

F0149-C

Power PCB Relay RT2-AP

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

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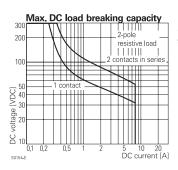
Contact Data	
Contact arrangement	2 form C (CO) or 2 form A (NO)
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A, UL: 10A
Limiting continuous current	8A, UL: 10A
Limiting making current, max. 4s, duty	factor 10% 15A
Breaking capacity max.	2000VA
Contact material	AgNi 90/10
Frequency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

Contact ratings

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Туре	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

>30x10⁶ operations



3 10 ⁷ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁶ 10 ⁶ 2 × 8 Å 10 ⁶ 10 ⁶ 2 × 8 Å DC-coil AC-coil 10 ⁶ 10 ⁶ 2 × 8 Å CC-coil AC-coil AC-coil CC-	0.07	Elec	trica	l en	dura	nce			
10 ⁶ 2 x 8 A A A A A A A A A A A A A A A A A A	<u>s</u> 10'								
10 ⁶ 2 4 6 8 10 12 14 16		١					resist	ive loa	nd —
	10	V		2 x 8 /					
0 2 4 6 8 10 12 14 16	10 ⁵			//	\sim	DC-c	coil		
	10 ⁴								
		0 3	24	4 1	6 8				

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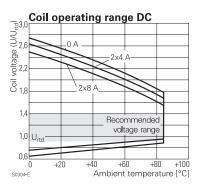
Coil Data

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

Coil versions, DC coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	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.



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	Illa	
Tracking index of relay base	PTI 250V	

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 RT2-AP (Continued)

Other Data

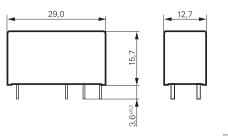
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter Resistance to heat and fire WG version according EN60335, par30 Ambient temperature -40 to 85°C Category of environmental protection IEC 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

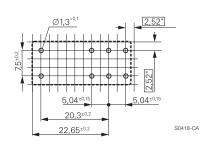
Accessories Industrial Power Relay RT For details see datasheet NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

Dimensions

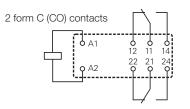


S0272-BA

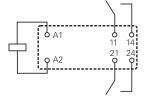
PCB layout / terminal assignment



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



2 form A (NO) contacts



S0163-BJ



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Bottom view on solder pins



Power PCB Relay RT2-AP (Continued)

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Produ	t code structure Typical product code RT	4	2	4	024	AP
Туре						
	RT Power PCB Relay RT2					
Version						
	8A, pinning 5mm, flux proof					
	8A, pinning 5mm, wash tight					
Contac	: arrangement		-			
:	2 form C (CO) contacts					
	2 form A (NO) contacts					
Contac	material			-		
	AgNi 90/10					
Coil						
	Coil code: please refer to coil versions table					
Version						
A	P Standard version					
V	IGAP Product in accordance with IEC 60335-1 (domestic appliances)					

Product code	Version	Contacts	Contact material	Coil	Part number
RT424005AP	8A,	2 form C (CO)	AgNi 90/10	5 VDC	1-1649329-0
RT424009AP	pinning 5mm,	contacts		9 VDC	1-1649329-2
RT424012AP	flux proof			12 VDC	1-1649329-3
RT424024AP				24 VDC	1-1649329-5
RT424048AP				48 VDC	1-1649329-6
RTE24005AP	8A,			5 VDC	1649329-1
RTE24012AP	pinning 5mm,			12 VDC	1649329-4
RTE24024AP	wash tight			24 VDC	1649329-6
RTE24048AP	Ĭ			48 VDC	1649329-7
RTE24110AP				110 VDC	1649329-9

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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