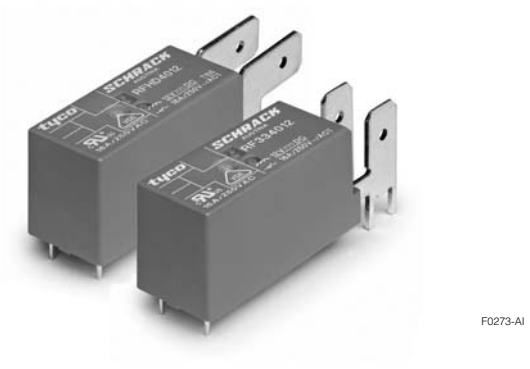
Power Relay RF

- **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



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Approvals

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

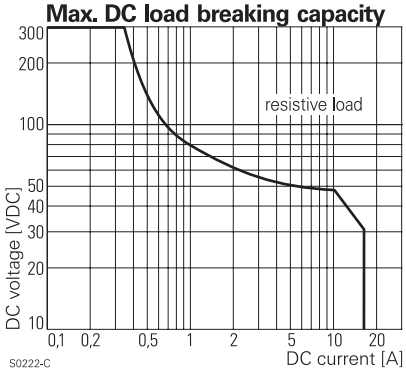
Contact data

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	$1.5x10^5$

Max. DC load breaking capacity



Coil data

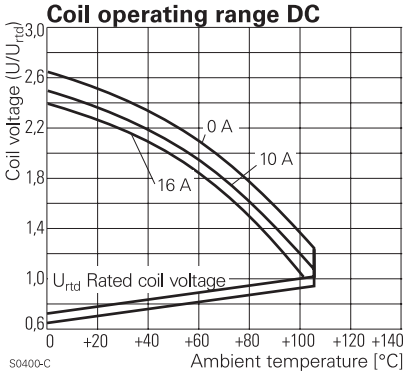
Rated coil voltage DC coil	5...60 VDC
Coil power DC coil	typ. 400 mW
Operative range	2
Coil insulation system according UL1446	Class F

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

Coil operating range DC



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Dimensions are in mm unless otherwise specified and are shown for reference purposes only.

Product specification according to IEC 61810-1. Product data, technical parameters, test conditions and processing information only to be used together with the 'Definitions' at schrackrelays.com in the 'Schrack' section.

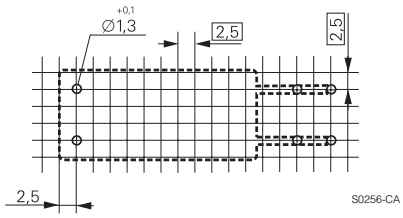
Specifications subject to change.

Power Relay RF (Continued)

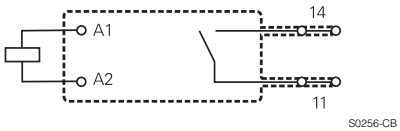
Insulation	
Dielectric strength coil-contact circuit	4000 V_{rms}
open contact circuit	1000 V_{rms}
Clearance / creepage coil-contact circuit	≥ 8 / 8 mm
Material group of insulation parts	≥ IIIa
Tracking index of relay base	PTI 250
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	reinforced
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

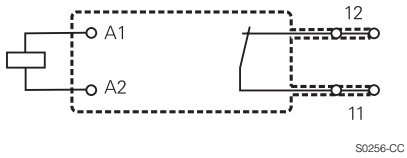
PCB layout / terminal assignment
Bottom view on solder pins



1 NO contact

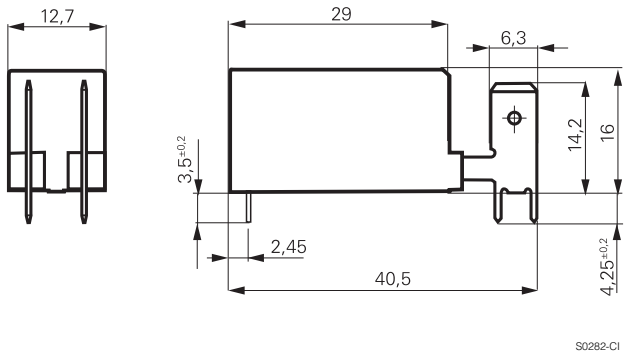


1 NC contact

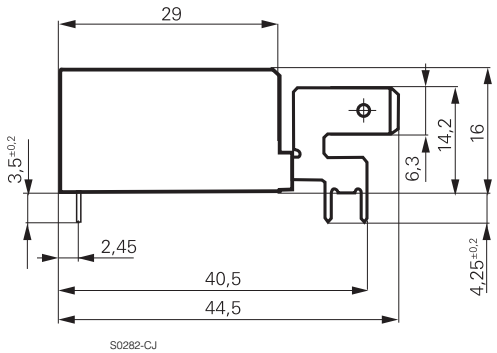


Dimensions

Quick connect terminals vertical



Quick connect terminals horizontal



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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	vertical		12 VDC	7-1415517-1
RF334024WG	IEC 60335-1			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	vertical		12 VDC	5-1415520-1
RFH34024WG	IEC 60335-1			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

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