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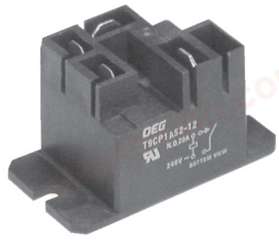
RELAY PRODUCTS

General Purpose
High Power PCB Relays

OEG

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
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	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.

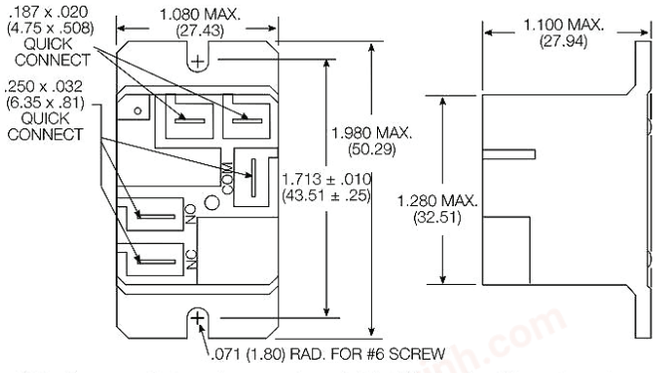
Insulation Data

Initial dielectric strength	
between open contacts	$1500V_{rms}$
between contact and coil	$2500V_{rms}$
Initial insulation resistance	
between insulated elements	$1x10^9\Omega$
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
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.

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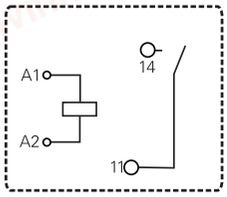
Catalog product data, 'Definitions' section, application notes and all specifications are subject to change.

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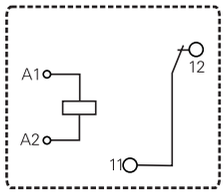
T9C Series, AC Coil Power Relay (Continued)

Terminal assignment

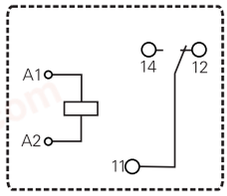
1 form A



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

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