

T9A_2X series, DC coil NC PCB or Panel Mount Relay

- 30A switching in 1 Form B (NC)
- Plastic sealed case available
- Meets UL 508 and 873 spacing 3.18mm through air, 6.36mm over surface
- Option for load connections via 0.250" (6.35mm) Q.C. terminals
- UL class F insulation system standard

Typical applications Energy Management, Lighting, Industrial Controls

Approvals
UL E58304
Technical data of approved types on request

Contact Data	
Contact arrangement	1 form B (NC)
Rated voltage	240VAC
Max. switching voltage	240VAC
Rated current	30A
Limiting continuous current	30A
Contact material	AgSnOlnO
Min. recommended contact load	1A, 5VDC or 12VAC
Initial contact resistance	75 mΩ at 1A at 5VDC or 12VAC
Frequency of operation, with/without	load 360/3600hr
Operate/release time max., including	bounce 18/15ms
Electrical endurance	20,000 typical

Contact	ratings 1)		
Type	Load		Cycles
UL 508/8	73		
AgSnOIn	O (contact co	de 6)	
NC	30A, 240	OVAC, Resistive	20x10 ³
1) Contact	ratings at 25°C (un	less otherwise noted) with relay pro	perly vented. Remove

Mechanical endurance 10x10⁶ ops.

Coil Da	ıta				
Coil volta	ge range		5	to 110VDC	
Max. coil	power		110	0% of nominal	
Max. coil	temperature			155°C	
Coil insul	ation system a	according UL		Class F	
Coil vers	sions, DC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	mW
Code D	(1W) coil				
5	5	3.75	0.5	25	1W
9	9	6.75	0.9	81	1W
12	12	9	1.2	144	1W
15	15	11.25	1.5	225	1W
18	18	13.5	1.8	324	1W
24	24	18	2.4	576	1W
48	48	36	4.8	2304	1W

All figures are given for coil without preenergization, at ambient temperature +23°C.

	Insul	ation	Data
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Initial dielectric strength between open contacts

vent nib after soldering and cleaning.

1500V_{rms}



between contact and coil	2500V _{rms}
Initial surge withstand voltage	
between contact and coil	6kV
Initial insulation resistance	
between insulated elements	1x10 ⁹ Ω
Clearance/creepage	
between contact and coil	3.18mm clearance/6.36mm

Other Data

IFC 60068-2-20

coil cooled to ambient.

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		
DC coil	-55°C to 70°C	$C^{2)}$

Category of environmental protection	1
IEC 61810	RT0 - open, RTI - dust protected
	RTII - flux proof, RTIII - wash tight
Vibration resistance (functional)	1.65mm max excursions, 10-55 Hz
Shock resistance (functional)	10g for 11msec
Shock resistance (destructive)	100g
Terminal type	pcb-tht, pcb-tht + quick connect, and
	quick connect
Weight	26g mounting code 1
	33g mounting codes 2 and 5
Resistance to soldering heat THT	<u> </u>

120 00000 2 20	200 0
Packaging/unit	tray/50 pcs., bundle/250 pcs., box/500 pcs.
2) Operating ambient tempe	rature must consider "Must Operate Voltage Change Over
Temperature," Contact Te	mperature Rise, Coil Temperature Rise (If coil is not allowed to
cool) and Maximum Coil 7	Temperature. Specification ambient considers 30A load with

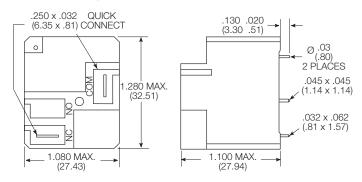
250°C



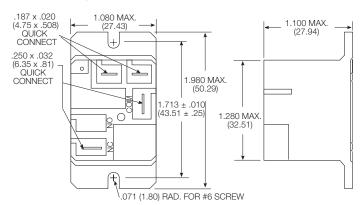
T9A_2X series, DC coil NC PCB or Panel Mount Relay (Continued)

Dimensions

T9AS - Mounting and termination code 2

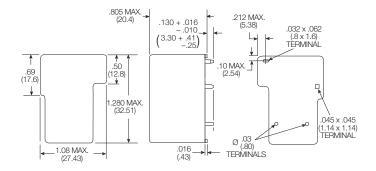


T9AP - Mounting and termination code 5

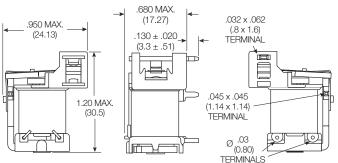


Note: Recommended mounting screw torque is 4.0-5.0 lbs.in when #6 screw is used.

Plain case



Open style



Terminal assignment

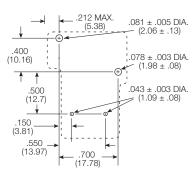
Bottom view on pins



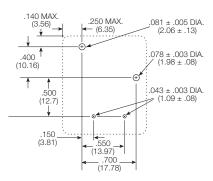
PCB layout

Bottom view on pins

T9AP/S - Mounting and termination code 2



T9AS/V - Mounting and termination code 1





T9A_2X series, DC coil NC PCB or Panel Mount Relay (Continued)

Product	code structure	Typical product code	T9A	S	2X	D	1	6	-12
Туре	A Power PCB or panel mount relay T9A		_						
Enclosure	,								
N	Open, no enclosure (requires mounting code 1)								
Р	Dust protected plastic case (requires mounting code 5)								
s	Wash-tight plastic case with knock off nib (requires mour	nting code 1 or 2)							
V	Flux-proof plastic case (requires mounting code 1 or 2)	,							
Contact a	rrangement				_				
2X	1 form B (1 NC) with ratings to 30A								
Coil Input	t .					•			
D	DC voltage, 1W								
Mounting	and termination						<i>'</i>		
1	PCB mounting; PCB terminals for coil and contacts (only	available with enclosure co	ode N, S c	or V)					
2	PCB mounting; PCB term. for coil and contacts; 6.35mm	n (.250in) QC for contacts (only availa	ble with	enclosur	e code S	G or V)		
5	Flanged mounting; 4.75mm (.187) QC for coil; 6.35mm (.	250in) QC for contacts (on	ly available	e with e	nclosure (code P)			
Contact r	naterial + Size								
6	AgSnOlnO								
Coil volta	ge								,
Co	il code: please refer to coil versions table								

Product Code	Enclosure	Contacts	Coil	Mounting	Contact Material	Coil	Part Number
T9AV2XD16-12	Flux proof case	1 NC contact	1W	pcb terminals	AgSnOlnO	12VDC	2071229-2
T9AP2XD56-12	Unsealed, plastic dust cover (mounting code 5)			Flanged mount, quick conn.			2071229-1