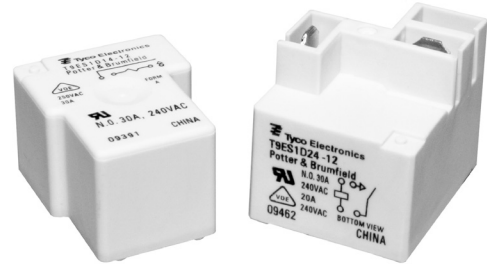


T9E Series, DC Coil 30A PCB Relay

- 1 pole 30A, 1NO or 1CO contact
- High breaking capacity 7500 VA
- PCB and PCB/quick connect terminals
- UL class F insulation as standard
- Ambient temperature up to 105°C
- Plastic materials according to IEC60335-1

Typical applications
HVAC, power supplies, domestic appliances, measurement and control



Approvals

VDE 40027903, UL E58304
Technical data of approved types on request

Contact Data

Contact arrangement	1 form A (NO)	1 form C (CO)
Rated voltage	240VAC	
Max. switching voltage	250VAC (VDE); 300VAC (UL)	
Rated current	30A	20A/10A
Limiting continuous current	30A	
Breaking capacity max.	7500VA	5000/2500VA
Contact material	AgSnOInO (AgCdO optional)	
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	6/120min ⁻¹	
Operate/release time max., including bounce	15/15ms	

Contact ratings

Type	Contact	Load	Cycles
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IEC 61810

AgSnOInO, 1W coil			
1	NO	30A, 250VAC, cosφ=1, 60°C	20x10 ³
1	NO	20A, 250VAC, cosφ=1, 85°C	100x10 ³
2	NO	20A, 250VAC, cosφ=1, 70°C	100x10 ³
1, 2	CO	20A / 10A, 250VAC, cosφ=1, 60°C	20x10 ³
AgSnOInO, 900mW coil			
1	NO	17A, 250VAC, cosφ=1, 105°C	100x10 ³
1	NO	20A, 250VAC, cosφ=1, 85°C	100x10 ³

EN 60730-1

AgSnOInO, 1W coil			
1	NO	12(12)A, 240VAC, 60°C	100x10 ³

UL 508 1)

AgSnOInO, 1W coil			
1, 2	NO	30A, 240VAC, general purpose, 25°C	100x10 ³
AgSnOInO, 900mW coil			
1, 2	NO	TV-8, 125VAC, 25°C	25x10 ³

1) Additional UL 508 ratings are available.

Mechanical endurance	10x10 ⁶ ops.
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Coil Data

Coil voltage range	6 to 110VDC
Max. coil power	110% of nominal
Max. coil temperature	155°C
Coil insulation system according UL	Class F

Coil Data (continued)

Coil versions, DC coil

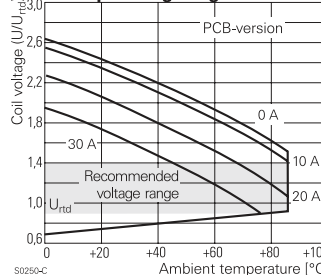
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power W
Code D (1W) coil					
6	6	4.5	0.6	36	1
9	9	6.75	0.9	81	1
12	12	9	1.2	144	1
18	18	13.5	1.8	324	1
22	22	16.5	2.2	484	1
24	24	18	2.4	576	1
48	48	36.2	4.8	2304	1
110	110	82.5	11	12100	1
Code L (900W) coil					
6	6	4.5	0.6	40	.9
12	12	9	1.2	155	.9
24	24	18	2.4	660	.9

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

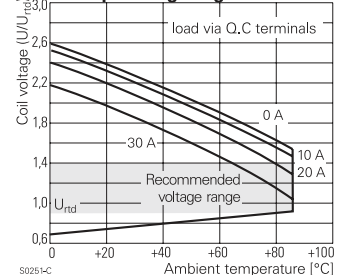
Insulation Data

Initial dielectric strength	1500V _{rms}
between open contacts	
between contact and coil	2500V _{rms}
Initial surge withstand voltage	6kV (1.2μs/50μs impulse wave)
between contact and coil	
Initial insulation resistance	1x10 ⁹ Ω
between insulated elements	
Clearance/creepage	≥3mm/4mm
between contact and coil	

Coil operating range DC



Coil operating range DC



Coil operating ranges shown above are for 1W coils

T9E Series, DC Coil 30A PCB Relay (Continued)

Product code structure		Typical product code		T9E	S	1	D	1	4	-24
Type										
T9E		Power PCB relay T9E								
Enclosure										
S		Wash-tight plastic case with knock off nib								
V		Flux-proof plastic case								
Contact arrangement										
1		1 form A (1 NO)		5	1 form C (1 CO)					
Coil Input										
D		DC voltage, 1W		L	DC voltage, 900mW					
Mounting and termination										
1		PCB mounting; PCB terminals for coil and contacts								
2		PCB mounting; PCB terminals for coil and contacts; 6.35mm (.250in) QC for contacts								
Contact material										
4		AgSnOInO								
2		AgCdO – optionally available. Contact Product Engineering for availability and ratings.								
Coil voltage										
		Coil code: please refer to coil versions table								

Product Code	Enclosure	Mounting	Contact material	Contacts	Coil version	Coil voltage	Part number
T9ES1D14-12	wash tight	pcb terminals	AgSnOInO	1 form A, 1 NO	1W	12VDC	2027234-2
T9ES1D14-24						24VDC	2027234-7
T9ES1D14-48						48VDC	tba
T9ES1D24-12		pcb + quick connect				12VDC	2027234-8
T9ES1D24-24						24VDC	tba
T9ES1D24-48						48VDC	tba
T9ES5D14-12		pcb terminals		1 form C, 1 CO		12VDC	2027234-6
T9ES5D14-24						24VDC	tba
T9ES5D14-48						48VDC	tba
T9ES5D24-12		pcb + quick connect				12VDC	2027234-9
T9ES5D24-24						24VDC	tba
T9ES5D24-48						48VDC	tba