

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	AgSnInO
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
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UL 508/873

AgSnInO (contact code 6)

NC	30A, 240VAC, Resistive	20x10 ³
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¹⁾ Contact ratings at 25°C (unless otherwise noted) with relay properly vented. Remove vent nib after soldering and cleaning.

Mechanical endurance	10x10 ⁶ ops.
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Coil Data

Coil voltage range	5 to 110VDC
Max. coil power	110% of nominal
Max. coil temperature	155°C
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
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
110	110	82.5	11	12100	1W

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

Insulation Data

Initial dielectric strength	
between open contacts	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

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

Ambient temperature	
DC coil	-55°C to 70°C ²⁾
Category of environmental protection	
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

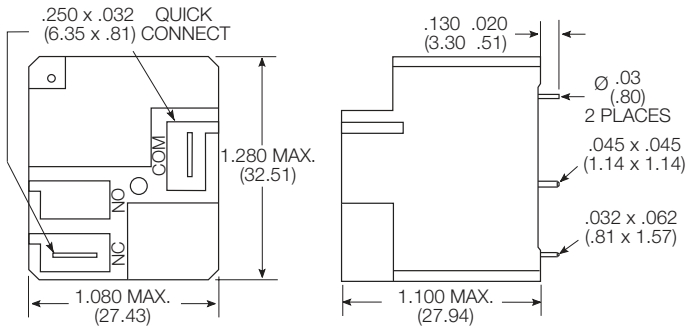
Resistance to soldering heat THT	
IEC 60068-2-20	250°C
Packaging/unit	tray/50 pcs., bundle/250 pcs., box/500 pcs.

²⁾ Operating ambient temperature must consider "Must Operate Voltage Change Over Temperature," Contact Temperature Rise, Coil Temperature Rise (If coil is not allowed to cool) and Maximum Coil Temperature. Specification ambient considers 30A load with coil cooled to ambient.

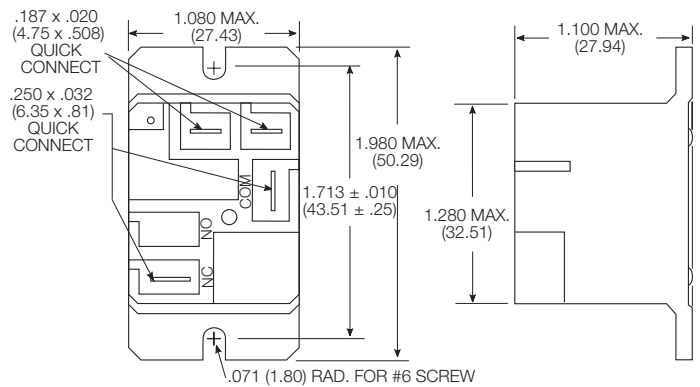
T9A_2X series, DC coil NC PCB or Panel Mount Relay (Continued)

Dimensions

T9AS – Mounting and termination code 2

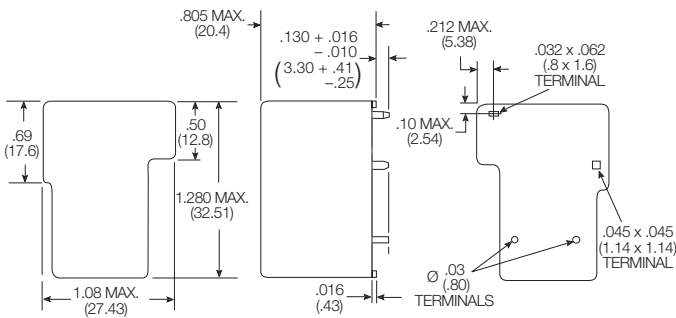


T9AP – Mounting and termination code 5

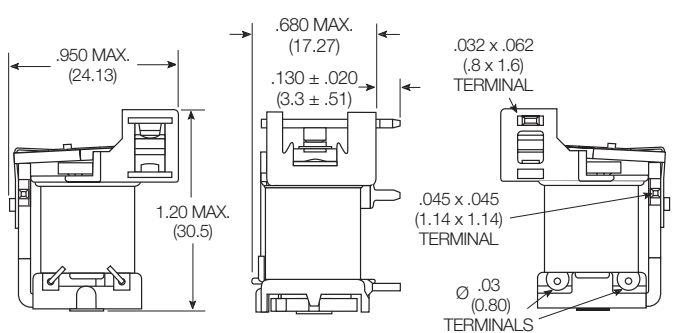


Note: Recommended mounting screw torque is 4.0-5.0 lbs.in when #6 screw is used.

Plain case

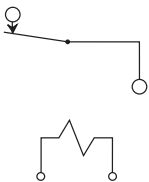


Open style



Terminal assignment

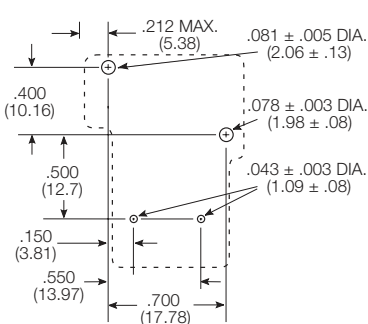
Bottom view on pins



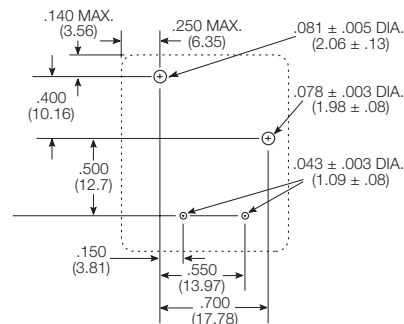
PCB layout

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
Type								
T9A Power PCB or panel mount relay T9A								
Enclosure								
N Open, no enclosure (requires mounting code 1)								
P Dust protected plastic case (requires mounting code 5)								
S Wash-tight plastic case with knock off nib (requires mounting code 1 or 2)								
V Flux-proof plastic case (requires mounting code 1 or 2)								
Contact arrangement								
2X 1 form B (1 NC) with ratings to 30A								
Coil Input								
D DC voltage, 1W								
Mounting and termination								
1 PCB mounting; PCB terminals for coil and contacts (only available with enclosure code N, S or V)								
2 PCB mounting; PCB term. for coil and contacts; 6.35mm (.250in) QC for contacts (only available with enclosure code S or V)								
5 Flanged mounting; 4.75mm (.187) QC for coil; 6.35mm (.250in) QC for contacts (only available with enclosure code P)								
Contact material + Size								
6 AgSnOInO								
Coil voltage								
Coil 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	AgSnOInO	12VDC	2071229-2
T9AP2XD56-12	Unsealed, plastic dust cover (mounting code 5)			Flanged mount, quick conn.			2071229-1