



Power factor correction

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Extended PhaseCap Compact series

TDK-EPC, a group company of the TDK Corporation, has extended its range of power factor correction (PFC) capacitors. The EPCOS PhaseCap® Compact series now also comprises types for voltages from 415 V AC, 440 V AC, 480 V AC and 525 V AC. As an alternative to capacitors with dimensions of 136 mm x 200 mm (D x H), types with dimensions of only 116 mm x 224 mm or 116 mm x 248 mm are now also available, depending on the reactive power that must be compensated.

This means that the EPCOS PhaseCap Compact series now covers a voltage range from 230 to 525 V AC and a capacitance range of between 3 x 27 µF and 3 x 251 µF (50 Hz). Depending on the type, they can compensate reactive powers ranging from 5 to 33 kvar.

Thanks to their special construction, the capacitors can withstand an inrush current of up to 300 times the rated current. The components are PCB-free. Their self-healing design means that individual dielectric breakdowns do not destroy the capacitor. An integrated overpressure disconnecter ensures additional safety. The capacitors are designed for a continuous operating temperature of 65 °C (casing) and a service life of up to 180,000 hours.

The extensive EPCOS product range for power factor correction comprises not only capacitors and thyristor modules but also controllers, contactors and reactors.

Glossary

- Reactive power: This occurs whenever the phase angle between current and voltage is shifted. It is caused by inductive loads such as electric motors and transformers. The reactive power has no use, but still must be generated by power plants.
- Power factor correction: By connecting-in PFC capacitors, the reactive power can be almost completely compensated. This reduces energy costs as well as environmental impacts.

Main applications

- Power factor correction in three-phase industrial networks

Main features and benefits

- Voltage range of 230 to 525 V AC
- Capacitance values between 3 x 27 µF and 3 x 251 µF (50 Hz)
- Reactive power values ranging from 5 to 33 kvar