

EMC filters

Compact, high-performance 3-line EMC filters

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TDK Corporation (TSE:6762) is expanding the B84243* series of EPCOS 3-line EMC filters to include 10 new types for currents of up to 280 A. All 18 types in the series are designed for a rated voltage of 530 V AC. The performance of this series of filters has been optimized for adherence to limit values in accordance with EN 61800-3:2004+A1:2011 for motor cable lengths of either up to 25 m (C1) or 50 m (C2). The metal cases of the filters are designed with IP20 protection and, depending on the type, have compact dimensions of between 190 x 40 x 95 mm and 450 x 170 x 230 mm. Thanks to the highly saturation resistant chokes, parasitic asymmetric currents can be reliably controlled even in the case of longer motor cables.

A further advantage of the new B84243* series is the low leakage current that also permits operation in a 30 mA RCD environment. For smaller, hand-operated equipment the leakage current must be below 3.5 mA. For this reason, the 3-A version (B84243A8003U000) has been designed for a leakage current of 1.9 mA at 400 V AC. One important safety aspect is the short discharge time to <60 V within one second for the types rated at up to 44 A.

Typical applications of the new filters are frequency converters for the drives of elevators, pumps, conveyor systems, and HVAC systems.

Main applications

- Frequency converters for the drives of elevators, pumps, conveyor systems, and HVAC systems

Main features and benefits

- Compact dimensions
- Adherence to limit values in accordance with EN 61800-3:2004+A1:2011
- Low leakage currents for operation within a 30 mA RCD environment
- Short discharge time to <60 V within one second for the types rated at up to 44 A

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 2018, TDK posted total sales of USD 12 billion and employed about 103,000 people worldwide.

You can download this text and associated images from www.epcos.com/pressreleases.

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