

Products & Technologies



EMC filters

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Outstanding attenuation for long motor leads

EPCOS has extended its 3-line EMC filters by a high-performance series for frequency converters. It is distinguished by outstanding attenuation properties that offer decisive advantages especially with long motor leads. Cable-based measurements of commercial frequency converters showed that the EN 55011 limits were observed for class A up to 300 m and class B up to 200 m as well as for class C2 up to 300 m and class C1 up to 200 m as specified by EN 61800-3.

The filters of the B84143D*R127 series are designed for currents from 16 to 200 A at a rated voltage of 520 V. Their high rated temperature of 50 °C also makes them well suited for fitting in switching cabinets. Thanks to their proven book-style housing, these filters can even be effectively incorporated under conditions of limited space. Applications of these new EMC input filters include pumps, HVAC, printing machines and conveyor systems.

In combination with the EPCOS SineFormer™ output filters of the B84143V*R127 series (www.sineformer.com), observance of the EMC limits can be extended to leads of over 500 m depending on the converter type. In addition, the SineFormer filters make shielded motor leads unnecessary, while almost completely eliminating the motor bearing currents. This combination of high-performance input filters and SineFormer output filters thus offers complete EMC protection. It enhances the availability and service life of relevant equipment and significantly reduces system costs.