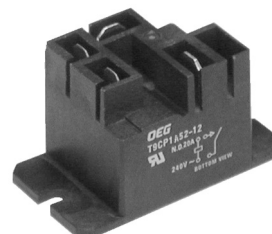


T9C Series, AC Coil Power Relay

- 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	AgSnInO, 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		
NO	30A, 250VAC, resistive, 25°C	30x10 ³
NO	15A, 240VAC, general purpose, 70°C	100x10 ³
CO	20A/10A, 250VAC, resistive, 25°C	6x10 ³
IEC 61810		
E coil		
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 VAC	Operate voltage VAC	Release voltage VAC	Coil resistance Ω±10%	Rated coil power VA
Code A (1.6VA) coil					
12	12	9.6	3.6	36	1.6
24	24	19.2	7.2	144	1.6
48	48	38.4	14.4	576	1.6
120	110	88	33	3025	1.6
240	220	176	66	12000	1.6
Code E (1.2VA) coil					
12	12	9.6	3.6	52	1.2
24	24	19.2	7.2	198	1.2
48	48	38.4	14.4	824	1.2
120	110	88	33	3728	1.2
240	220	176	66	14810	1.2

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

Insulation Data

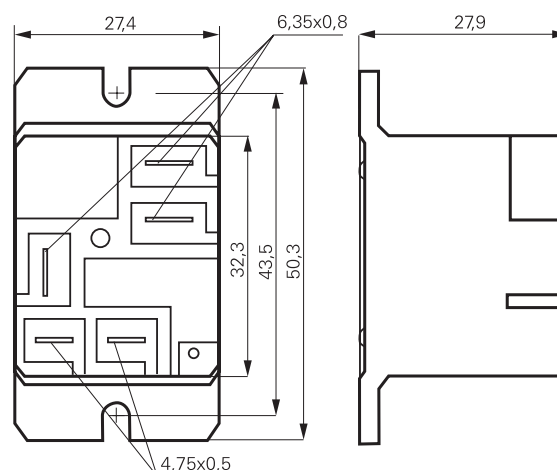
Initial dielectric strength	
between open contacts	1500V _{rms}
between contact and coil	2500V _{rms}
Initial insulation resistance	
between insulated elements	1x10 ⁹ Ω
Clearance/creepage	
between contact and coil	2.5 / 4mm; 3.1 / 6.3mm (UL508)
Tracking index of relay base	175

Other Data

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

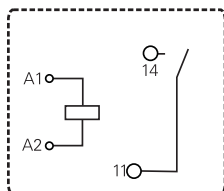
Dimensions



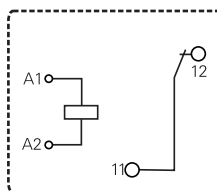
T9C Series, AC Coil Power Relay (Continued)

Terminal assignment

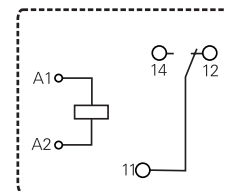
1 Form A



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; 4.75mm (.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)		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