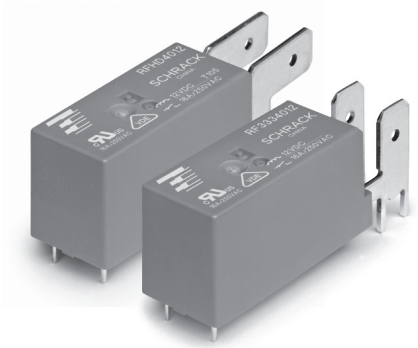
Power Relay RF

- **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**



F0273-BI

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

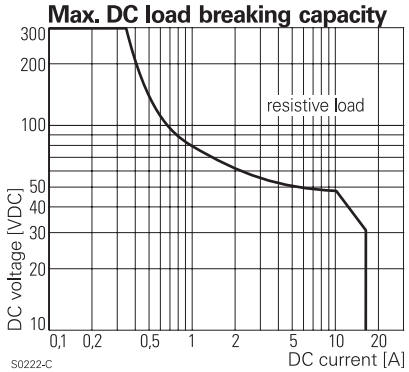
Contact Data

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, 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 load	360/72000h^{-1}
Operate/release time max.	11/7ms
Bounce time max., form A/form B	4/4ms

Contact ratings

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

Mechanical endurance >10x10^6 operations



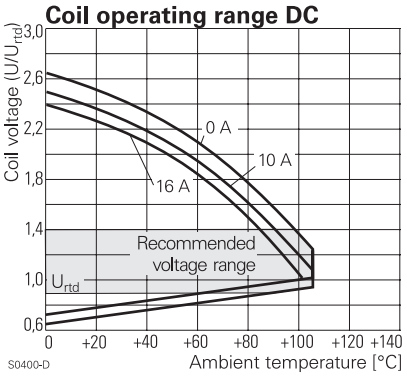
Coil Data

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

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power 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$_{rms}$
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

11-2011, Rev. 1111
www.te.com
© 2011 Tyco Electronics Corporation,
a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

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

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

Power Relay RF (Continued)

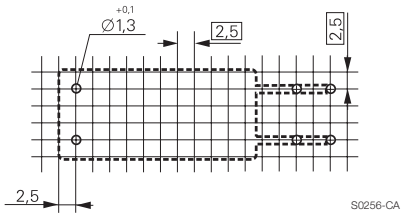
Other Data

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	
RF3	-40 to 85°C
RFH	-40 to 105°C
Category of environmental protection	
IEC 61810	RTII - flux proof[1)]
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
Packaging/unit	tray/30 pcs., box/300 pcs.

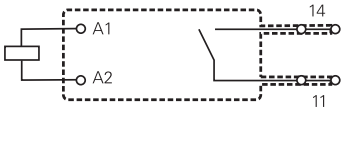
1) RTIII - wash tight version on request

PCB layout / terminal assignment

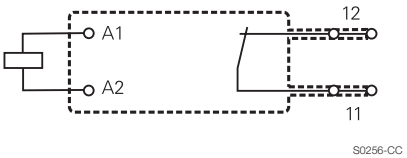
Bottom view on solder pins



1 form A (NO) contact

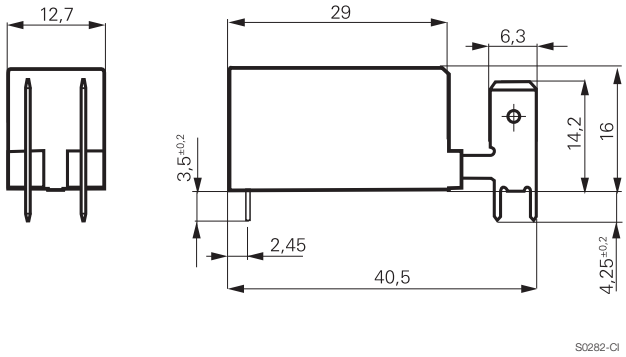


1 form B (NC) contact

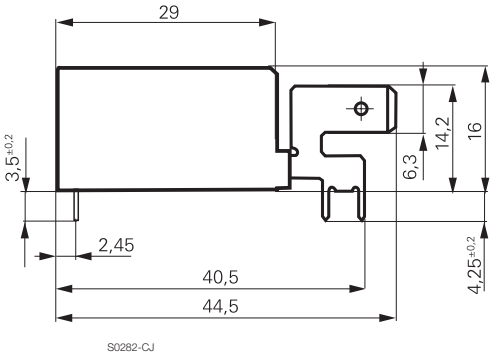


Dimensions

Quick connect terminals vertical



Quick connect terminals horizontal



11-2011, Rev. 1111
www.te.com
© 2011 Tyco Electronics Corporation,
a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

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

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

Power Relay RF (Continued)

Product code structure

Typical product code	**RF**	**3**	**3**	**4**	**012**	**WG**

Type
RF Power Relay RF

Version
3 16A, 85°C **H** 16A, 105°C

Contact configuration
3 1 form A (NO) contact, quick connect term. vertical **D** 1 form A (NO) contact, quick connect term. horizontal
5 1 form B (NC) contact, quick connect term. vertical **F** 1 form B (NC) contact, quick connect term. horizontal

Contact material
4 AgNi 90/10

Coil
Coil code: please refer to coil versions table

Version
Blank 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

11-2011, Rev. 1111
www.te.com
© 2011 Tyco Electronics Corporation,
a TE Connectivity Ltd. company

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

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

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

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

TE Connectivity:

1-794222-0 2005330-1 3-1393225-0 650075-000 MPT100C18RF SBCHE64R7K U5254-000005-030PA 2310537-1 CPF0402B37K4E1 175977-2 2-292161-3 2380312-2 RH73H2A40MKTN SMW73R0JT 1-962915-1 917696-1 CRGCQ2010J3K3 1743455-2 1903112-2 2377783-2 3430B2F51RTDF 936348-1 1393431-1 1969656-1 2834055-1 3631B101LL SBCHE154R7K 141991-2 ROX05SJ18R TE50BR39J