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

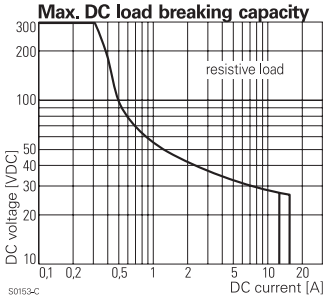
VDE REG.-Nr. 6106, UL E214025, cCSAus 14385
Technical data of approved types on request

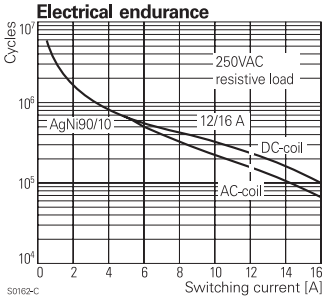
Contact Data

	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





Contact Data (continued)

Contact ratings

Type	Load	Cycles
RT3, RTD	1 HP @ 480VAC* motor	6x10^3
RT3, RTD	1 HP @ 240VAC* motor	6x10^3
RT3, RTD	1/2 HP @ 120VAC* motor	6x10^3
RT3, RTD	60 LRA/10 FLA @ 250VAC* motor	30x10^3
RT3, RTD	TV-5 @ 120VAC* Tungsten	25x10^3
RT3, RTD	A300, 720VA @ 240VAC* Pilot Duty	30x10^3
RT3, RTD	B300, 360VA @ 240VAC** Pilot Duty	30x10^3

*) form A (NO) contact only, **) form B (NC) contact only

Mechanical endurance	>30x10^6 operations

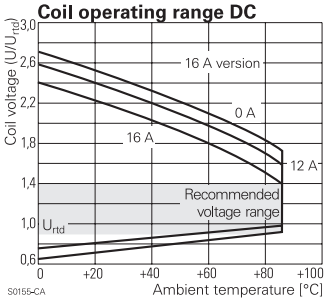
Coil Data

Coil voltage range	5 to 110VDC
Operative range, IEC 61810	2
Coil insulation system according UL	class F

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power mW
005	5	3.5	0.5	62	403
006	6	4.2	0.6	90	400
009	9	6.3	0.9	200	400
012	12	8.4	1.2	360	400
024	24	16.8	2.4	1440	400
048	48	33.6	4.8	5520	417

All figures are given for coil without pre-energization, at ambient temperature +23°C.
Other coil voltages on request.



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

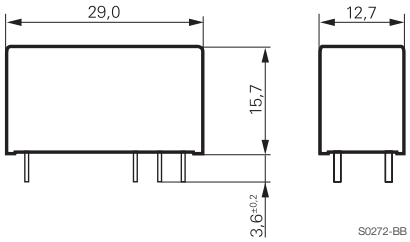
Other Data	
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-40 to 85°C
Category of environmental protection	
IEC 61810	RTII - flux proof, RTIII - wash tight
Vibration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

Other Data (contiinued)	
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

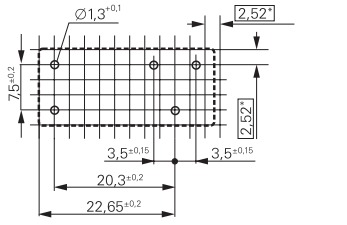


PCB layout / terminal assignment

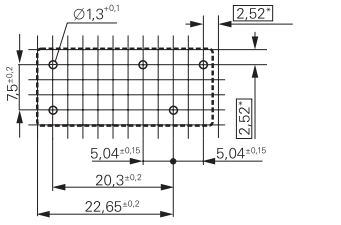
Bottom view on solder pins

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

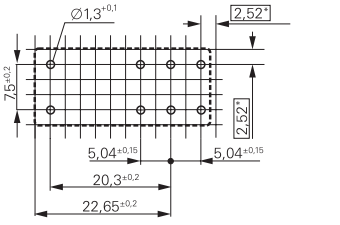
12A, pinning 3.5mm



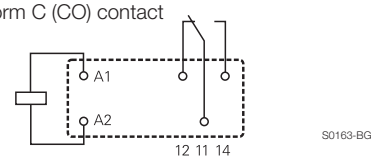
12A, pinning 5mm



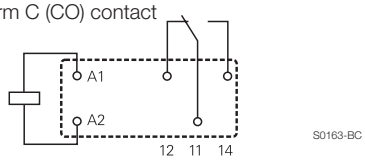
16A, pinning 5mm



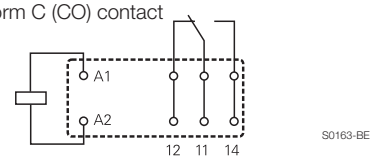
1 form C (CO) contact



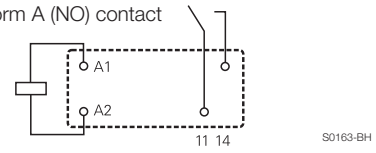
1 form C (CO) contact



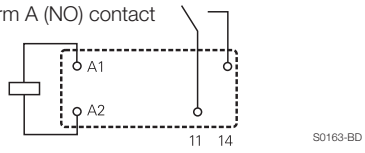
1 form C (CO) contact



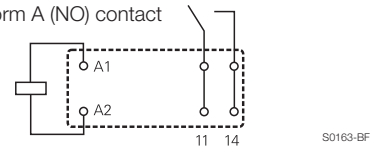
1 form A (NO) contact



1 form A (NO) contact



1 form A (NO) contact



Power PCB Relay RT1 (Continued)

Product code structure	Typical product code	RT	3	1	4	024	F

Type
RT Power PCB Relay RT1

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				24VDC	1419108-3
RT134012F		1 form A (NO) contact		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) contact		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

Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

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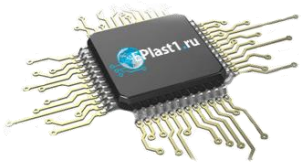
- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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