

CEE-connector with filter for 1- and 3-phase applications

With a long history of innovation in the connector and EMC marketplace, SCHURTER expands its range of power entry modules with the introduction of the FMAD and FMAB CEE connectors, featuring a first of its kind integrated line filter for 1- and 3-phase industrial and power distribution applications. The integrated filter optimizes suppression of conducted emissions by eliminating cables between the inlet and filter.



The CEE connectors according IEC 60309 are used all over the world for industrial applications and power distribution. The single and three phase connectors can be used for any application with a detachable power cord. Today, noise generating electronics used in machines drive demand for EMI suppression filters in order to meet international EMC standards. This filter is typically mounted on the metal chassis for optimal performance. Traditionally, wires are used to connect the power inlet to the EMI filter mounted separately on the chassis. These wires can vary in length and can cause EMC problems with electromagnetic fields generated by a noise source inside the equipment bypassing the filter! The new CEE connector with integrated filter solves this problem by eliminating these wires and making a direct connection between the filtered connector and its metal shield, which is grounded to the panel cut-out. The fully integrated unit can be front or rear panel mounted directly where the power comes into the equipment.

The new FMAB CEE series is suitable for single phase AC applications. It extends the power entry module concept outlined in IEC 60320, where power input is limited to 16 A. Both the FMAB CEE and the FMAD CEE, which is designed for three phase applications, are rated from 16 up to 32 amperes. They are designed and approved according IEC 60309, UL 1283 and CSA 22.2 no. 8. The voltage rating is 250 VAC (IEC, UL, CSA) and 110 / 125 VAC (UL, CSA). The new filter series are suitable for use in industrial appliances exposed to temperatures ranging from -40 to +85°C. Screw terminals provide for ease of installation.

Technical data FMAB CEE (1-phase):

- Rated voltage: 110 / 125 VAC (UL, CSA), 250 VAC (ENEC, UL, CSA)
- Rated currents: 16, 30 A (UL, CSA) / 16, 32 A (ENEC, UL, CSA) at 40 °C
- Leakage current: max. 0.5 / 1.0 mA
- Operating temperatures: -40 – 85 °C

Technical data FMAD CEE (3-phase):

- Rated voltage: 277 / 480 VAC (UL, CSA), 240 / 415 VAC (ENEC, UL, CSA)
- Rated currents: 16, 30 A (UL, CSA) / 16, 32 A (ENEC, UL, CSA) at 40 °C
- Leakage current: max. 10.0 mA
- Operating temperatures: -40 – 85 °C

Applications:

- Equipment with detachable power cord
- Industrial machines
- Electrical tools
- Power distribution

Internet:

[Datasheet FMAD CEE](#) [2]

[Datasheet FMAD CEE](#) [3]

[Microsite CEE-Filter](#) [4]

Company:

SCHURTER is an internationally leading innovator and manufacturer of electric and electronic components. The company focuses on safe power supply and easy-to-use equipment. Its extensive product portfolio comprises standard solutions in the fields of circuit protection, plugs and connectors, EMV products, switches, input systems and electronic manufacturing services. SCHURTER's global network of representative offices ensures reliable delivery and professional customer service. Where standard products are unsuitable, the company develops client-specific solutions.

Contact:

If you require further information, please contact SCHURTER using the following information:

Division Components
SCHURTER Group

SCHURTER AG
Product Marketing
Werkhofstrasse 8-12
P. O. Box 4168
6002 Luzern
Switzerland
phone +41 41 369 31 11

contact@schurter.ch
schurter.com

[1]: <http://www.schurter.com/en/Components/EMC-Products/Single-Phase-Block-Filters/FMAB-CEE>

[2]: <http://www.schurter.com/en/Components/EMC-Products/3-Phase-Block-Filters/FMAD-CEE>

[3]: <http://cee-filter.schurter.com>