

# **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

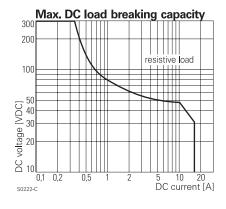
Approvals
VDE REGNr. A652, UL E214025, CQC 05001014817
Technical data of approved types on request

Contact Data	
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 contact	et,
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	oad 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	$50x10^3$
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





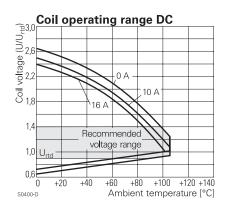
VDE CAL US CAC

Coil Data		
Coil voltage range	5 to 60VDC	
Operative range, IEC 61810	2	
Coil insulation system according UL1446	class F	

#### Coil versions, DC coil

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	$4000V_{rms}$	
Clearance/creepage		
between contact and coil	≥8/8mm	
Material group of insulation parts	IIIa	
Tracking index of relay base	PTI250V	



# 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

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 100g

20g

according EN 60335-1, par.30

Shock resistance (destructive) Terminal type PCB-THT, quick connect for load side

Weight Resistance to soldering heat THT, IEC 60068-2-20

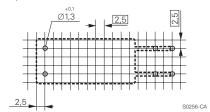
flux proof version 270°C/10s wash tight version 260°C/5s

tray/30 pcs., box/300 pcs. Packaging/unit

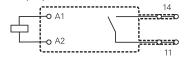
1) RTIII - wash tight version on request

#### PCB layout / terminal assignment

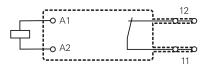
Bottom view on solder pins



#### 1 form A (NO) contact

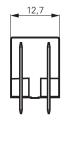


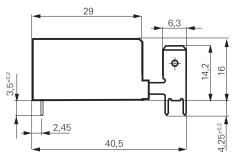
## 1 form B (NC) contact



#### **Dimensions**

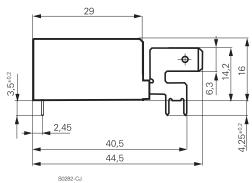
## Quick connect terminals vertical





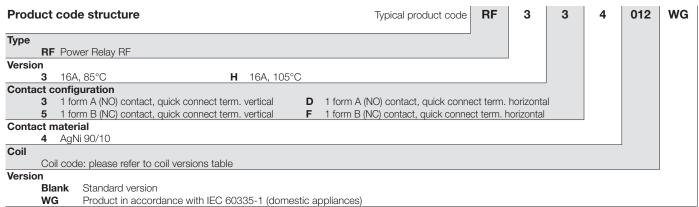
S0282-CI

## Quick connect terminals horizontal





# Power Relay RF (Continued)



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

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

<u>TE Connectivity</u>: 9-1415513-1