

Power Relay RF

- 1 pole 16 A, 1 NO or 1 NC contact
- Switching capacity 4000 VA
- Coil power 400 mW
- 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
- RoHS compliant (Directive 2002/95/EC)

Applications

Oven control, electric heating, power supplies, air conditioning, microwares, hobs



F0273-AI

Approvals

VDE REG.-Nr. A652, cULus E214025
Technical data of approved types on request

Contact data

Contact configuration	1NO or 1NC
Contact set	single contact
Type of interruption	micro disconnection
Rated current	16 A
Rated voltage / max.switching voltage AC	240/400 VAC
Maximum breaking capacity AC	4000 VA
Limiting making capacity, max 4 s, duty factor 10%	25 A
Contact material	AgNi90/10
Minimum contact load	12VAC / 500mA
Mechanical endurance	10x10 ⁶ cycles
Rated frequency of operation with / without load	6 / 1200 min ⁻¹

Contact ratings

Type	Load	Cycles
RF33, RFH3	11 A, 250 VAC, 85°C, EN61810-1	2.5x10 ⁵
RF33, RFH3	16 A, 250 VAC, 85°C, EN61810-1	1x10 ⁵
RF33, RFH3	20 A, 250 VAC, 85°C, EN61810-1	2.5x10 ⁴
RF33, RFH3	25 A, 250 VAC, 70°C, EN61810-1	1.5x10 ⁴
RFH3	11 A, 250 VAC, 105°C, EN61810-1	2.5x10 ⁵
RFH3	16 A, 250 VAC, 105°C, EN61810-1	5x10 ⁴
RFH3	18, 5 A, 250 VAC, 105°C, EN61810-1	2x10 ⁴
RFH3	10 A, 400 VAC, 105°C, EN61810-1	1.5x10 ⁵

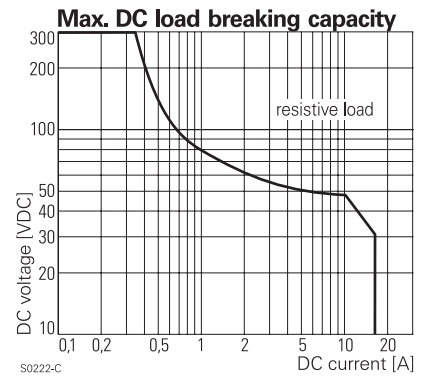
Coil data

Rated coil voltage DC coil	5...60 VDC
Coil power DC coil	typ. 400 mW
Operative range	2
Coil insulation system according UL1446	Class F

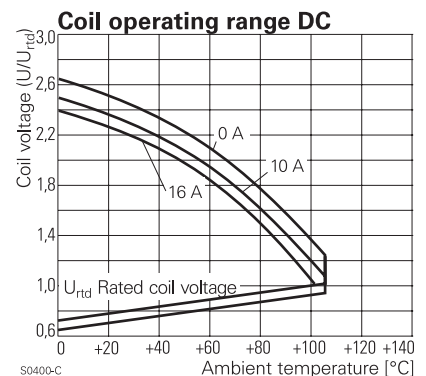
Coil versions, DC-coil

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

All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request



S0222-C



S0400-C

Power Relay RF (Continued)

Insulation

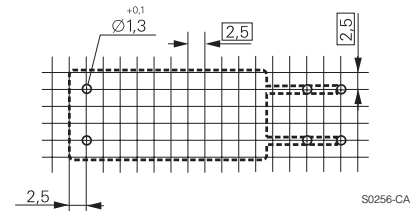
Dielectric strength coil-contact circuit	4000 V _{rms}
open contact circuit	1000 V _{rms}
Clearance / creepage coil-contact circuit	≥ 8 / 8 mm
Material group of insulation parts	≥ IIIa
Tracking index of relay base	PTI 250
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	functional
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230/400 V
Overvoltage category	III

Other data

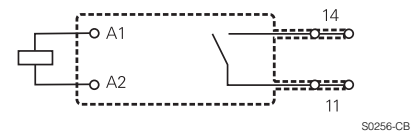
RoHS - Directive 2002/95/EC	compliant
Flammability class according to UL94	V-0
For WG version: GWFI to IEC 60695-2-12	>850°C
GWIT to IEC 60695-2-13	>775°C
Ambient temperature range	-40...+105°C
Operate- / release time	typ. 10 ms
Bounce time NO / NC contact	typ. 5 ms
Vibration resistance (function) NO / NC contact (55...500Hz)	20 / 5 ms
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof; RTIII - wash tight
Mounting	pcb
Resistance to soldering heat flux-proof version	270°C / 10 s
wash-tight version	260°C / 5 s
Relay weight	20 g
Packaging unit	150 / 300 pcs

PCB layout / terminal assignment

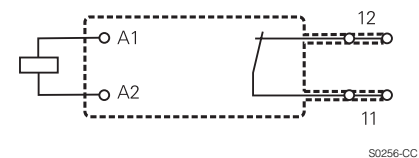
Bottom view on solder pins



1 NO contact

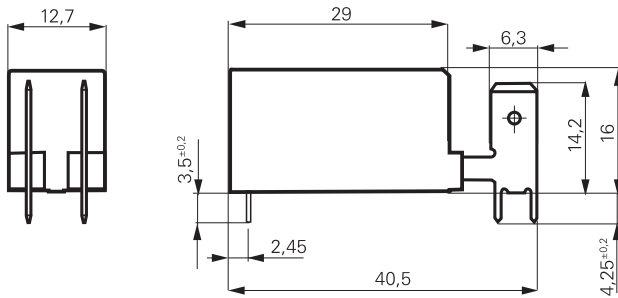


1 NC contact

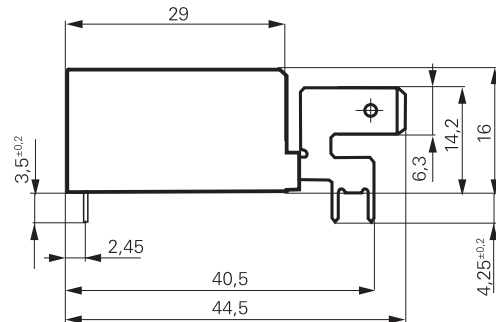


Dimensions

Quick connect terminals vertical



Quick connect terminals horizontal



Power Relay RF (Continued)

Product key

	R	F							
Type									
Version	3 16 A, 85°C				H 16 A, 105°C				
Contact configuration	3 1 NO contact, quick connect term. vertical				5 1 NC contact, quick connect term. vertical				
	D 1 NO contact, quick connect term. horizontal				F 1 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 key	Version	Configuration	Cont. material	Coil	Part number
RF334006	16 A	1 NO contact	AgNi 90/10	6 VDC	5-1415513-1
RF334009	85°C	quick connect term.		9 VDC	7-1415513-1
RF334012		vertical		12 VDC	8-1415513-1
RF334024				24 VDC	9-1415513-1
RF354006		1 NC contact		6 VDC	2-1415514-1
RF354009		quick connect term.		9 VDC	3-1415514-1
RF354012		vertical		12 VDC	4-1415514-1
RF354024				24 VDC	5-1415514-1
RFH34006	16 A	1 NO contact		6 VDC	8-1415510-1
RFH34009	105°C	quick connect term.		9 VDC	9-1415510-1
RFH34012		vertical		12 VDC	6-1415510-1
RFH34024				24 VDC	0-1415511-1
RFH54006		1 NC contact		6 VDC	4-1415511-1
RFH54009		quick connect term.		9 VDC	5-1415511-1
RFH54012		vertical		12 VDC	6-1415511-1
RFH54024				24 VDC	7-1415511-1
RF334006WG	16 A	1 NO contact		6 VDC	5-1415517-1
RF334009WG	85°C	quick connect term.		9 VDC	6-1415517-1
RF334012WG	materials according IEC 60335-1	vertical		12 VDC	7-1415517-1
RF334024WG				24 VDC	8-1415517-1
RF354006WG		1 NC contact		6 VDC	2-1415518-1
RF354012WG		quick connect term.		9 VDC	4-1415518-1
RF354024WG		vertical		12 VDC	5-1415518-1
RF354048WG				24 VDC	6-1415518-1
RFH34006WG	16 A	1 NO contact		6 VDC	3-1415520-1
RFH34009WG	105°C	quick connect term.		9 VDC	4-1415520-1
RFH34012WG	materials according IEC 60335-1	vertical		12 VDC	5-1415520-1
RFH34024WG				24 VDC	6-1415520-1
RFH54006WG		1 NC contact		6 VDC	0-1415521-1
RFH54009WG		quick connect term.		9 VDC	1-1415521-1
RFH54012WG		vertical		12 VDC	2-1415521-1
RFH54024WG				24 VDC	3-1415521-1