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## Power PCB Relay RT2 DC and AC (for global markets)

<ul> <li>2 pole 8A, 2 form C (CO) or 2 fe</li> <li>DC or AC coil</li> <li>5kV/10mm coil-contact, reinfo</li> <li>Ambient temperature up to 85</li> <li>WG version: product in accord</li> <li>Reflow version: for THR (Through)</li> </ul>	orced insulation °C ance to IEC60335-1 Igh-Hole Reflow) soldering p				THE STATE	STERNAL STREET		
Boiler control, timers, garage door of modules.	control, POS automation, interfa	ice			Ę	over c RU	us c <sup>®®</sup> us	
Approvals VDE Cert. No. 40007571, UL E214 Technical data of approved types on reque	est.		Mechani DC co DC co AC co	oil, reflow versi	on	>10> >5x	<10 <sup>6</sup> operation <10 <sup>6</sup> operation 10 <sup>6</sup> operations 10 <sup>6</sup> operations	S S
Contact arrangement Rated voltage Max. switching voltage Rated current Limiting continuous current Limiting making current, max. 4s, d Breaking capacity max.	2000VA		Operativ Coil insu	age range, DC e range, IEC 6 lation system a	1810 according UL	5 to 110	/DC / 24 to 23 2 class F	OVAC
Contact material Frequency of operation, with/withou DC coil AC coil Operate/release time max., DC coil Bounce time max., DC coil, form A/ Electrical endurance	360/72000h <sup>-1</sup> 360/36000h <sup>-1</sup> 8/6ms		Coil code 005 006 009 012 024	sions, DC co Rated voltage VDC 5 6 9 12 24	Operate voltage VDC 3.5 4.2 6.3 8.4 16.8	Release voltage VDC 0.5 0.6 0.9 1.2 2.4	$\begin{array}{c} \text{Coil} \\ \text{resistance} \\ \Omega \pm 10\%^{(2)} \\ 62 \\ 90 \\ 200 \\ 360 \\ 1440 \\ 1440 \end{array}$	Rated coil power mW 403 400 400 400 400
RT444 AC coil A (NO) 8A, 3	250VAC, cosφ=1, 85°C 250VAC, cosφ=1, 70°C 250VAC, cosφ=1, 70°C	Cycles 10x10 <sup>3</sup> 50x10 <sup>3</sup> 30x10 <sup>3</sup> 20x10 <sup>3</sup>	temperatu	48 60 110 stance ±12%. All re +23°C. Other of sions, AC coi Rated	coil voltages on r		5520 8570 <sup>2)</sup> 28800 <sup>2)</sup> t pre-energization	417 420 420 a, at ambient Rated coil
RT424 DC coil         A/B (NO/NC)         1/2n           RT424 DC coil         A/B (NO/NC)         Pilot           EN60947-5-1         RTE24 DC coil         A/B (NO/NC)         AC1           RTE24 DC coil         A/B (NO/NC)         AC1         RTE24 DC coil         A/B (NO/NC)         DC1           RTE24 DC coil         A/B (NO/NC)         DC1         RTE24 DC coil         A/B (NO/NC)         DC1           RTE24 DC coil         A/B (NO/NC)         BC1         RT424 DC coil         A/B (NO/NC)         6(2)/           1) For reflow solderable versions: actual co         1         Contents         Contents         Contents         Contents	p, 240VAC, 85°C duty, B300, R300, 85°C 5, 250VAC, 3A 3, 24VDC, 2A 3, 250VDC, 0.2A A, 250VAC, 85°C	1×10 <sup>3</sup> 6×10 <sup>3</sup> 6.050 6.050 6.050 100×10 <sup>3</sup>		voltage VAC 24 115 120 200 230 stance ±10%. All re +23°C, 50Hz.			resistance Ω±15% <sup>3)</sup> 350 <sup>3)</sup> 8100 8800 24350 32500 t pre-energization	power VA 0.76 0.76 0.75 0.76 0.74 0.74
reflow soldering process. Max. DC load breaking capacity 200 201 201 201 201 201 201 201	10 <sup>6</sup> 2 × 8 A AgN 10 <sup>6</sup> 2 × 8 A AC-coil 10 <sup>6</sup> 0 2 4 6 8 10	VAC	0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0	+20 +40 +		E2.2 00 1.8 1.6 00 1.4 1.2 1.0 0.8 0.6	2x8 / 2x8 / ed coil voltage	
10-2014, Rev. 1014 <u>www.te.com</u> © 2014 Tyco Electronics Corporation, a TE Connectivity Ltd. company.	Catalog and product specification to IEC 61810-1 and to be used of with the 'Definitions' section.	only together	terms of the the 'Definition http://relays	product data is s disclaimer and al ons' section, availa .te.com/definition	II chapters of able at <u>s</u>	application n subject to ch		fications are



## Power PCB Relay RT2 DC and AC (for global markets) (Continued)

Insulation Data	Other Data (continued)
Initial dielectric strength	Terminal type PCB-THT, plug-in
between open contacts 1000V	reflow version PCB-THR
between contact and coil 5000V <sub>ms</sub>	Mounting distance, AC coil ≥2.5mm
between adjacent contacts 2500V	Weight 13g
Clearance/creepage	Resistance to soldering heat THT, IEC 60068-2-20
between contact and coil ≥10/10mm	RTII 270°C/10s
	RTIII 260°C/5s
between adjacent contacts ≥3/4mm	
Material group of insulation parts	Resistance to soldering heat THR
Tracking index of relay base PTI 250V	reflow soldering (for reflow version) forced gas convection 4) or
reflow version PTI 175V	vapour phase <sup>5)</sup>
	temperature profile according EN61730
	Packaging/unit tube/20pcs., box/500pcs.
Other Data	4) infrared heating not allowed.
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content	5) recommended fluid LS/230.
refer to the Product Compliance Support Center at	
www.te.com/customersupport/rohssupportcenter	For details see datasheet Accessories Industrial Power Relay F
Resistance to heat and fire	NOTE: indicated contact ratings and electrical endurance data for direct
WG version or reflow version according EN60335, par30	WOTE. Indicated contact fatings and electrical endurance data for direct
Ambient temperature	wiring of relays (according IEC 61810-1); for relays mounted on sockets
DC coil -40 to 85°C	deratings may apply.
AC coil -40 to 70°C	
AgSnO <sub>2</sub> contacts -40 to 70°C	
Category of environmental protection, IEC 61810	
standard version RTII - flux proof, RTIII - wash tight	
reflow version RTII - flux proof	
Vibration resistance (functional),	
form A/form B contact, 30 to 300Hz 20g/5g	
Shock resistance (destructive) 100g	
Dimensions	PCB layout / terminal assignment
THT version THR version (reflow so	Bottom view on solder pins
	Jidei abie)
29,0 12,7 29,0 max	$12.7 \text{ max}$ $01.3^{+0.1}$
(2)	
12	
	5,04±0,15 5,04±0,15
6	20,3±0,2
00	
m	
	*) With the recommended PCB hole sizes a grid
	*) With the recommended PCB hole sizes a grid
	*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.
SKV	*) With the recommended PCB hole sizes a grid
SKY	*) With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.
SKY	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used. ELEC 2 form C (CO) contacts
SKY	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.
Process conditions for Reflow soldering	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.
Process conditions for Reflow soldering according to EN61760-1	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used. ELEC 2 form C (CO) contacts
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 9300[vapour phase, SnAqCu solder ]	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 9300[vapour phase, SnAqCu solder ]	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used. ELEC 2 form C (CO) contacts
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 9300[vapour phase, SnAqCu solder] 9300[forced gas convection, SnAqCu solder]	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used.
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 9300[vapour phase, SnAqCu solder ]	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used. <b>ELEC</b> 2 form C (CO) contacts Ofile solder 250°C max
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 9300[vapour phase, SnAqCu solder] 9300[forced gas convection, SnAqCu solder]	") With the recommended PCB hole sizes a grid pattern from 2.5mm to 2.54mm can be used. ELEC 2 form C (CO) contacts O A1 12 11 14 22 21 24 0 A2 22 21 24 250°C max 15.909 2 form A (NO) contacts
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2300 vapour phase. SnAgCu solder min/max profile 2200 60305 217°C Barbon temperature profile 2000 forced gas convection. SnAgCu solder by pical profile 2000 forced gas convection. SnAgCu solder 2000 vapour phase. SnAgCu solder 2000 forced gas convection. SnAgCu solder 2000 vapour phase. SnAgCu solder 2000 forced gas convection. SnAgCu solder 2000 vapour phase. SnAgCu solde	<b>Dile</b>
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile according to EN61760-1 Reflow temperature profile according to EN61760-1 Solution forced gas convection, SnAqCu sol according to EN61760-1 according to EN61760-1 ac	<b>Dile</b> 2 form A (NO) contacts 2 form A (NO) contacts
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2000 min/max profile 2040s 230°C 150 cooling rate	<b>Dile Ofile Ofi</b>
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile according to EN61760-1 Reflow temperature profile according to EN61760-1 Reflow temperature profile according to EN61760-1 Country action of the soldering according to EN61760-1 Reflow temperature profile according to EN61760-1 Country action of the soldering according to EN61760-1 Reflow temperature profile according to EN61760-1 Country action of the soldering according to EN61760-1 Reflow temperature profile according to EN61760-1 Country action of the soldering according to EN61760-1 according to EN61760-1 ac	<b>File</b> Solder       25°°C max       25°°C max       25°°C max       25°°C max       20°C max       20°C max
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2500 Vapour phase, SnAgCu solder 2500 forced gas convection,	bile Solder
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2300 vapour phase, SnAgCu solder 2500 reflevent temperature profile 2500 reflevent temperature profile 2000 ref	bile Solder 220°C max C 6 K/S C 6 K/S C 6 K/S C 6 K/S C 7 K K C (CO) contacts C 10 K C (CO) contacts C 10 K C (CO) contacts C 11 14 C 11
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2500 very provide in the solder in t	bile Solder 220°C max C 6 K/S C 6 K/S C 6 K/S C 6 K/S C 7 K K C (CO) contacts C 10 K C (CO) contacts C 10 K C (CO) contacts C 11 14 C 11
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2000 vapour phase, SnAgCu solder min/max profile 2000 forced gas convection, SnAgCu solder 2000 vapour phase, SnAgCu solder 2000 forced gas convection, SnAgCu solder 2000 forced gas conv	bile 220°C max + Solder + Solder
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile 2500 very provide in the solder in t	bile 220°C max + Solder + Solder
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile	<b>Dile Offile Offile</b>
Process conditions for Reflow soldering according to EN61760-1 Reflow temperature profile	<b>Dile Offile Offile</b>

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## Power PCB Relay RT2 DC and AC (for global markets) (Continued)

Product code structure			Typical product code	RT	4	2	4	024	
Туре									
R	RT Power PCB Relay RT2								
Version									
4	4 8A, pinning 5mm, flux proof								
E	E 8A, pinning 5mm, wash tight (not for Reflow version)								
Contact a	Contact arrangement								
2	2 2 form C (CO) contacts								
4	4 2 form A (NO) contacts								
Contact r	mater	ial							
3	3 AgSnO								
4 AgNi 90/10									
5	5 AgNi 90/10 gold plated								
Coil					100	1			
	Coil	code: please refer to coil versions table							
Version									
BI	lank	Standard version							
W	'G	Product in accordance with IEC 60335-1 (domestic appliances)							
R		Reflow solderable							

Product code	Version	Contacts	<b>Contact material</b>	Coil	Version	Part number
RT423730	8A,	2 form C (CO)	AgSnO	230VAC	Standard	4-1393243-3
RT424005	pinning 5mm,	contacts	AgNi 90/10	5VDC		5-1393243-9
RT424006	flux proof			6VDC		6-1393243-1
RT424012				12VDC		6-1393243-3
RT424012WG					IEC60335-1 compliant	7-1415538-8
RT424024				24VDC	Standard	6-1393243-8
RT424024WG					IEC60335-1 compliant	7-1415538-7
RT424048		1 Y 10		48VDC	Standard	7-1393243-0
RT424060				60VDC		7-1393243-3
RT424110				110VDC		7-1393243-5
RT424524				24VAC		7-1393243-6
RT424615				115VAC		7-1393243-8
RT424730				230VAC		7-1393243-9
RT425003			AgNi 90/10	3VDC		7-1415525-1
RT425005			gold plated	5VDC		8-1393243-0
RT425012				12VDC		8-1393243-2
RT425024				24VDC		8-1393243-5
RT444012		2 form A (NO)	AgNi 90/10	12VDC		9-1393243-7
RT444024		contacts		24VDC		9-1393243-9
RTE24005	8A,	2 form C (CO)	1 10-10-10-10-10-10-10-10-10-10-10-10-10-1	5VDC		1393243-1
RTE24006	pinning 5mm,	contacts		6VDC		1393243-2
RTE24012	wash tight			12VDC		1393243-4
RTE24024				24VDC		1-1393243-0
RTE24048				48VDC		1-1393243-1
RTE24110				110VDC		1-1393243-4
RTE24524				24VAC		1-1393243-5
RTE24615				115VAC		1-1393243-7
RTE24730				230VAC		1-1393243-8
RTE25005			AgNi 90/10	5VDC		1-1393243-9
RTE25012			gold plated	12VDC		2-1393243-0
RTE25024				24VDC		2-1393243-1
RTE25524						2-1393243-4
RTE43009		2 form A (NO)	AgSnO	9VDC		4-1415535-1
RTE44009		contacts	AgNi 90/10			3-1393243-1
RTE44730			Ĭ	230VAC		3-1393243-5
This list represents the mo	st common types and doe	s not show all variants co	overed by this datasheet		-	

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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