

Power PCB Relay RZ

- 1 pole 12 / 16 A, 1 CO or 1 NO contact
- DC-coil 400 mW
- 5 kV / 10 mm coil-contact, reinforced insulation
- Ambient temperature 85°C, HOT version for 105°C
- Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC)



Applications

Household appliances, boiler control, timers, garage door control, POS automation

F0144-B

Approvals

REG.-Nr. C693, us E214025
 Technical data of approved types on request

Contact data

Contact configuration	1 CO or 1 NO contact	
Contact set	single contact	
Type of interruption	micro disconnection	
Rated current	12 A	16 A
Rated voltage / max.switching voltage AC	250/400 VAC	
Maximum breaking capacity AC	3000 VA	4000 VA
Contact material	AgNi 90/10	
Mechanical endurance	> 10 x 10 ⁶ cycles	
Rated frequency of operation with / without load	6 / 1200 min ⁻¹	

Contact ratings

Type	Load	Cycles
RZ03-1.4-D...	16 A, 250 VAC, NO contact, 85°C, EN61810-1	30x10 ³
RZ03-1C4-D...	16 A, 250 VAC, CO contact, 85°C, EN61810-1	10x10 ³
RZ03-1.4-D...	16 A, 250 VAC, NO contact, 70°C, EN61810-1	50x10 ³
RZ01-1.4-D...	12 A, 250 VAC, NO contact, 85°C, EN61810-1	50x10 ³
RZ01-1C4-D...	12 A, 250 VAC, CO contact, 85°C, EN61810-1	30x10 ³
RZ01-1.4-D...	12 A, 250 VAC, NO contact, 70°C, EN61810-1	100x10 ³
RZH3-1.4-D...	10 A, 250 VAC, NO contact, 105°C, EN61810-1	100x10 ³
RZH3-1C4-D...	16 A, 250 VAC, CO contact, 105°C, EN61810-1	10x10 ³
RZ03-1.4-D...	B300, NO contact, 85°C, UL508	6050
RZ03-1.4-D...	R300, NO contact, 85°C, UL508	6050
RZ03-1.4-D...	1/2 hp, 125 VAC, NO contact, 85°C	6050
RZ03-1.4-D...	1 hp, 277 VAC, NO contact, 85°C	6050

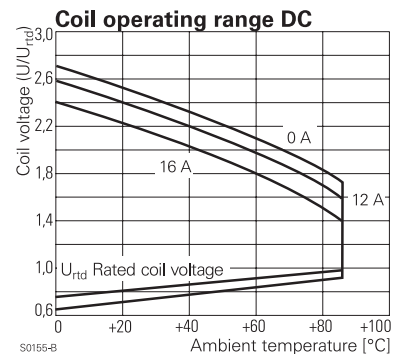
Coil data

Rated coil voltage range	5...48 VDC
Coil power	typ 400 mW
Operative range standard / HOT-version	2 / 90...110% U _{RTD}
Coil insulation system according UL1446	class F

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω	Rated coil power mW
D005	5	3.5	0.5	60±10%	420
D006	6	4.2	0.6	90±10%	400
D009	9	6.3	0.9	200±10%	400
D012	12	8.4	1.2	360±10%	400
D024	24	16.8	2.4	1440±10%	400
D048	48	33.6	4.8	5730±10%	400

All figures are given for coil without preenergization, at ambient temperature +23°C
 Continuous thermal load > 10 A at 105°C requires reduction of coil power to 64% of rated power after 100 ms.



Power PCB Relay RZ (Continued)

Other coil voltages on request

Insulation

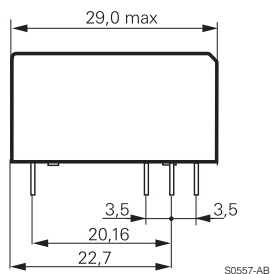
Dielectric strength coil-contact circuit	5000 V _{rms}	
open contact circuit	1000 V _{rms}	
Clearance / creepage coil-contact circuit	≥ 10 / 10 mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI 250 V	
Insulation to EN61810-1		
Type of insulation coil-contact circuit	reinforced	
open contact circuit	micro disconnection	
Rated insulation voltage	250 V	
Pollution degree 12 A version	3	3
16 A version	3	2
Rated voltage system	250 V	400 V
Overvoltage category	III	

Other data

RoHS - Directive 2002/95/EC	compliant	
Resistance to heat and fire	according EN60335-1, par.30	
Ambient temperature range Standard version	-40...+85°C	
HOT version	-40...+105°C	
Shock resistance (destruction)	100 g	
Category of protection	RTII - flux proof, RTIII - wash tight	
Mounting	pcb	
Mounting distance Standard version	0 mm	
HOT version	2 mm	
Resistance to soldering heat flux proof version	270°C / 10 s	
Relay weight	10 g	
Packaging unit	20 / 500 pcs	

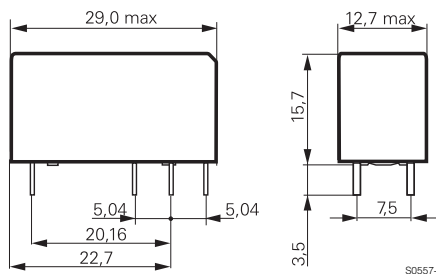
Dimensions

12 A, pinning 3.5 mm



S0557-AB

16 A, pinning 5 mm



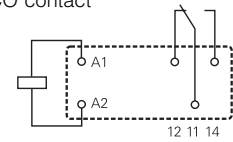
S0557-AA

PCB layout / terminal assignment

Bottom view on solder pins

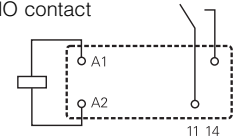
12 A, pinning 3.5 mm

1 CO contact



S0163-BG

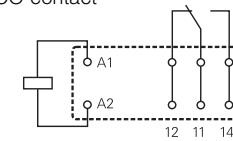
1 NO contact



S0163-BH

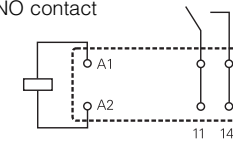
16 A, pinning 5 mm

1 CO contact



S0163-BE

1 NO contact



S0163-BF

Recommended pcb hole for manual mounting: Ø1,3

For automated mounting please ask for detailed drawing.

