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	AgSnOlnO, AgCdO
Min. recommended contact load	d 1A, 5VDC or 12VAC
Initial contact resistance	75 mΩ at 1A at 5VDC or 12VAC
Frequency of operation, with/with	thout load 6/300min
Operate/release time max., inclu	uding bounce 15/15ms

Co	ntac	t rat	inas
	muu	u	ingo

Туре	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
Mechanica	l endurance	5x10 ⁶ ops.

Coil Data

	la				
Coil volta	ge range		12	2 to 240VAC	
Max. coil	power		Coil A, 1.6V	A Coil E,	1.2VA
Coil insul	ation system a	according UL		Class F	
Coil vers	sions, AC co	il			
Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VAC	VAC	VAC	Ω±10%	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.

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Insulation Data

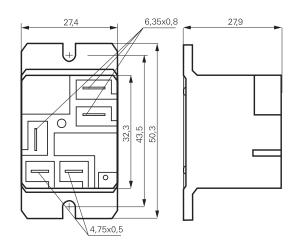
Initial dielectric strength	
between open contacts	1500V _{rms}
between contact and coil	2500V _{rms}
Initial insulation resistance	
between insulated elements	1x10 ⁹ Ω
Clearance/creepage	
between contact and coil	2.5 / 4mm; 3.1 / 6.3mm (UL508)
Tracking index of relay base	175

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at

www.te.com/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					

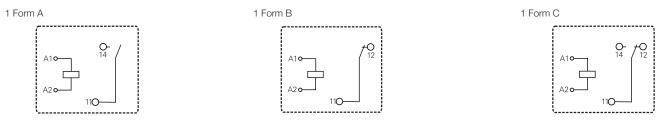
Dimensions



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Datasheets, product data, 'Definitions' section, application notes and all specifications are subject to change. 1

Terminal assignment



Product code structure	Typical product code	T9C	Ρ	1	Α	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 vo	ltage, 1.2VA (VDE approved)							
Mounting and termination						' 		
5 Flanged mounting; 4.75mm (.187) QC for coil and 6.3	5mm (.250in) QC for contacts							
Contact material								
2 AgCdO 4 AgSn	OlnO							
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

2

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