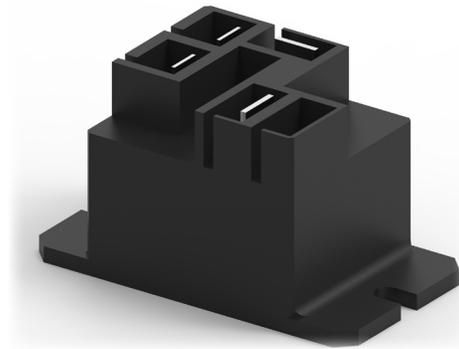


T9C SERIES, AC COIL POWER RELAY

HIGH POWER
PCB RELAYS

FEATURES

- 30A, 1NO, 20A/10A 1CO
- Flange mount
- 1.6VA coil (cULus recognized)
- 1.2VA coil (VDE approved)
- 2.5kV coil - contact dielectric



APPLICATIONS

- HVAC
- Power supplies
- Domestic appliances
- Measurement and controls

APPROVALS

- UL E58304
- CSA LR48471
- VDE REG
- -Nr.A876



Technical data of approved types on request

T9C SERIES, AC COIL POWER RELAY

GENERAL PURPOSE RELAYS PCB RELAYS

CONTACT DATA

Contact arrangement	1 form A (NO), 1 form B (NC), 1 form C (CO)
Rated voltage	250VAC
Max. switching voltage	277VAC
Rated current	30A (NO), 10A (NC), 20A/10A (CO)
Breaking capacity max	7500VA
Contact material	AgSnOInO, AgCdO
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	6/300min
Operate/release time max., including bounce	15/15ms

CONTACT RATINGS

Type	Load	Cycles
UL508		
AgCdO		
NO	30A, 125VAC, resistive	100x10 ³
NO	20A, 28VDC, resistive	100x10 ³
NO	1hp, 277VAC	6000
CO	30A(NO)/15A(NC), 125VAC, general purpose	100x10 ³
CO	10A(NO)/10A(NC), 240VAC, general purpose	100x10 ³
CO	30A(NO)/20A(NC), 240VAC, resistive	6000
NC	20A, 240VAC, resistive	6000
AgSnOInO		
NO	30A, 250VAC, resistive	30x10 ³
NO	15A, 240VAC, general purpose	100x10 ³
NO	1hp, 120VAC	6000
CO	20A(NO)/10A(NC), 250VAC, resistive	6000
NC	1/2hp, 240VAC	6000
IEC 61810		
NO	15A, 277VAC, cos =1, 85°C	100x10 ³
Mechanical endurance		5x10 ⁶ ops.

COIL DATA

Coil voltage range	12 to 240VAC
Max. coil power	Coil A, 1.6VA Coil E, 1.2VA
Coil insulation system according UL	Class F

COIL VERSIONS, AC COIL

Coil code	Rated voltage VDC	Frequency HZ	Operate voltage VAC, 60HZ	Release voltage VAC, 60HZ	Coil resistance Ω±10%	Rated coil power VA
Code A (1.6VA) coil						
12	12	50/60	9.6	1.2	36	1.6
24	24	50/60	19.2	2.4	136	1.6
48	48	50/60	38.4	4.8	548	1.6
120	110/120	50/60	96	12	2800	1.6
240	220/240	50/60	192	24	11500	1.6
277	250/277	50/60	221.6	27.7	15625	1.6
Code E (1.2VA) coil						
12	12	50/60	9.6	1.2	52	1.2
24	24	50/60	19.2	2.4	198	1.2
48	48	50/60	38.4	4.8	824	1.2
120	110/120	50/60	96	12	3728	1.2
240	220/240	50/60	192	24	14810	1.2

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

T9C SERIES, AC COIL POWER RELAY

GENERAL PURPOSE RELAYS PCB RELAYS

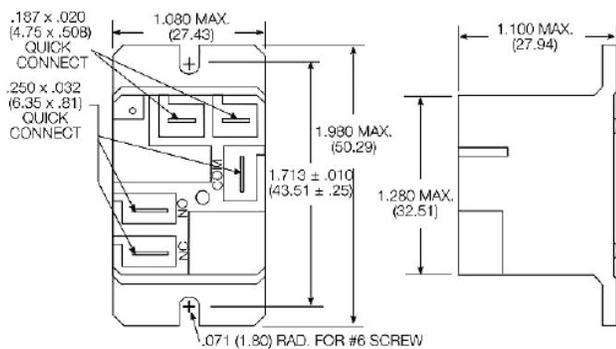
INSULATION DATA

Initial dielectric strength	
between open contacts	1500V _{rms}
between contact and coil	2500V _{rms}
Initial insulation resistance	
between insulated elements	1x10 ⁹ Ω
Clearance/creepage	
between contact and coil	3.1 / 6.3mm (UL508)
Tracking index of relay base	175

OTHER DATA

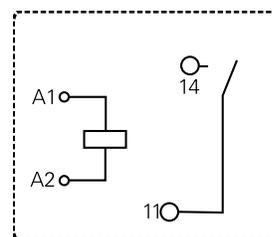
Material compliance	EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter
Ambient temperature	
AC coil	-40°C to 85°C
Category of environmental protection	
IEC 61810	RTI - dust protected
Vibration resistance (functional)	1.5mm, 10-55 Hz
Shock resistance (functional)	10g for 11msec
Shock resistance (destructive)	100g
Terminal type	quick connect
Weight	33g
Resistance to soldering heat THT	
IEC 60068-2-20	250°C
Packaging/unit	250 pcs

DIMENSIONS (Unit: mm)

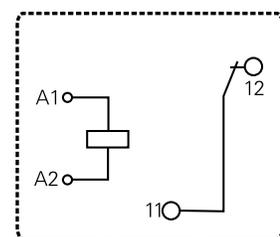


TERMINAL ASSIGNMENT

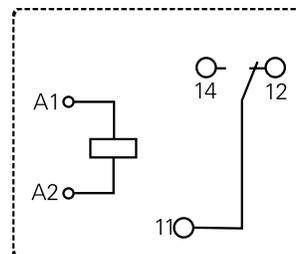
1 form A



1 form B



1 form C



T9C SERIES, AC COIL POWER RELAY

GENERAL PURPOSE RELAYS PCB RELAYS

PRODUCT CODE STRUCTURE

Typical product code
T9C P 1 A 5 4 -24

Type

T9C	Power Relay T9C AC coil
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Enclosure

P	Dust protected (flange mount)
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Contact arrangement

1	1 form A (1 NO);
2	1 form B (1 NC)
5	1 form C (1 CO);

Coil input

A	AC voltage, 1.6VA
E	AC voltage, 1.2VA

Coil voltage

Coil code: please refer to coil versions table

Contact material

2	AgCdO
4	AgSnOInO

Mounting and termination

5	Flanged mounting; 4.75 mm (.187) QC for coil and 6.35mm (.250in) QC for contacts
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PRODUCT INFORMATION

Product code	Version	Contacts	Coil Voltage	Part Number
T9CP1A52-12	1 form A (NO)	AgCdO	12 VAC	1649341-3
T9CP1A52-24			24 VAC	1649341-1
T9CP1A52-48			48 VAC	1649341-4
T9CP1A52-120			120 VAC	1649341-5
T9CP1A52-240			240 VAC	1649341-6
T9CP5A52-12	1 form C (CO)		12 VAC	1-1649341-1
T9CP5A52-24			24 VAC	1-1649341-2
T9CP5A52-48			48 VAC	1-1649341-3
T9CP5A52-120			120 VAC	1-1649341-4
T9CP5A52-240			240 VAC	1-1649341-5
T9CP1A54-12	1 form A (NO)	AgSnInO	12 VAC	1649341-7
T9CP1A54-24			24 VAC	1649341-8
T9CP1A54-48			48 VAC	1649341-9
T9CP1A54-120			120 VAC	1-1649341-0
T9CP1A54-240			240 VAC	1649341-2
T9CP2A54-120	1 form B (NC)		120 VAC	2-1649341-5
T9CP2A54-240			240 VAC	2-1649341-4
T9CP5A54-12	1 form C (CO)		12 VAC	1-1649341-6
T9CP5A54-24			24 VAC	1-1649341-7
T9CP5A54-48			48 VAC	1-1649341-8
T9CP5A54-120		120 VAC	1-1649341-9	
T9CP5A54-208		208 VAC	2-1649341-6	
T9CP5A54-240		240VAC	2-1649341-0	
T9CP5A54-277		277 VAC	2-1649341-7	

This list represents the most common type and does not show all variants covered by this datasheet. Other types on request

Notes:

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

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08/25 AP