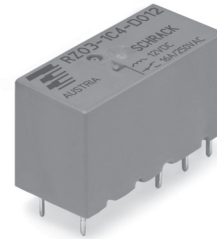


Power PCB Relay RZ

- 1 pole 12/16 A, 1 form C (CO) or 1 form A (NO) contact
- DC coil 400 mW
- 5kV/10mm coil-contact, reinforced insulation
- Ambient temperature 85°C (clear cover: 70°C)
- Product in accordance to IEC 60335-1



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



F0305-A

Approvals
VDE REG.-Nr. C693, UL E214025, CQC
Technical data of approved types on request

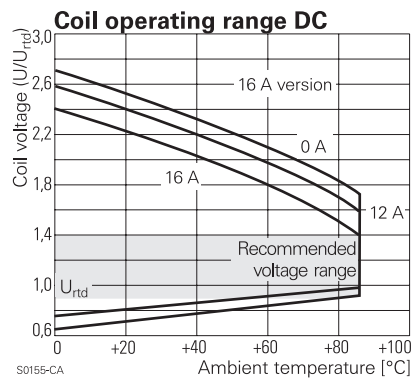
Contact Data	12A	16A
Contact arrangement	1 form C (CO) or 1 form A (NO)	
Rated voltage	250VAC	
Max. switching voltage	400VAC	
Rated current	12A	16A
Limiting making current (form A contact)		
max. 4s, duty factor 10%	30A	
max. 20ms (incandescent lamp); AgSnO ₂	80A	
Breaking capacity max.	3000VA	4000VA
Contact material	AgNi 90/10 or AgSnO ₂	
Frequency of operation, with/without load	360/72000h ⁻¹	
Operate/release time max.	8/6ms	
Bounce time max., form A/form B	4/6ms	

Contact ratings			
Type	Contact	Load	Cycles
IEC 61810			
RZ03-1A.	A (NO)	16A, 250VAC, 85°C	50x10 ³
RZ03-1C4	C (CO)	16A, 250VAC, 85°C	10x10 ³
RZ01-1A3	A (NO)	12A, 250VAC, 85°C	100x10 ³
RZ01-1A4	A (NO)	12A, 250VAC, 85°C	50x10 ³
RZ01-1C4	C (CO)	12A, 250VAC, 85°C	30x10 ³
RZ01/3-1A4	A (NO)	10A, 250VAC, 85°C	150x10 ³
RZ0H-1A4	A (NO)	12A, 250VAC, 85°C	150x10 ³
RZ0H-1A4	A (NO)	16A, 250VAC, 85°C	50x10 ³
RZ0H-1A4	A (NO)	18A, 250VAC, 85°C	30x10 ³
UL 508			
RZ03-1A.	A (NO)	16A, 250VAC, 85°C	50x10 ³
RZ03-1A4	A (NO)	12A, 250VAC, 85°C	150x10 ³
RZ01-1A3	A (NO)	12A, 250VAC, 85°C	50x10 ³
RZ03-1.4	A (NO)	B300, R300, 85°C	6x10 ³
RZ03-1.4	A (NO)	12A, 250VAC, 85°C	100x10 ³
RZ03-1.4	A (NO)	1/2hp, 125VAC, 85°C	6x10 ³
RZ03-1A.	A (NO)	1hp, 277VAC, 85°C	30x10 ³

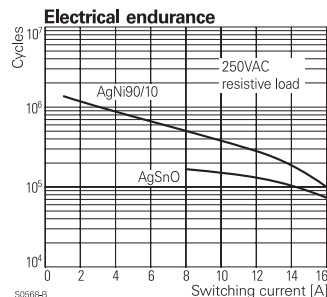
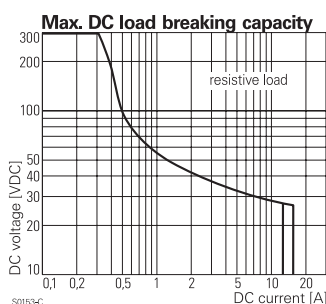
Mechanical endurance >10x10⁶ operations
1) planned rating

Coil Data	
Coil voltage range	3 to 48VDC
Operative range, IEC 61810	2
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±10%	Rated coil power mW
D003	3	2.1	0.3	22	410
D005	5	3.5	0.5	60	420
D006	6	4.2	0.6	90	400
D009	9	6.3	0.9	200	400
D012	12	8.4	1.2	360	400
D015	15	10.5	1.5	562	410
D024	24	16.8	2.4	1440	400
D048	48	33.6	4.8	5730	400



All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.



Insulation Data	
Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	5000V _{rms}
Clearance/creepage	
between contact and coil	≥10/10mm

Power PCB Relay RZ (Continued)

Material group of insulation parts	IIIa
Tracking index of relay base	PTI250V

Other Data

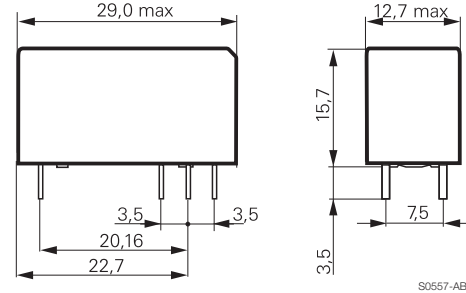
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

Resistance to heat and fire standard cover version	according EN 60335-1, par.30
Ambient temperature standard version	-40 to 85°C
clear cover	-40 to 70°C
Category of environmental protection IEC 61810	RTII - flux proof
Vibration resistance (functional), 30 to 500Hz closing form A contact	>15g
opening form A contact	>20g
opening form B contact	>5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Mounting distance standard version	≥0mm
clear cover	≥14mm
Weight	10g
Resistance to soldering heat THT IEC 60068-2-20	270°C/10s ²⁾
Packaging/unit	tube/20 pcs., box/500 pcs.

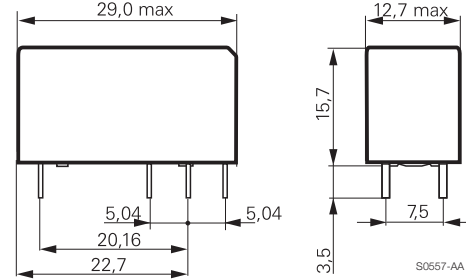
2) The use of foaming flux is not permitted.

Dimensions

12A, pinning 3.5mm



12A, 16A, pinning 5mm



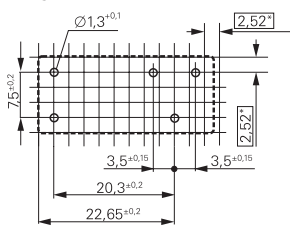
PCB layout / terminal assignment

Bottom view on solder pins

Recommended pcb hole for manual mounting: Ø1.3mm

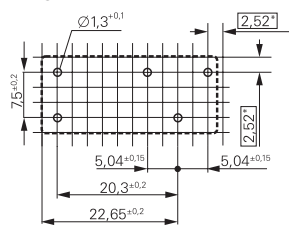
For automated mounting please ask for detailed drawing.

12A, pinning 3.5mm



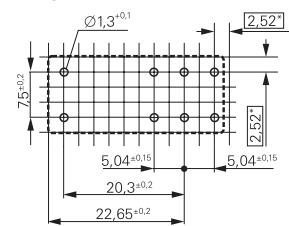
S0418-CB

12A, pinning 5mm



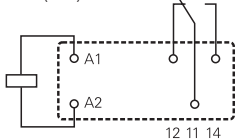
S0418-CN

16A, pinning 5mm



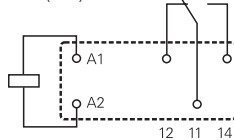
S0418-CA

1 form C (CO) contact



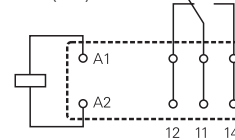
S0163-BG

1 form C (CO) contact



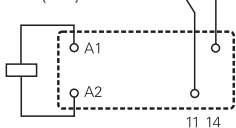
S0163-BC

1 form C (CO) contact



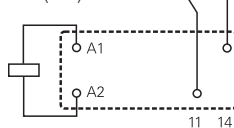
S0163-BE

1 form A (NO) contact



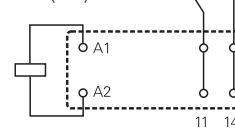
S0163-BH

1 form A (NO) contact



S0163-BD

1 form A (NO) contact



S0163-BF

Power PCB Relay RZ (Continued)

Product code structure

Typical product code **RZ 0 3 -1C 4 -D012**

Type	RZ Power PCB Relay RZ				
Version	0 standard version				
Version	1 3.5mm pinning, 12 A	3 5mm double pinning, 16 A			
	2 5mm pinning, 12 A	H High Performance 5mm double pinning, 16 A			
Contact configuration	1A 1 form A (1 NO) contact		1C 1 form C (1 CO) contact		
Contact material	4 AgNi 90/10		3 AgSnO ₂		
Coil version	Coil code: please refer to coil versions table				
Cover version	blank standard (orange)	000C clear (transparent)	R reinforced flux proof (epoxy)		

Product code	Version	Contacts	Contact material	Coil	Part number	
RZ01-1A3-D005	12A	1 form A (NO)	AgSnO ₂	5VDC	3-1415899-7	
RZ01-1A3-D006	pinning 3.5mm			6VDC	3-1415899-8	
RZ01-1A3-D012				12VDC	3-1415899-9	
RZ01-1A3-D024				24VDC	4-1415899-0	
RZ01-1A3-D048				48VDC	4-1415899-1	
RZ01-1A4-D005				AgNi 90/10	5VDC	1415899-1
RZ01-1A4-D006					6VDC	1415899-2
RZ01-1A4-D009			9VDC	1415899-3		
RZ01-1A4-D012			12VDC	1415899-4		
RZ01-1A4-D024			24VDC	1415899-5		
RZ01-1A4-D048			48VDC	1415899-6		
RZ01-1C3-D005		1 form C (CO)	AgSnO ₂	5VDC	4-1415899-2	
RZ01-1C3-D006				6VDC	4-1415899-3	
RZ01-1C3-D012				12VDC	4-1415899-4	
RZ01-1C3-D024				24VDC	4-1415899-5	
RZ01-1C3-D048				48VDC	4-1415899-6	
RZ01-1C4-D005				AgNi 90/10	5VDC	1415899-7
RZ01-1C4-D006	6VDC	1415899-8				
RZ01-1C4-D009			9VDC	1415899-9		
RZ01-1C4-D012			12VDC	1-1415899-0		
RZ01-1C4-D024			24VDC	1-1415899-1		
RZ01-1C4-D048			48VDC	1-1415899-2		
RZ03-1A3-D005	16A	1 form A (NO)	AgSnO ₂	5VDC	4-1415899-7	
RZ03-1A3-D006				6VDC	4-1415899-8	
RZ03-1A3-D012	pinning 5mm			12VDC	4-1415899-9	
RZ03-1A3-D024				24VDC	5-1415899-0	
RZ03-1A3-D048				48VDC	5-1415899-1	
RZ03-1A4-D005				AgNi 90/10	5VDC	1-1415899-3
RZ03-1A4-D006	6VDC	1-1415899-4				
RZ03-1A4-D009			9VDC	1-1415899-5		
RZ03-1A4-D012			12VDC	1-1415899-6		
RZ03-1A4-D024			24VDC	1-1415899-7		
RZ03-1A4-D048			48VDC	1-1415899-8		
RZ03-1C3-D005		1 form C (CO)	AgSnO ₂	5VDC	5-1415899-2	
RZ03-1C3-D006				6VDC	5-1415899-3	
RZ03-1C3-D012				12VDC	5-1415899-4	
RZ03-1C3-D024				24VDC	5-1415899-5	
RZ03-1C3-D048				48VDC	5-1415899-6	
RZ03-1C4-D005				AgNi 90/10	5VDC	1-1415899-9
RZ03-1C4-D006	6VDC	2-1415899-0				
RZ03-1C4-D009			9VDC	2-1415899-1		
RZ03-1C4-D012			12VDC	2-1415899-2		
RZ03-1C4-D015			15VDC	8-1415899-2		
RZ03-1C4-D024			24VDC	2-1415899-3		
RZ03-1C4-D048	48VDC	2-1415899-4				
RZ01-1C4-D012-000C	Clear cover		AgNi 90/10	12VDC	6-1415899-8	
RZ01-1C4-D024-000C	12A, pinning 3.5mm			24VDC	6-1415899-9	
RZ03-1A4-D012-000C	Clear cover	1 form A (NO)		12VDC	7-1415899-2	
RZ03-1A4-D024-000C	16A, pinning 5mm	1 form C (CO)		24VDC	7-1415899-3	
RZ03-1C4-D012-000C			12VDC		7-1415899-0	
RZ03-1C4-D024-000C				24VDC	7-1415899-1	
RZ0H-1A4-D012	16A, pinning 5mm, High Performance	1 form A (NO)	AgNi 90/10	12VDC	9-1415899-4	

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