

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



F0145-C

Approvals

VDE REGNr. 6106,UL E214025, cCSAus 14385
Technical data of approved types on request

Contact D	ata
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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 ratings

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

Mechanical endurance







Coil Data

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

Coil versions, DC coil

	50113, 00 00				
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	12857 ¹⁾	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

insulation Data		
Initial dielectric strength		
between open contacts	1000V _{rms}	
between contact and coil	5000Vrms	
Clearance/creepage		
between contact and coil	≥10/10mm	
Material group of insulation parts	Illa	
Tracking index of relay base	PTI 250V	

Datasheets and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section. Datasheets and product data is subject to the terms of the disclaimer and all chapters of the 'Definitions' section, available at http://relays.te.com/definitions

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



Power PCB Relay RT1 sensitive (Continued)

Other Data

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Material compliance: EU RoHS/E	ELV, China RoHS, REACH, Halogen content					
refer to	refer to the Product Compliance Support Center					
<u>www.te</u>	e.com/customersupport/rohssupportcenter					
Ambient temperature	-40 to 85°C					
Category of environmental prote	ction					
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					
Weight	14g					
Resistance to soldering heat TH	IT, 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 <u>Accessories Industrial Power Relay RT</u> 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







S0163-BG

1 form A (NO) contact



S0163-BH

Product code structure		Typical product code	1	I	7	4	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							
4 AgNi 90/10							
Coil							
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		contact		9VDC	9-1419143-5
RT174012				12VDC	3-1393239-8
RT174024				24VDC	3-1393239-9
RT184005		1 form A (NO)		5VDC	4-1393239-5
BTB84009	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

2

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