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**

F0305-A

Applications

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

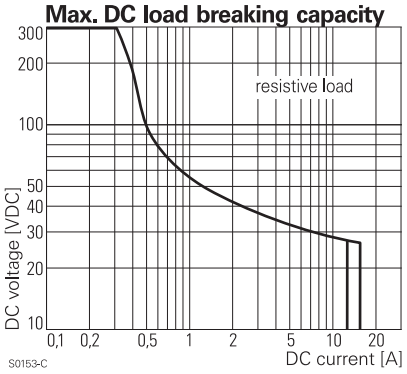
Approvals

VDE REG.-Nr. C693, cULus 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 voltage / max. switching voltage AC	250 / 400 VAC	
Rated current	12 A	16 A
Maximum breaking capacity AC	3000 VA	4000 VA
Contact material	AgNi 90/10 or AgSnO	
Rated frequency of operation with / without load	6 / 1200 min^{-1}	
Operate- / release time DC coil	max 8 / 6 ms	
Bounce time NO / NC contact	max 4 / 6 ms	

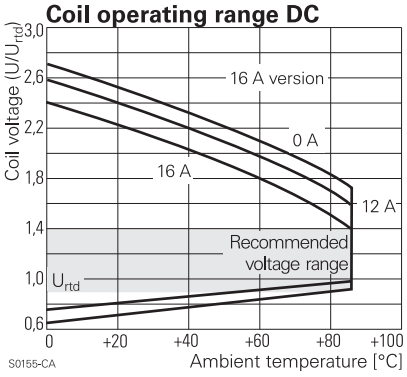
Max. DC load breaking capacity



Contact ratings

Type	Contact	Load	Ambient temp. [°C]	Cycles
IEC 61810				
RZ03-1.4-D...	NO	16 A, 250 VAC	85°C	30x10^3
RZ03-1C4-D...	CO	16 A, 250 VAC	85°C	10x10^3
RZ03-1.4-D...	NO	16 A, 250 VAC	70°C	50x10^3
RZ01-1.4-D...	NO	12 A, 250 VAC	85°C	50x10^3
RZ01-1C4-D...	CO	12 A, 250 VAC	85°C	30x10^3
RZ01-1.4-D...	NO	12 A, 250 VAC	70°C	100x10^3
RZH3-1.4-D...	NO	10 A, 250 VAC	105°C	100x10^3
RZH3-1C4-D...	CO	16 A, 250 VAC	105°C	10x10^3
UL 508				
RZ03-1.4-D...	NO	B300	85°C	6x10^3
RZ03-1.4-D...	NO	R300	85°C	6x10^3
RZ03-1.4-D...	NO	1/2 hp, 125 VAC	85°C	6x10^3
RZ03-1.4-D...	NO	1 hp, 277 VAC	85°C	6x10^3
RZH3-1.4-D...	NO	10 A, 250 VAC	105°C	150x10^3
Approvals in process				
RZ03-1.3-D...	NO	16 A, 250 VAC	85°C	50x10^3
RZ03-1.3-D...	CO	16 A, 250 VAC	85°C	10x10^3
RZ03-1.3-D...	NO	1 hp, 277 VAC	85°C	30x10^3

Coil operating range DC



Coil data

Rated coil voltage range	5...48 VDC
Operative range to IEC 61810 standard / HOT-version	2 / 90...110% U_{RTD}
Coil insulation system according UL1446	class F

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Specifications subject to change.

Power PCB Relay RZ (Continued)

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.
Other coil voltages on request

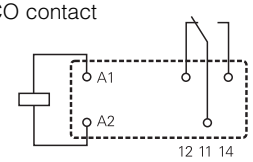
Insulation			
Dielectric strength coil-contact circuit		5000 V_{rms}	
open contact circuit		1000 V_{rms}	
Clearance / creepage coil-contact circuit		≥ 10 / 10 mm	
Material group of insulation parts		IIIa	
Tracking index of relay base		PTI 250 V	
Insulation to EN61810-1			
Type of insulation coil-contact 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		240 V	230 / 400 V
Overvoltage category		III	

Other data			
Mechanical endurance		> 10 x 10^6 cycles	
Material			
RoHS - Directive 2002/95/EC		compliant	
Resistance to heat and fire		according EN60335-1, par.30	
Environment			
Ambient temperature range	Standard version	-40...+85°C	
	HOT version	-40...+105°C	
Vibration resistance (function; 30...500 Hz)			
closing NO contact		> 15 g	
opening NO contact		> 20 g	
opening NC contact		> 5 g	
Shock resistance (destruction)		100 g	
Category of protection		RTII - flux proof, RTIII - wash tight	
Processing			
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	

PCB layout / terminal assignment
Bottom view on solder pins

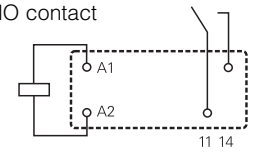
12 A, pinning 3.5 mm

1 CO contact



S0163-BG

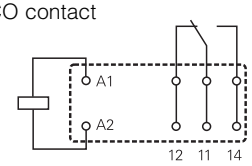
1 NO contact



S0163-BH

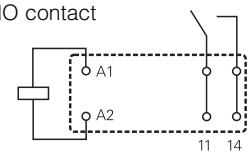
16 A, pinning 5 mm

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.

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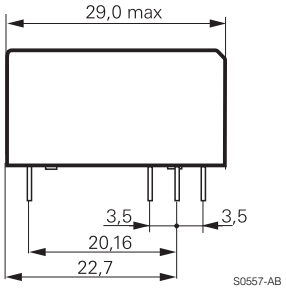
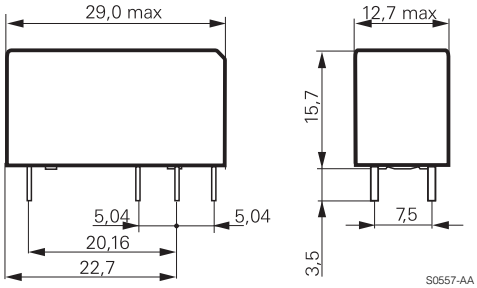
Power PCB Relay RZ (Continued)

Dimensions

12 A, pinning 3.5 mm



16 A, pinning 5 mm



Product key Typical product key **RZ 0 3 -1C 4 -D012**

Type
- **RZ** Power PCB Relay RZ

Version
- **0** standard version
- **H** HOT-version

Version
- **1** 3.5 mm pinning, 12 A
- **3** 5 mm double pinning, 16 A

Contact configuration
- **1A** 1 form A (NO contact)
- **1C** 1 form C (CO contact)

Contact material
- **4** AgNi 90/10
- **3** $AgSnO_2$

Coil version
Coil code: please refer to coil versions table

Sealing level
- **blank** standard (RT II - flux proof)
- **W** wash tight (RT III - wash tight)

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Power PCB Relay RZ (Continued)

Product key	Version	Contacts	Contact material	Coil	Part number
RZ01-1A3-D005	12A	1 NO (form A)	$AgSnO_2$	5 VDC	3-1415899-7
RZ01-1A3-D006	pinning 3.5 mm			6 VDC	3-1415899-8
RZ01-1A3-D012	flux proof			12 VDC	3-1415899-9
RZ01-1A3-D024				24 VDC	4-1415899-0
RZ01-1A3-D048				48 VDC	4-1415899-1
RZ01-1A4-D005			AgNi 90/10	5 VDC	1415899-1
RZ01-1A4-D006				6 VDC	1415899-2
RZ01-1A4-D009				9 VDC	1415899-3
RZ01-1A4-D012				12 VDC	1415899-4
RZ01-1A4-D024				24 VDC	1415899-5
RZ01-1A4-D048				48 VDC	1415899-6
RZ01-1C3-D005		1 CO (form C)	$AgSnO_2$	5 VDC	4-1415899-2
RZ01-1C3-D006				6 VDC	4-1415899-3
RZ01-1C3-D012				12 VDC	4-1415899-4
RZ01-1C3-D024				24 VDC	4-1415899-5
RZ01-1C3-D048				48 VDC	4-1415899-6
RZ01-1C4-D005			AgNi 90/10	5 VDC	1415899-7
RZ01-1C4-D006				6 VDC	1415899-8
RZ01-1C4-D009				9 VDC	1415899-9
RZ01-1C4-D012				12 VDC	1-1415899-0
RZ01-1C4-D024				24 VDC	1-1415899-1
RZ01-1C4-D048				48 VDC	1-1415899-2
RZ03-1A3-D005	16A	1 NO (form A)	$AgSnO_2$	5 VDC	4-1415899-7
RZ03-1A3-D006	pinning 5 mm			6 VDC	4-1415899-8
RZ03-1A3-D012	flux proof			12 VDC	4-1415899-9
RZ03-1A3-D024				24 VDC	5-1415899-0
RZ03-1A3-D048				48 VDC	5-1415899-1
RZ03-1A4-D005			AgNi 90/10	5 VDC	1-1415899-3
RZ03-1A4-D006				6 VDC	1-1415899-4
RZ03-1A4-D009				9 VDC	1-1415899-5
RZ03-1A4-D012				12 VDC	1-1415899-6
RZ03-1A4-D024				24 VDC	1-1415899-7
RZ03-1A4-D048				48 VDC	1-1415899-8
RZ03-1C3-D005		1 CO (form C)	$AgSnO_2$	5 VDC	5-1415899-2
RZ03-1C3-D006				6 VDC	5-1415899-3
RZ03-1C3-D012				12 VDC	5-1415899-4
RZ03-1C3-D024				24 VDC	5-1415899-5
RZ03-1C3-D048				48 VDC	5-1415899-6
RZ03-1C4-D005			AgNi 90/10	5 VDC	1-1415899-9
RZ03-1C4-D006				6 VDC	2-1415899-0
RZ03-1C4-D009				9 VDC	2-1415899-1
RZ03-1C4-D012				12 VDC	2-1415899-2
RZ03-1C4-D024				24 VDC	2-1415899-3
RZ03-1C4-D048				48 VDC	2-1415899-4
RZH3-1C4-D012	16A, 105°C			12 VDC	2-1415899-5
RZH3-1C4-D024	pinning 5 mm			24 VDC	2-1415899-6
RZH3-1A4-D009	flux proof	1 NO (form A)		9 VDC	2-1415899-7
RZH3-1A4-D012				12 VDC	2-1415899-8
RZH3-1A4-D024				24 VDC	2-1415899-9

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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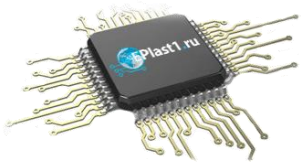
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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