Power PCB Relay RZF

- **1 pole, 16A, 1 form A (NO)**
- **Coil power 530mW**
- **Reinforced insulation (EN 61810, 60335, 60730)**
- **Ambient temperature up to 85°C**
- **Quick connect terminals for load**
- **Low mounted height of 17.9mm (27.6mm with quick connects)**
- **WG version with material in acordance with IEC 60335-1**

Typical applications
Microwave ovens, water heaters, ovens, industrial equipment.

Approvals

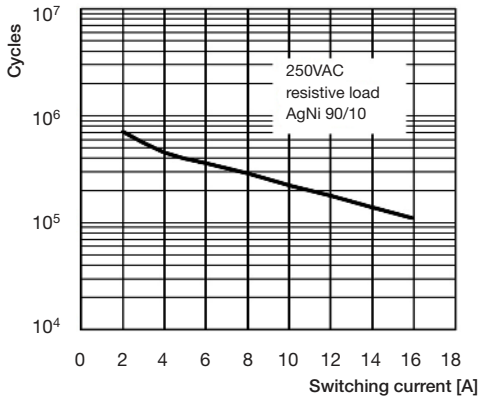
VDE 40046175, UL E214025, CQC 17002175064

Technical data of approved types on request.

Contact Data

Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	16A
Limited making current, form A contact, max. 4 s, duty factor 10%	16A
Switching power	4000VA
Contact material	AgNi
Min. recommended contact load	100mA, 5VDC
Frequency of operation, with/without load	360/18000h^{-1}
Operate/release time max.	8ms/6ms
Bounce time max.	4ms
Electrical endurance	
16A, 250VAC, resistive, 23°C	100x10^3 ops.
16A, 250VAC, resistive, 85°C	50x10^3 ops.
Contact ratings	16A, 250VAC, resistive, 23°C, 100x10^3 ops. 16A, 250VAC, resistive, 85°C, 100x10^3 ops.
Mechanical endurance	10x10^6 operations

Electrical endurance



Coil Data

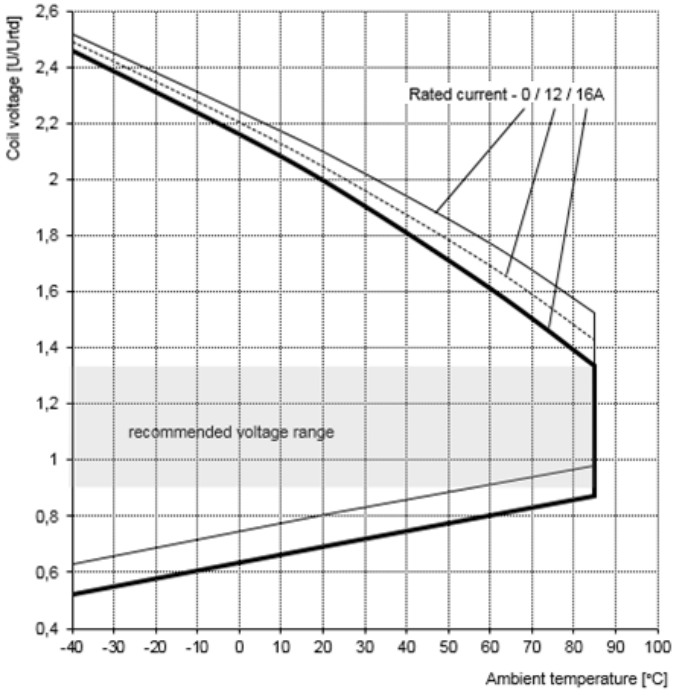
Coil voltage range	5 to 48VDC
Coil operative range, IEC 61810	2
Coil insulation system according UL	class F

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
005	5	3.5	0.5	47.2	530
006	6	4.2	0.6	66.6	530
009	9	6.3	0.9	152.8	530
012	12	8.4	1.2	271.7	530
018	18	12.6	1.8	611	530
024	24	16.8	2.4	1086	530
048	48	33.6	4.8	4347	530

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

Coil Operating Range



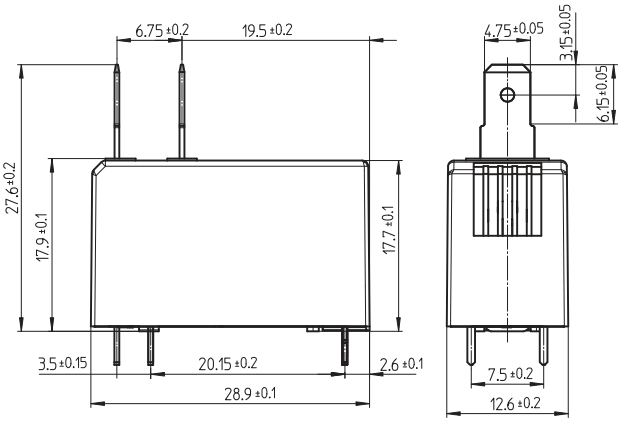
Power PCB Relay RZF (Continued)

Insulation Data	
Initial dielectric strength	
between open contacts	$1000V_{rms}$
between contact and coil	$5000V_{rms}$
Initial surge withstand voltage	
between contact and coil	10000V
Clearance/creepage	
between contact and coil	≥ 5.5/8mm
Material group of insulation parts	III
Tracking index of relay base	PTI 300

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	
Resistance to heat and fire	According EN 60335-1, par. 30
Ambient temperature	-40 to 85°C
Category of environmental protection	
IEC 61810	RTII - flux proof
Vibration resistance (functional), 3 to 100Hz	>20g
Shock resistance (functional)	>10g
Shock resistance (destrictive)	>100g
Terminal type	PCB-THT, quick connect for load side
Weight	11g
Resistance to soldering heat THT	
IEC 60068-2-20	270°C/10s
Packaging/unit	tube/20 pcs. box/500 pcs.

Dimensions

RZF1-..-....

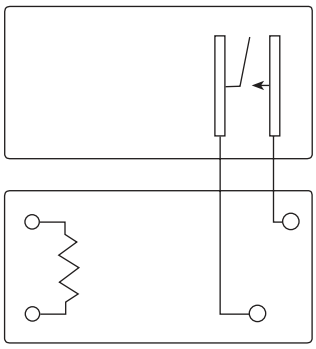


Terminal dimensions: Coil-Terminal: 0.5±0.025
Contact-Terminal: 0.5±0.01 x 0.8±0.05

- All terminal dimensions valid for the untinned terminal
- For the tin-plating of the pins add +0,1mm for the width, thickness or diameter.

Terminal assignment

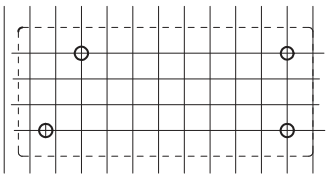
Bottom view on solder pins



PCB layout

Bottom view on solder pins

RZF1-..-....



grid pattern: 2.50 to 2,54
hole diameter: ø1.3 +0,1
Bottom view on solder pins
dimensions in mm

Power PCB Relay RZF (Continued)

Product code structure Typical product code **RZF 1 -1A 4 -L 012 000**

Type
RZF Power PCB Relay RZF

Version
1 16A, 3.5mm pinning, 4 PCB pins

Contact configuration
1A 1 form A (NO) contact

Contact material
4 AgNi 90/10 **6** AgNi 90/10, special version

Coil version
L DC coil, 530mW

Coil voltage
Coil code: please refer to coil versions table

Suffix
000 Standard, RT II, Reinforced flux proof, IEC 60335-1 Compliant **Other** Special

Note: May be followed by up to five additional characters for manufacturer internal identification.

Product code	Version	Contact	Cont.material	Coil power	Coil voltage	Sealing	Part number
RZF1-1A4-L005	4 PCB pins	1 form A (NO)	AgNi 90/10 (std.)	530mW	5VDC	Flux proof	1833011-1
RZF1-1A4-L006					6VDC		1833011-2
RZF1-1A4-L009					9VDC		1833011-3
RZF1-1A4-L012					12VDC		1833011-4
RZF1-1A4-L018					18VDC		1833011-5
RZF1-1A4-L024					24VDC		1833011-6
RZF1-1A4-L048					48VDC		1833011-7
RZF1-1A6-L005			AgNi 90/10 (spl.)		5VDC		2-1833011-8
RZF1-1A6-L006					6VDC		1-1833011-5
RZF1-1A6-L009					9VDC		1-1833011-6
RZF1-1A6-L012					12VDC		1-1833011-7
RZF1-1A6-L018					18VDC		1-1833011-8
RZF1-1A6-L024					24VDC		1-1833011-9
RZF1-1A6-L048					48VDC		2-1833011-0

Power PCB Relay RZF (Continued)

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