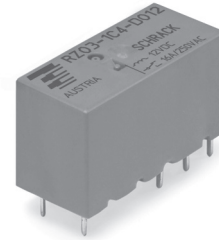


Power PCB Relay RZH 105°C 16A

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

Typical applications
Oven control, cooking plate control



F0305-A



Approvals

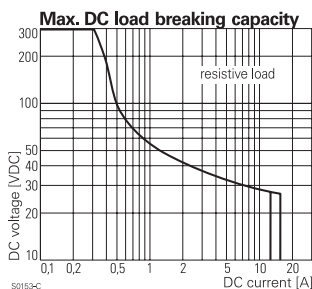
VDE Cert. No. 40023970, cULus E214025, CQC
Technical data of approved types on request

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 making current, form A contact, max. 4 s, duty factor 10 %	30A
Breaking capacity max.	4000VA
Contact material	AgNi 90/10 or AgSnO ₂
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			
RZH3-1C4	A/C (NO/NC)	16 A, 250 VAC, resistive, 105°C	10x10 ³
RZH3-1A3	A (NO)	16 A, 250 VAC, resistive, 85°C	40x10 ³
RZH3-1A3	A (NO)	12 A, 250 VAC, resistive, 105°C	20x10 ³
RZH . -1A4	A (NO)	10 A, 250 VAC, resistive, 105°C	150x10 ³
RZHH-1A4	A (NO)	12 A, 250 VAC, resistive, 85°C	150x10 ³
RZHH-1A4	A (NO)	18 A, 250 VAC, resistive, 85°C	30x10 ³
RZHH-1A4	A (NO)	12 A, 250 VAC, resistive, 105°C	100x10 ³
RZHH-1A4	A (NO)	10 A, 250 VAC, resistive, 105°C	300x10 ³
RZHH-1A4	A (NO)	16 A, 250 VAC, resistive, 105°C	30x10 ³
RZH . -1A4	A (NO)	16 A, 250 VAC, resistive, 85°C	50x10 ³
UL 508			
RZH3-1A4	A (NO)	10 A, 250 VAC, resistive, 105°C	150x10 ³
RZH3-1C4	A/C (NO/NC)	16 A, 250 VAC, resistive, 105°C	10x10 ³
RZHH-1A4	A (NO)	10 A, 250 VAC, resistive, 105°C	300x10 ³
RZHH-1A4	A (NO)	12 A, 250 VAC, resistive, 105°C	150x10 ³
RZHH-1A4	A (NO)	12 A, 250 VAC, resistive, 85°C	150x10 ³
RZHH-1A4	A (NO)	16 A, 250 VAC, resistive, 105°C	30x10 ³
RZHH-1A4	A (NO)	16 A, 250 VAC, resistive, 85°C	50x10 ³



Contact Data (continued)

Mechanical endurance >10x10⁶ operations
1) Continuous thermal load >10A at 105°C requires reduction of coil power to 49% of rated power after 100ms.

Coil Data

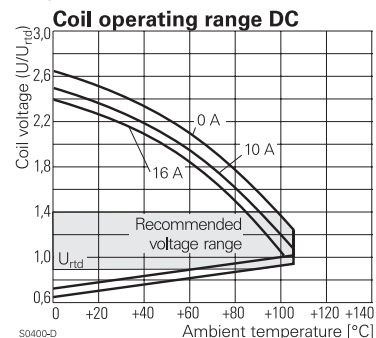
Coil voltage range	3 to 48VDC
Operative range, IEC 61810	90...110% U _{RTD}
Coil insulation system according UL1446	class F

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW ¹⁾
D003	3	2.1	0.3	22	410
D005	5	3.5	0.5	60	420
D006	6	4.2	0.6	90	400
D009	9	6.3	0.9	200	400
D012	12	8.4	1.2	360	400
D024	24	16.8	2.4	1440	400
D048	48	33.6	4.8	5730	400

1) Continuous thermal load > 10 A at 105°C requires reduction of coil power to 49% of rated power after 100 ms.

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 RZH 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	
standard cover version	according EN 60335-1, par.30
Ambient temperature	-40 to 105°C
Category of environmental protection	RTII - flux proof
IEC 61810	
Vibration resistance (functional), 30 to 500Hz	
closing form A contact	>15g
opening form A contact	>20g
opening form B contact	>5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT
Mounting distance	≥2mm
Weight	10g
Resistance to soldering heat THT	
IEC 60068-2-20	270°C/10s ²
Packaging/unit	tube/20 pcs., box/500 pcs.

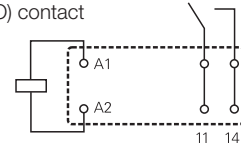
2) The use of foaming flux is not permitted.

PCB layout / terminal assignment

Bottom view on solder pins

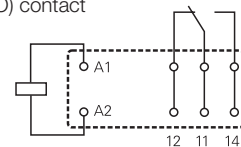
16A, pinning 5mm

1 form A (NO) contact



S0163-BF

1 form C (CO) contact



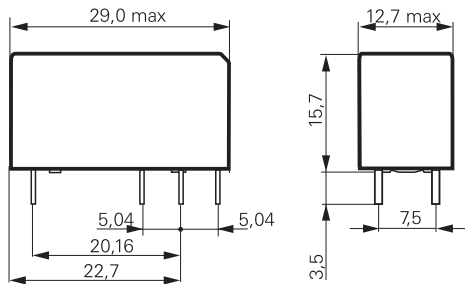
S0163-BE

Recommended pcb hole for manual mounting:
Ø1.3mm

For automated mounting please ask for detailed drawing.

Dimensions

16 A, pinning 5 mm



S0557-AA

Product code structure

Typical product code **RZ H 3 -1A 4 -D012**

Type

RZ Power PCB Relay RZ

Version

H Hot version 105°C

Version

3 double pinning 5mm, 16A (1 form A or 1 form C)

H double pinning 5mm, 16A High performance (1 form A)

Contact Configuration

1A 1 form A (1 NO) contact

1C 1 form C (1 CO) contact

Contact material

4 AgNi 90/10

3 AgSnO₂

Coil version

Coil code: please refer to coil versions table

Product code	Version	Contacts	Contact material	Coil	Part number
RZH3-1C4-D012	16A, 105°C	1 form C (CO)	AgNi 90/10	12VDC	2-1415899-5
RZH3-1C4-D024	pinning 5mm			24VDC	2-1415899-6
RZH3-1A4-D009		1 form A (NO)		9VDC	2-1415899-7
RZH3-1A4-D012				12VDC	2-1415899-8
RZH3-1A4-D024				24VDC	2-1415899-9
RZHH-1A4-D009	16A, 105°C			9VDC	6-1415899-2
RZHH-1A4-D012	pinning 5mm			12VDC	6-1415899-6
RZHH-1A4-D024	High performance			24VDC	6-1415899-7
RZH3-1A3-D012	16A, 105°C, pinning 5mm	1 form A (NO)	AgSnO ₂	12VDC	9-1415899-0

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:](#)

[2-1415899-6](#)