

Power PCB Relay RTH 105°C 16A

- 1 pole 16A, 1 form C (CO) or 1 form A (NO) contact
- Ambient temperature 105°C
- Sensitive coil 400mW
- 5kV/10mm coil-contact
- Reinforced insulation
- WG version: Product in accordance to IEC 60335-1



Typical applications
Oven control, cooking plate control



F0220-D

Approvals

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

Contact Data

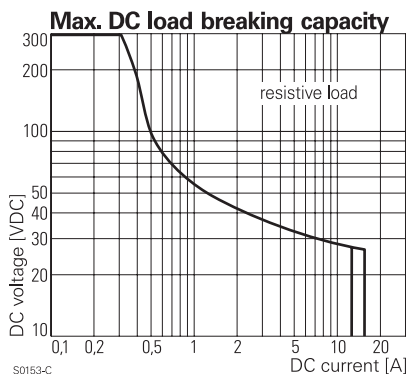
Contact arrangement	1 form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	16A ¹⁾
Limiting continuous current, form A/form B	16 / 26A
Limiting making current (form A contact) max. 4 s, duty factor 10 %	30A
Breaking capacity max.	4000VA
Contact material	AgNi 90/10
Frequency of operation, with/without load	360/72000h ⁻¹
Operate/release time max.	8/6ms
Bounce time max., form A/form B	4/6ms

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
RTH14	A (NO)	10A, 250VAC resistive, 105°C	150x10 ³
RTH14	C (CO)	16A, 250VAC resistive, 105°C	10x10 ³
RTH14	B (NC)	26A, 250VAC resistive, 85°C	500
RTH34	A (NO)	10A, 400VAC resistive, 105°C	150x10 ³
RTHH4	A (NO)	10A, 250VAC resistive, 105°C	250x10 ³
UL 508			
RTH14	A/B (NO/NC)	16A, 250VAC, resistive, 105°C	30x10 ³
RTH34	A (NO)	20A, 250VAC, general purpose, 105°C	6x10 ³

Mechanical endurance >30x10⁶ operations

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



Coil Data

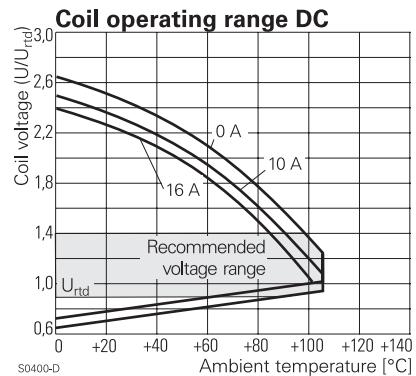
Coil voltage range	5 to 60VDC
Operative range, IEC 61810	90...110% U _{RTD}
Coil insulation system according UL1446	class F

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
009	9	6.3	0.9	203	399 ¹⁾
012	12	8.4	1.2	360	400 ¹⁾
024	24	16.8	2.4	1440	400 ¹⁾

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

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	5000V _{rms}
Clearance/creepage	
between contact and coil	≥10/10mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI250V

Power PCB Relay RTH 105°C 16A (Continued)

Other Data

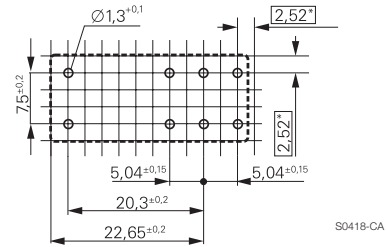
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

Resistance to heat and fire	WG version	according EN 60335-1, par.30
Ambient temperature		-40 to 105°C
Category of environmental protection	IEC 61810	RTII - flux proof
Vibration resistance (functional)	form A/form B contact, 30 to 150Hz	20/5g
Shock resistance (destructive)		100g
Terminal type		PCB-THT
Weight		14g
Resistance to soldering heat THT	IEC 60068-2-20	270°C/10s
Packaging/unit		tube/20 pcs., box/500 pcs.

PCB layout / terminal assignment

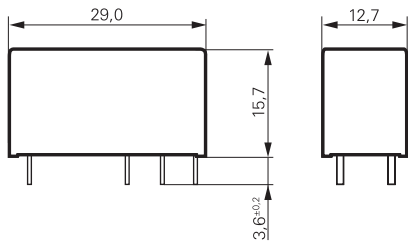
Bottom view on solder pins

16A, pinning 5mm

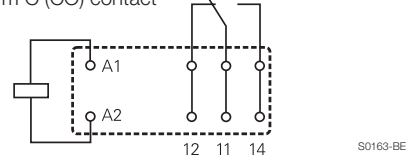


*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

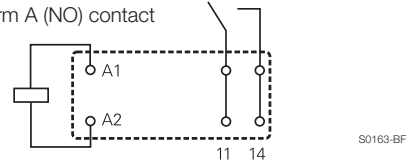
Dimensions



1 form C (CO) contact



1 form A (NO) contact



Product code structure

Typical product code **RT H 3 4 012 WG**

Type	RT Power PCB Relay RTH 105°C 16A
Version	H 16A, pinning 5mm, 105°C
Contact configuration	1 1 form C (CO) contact 3 1 form A (NO) contact H 1 form A (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 code	Version	Contact configuration	Contact Material	Coil	Part number
RTH14012	16A, 105°C	1 form C (CO) contact	AgNi 90/10	12VDC	8-1415006-1
RTH14012WG				24VDC	1-1415538-1
RTH14024WG				12VDC	9-1415535-4
RTH34012		1 form A (NO) contact		12VDC	9-1415006-1
RTH34012WG				24VDC	1-1415536-9
RTH34024				24VDC	1415039-1
RTH34024WG				9VDC	2-1415536-0
RTHH4009WG	16A, 105°C, High Performance			12VDC	1-1415540-6
RTHH4012				12VDC	8-1415047-1
RTHH4012WG				24VDC	4-1415536-2
RTHH4024				24VDC	9-1415047-1

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:

[TE Connectivity:](#)

[RTH14012](#) [RTH14024](#) [RTH34024](#)