B contact (1 NC)		
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
4	AgNi 90/10, pinning 5mm		
N	AgNi 90/10, pinning 3.5mm		
Coil			
Coil code: please refer to coil versions table			

Power PCB Relay RP11/1 (Continued)

Product Code	Version	Contacts	Cont. Material	Pinning	Coil Version	Coil	Part Number
RP310012	16A, flux proof	1 form C (CO) contact	AgCdO	5mm	monostable	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				24VDC	8-1393230-2
RP411024	8A, flux proof		AgNi0.15			24VDC	9-1393230-5
RP412024				3,5mm		24VDC	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		12VDC	7-1393231-2
RP710024						24VDC	7-1393231-5
RP730012		1 form A (NO) contact				12VDC	8-1393231-2
RP818012	12A, wash tight			3,5mm		12VDC	1-1393232-7
RP314005	16A, flux proof	1 form C (CO) contact	AgNi 90/10	5mm		5VDC	8-1415546-4
RP314006						6VDC	8-1415546-5
RP314010						10VDC	8-1415546-6
RP314012						12VDC	8-1415546-7
RP314024						24VDC	8-1415546-8
RP314048						48VDC	8-1415546-9
RP314110						110VDC	9-1415546-0
RP314F12					REM II	12VDC	8-1415546-1
RP314F24						24VDC	8-1415546-2
RP334012		1 form A (NO) contact			monostable	12VDC	9-1415546-1
RP334024						24VDC	9-1415546-2
RP334048						48VDC	9-1415546-4
RP354012		1 form B (NC) contact				12VDC	9-1415546-5
RP414012	12A, flux proof	1 form C (CO) contact				12VDC	1415546-4
RP414024						24VDC	1415546-5
RP414A24					REM I	24VDC	9-1415546-6
RP414F24					REM II	24VDC	9-1415546-7
RP434024		1 form A (NO) contact			monostable	24VDC	9-1415546-3
RP714006	16A, wash tight	1 form C (CO) contact				6VDC	9-1415546-8
RP714012						12VDC	9-1415546-9
RP714024						24VDC	1415546-1
RP714048						48VDC	1415546-2
RP734012		1 form A (NO) contact				12VDC	1415546-6
RP734020						20VDC	1415546-7
RP734024						24VDC	1415546-8
RP734036						36VDC	1415546-9
RP734A12					REM I	12VDC	1415546-3
RP814012	12A, wash tight	1 form C (CO) contact			monostable	12VDC	1-1415547-0
RP814024						24VDC	1-1415547-1
RP814048						48VDC	1-1415547-2

Note. This list represents the most common types and does not show all variants covered by this datasheet. Other types on request.