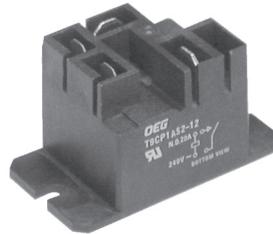


**T9C Series, AC Coil Power Relay**

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

**Typical 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.

**Contact Data**

Contact arrangement	1 form A (NO), 1 form B (NC), 1 form C (CO)
Rated voltage	250VAC
Max. switching voltage	250VAC
Rated current	20A / 10A
Breaking capacity max.	5000VA
Contact material	AgSnO <sub>3</sub> , 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
<b>UL508</b>		
NO	30A, 250VAC, resistive, 25°C	30x10 <sup>3</sup>
NO	15A, 240VAC, general purpose, 70°C	100x10 <sup>3</sup>
CO	20A/10A, 250VAC, resistive, 25°C	6x10 <sup>3</sup>

**IEC 61810**

E coil	
NO	15A, 277VAC, cos =1, 85°C

Mechanical endurance	5x10 <sup>6</sup> 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 VAC	Frequency HZ	Operate voltage VAC, 60Hz	Release voltage VAC, 60Hz	Coil resistance Ω±10%	Rated coil power VA
<b>Code A (1.6VA) coil</b>						
12	12	50/60	9.6	1.2	36	1.6
24	24	50/60	19.2	2.4	144	1.6
48	48	50/60	38.4	4.8	576	1.6
120	110/120	50/60	96	12	3025	1.6
240	220/240	50/60	192	24	12000	1.6
277	250/277	50/60	221.6	27.7	15625	1.6
<b>Code E (1.2VA) coil</b>						
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.

**Insulation Data**

Initial dielectric strength between open contacts	1500V <sub>rms</sub>
between contact and coil	2500V <sub>rms</sub>

Initial insulation resistance between insulated elements	1x10 <sup>9</sup> Ω
--	---------------------

Clearance/creepage between contact and coil	2.5 / 4mm; 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/customersupport/rohssupportcenter](http://www.te.com/customersupport/rohssupportcenter)

Ambient temperature AC coil -40°C to 70°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

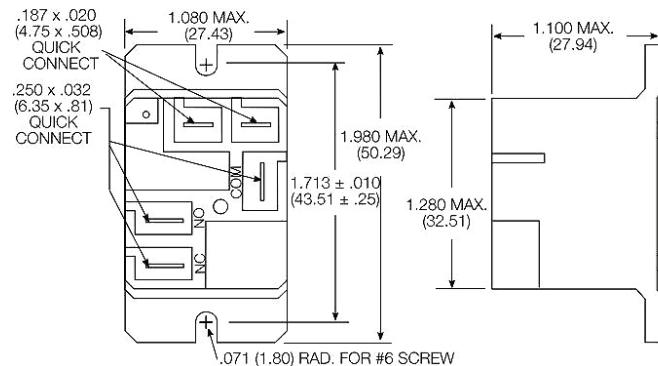
Terminal type quick connect

Weight 33g

Resistance to soldering heat THT

IEC 60068-2-20 250°C

Packaging/unit 250 pcs

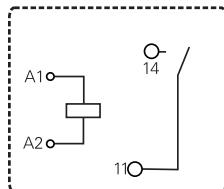
**Dimensions**


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

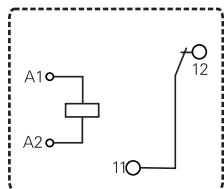
## T9C Series, AC Coil Power Relay (Continued)

## Terminal assignment

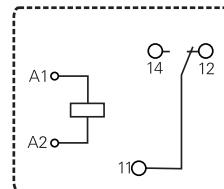
1 form A



1 form B



1 form C



## Product code structure

Typical product code

T9C

P

1

A

5

4

-24

**Type**  
**T9C** Power Relay T9C AC coil

**Enclosure**  
**P** Dust protected (flange mount)

**Contact arrangement**

- 1** 1 form A (1 NO); VDE approved and UL recognized
- 2** 1 form B (1 NC)
- 5** 1 form C (1 CO); UL recognized

**Coil input**

- A** AC voltage, 1.6VA
- E** AC voltage, 1.2VA (VDE approved)

**Mounting and termination**

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

**Contact material**

- 2** AgCdO
- 4** AgSnOInO

**Coil voltage**

Coil code: please refer to coil versions table

Product Code	Contact arrangement	Contact material	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			240 VAC	2-1649341-0
T9CP5A54-277			277 VAC	2-1649341-7

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[T9CP1A54-24](#) [T9CP5A52-120](#) [T9CP5A52-24](#) [T9CP5A52-240](#)