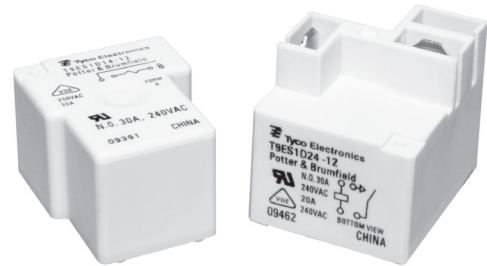


Power PCB Relay T9E

- 1 pole 30A, 1 formA(NO) or 1 formC(CO)
- 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 | AgSnOlnO (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 |
|------|---------|------|--------|
|------|---------|------|--------|

IEC 61810

| | | | |
|-------------------|----|---------------------------------|---------------------|
| AgSnOlnO, 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 |

AgSnOlnO, 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

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

UL 508 1)

| | | | |
|-------------------|----|------------------------------------|---------------------|
| AgSnOlnO, 1W coil | | | |
| 1, 2 | NO | 30A, 240VAC, general purpose, 25°C | 100x10 ³ |

AgSnOlnO, 900mW coil

| | | | |
|------|----|--------------------|--------------------|
| 1, 2 | NO | TV-8, 125VAC, 25°C | 25x10 ³ |
|------|----|--------------------|--------------------|

1) Additional UL 508 ratings are available.

| | |
|----------------------|-------------------------|
| Mechanical endurance | 10x10 ⁶ ops. |
|----------------------|-------------------------|

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)

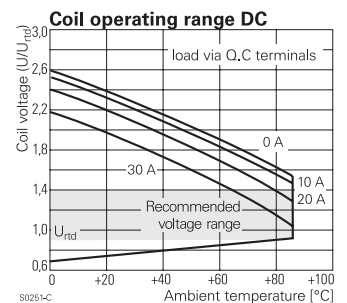
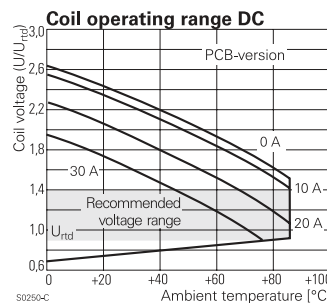
Coil versions, DC coil

| 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 (900mW) coil | | | | | |
| 6 | 6 | 4.5 | 0.6 | 40 | .9 |
| 12 | 12 | 9 | 1.2 | 155 | .9 |
| 18 | 18 | 13.5 | 1.8 | 380 | .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 | | |
| between open contacts | | 1500V |
| between contact and coil | | 2500V ^{ms} |
| Initial surge withstand voltage | | |
| between contact and coil | | 6kV (1.2μs/50μs impulse wave) |
| Initial insulation resistance | | |
| between insulated elements | | 1x10 ⁹ Ω |
| Clearance/creepage | | |
| between contact and coil | | ≥3mm/4mm |



Coil operating ranges shown above are for 1W coils.

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[T9EV1L14-12](#) [T9ES1D14-18](#) [T9ES1D12-12](#) [T9ES1D22-12](#) [T9ES1L22-12](#) [T9EV1D14-12](#) [T9EV1D24-12](#)