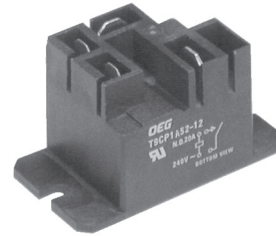


**T9C Series, AC Coil Power Relay**

- 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	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
<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>
<b>IEC 61810</b>		
E coil		
NO	15A, 277VAC, cos =1, 85°C	100x10 <sup>3</sup>
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
Code A (1.6VA) coil						
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
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	240/240	50/60	192	24	14810	1.2

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

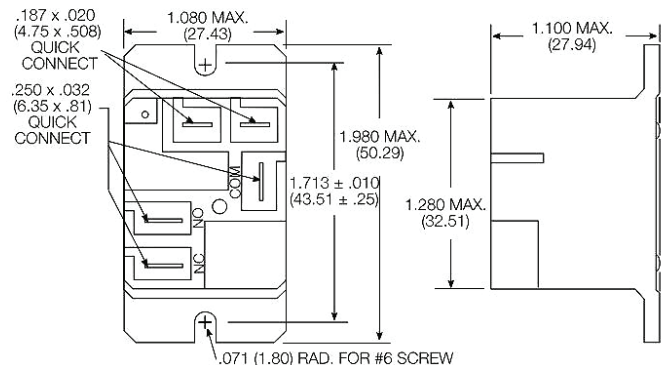
**Insulation Data**

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 <a href="http://www.te.com/customer-support/rohssupportcenter">www.te.com/customer-support/rohssupportcenter</a>	
Ambient temperature	
AC coil	-40°C to 70°C
Category of environmental protection	RTI - dust protected
IEC 61810	
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**

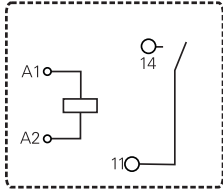


Note: Recommended mounting screw torque is 4.0-5.0 lbs.in when #6 screw is used.

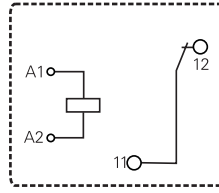
**T9C Series, AC Coil Power Relay** (Continued)

**Terminal assignment**

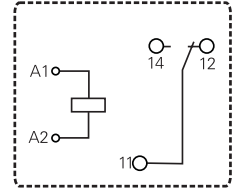
1 form A



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** AgSnInO

**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)	
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		
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)	
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