

Power PCB Relay RT1 sensitive

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



F0145-C

Applications

Domestic appliances, heating control

Approvals

VDE REG.-Nr. 6106, **UL** US E214025, **SP** US 14385
 Technical data of approved types on request

Contact data

Contact configuration	1 CO or 1 NO
Contact set	single contact
Type of interruption	micro disconnection
Rated voltage / max. switching voltage AC	250 / 400 VAC
Rated current	10 A
Maximum breaking capacity AC	2500 VA
Limiting making capacity, max 4 s, duty factor 10%	15 A
Contact material	AgNi 90/10
Rated frequency of operation with / without load	50 / 1200 min ⁻¹
Operate- / release time	max 10 / 8 ms
Bounce time NO / NC contact	max 4 / 9 ms

Contact ratings

Type	Contact Load	Ambient temp. [°C]	Cycles
IEC 61810			
RT174	NO / NC 10 A, 250 VAC, cosφ=1	85°C	100x10 ³
UL 508			
RT174	CO 10 A, 250 VAC, general purpose	85°C	6x10 ³
RT174	NO / NC 10 A, 250 VAC, general purpose	40°C	30x10 ³
RT174	NO / NC B300	40°C	6x10 ³
RT174	NO R150	40°C	6x10 ³
RT174	NC 1/2 hp, 240 VAC	40°C	1x10 ³
RT174	NO 3/4 hp, 240 VAC	40°C	1x10 ³
EN60730-1			
RT174	NO 6(4) A, 250 VAC	85°C	100x10 ³

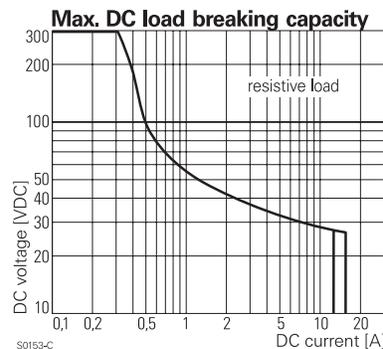
Coil data

Rated coil voltage range DC coil	5...60 VDC
Operative range to IEC 61810	2
Coil Coil insulation system according UL1446	class F

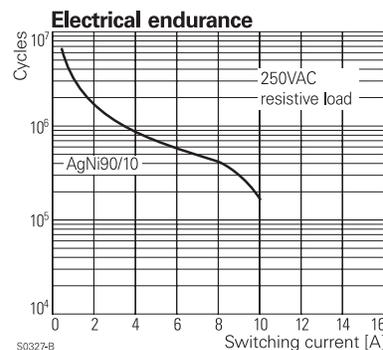
Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω	Rated coil power mW
005	5	3.7	0.5	100±10%	250
006	6	4.5	0.6	144±10%	250
012	12	9.0	1.2	576±10%	250
024	24	18.0	2.4	2304±10%	250
048	48	36.0	4.8	9216±10%	250
060	60	45.0	6.0	12857±12%	280

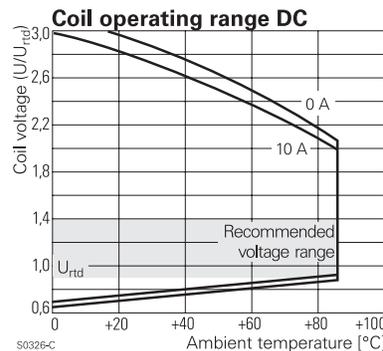
All figures are given for coil without preenergization, at ambient temperature +23°C
 Other coil voltages on request



S0153-C



S0327-B



S0326-C

Power PCB Relay RT1 sensitive (Continued)

Insulation

Dielectric strength coil-contact circuit	5000 V _{rms}
open contact circuit	1000 V _{rms}
Clearance / creepage coil-contact circuit	> 10 / 10 mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 250 V
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	micro disconnection
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	230 / 400 V
Overvoltage category	III

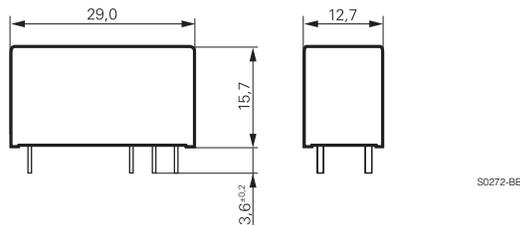
Other data

Mechanical endurance	> 30 x 10 ⁶ cycles
Material	
RoHS - Directive 2002/95/EC	compliant as per product date code 0413
Environment	
Ambient temperature range	-40...+85°C
Vibration resistance (function) NO / NC contact	20 / 5 g, 30 ... 500 Hz
Shock resistance (destruction)	100 g
Category of protection	RTII - flux proof, RTIII - wash tight
Processing	
Mounting	pcb or on socket
Mounting distance	≥ 0 mm
Resistance to soldering heat flux-proof version	270°C / 10 s
wash-tight version	260°C / 5 s
Relay weight	14 g
Packaging unit	20 / 500 pcs

Accessories

For details see datasheet Accessories Power Relay RT

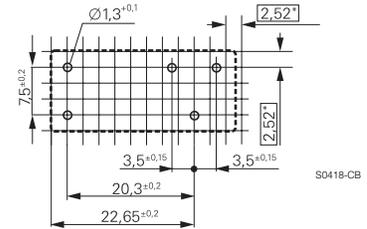
Dimensions



PCB layout / terminal assignment

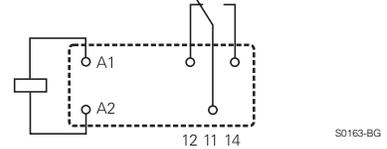
Bottom view on solder pins

10 A, pinning 3.5 mm

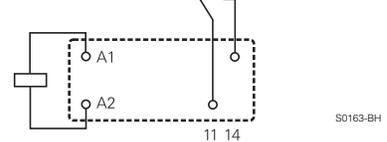


*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.

1 CO contact



1 NO contact



Product key

Typical product key

RT 1 7 4 012

Type

RT Power PCB Relay RT1 sensitive

Version

1 10 A, pinning 3.5 mm, flux proof **B** 10 A, pinning 3.5 mm, wash tight

Contact configuration

7 1 CO contact (1 form C) **8** 1 NO contact (1 form A)

Contact material

4 AgNi 90/10

Coil

Coil code: please refer to coil versions table

Preferred types in bold print

Product key	Version	Contacts	Contact material	Coil	Part number
RT174005	10 A	1 CO contact	AgNi 90/10	5 VDC	3-1393239-6
RT174006	pinning 3.5 mm			6 VDC	3-1393239-7
RT174012	flux proof			12 VDC	3-1393239-8
RT174024				24 VDC	3-1393239-9
RTB74012	10 A, 3.5mm			12 VDC	4-1393238-4
RTB74024	wash tight			24 VDC	4-1393238-6