

General Purpose Relays PCB Relays

# **Power Relay RF**

- 1 pole 16A, 1 form A (NO) or 1 form B (NC) contact
- Coil power 400mW
- Reinforced insulation (EN 61810, 60335, 60730)
- Ambient temperature up to 105°C
- Quick connect terminals for load side
- WG version: Materials in accordance to IEC 60335-1

### Typical applications

Oven control, electric heating, power supplies, air conditioning, microwave ovens, hobs



## Approvals

VDE REG.-Nr. A652, UL E214025, CQC 05001014817 Technical data of approved types on request

Co	ont	tac	t Data	
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Contact arrangement	1 form A (NO) or 1 form B (NC)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	16A
Limiting making current, form A contac	rt,
max. 4s, duty factor 10 %	25A
Breaking capacity max.	4000VA
Contact material	AgNi 90/10
Min. recommended contact load	12VAC at 500mA
Frequency of operation, with/without lo	ad 360/72000h <sup>-1</sup>
Operate/release time max.	11/7ms
Bounce time max., form A/form B	4/4ms

## Contact ratings

Contact ratings	•		
Туре	Contact	Load	Cycles
IEC 61810			
RF334; RFH34	A (NO)	16A, 250VAC resistive, 85°C	100x10 <sup>3</sup>
RF334; RFH34	A (NO)	11A, 250VAC resistive, 85°C	250x10 <sup>3</sup>
RF334; RFH34	A (NO)	20A, 250VAC resistive, 85°C	25x10 <sup>3</sup>
RF334; RFH34	A (NO)	25A, 250VAC resistive, 70°C	15x10 <sup>3</sup>
RF354; RFH54	B (NC)	16A, 250VAC resistive, 85°C	100x10 <sup>3</sup>
RF354; RFH54	B (NC)	20A, 250VAC resistive, 85°C	50x10 <sup>3</sup>
RF354; RFH54	B (NC)	25A, 250VAC resistive, 70°C	20x10 <sup>3</sup>
RFH34	A (NO)	16A, 250VAC resistive, 105°C	100x10 <sup>3</sup>
RFH34	A (NO)	11A, 250VAC resistive, 105°C	250x10 <sup>3</sup>
RFH34	A (NO)	18.5A, 250VAC resistive, 105°C	20x10 <sup>3</sup>
RFH34	A (NO)	10A, 400VAC resistive, 105°C	150x10 <sup>3</sup>

### Mechanical endurance

>10x10<sup>6</sup> operations



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5 to 60VDC
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class F

#### Coil versions, DC coil

	50113, <b>DO</b> CO				
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
005	5	3.5	0.5	62	403
006	6	4.2	0.6	90	400
009	9	6.3	0.9	203	399
012	12	8.4	1.2	360	400
024	24	16.8	2.4	1440	400
048	48	33.6	4.8	5520	417
060	60	42.0	6.0	8570	420

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 <sub>rms</sub>	
between contact and coil	4000V <sub>rms</sub>	
Clearance/creepage		
between contact and coil	≥8/8mm	
Material group of insulation parts	Illa	
Tracking index of relay base	PTI250V	

Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at <a href="http://relays.te.com/definitions">http://relays.te.com/definitions</a>

Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1



# Power Relay RF (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 Resistance to heat and fire WG version according EN 60335-1, par.30 Ambient temperature -40 to 85°C RF3 RFH -40 to 105°C Category of environmental protection IEC 61810 RTII - flux proof1) Vibration resistance (functional), form A/form B, 55 to 500Hz 20/5g Shock resistance (destructive) 100g Terminal type PCB-THT, quick connect for load side Weight 20g Resistance to soldering heat THT, IEC 60068-2-20 flux proof version 270°C/10s wash tight version 260°C/5s tray/30 pcs., box/300 pcs. Packaging/unit

#### PCB layout / terminal assignment Bottom view on solder pins









### Dimensions

Quick connect terminals vertical

1) RTIII - wash tight version on request



S0282-CI

Quick connect terminals horizontal



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## Power Relay RF (Continued)

Prod	uct	code structure Typical product cod	e RF	3	3	4	012	WG
Туре								
	RF	Power Relay RF						
Versic	n							
	3	16A, 85°C <b>H</b> 16A, 105°C						
Conta	ict c	onfiguration						
	3	1 form A (NO) contact, quick connect term. vertical D 1 form A (NO) contact, quick co	nnect term	. horizonta	al			
	5	1 form B (NC) contact, quick connect term. vertical <b>F</b> 1 form B (NC) contact, quick cor	nect term.	horizontal				
Conta	ict m	naterial						
	4	AgNi 90/10						
Coil		- •					-	
	Coi	l code: please refer to coil versions table						
Versio	n							
	Bla	nk Standard version						
	WG	Product in accordance with IEC 60335-1 (domestic appliances)						

Wash tight version on request

Product code	Contact arrangement	Version	Coil	Version	Part number
RF334012	1 form A (NO)	85°C	12VDC	Standard	8-1415513-1
RFH34009WG	contact	105°C	9VDC	IEC60335-1 compliant	4-1415520-1
RFH34012WG			12VDC		5-1415520-1
RFH34024			24VDC	Standard	1415511-1
RFH54006WG	1 form B (NC)		6VDC	IEC60335-1 compliant	1415521-1
RFH54024WG	contact		24VDC		3-1415521-1
RFHD4012WG	1 form A (NO)		12VDC		9-1415521-1

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

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