

## **Power PCB Relay RT1 sensitive**

- 1 pole 10A, 1 form C (CO) or 1 form A (NO) contact
- Highly sensitive version, coil power 250mW
- 5kV/10mm coil-contact
- **■** Reinforced insulation
- Ambient temperature 85°C

Typical applications

Domestic appliances, heating control.





# Approvals VDE Cert. No. 40007571, UL E214025, cCSAus 1142018 Technical data of approved types on request.

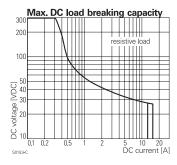
Contact Data	
Contact arrangement	1 form C (CO) or 1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400 VAC
Rated current	10A
Limiting making current; max. 4s, duty	factor 10% 15A
Breaking capacity	2500VA
Contact material	AgNi 90/10
Frequency of operation; with/without lo	ad 3000/72000h <sup>-1</sup>
Operate/release time max.	10/8ms
Bounce time max.; form A/form B	4/9ms

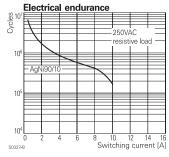
**Contact ratings** 

Type	Contact	Load	Cycles
<b>IEC 61810</b>	)		
RT174	A/B (NO/NC)	10A, 250VAC resistive, 85°C	100x10 <sup>3</sup>
UL 508			
RT174	C (CO)	10A, 250VAC, general purpose, 85°C	6x10 <sup>3</sup>
RT174	A/B (NO/NC)	10A, 250VAC, general purpose, 40°C	30x10 <sup>3</sup>
RT174	A/B (NO/NC)	B300, 40°C	6x10 <sup>3</sup>
RT174	A (NO)	R150, 40°C	6x10 <sup>3</sup>
RT174	B (NC)	1/2hp, 240VAC, 40°C	1x10 <sup>3</sup>
RT174	A (NO)	3/4hp, 240VAC, 40°C	1x10 <sup>3</sup>
EN60730-	1		
RT174	A (NO)	6(4)A, 250VAC, 85°C	100x10 <sup>3</sup>

Mechanical endurance

>30x10<sup>6</sup> operations



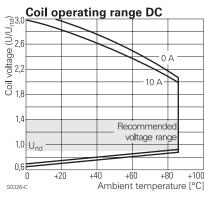


Coil Data		
Coil voltage range	5 to 60VDC	
Operative range, IEC 61810	2	
Coil insulation system according UL	class F	

Coil vers	sions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	$\Omega \pm 10\%^{1)}$	mW
005	5	3.7	0.5	100	250
006	6	4.5	0.6	144	250
009	9	6.8	0.9	312	260
012	12	9.0	1.2	576	250
024	24	18.0	2.4	2304	250
048	48	36.0	4.8	9216	250
060	60	45.0	6.0	128571)	280

1) Coil resistance ±12%

All figures are given for coil without pre-energization, at ambient temperature  $+23^{\circ}$ C. Other coil voltages on request.



Insulation Data		
Initial dielectric strength		
between open contacts	1000V <sub>ms</sub>	
between contact and coil	5000V_ms	
Clearance/creepage	1110	
between contact and coil	≥10/10mm	
Material group of insulation parts	Illa	
Tracking index of relay base	PTI 250V	



## Power PCB Relay RT1 sensitive (Continued)

#### **Other Data**

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="https://www.te.com/customersupport/rohssupportcenter">www.te.com/customersupport/rohssupportcenter</a>

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

Terminal type

PCB-THT, plug-in 14g

Weight
Resistance to soldering heat THT, IEC 60068-2-20

RTII

2-20 270°C/10s

RTIII

260°C/5s

Packaging/unit

tube/20 pcs., box/500 pcs.

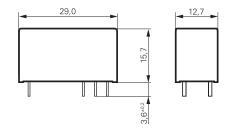
#### **Accessories**

For details see datasheet

Accessories Industrial Power Relay RT

NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

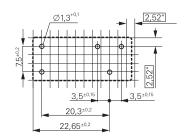
#### **Dimensions**



#### PCB layout / terminal assignment

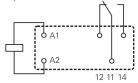
Bottom view on solder pins

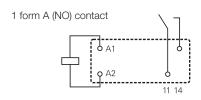
10A, pinning 3.5mm



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

### 1 form C (CO) contact





Product code structure		Typical product code RT	1	7	4	012
Troduct code structure		Typical product code		•	•	012
Туре						
RT Power PCB Relay RT1 sensitive						
Version			_			
1 10A, pinning 3.5mm, flux proof	В	10A, pinning 3.5mm, wash tight				
Contact configuration				_		
7 1 form C (CO) contact	8	1 form A (NO) contact				
Contact material		· ·			•	
<b>4</b> AgNi 90/10						
Coil						
Coil code: please refer to coil versions tab	ole					

Product code	Version	Contacts	Contact material	Coil	Part number
RT174005	Flux proof	1 form C (CO)	AgNi 90/10	5VDC	3-1393239-6
RT174009		contact		9VDC	9-1419143-5
RT174012				12VDC	3-1393239-8
RT174024				24VDC	3-1393239-9
RT184005		1 form A (NO)		5VDC	4-1393239-5
RTB84009	Wash tight	contact		9VDC	4-1393238-7

This list represents the most common types and does not show all variants covered by this datasheet. Other types on request.