Power PCB Relay RTH 105°C 16A

- **1 pole 16 A, 1 CO or 1 NO contact**
- **High-temperature version**
- **Sensitive coil 400 mW**
- **5 kV / 10 mm coil-contact**
- **Reinforced insulation**
- **WG version: Product in accordance to IEC60335-1**
- **Ambient temperature 105°C at rated load**
- **RoHS compliant (Directive 2002/95/EC) as per product date code 0413**

F0220-C

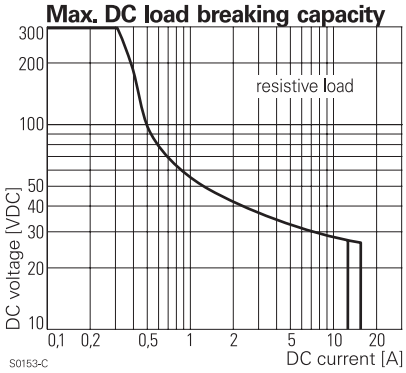
Applications

Oven control, cooking plate control

Approvals

VDE REG.-Nr. 6106, cULus E214025, cCSAus 14385
Technical data of approved types on request

Max. DC load breaking capacity



Contact data

Contact configuration	1 CO or 1 NO
Contact set	single contact
Type of interruption	micro disconnection
Rated current	16 A [1]
Rated voltage / max.switching voltage AC	250/400 VAC
Limiting continuous current NO/NC contact	16 / 25 A
Maximum breaking capacity AC	4000 VA
Limiting making capacity, max 4 s, duty factor 10%	30 A
Contact material	AgNi 90/10
Mechanical endurance	> 10 x 10^6 cycles
Rated frequency of operation with / without load	6 / 1200 min^{-1}

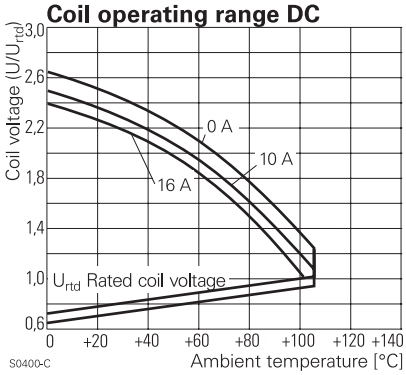
Contact ratings

Type	Load	Cycles
RTH14	10 A, 250 VAC, NO contact. 105°C, EN61810-1	$1{,}5x10^5$
RTH14	16 A, 250 VAC, NO contact, 105°C, UL508	$3x10^4$
RTH14	16 A, 250 VAC, CO contact, 105°C, EN61810-1	$1x10^4$
RTHH4	10 A, 250 VAC, 105°C	typ $3x10^5$
RTHH4	16/8 A, 250 VAC, 105°C	typ $2{,}5x10^5$
RTHH4	15 A, 250 VAC, 105°C, 10% DF, 7.5 min^{-1}, UL508	$1x10^5$

Coil data

Rated coil voltage range DC coil	5...60 VDC
Coil power	typ 400 mW [1]
Operative voltage range, % of rated coil voltage	90 - 110 %
Coil insulation system according UL1446	class F

Coil operating range DC



Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω	Rated coil power mW
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

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

[1] Continuous thermal load > 10 A at 105°C requires reduction of coil power to 64% of rated power after 100 ms

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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 PCB Relay RTH 105°C 16A (Continued)

Insulation

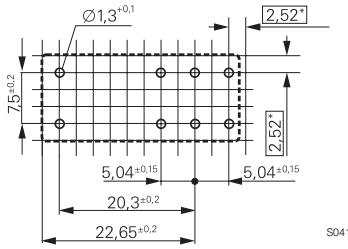
Dielectric strength coil-contact circuit	5000 V_{rms}	
open contact circuit	1000 V_{rms}	
Clearance / creepage coil-contact circuit	≥ 10 / 10 mm	
Material group of insulation parts	≥ IIIa	
Tracking index of relay base	PTI 250 V	
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit	reinforced	
open contact circuit	functional	
Rated insulation voltage	250 V	
Pollution degree	3	2
Rated voltage system	240 V	400 V
Overvoltage category	III	

Other data

RoHS - Directive 2002/95/EC	compliant as per product date code 0413
Flammability class according to UL94	V-0
For WG version: GWFI to IEC 60335-1 (IEC 60695-2-12)	> 850 °C
GWIT to IEC 60335-1 (IEC 60695-2-13)	> 755 °C
Ambient temperature range	-40...+105°C
Operate- / release time	typ 7 / 3 ms
Bounce time NO / NC contact	typ 1 / 3 ms
Vibration resistance (function) NO / NC contact	20 / 5 g, 30 ... 150 Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof
Mounting	pcb
Mounting distance	0 mm
Resistance to soldering heat flux-proof version	270 °C / 10 s
Relay weight	14 g
Packaging unit	20 / 500 pcs

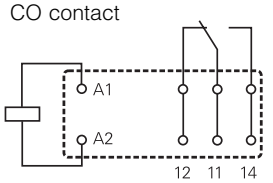
PCB layout / terminal assignment
Bottom view on solder pins

16 A, pinning 5 mm

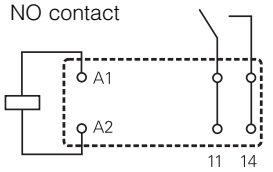


*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.

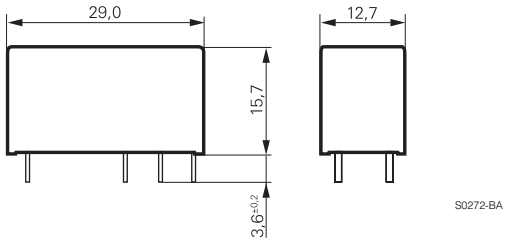
1 CO contact



1 NO contact



Dimensions



Product key

R	T	H		4				

Type

Version
- **H** 16 A, pinning 5 mm, 105°C

Contact configuration
- **1** 1 CO contact
- **3** 1 NO contact
- **H** 1 NO contact "High Performance"

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)

Product key	Version	Contacts	Contact material	Coil	Part number
RTH14012	16 A, 105°C	1 CO contact	AgNi 90/10	12 VDC	8-1415006-1
RTH34012	pinning 5mm	1 NO contact			9-1415006-1
RTHH4012	flux proof	1 NO high perform.			8-1415047-1
RTH14012WG	16 A, 105°C	1 CO contact			1-1415538-1
RTH34012WG	pinning 5mm	1 NO contact			1-1415536-9
RTH14024WG	flux proof	1 CO contact		24 VDC	9-1415535-4
RTH34024WG	IEC 60335-1	1 NO contact			2-1415536-0

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