

PFC capacitors

Rugged design for a long service life

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TDK Corporation presents DeltaCap™ X Black Premium – a new series of EPCOS MKD capacitors for power factor correction (PFC). With rated voltages of between 440 V AC and 850 V AC, the capacitors with an internal delta connection are designed for power factor correction and filtering of harmonics at the low-voltage level. With capacitance values of 3 x 51 μ F to 3 x 165 μ F, power correction performances ranging from 20 kvar to 44 kvar (50/60 Hz) per capacitor are achieved.

The special black coating improves the dissipation of heat, thereby achieving a very long service life of up to 300,000 hours in accordance with temperature class -40/D. Thanks to the extremely rugged construction, the capacitors of the B32305A* series can withstand a maximum inrush current of 500 x I_R , temperatures of up to +65 °C and perform up to 62,000 operating cycles per year.

The DeltaCap X Black Premium types are – like all EPCOS capacitors for power factor correction – self-healing and are equipped with an overpressure disconnecter which isolates all three phases from the grid in the event of damage. The impregnation, based on biodegradable soft resin, has an additional positive effect on the heat dissipation.

The capacitors are suitable for use with or without reactors in both conventional and dynamic PFC systems and also for use in tuned resonant circuits in industrial power grids and harmonic filters.

Main applications

- Power factor correction in industrial networks
- Filtering of harmonics in tuned resonant circuits

Main features and benefits

- Very long service life of up to 300,000 hours
- Permissible inrush current of up to 500 x I_R
- Overpressure disconnecter for all three phases
- Improved heat dissipation thanks to special black coating

About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's comprehensive portfolio features passive components such as ceramic, aluminum electrolytic and film capacitors, as well as magnetics, high-frequency, and piezo and protection devices. The product spectrum also includes sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK focuses on demanding markets in the areas of information and communication technology and automotive, industrial and consumer electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2019, TDK posted total sales of USD 12.5 billion and employed about 105,000 people worldwide.

You can download this text and associated images from www.tdk-electronics.tdk.com/en/190801.

Further information on the products can be found under
www.tdk-electronics.tdk.com/en/pfc_deltacap_x_black_premium.

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