

# **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.



Mechanical endurance

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

## **Coil Data**

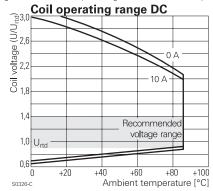
Coil voltage range	5 to 60VDC
Operative range, IEC 61810	2
Coil insulation system according UL	class F

#### Coil versions, DC coil

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°C.



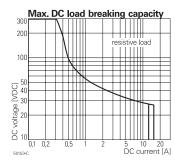
Other coil voltages on request.

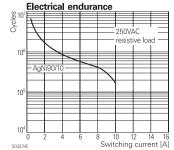
Insulation Data	
Initial dielectric strength	
between open contacts	1000V_ms
between contact and coil	5000V_ms
Clearance/creepage	1110
between contact and coil	≥10/10mm
Material group of insulation parts	Illa
Tracking index of relay base	PTI 250V
Material group of insulation parts	Illa

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

Oundor 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-1	
Operate/release time max.	10/8ms	
Bounce time max.: form A/form B	4/9ms	

Contact I	ratings		
Туре	Contact	Load	Cycles
IEC 6181	0		
RT17*	A (NO)	10A, 250VAC resistive, 85°C	100x103
RTB7*	A (NO)	10A, 250VAC resistive, 85°C	50x10 <sup>3</sup>
UL 508			
RT17*	C (CO)	10A, 250VAC, general purpose, 85°C	6x10 <sup>3</sup>
RT17*	A/B (NO/NC)	10A, 250VAC, general purpose, 40°C	30x103
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>





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Catalog product data, 'Definitions' section, application notes and all specifications are subject to change. 1



# Power PCB Relay RT1 sensitive (Continued)

## **Other Data**

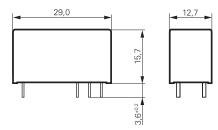
Material compliance: EU RoHS/ELV, Ch	ina RoHS, REACH, Halogen content
refer to the Pro	oduct Compliance Support Center at
www.te.com/	customersupport/rohssupportcenter
Ambient temperature	-40 to 85°C
Category of environmental protection	
IEC 61810 F	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional),	
form A/form B contact, 30 to 500Hz	20g/5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT, plug-in
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.

### Accessories

 For details see datasheet
 Accessories Industrial Power Relay RT

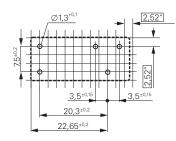
 NOTE: indicated contact ratings and electrical endurance data for direct
 wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

#### Dimensions



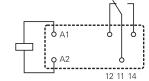
#### **PCB layout / terminal assignment** Bottom view on solder pins

10A, pinning 3.5mm



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





1 form A (NO) contact

Product code structure	Typical product code <b>RT</b> 1	7	4	012
Туре				
<b>RT</b> Power PCB Relay RT1 sensitive				(
Version				Í Í
1 10A, pinning 3.5mm, flux proof	B 10A, pinning 3.5mm, wash tight			Í Í
Contact configuration				Í Í
7 1 form C (CO) contact	8 1 form A (NO) contact			(
Contact material				Í Í
4 AgNi 90/10	5 AgNi 90/10 gold plated			Í Í
Coil				
Cail and a plaga refer to goil versions table				

Coil code: please refer to coil versions table

	Product code	Version	Contacts	Contact material	Coil	Part number
	RT174005	Flux proof	1 form C (CO)	AgNi 90/10	5VDC	3-1393239-6
	RT174009				9VDC	9-1419143-5
	RT174012				12VDC	3-1393239-8
	RT174024				24VDC	3-1393239-9
	RT175024			AgNi 90/10 gold pl.	24VDC	4-1393239-4
	RT184005		1 form A (NO)	AgNi 90/10	5VDC	4-1393239-5
	RT184012			_	12VDC	4-1393239-7
	RT184024				24VDC	4-1393239-9
	RTB84009	Wash tight			9VDC	4-1393238-7
	BTB84012				12VDC	1415536-4

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

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