

Power PCB Relay RT1

- 1 pole 12A/16A, 1 form C (CO) or 1 form A (NO) contact
- Sensitive coil 400mW
- 5kV/10mm coil-contact, reinforced insulation
- Ambient temperature 85°C



Typical applications

Boiler control, timers, garage door control, POS automation, interface modules



Approvals

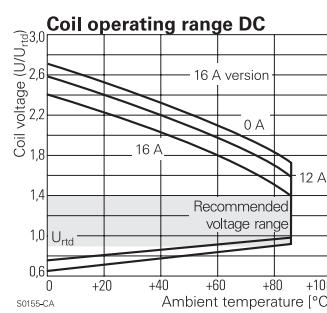
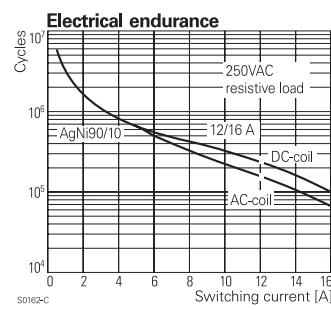
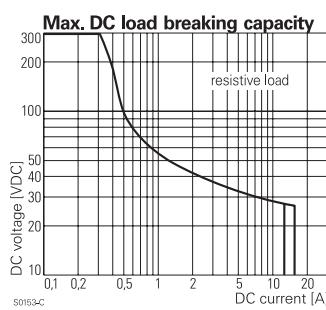
VDE REG.-Nr. 6106, UL E214025, cCSAus 14385

Technical data of approved types on request

Contact Data	12A	16A
Contact arrangement	1 form C (CO) or 1 form A (NO)	
Rated voltage	250VAC	
Max. switching voltage	400VAC	
Rated current	12A	16A
Limiting continuous current	12A	16A, UL: 20A
Limiting making current max. 4s, duty factor 10%	25A	30A
Breaking capacity max.	3000VA	4000VA
Contact Material	AgNi 90/10	
Frequency of operation, with/without load	360/72000h ⁻¹	
Operate/release time max., DC coil	8/6ms	
Bounce time max., DC coil, form A/form B	4/6ms	

Contact ratings

Type	Contact	Load	Cycles
IEC 61810			
RT314 DC-coil	A (NO)	16A, 250VAC, cosφ=1, 85°C	30x10 ³
RT314 DC-coil	C (CO)	16A, 250VAC, cosφ=1, 85°C	10x10 ³
RT314 DC-coil	A (NO)	10A, 400VAC, cosφ=1, 85°C	150x10 ³
RT114 DC-coil	A (NO)	12A, 250VAC, cosφ=1, 85°C	50x10 ³
RT114 AC-coil	A (NO)	12A, 250VAC, cosφ=1, 70°C	100x10 ³
UL 508			
RT314	A/B (NO/NC)	20A, 250VAC, general purpose, 85°C	6x10 ³
RT334	A (NO)	16A, 250VAC, gen. purpose, 85°C	50x10 ³
RT314	A (NO)	1hp, 240VAC, 40°C	1x10 ³
EN60947-5-1			
RT314 DC-coil	A/B (NO/NC)	2A, 24VDC, DC13	6.050
EN60730-1			
RT314 DC-coil	A (NO)	12(2)A, 250VAC, 85°C	100x10 ³



Power PCB Relay RT1 (Continued)
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	PTI 250V

Other Data (continued)

Terminal type	PCB-THT, plug-in
Weight	14g
Resistance to soldering heat	THT, IEC 60068-2-20
RTII	270°C/10s
RTIII	260°C/5s
Packaging/unit	tube/20 pcs., box/500 pcs.

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

Ambient temperature -40 to 85°C

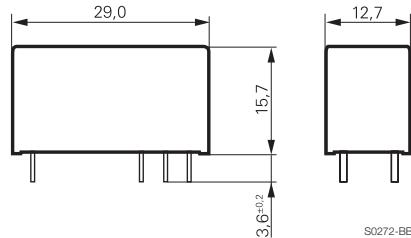
Category of environmental protection

IEC 61810 RTII - flux proof, RTIII - wash tight

Vibration resistance (functional)

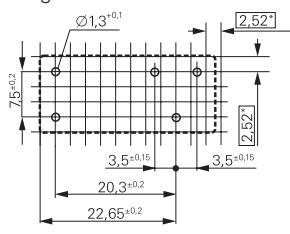
form A/form B contact, 30 to 500Hz 20g/5g

Shock resistance (destructive) 100g

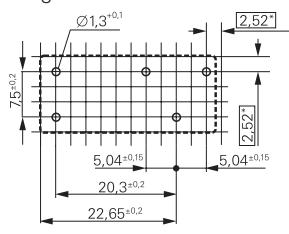
Dimensions

PCB layout / terminal assignment

Bottom view on solder pins

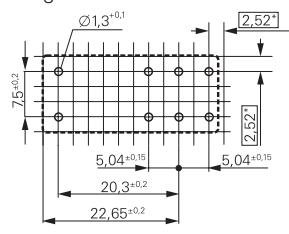
12A, pinning 3.5mm



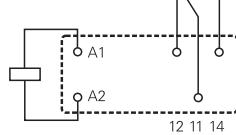
12A, pinning 5mm



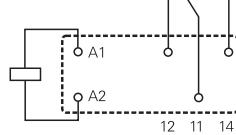
16A, pinning 5mm



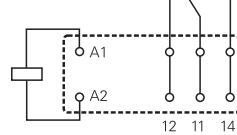
1 form C (CO) contact



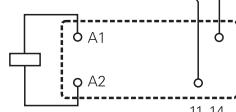
1 form C (CO) contact



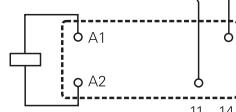
1 form C (CO) contact



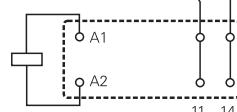
1 form A (NO) contact



1 form A (NO) contact



1 form A (NO) contact



Power PCB Relay RT1 (Continued)

Product code structure

Type	RT Power PCB Relay RT1	Typical product code	RT	3	1	4	024	F
Version								
1	12A, pinning 3.5mm, flux proof							
2	12A, pinning 5mm, flux proof *)							
3	16A, pinning 5mm, flux proof							
B	12A, pinning 3.5mm, wash tight							
D	16A, pinning 5mm, wash tight							
Contact arrangement								
1	1 form C (CO) contact							
3	1 form A (NO) contact							
Contact material								
4	AgNi 90/10							
Coil	Coil code: please refer to coil versions table							
Version								
F	Standard version							

Product code	Version	Contacts	Contact material	Coil	Part number
RT114012F	12A, pinning 3.5mm, flux proof	1 form C (CO) contact	AgNi 90/10	12VDC	1419108-2
RT114024F		1 form A (NO) contact		24VDC	1419108-3
RT134012F				12VDC	5-1415020-1
RT134024F				24VDC	2-1393242-1
RT314005F	16A, pinning 5mm, flux proof	1 form C (CO) contact		5VDC	1419108-8
RT314012F				12VDC	2-1393237-2
RT314024F				24VDC	2-1393237-3
RT334012F		1 form A (NO) contact		12VDC	2-1393237-5
RT334024F				24VDC	2-1393237-7
RTB14005F	12A, pinning 3.5mm, wash tight	1 form C (CO) contact		5VDC	2-1419108-4
RTB14012F				12VDC	2-1419108-5
RTB14024F				24VDC	2-1419108-6
RTB34012F		1 form A (NO)		12VDC	2-1419108-7
RTD14005F	16A, pinning 3.5mm, wash tight	1 form C (CO) contact		5VDC	2-1419108-8
RTD14012F				12VDC	2-1419108-9
RTD14024F				24VDC	3-1419108-1
RTD34012F		1 form A (NO) contact		12VDC	3-1419108-6
RTD34024F				24VDC	3-1419108-9

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:](#)

[5-1415020-1](#)