

CEE-Connector Filters





FMAB CEE and FMAD CEE



- > First CEE Power Entry Module with Filter
- > Easy prewired solution
- > One flange for front or rear mounting
- > Optimal filter position directly at power entry
- Saves space, reduces part count, assembly time and overall cost









Industry Standard CEE Connectors



CEE Connector

- Connectors according IEC 60309
 International standard for "plugs, socket-outlets and couplers for industrial purposes"
- > Wide range of connectors for 1- / 3-Phase applications AC / DC
- > Typical current ratings: 16, 32, 63, 125 A
- Voltage and frequency ratings of plug and sockets are indicated by the <u>color</u> and the location of the <u>earth pin</u>



Typical CEE connectors

Characteristic	Color	Earth pin (o'clock)
100–130 V	Yellow	4
120, or 240 V	Orange	12
200–250 V	Blue	6
120–250 V	Blue	9
12-24 V DC	Purple	12
50-250 V DC	White	3
>250 V DC	White	8
277 V 60 Hz only	Grey	5
380–480 V	Red	6
440 V 60 Hz only	Red	3
480–500 V	Black	7
500–680 V	Black	5
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1-Phase CEE Connector with Filter

> Ratings IEC 16-32 A @ 250 VAC

> Ratings UL, CSA 16-30 A @ 110/125 VAC

> Operating frequency 50/60 Hz

> Leakage current max. 0.5 / 1.0 mA

> Dielectric strength 2250 VDC (2sec.)

> Weight 650 – 1100 gr.

> Operating temperature -40 to +85 °C

> Terminals screw clamps









3-Phase CEE Connector with Filter

> Ratings IEC

> Ratings UL, CSA

> Operating frequency

> Leakage current

> Dielectric strength

> Weight

> Operating temperatures

> Terminals

16 -32 A @ 240/415 VAC

16-30 A @ 277/480 VAC

50/60 Hz

max. 10 mA

2400 VDC (2sec.)

1.3 / 1.4 kg

-40 to +85 °C

screw clamps







277/480 VAC



CEE-Filter – Market Position



Strategic Positioning

- > First CEE connector filter on the market
- New segment of high power connector filters for 1- & 3-phase applications
- > Extension of EMC filters range
- Extension of PEM filter range for higher power and 3 phase applications

Competitors

No equivalent product on the market

Price Position

> Attractive pricing

Applications

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

USP (Customer Focus)

- > First CEE connector filter on the market
- > Optimal filter position direct on the power entry
- Integrated connector with filter
 - Saves space, reduces part count, assembly time and overall cost
- > Easy prewired solution
- Universal flange for front or rear mounting
- Optimal filter position direct on the power entry
- > Wide temperature range -40 to +85°C

FMAx CEE - Ordering Information



FMAB CEE (1-Phase)

In	U	Leakage current	Approvals		Order Number
[A]	[VAC]	[mA]	ENEC	UL, CSA	
16	110	0.5		•	5500.2359
16	125/250	1.0	•	•	5500.2360
30	125	0.5		•	5500.2361
32	125/250	1.0	•	•	5500.2362



FMAD CEE (3-Phase)

In	U	Leakage current	Approvals		Order Number
[A]	[VAC]	[mA]	ENEC	UL, CSA	
16	240/415	10.0	•	•	FMAD-T4QT-1660.EU
30	277/480	10.0		•	FMAD-T4QT-3060.US
32	240/415	10.0	•	•	FMAD-T4QT-3260.EU



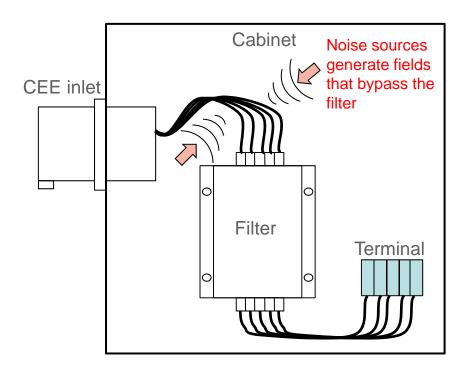
Packing unit: 1pc.

CEE Filter – Application

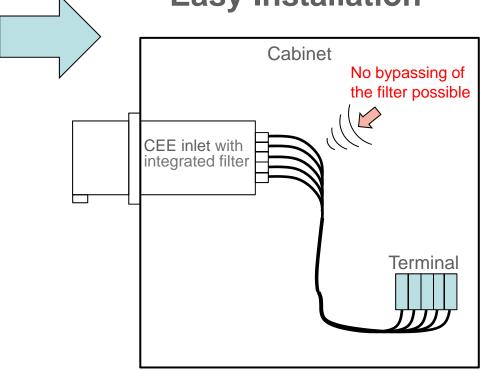


Safe & Easy Power Entry

Standard Wiring







- > Most effective filtering
- > Space savings
- > Cost savings
- > Easier installation

CEE-Filter – Applications



Machines, Tools





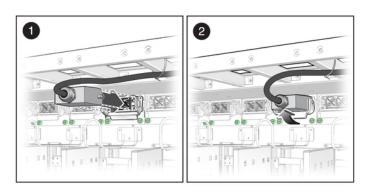
Mobile Equipment





Power Distribution





Power Distribution for IT

Other SCHURTER Filters





Chassis mounted block filters

1-Phase Filter

> FMAB NEO 1-60 A single stage

> FMBB NEO 1-36 A double stage



3-Phase and Neutral Filter

> FMAD 6-250 A single stage

> FMBD NEO 8 – 200 A double stage

Other SCHURTER High Current Chokes





Current compensated chokes

1-Phase fully potted

> DKIP-1

10 - 50A

flexible wire

> DKIL-1

10 - 20A

THT

1-Phase for PCB Mounting

> DKIH-1

10 - 50A

THT



3-Phase fully potted

> DKIP-3

10 - 50A

flexible wire

> DKIL-3

10 - 20A

THT

3-Phase for PCB Mounting

> DKIH-3

10 - 50A

THT

CEE Connector Filter



Additional Information

- > Website enables quick access to sales > and marketing materials
- > Click on <u>Partner Services</u> to download:
 - > Latest press releases
 - > Training presentations
 - > Price lists
 - > High and low resolution product photos
- Samples can be ordered from the standard product inventory
- > Microsite: http://cee-filter.schurter.com/

Technical Assistance

For general product questions, contact your Inside Sales Representative.