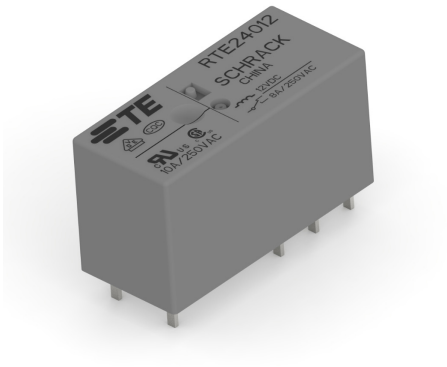
Power PCB Relay RT2 DC and AC (for Asia/Pacific markets)

- **2 pole 8A, 2 form C (CO) or 2 form A (NO) contacts**
- **Sensitive coil 400mW**
- **5kV/10mm coil-contact, reinforced insulation**
- **Ambient temperature 85°C**
- **WG version: product in accordance to IEC60335-1**



Typical applications
Boiler control, timers, garage door control, POS automation, interface modules.

Approvals

VDE Cert. No. 40007571, UL E214025, cCSAus 1142018, CQC 18002197247

Technical data of approved types on request.

Contact Data

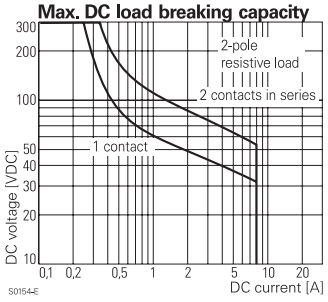
Contact arrangement	2 form C (CO) or 2 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A, UL: 10A
Limiting continuous current	8A, UL: 10A
Limiting making current, max. 4s, duty factor 10%	15A
Breaking capacity max.	2000VA
Contact material	AgNi 90/10
Frequency of operation, with/without load	360/72000h^{-1}
Operate/release time max., DC coil	8/6ms
Bounce time max., DC coil, form A/form B	4/10ms

Contact ratings

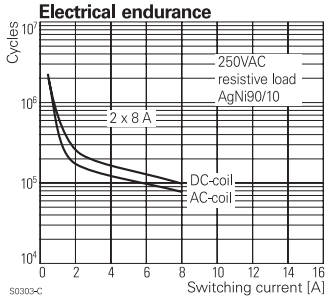
Type	Contact	Load	Cycles
IEC 61810			
RT424 DC coil	C (CO)	8A, 250VAC, cosφ=1, 85°C	10x10^3
RT444 AC coil	A (NO)	8A, 250VAC, cosφ=1, 70°C	50x10^3
RT424 AC coil	C (CO)	8A, 250VAC, cosφ=1, 70°C	30x10^3
UL 508			
RT424 DC coil	A/B (NO/NC)	10A, 250VAC, gen. purpose, 85°C	20x10^3
RT424 DC coil	A/B (NO/NC)	1/2hp, 240VAC, 85°C	1x10^3
RT424 DC coil	A/B (NO/NC)	Pilot duty, B300, R300, 85°C	6x10^3
EN60947-5-1			
RTE24 DC coil	A/B (NO/NC)	AC15, 250VAC, 3A	6.050
RTE24 DC coil	A/B (NO/NC)	DC13, 24VDC, 2A	6.050
RTE24 DC coil	A/B (NO/NC)	DC13, 250VDC, 0.2A	6.050
EN60730-1			
RT424 DC coil	A/B (NO/NC)	6(2)A, 250VAC, 85°C	100x10^3

Mechanical endurance >30x10^6 operations

Max. DC load breaking capacity



Electrical endurance



Coil Data

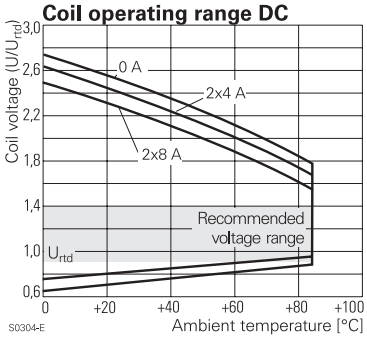
Coil voltage range	5 to 110VDC
Operative range, IEC 61810	2
Coil insulation system according UL	class F

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
060	60	42.0	6.0	8570 [1]	420
110	110	77.0	11.0	28800 [1]	420

1) Coil resistance ±12%. All figures are given for coil without pre-energization, at ambient temperature +23°C. Other coil voltages on request.

Coil operating range DC



Insulation Data

Initial dielectric strength	
between open contacts	1000Vrms
between contact and coil	5000Vrms
between adjacent contacts	2500Vrms
Clearance/creepage	
between contact and coil	≥ 10/10mm
between adjacent contacts	≥ 3/4mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 250V

08-2019, Rev. 0819
www.te.com
© 2014 Tyco Electronics Corporation,
a TE Connectivity Ltd. company.

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog 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

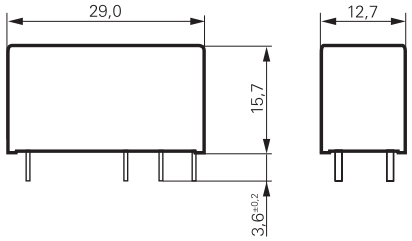
Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

Power PCB Relay RT2 DC and AC (for Asia/Pacific markets) (Continued)

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	
Resistance to heat and fire	
WG version	according EN60335, par30
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 300Hz	20g/5g
Shock resistance (destructive)	100g
Terminal type	PCB-THT, plug-in
Weight	13g
Resistance to soldering heat THT, IEC 60068-2-20	
RTII	270°C/10s
RTIII	260°C/5s
Packaging/unit	tube/20pcs., box/500pcs.

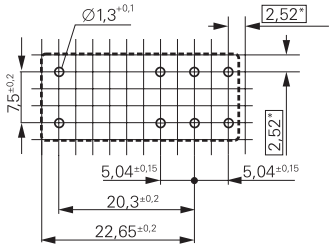
Accessories	
For details see datasheet	Accessories Industrial Power Relay RT
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.	

Dimensions



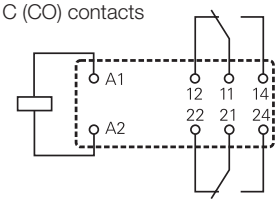
PCB layout / terminal assignment

Bottom view on solder pins

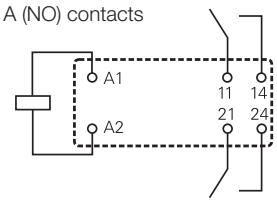


*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.

2 form C (CO) contacts



2 form A (NO) contacts



08-2019, Rev. 0819
www.te.com
© 2014 Tyco Electronics Corporation,
a TE Connectivity Ltd. company.

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog 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

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

Power PCB Relay RT2 DC and AC (for Asia/Pacific markets) (Continued)

Product code structure	Typical product code	RT	4	2	4	024

Type
- **RT** Power PCB Relay RT2

Version
- **4** 8A, pinning 5mm, flux proof
- **E** 8A, pinning 5mm, wash tight (not for Reflow version)

Contact arrangement
- **2** 2 form C (CO) contacts
- **4** 2 form A (NO) contacts

Contact material
- **3** AgSnO
- **4** AgNi 90/10
- **5** AgNi 90/10 gold plated

Coil
- Coil code: please refer to coil versions table

Version
- **Blank** Standard version
- **WG** Product in accordance with IEC 60335-1 (domestic appliances)
- **R** Reflow solderable

Product code	Version	Contact	Contact Material	Coil	Version	Part number
RT424005	8A,	2 form C (CO)	AgNi 90/10	5VDC	standard	1-1649329-0
RT424006	pinning 5 mm,	contacts		6VDC		1-1649329-1
RT424009	flux proof			9VDC		1-1649329-2
RT424012				12VDC		1-1649329-3
RT424012WG				12VDC	IEC 60335-1 compliant	8-1833003-5
RT424024				24VDC	standard	1-1649329-5
RT424048				48VDC		1-1649329-6
RT424060				60VDC		1-1649329-7
RT424110				110VDC		1-1649329-8
RT425005			AgNi 90/10	5VDC		4-1649329-6
RT425012			gold plated	12VDC		4-1649329-9
RT425024				24VDC		5-1649329-1
RT444012		2 form A (NO)	AgNi 90/10	12VDC		3-1649329-1
RT444024		contacts		24VDC		3-1649329-3
RTE24005	8A,	2 form C (CO)		5VDC		1649329-1
RTE24006	pinning 5 mm,	contacts		6VDC		1649329-2
RTE24012	wash tight			12VDC		1649329-4
RTE24024				24VDC		1649329-6
RTE24048				48VDC		1649329-7
RTE24060				60VDC		1649329-8
RTE24110				110VDC		1649329-9
RTE25005			AgNi 90/10	5VDC		3-1649329-7
RTE25012			gold plated	12VDC		4-1649329-0
RTE25024				24VDC		4-1649329-2
RTE44009		2 form A (NO)	AgNi 90/10	9VDC		2-1649329-1
RTE44012		contacts		12VDC		2-1649329-2
RTE44024				24VDC		2-1649329-4
RTE44048				48VDC		2-1649329-5

08-2019, Rev. 0819
www.te.com
© 2014 Tyco Electronics Corporation,
a TE Connectivity Ltd. company.

Catalog and product specification according to IEC 61810-1 and to be used only together with the 'Definitions' section.

Catalog 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

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