



# Power NTC thermistors (inrush current limiters)



Eaton offers NTC thermistors for inrush current limiting in electronic applications

### Product description

Eaton Bussmann Series Power NTC Thermistors provide protection against damaging inrush currents upon equipment startup and/or switching on. This type of thermistor is often referred to as Inrush Current Limiters (ICL), as they help reduce downstream component damage and avoid nuisance opening of fuses or tripping of circuit breakers. Given their variable resistance, they offer a more energy-efficient method of current limitation compared to standard, fixed resistors as resistance in continuous operation is significantly lower. Eaton offers a broad portfolio of thermistors that provides cost-effective solutions for inrush current protection. Applications include consumer, computing, energy, and industrial devices and equipment.

### Features and benefits

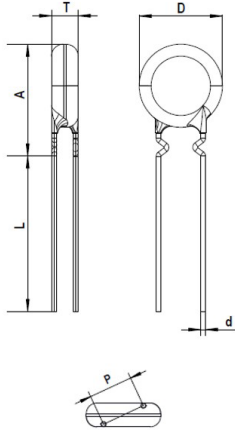
- Negative temperature coefficient behavior (goes from high resistance to low resistance upon heating up)
- Disc sizes from 7 up to 34 mm and current ratings up to 30 A
- A broad range of footprints and resistance values for a wide range of applications
- Helps prevent nuisance opening and tripping of other overcurrent protection devices, and reduces downstream component damage due to inrush current
- Power consumption is significantly lower in continuous operation, making these thermistors more efficient than fixed resistors

## Product specs

Disc size maximum (mm)	Zero power resistance range @ +25 °C R25 (Ω)	I <sub>max</sub> (A)	Beta value (25/50) (K)	Dissipation factor (mW/°C)	Operation temperature range TL~TU(°C) maximum
7 to 34	0.7 to 120	1 to 30	2500 to 3600	7 to 50	-40 to +200

## Dimensions- mm

Drawing not to scale



Disk size	D maximum	T maximum	P	d	A maximum	L
D05	7	5	5 ±0.5	0.6 ±0.02	12.5	3.5 ±0.5
D07	8.5	5	5 ±0.5	0.6 ±0.02	14.5	3.5 ±0.5
D09	9.5	5	5 ±0.5	0.8 ±0.02	15.5	3.5 ±0.5
D11	12	6	5 ±0.5	0.8 ±0.02	18	3.5 ±0.5
D13	13	6	7.5 ±0.8	0.8 ±0.02	19	3.5 ±0.5
D15	16	6	7.5 ±0.8	0.8 ±0.02	22	3.5 ±0.5
D18	19	7	7.5 ±0.8	1.0 ±0.02	25	3.5 ±0.5
D20	23	7	7.5 ±0.8	1.0 ±0.02	29	3.5 ±0.5
D25	28	8	7.5 ±0.8	1.0 ±0.02	34	3.5 ±0.5
D30	34	8	7.5 ±0.8	1.0 ±0.02	40	3.5 ±0.5

D05 (5 mm) to D11 (11 mm) Leads: tin plated copper clad steel covered CCS leads

D13 (13 mm) to D30 (30 mm) Leads: tin plated copper

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