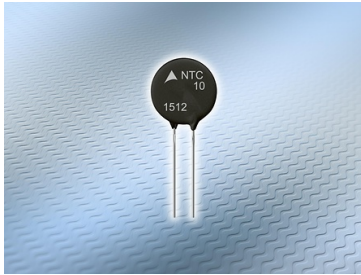


# Large-diameter inrush current limiters for high-watt applications



TDK Corporation presents the P27 series of EPCOS NTC inrush current limiters (ICLs) with a nominal disk diameter of 27 mm and lead spacing of 7.5 mm, thus extending the portfolio of large NTC ICLs for industrial electronics applications. The high material density of the new NTC ICLs enables a volume-efficient, high-performance design with a disk thickness of just  $\leq 7$  mm. The new P27 series with the ordering code B57127P0\*M301 features extremely stable and reliable electrical characteristics. It offers a rated resistance of 0.5  $\Omega$  to 10  $\Omega$  at 25 °C and can handle high currents of up to 30 A, depending on type.

Thanks to their very low resistance in the operating state, NTC ICLs offer very low power dissipation in both AC and DC circuits. The large-diameter components of the new P27 series are especially suitable for use in large electric motors and drives and all kinds of high-watt power supplies as well as in industrial applications such as welding and plasma cutting equipment.

The coating material of the P27 series of ICLs is flame retardant and UL 94 V-0 approved. The new components are RoHS-compatible and UL approved (E69802). Samples of the P27 series are available.

## Main applications

- Large electric motors and drives and all kinds of high watt power supplies
- Welding and plasma cutting equipment

## Main features and benefits

- High material density for a volume-efficient, high-performance design with a disk thickness of just  $\leq 7$  mm
- Extremely stable electrical characteristics
- Flame-retardant coating (UL 94 V-0)
- UL approval (E69802)
- RoHS-compatible

## Key data

Type	Nominal disk diameter [mm]	Lead spacing [mm]	High current endurance ( $I_{test}$ ) <sup>*</sup> [A]	Max. current ( $I_{max}$ ) <sup>**</sup> [A]	Resistance at 25°C ( $R_{25}$ ) [ $\Omega$ ]	Min. resistance at $I_{test}$ ( $R_{min}$ ) [ $\Omega$ ]
B57127P0508 M301	27	7.5	30	24	0.5	0.011
B57127P0109 M301	27	7.5	30	22	1	0.013
B57127P0209 M301	27	7.5	23	16	2	0.022
B57127P0509 M301	27	7.5	20	12	5	0.033
B57127P0709 M301	27	7.5	17	11	7	0.045
B57127P0100 M301	27	7.5	15	9	10	0.053

\* 50 hours at 25 °C

\*\* 1000 hours according to IEC 60539-1