

EMI Power Inlet Filter

EF Series



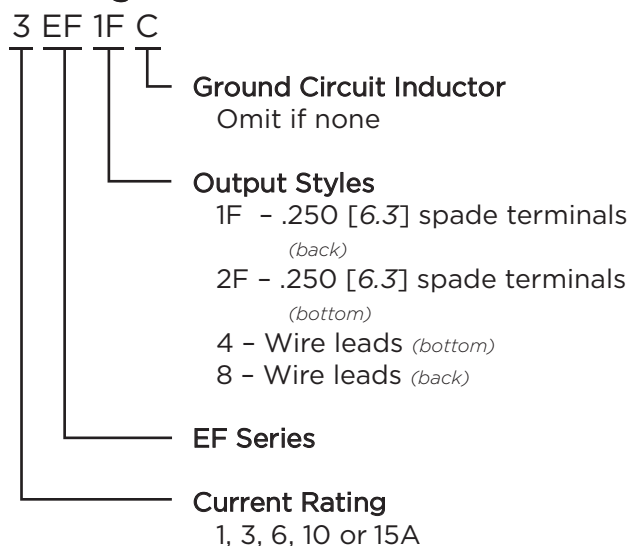
UL Recognized
CSA Certified
VDE Approved*



EF Series

- Compact single stage EMI filter with IEC 60320-1 C14 inlet
- Two element circuit provides basic attenuation
- Available with an internal ground-circuit inductor (C suffix versions) to isolate equipment chassis from power line ground at radio frequencies
- Superseded by the EEA Series

Ordering Information



Available Part Numbers

1EF1F	1EF2F	1EF4	1EF8
3EF1F	3EF2F	3EF4	3EF8
6EF1F	6EF2F	6EF4	6EF8
10EF1F			
15EF1F			
Ground Circuit Inductor Versions			
10EF1FC			

Specifications

Maximum leakage current each Line to Ground:

@ 120 VAC 60 Hz:	.21 mA
@ 250 VAC 50 Hz:	.36 mA

Hipot rating (one minute):

Line to Ground:	2250 VDC
Line to Line:	1450 VDC

Rated Voltage (max.):

250 VAC

Operating Frequency:

50/60 Hz

Rated Current:

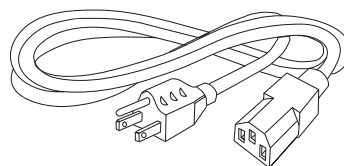
1 to 15A*

Operating Ambient Temperature Range

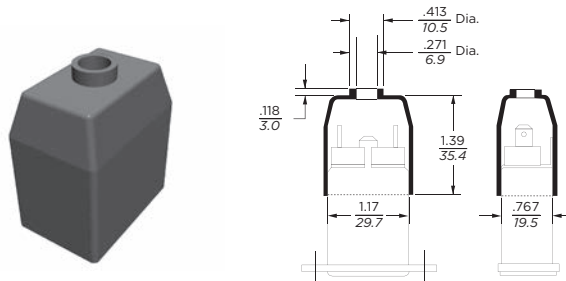
(at rated current I_r): -10°C to +40°C
In an ambient temperature (T_a) higher than +40°C the maximum operating current (I_o) is calculated as follows: $I_o = I_r \sqrt{(85-T_a)/45}$

Accessories

GA400: NEMA 5-15P to IEC 60320-1 C-13 line cord



FA601: Insulating Shroud

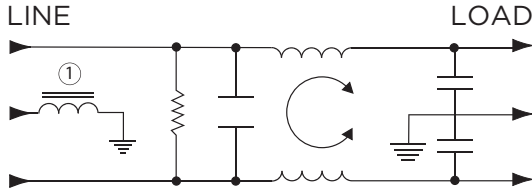


*15A versions are tested by Underwriters Laboratories to US and Canadian requirements and are VDE approved at 10A, 250VAC

EMI Power Inlet Filter (continued)

EF Series

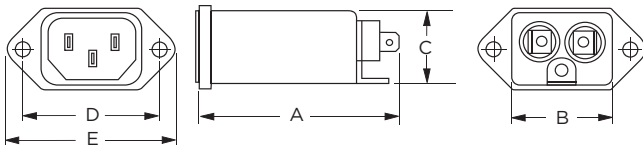
Electrical Schematic



Note 1: C Suffix (ground choke) versions only

Case Styles

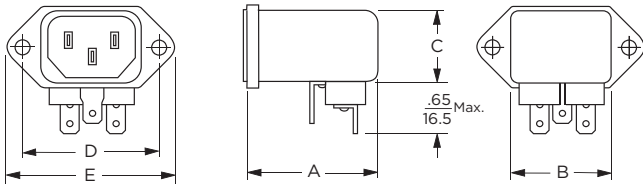
EF1F & EF1FC



Typical Dimensions:

Line Inlet (1): IEC 60320-1 C14
Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

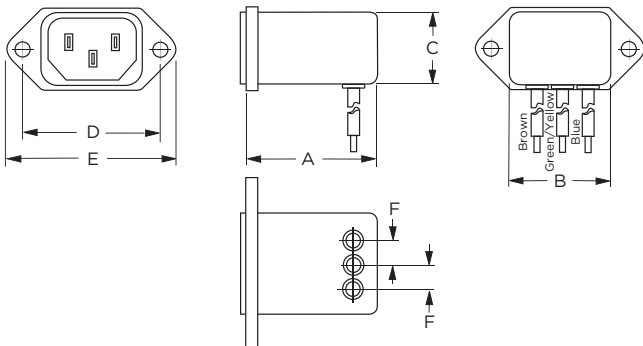
EF2F



Typical Dimensions:

Line Inlet (1): IEC 60320-1 C14
Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

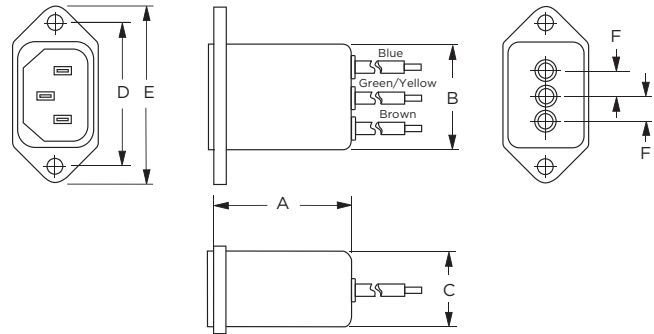
EF4



Typical Dimensions:

Line Inlet (1): IEC 60320-1 C14
Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

EF8



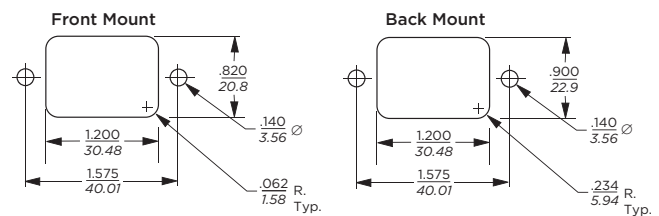
Typical Dimensions:

Line Inlet (1): IEC 60320-1 C14
Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D $\pm .015$ $\pm .38$	E (max.)	F (ref.)
1EF1F, 3EF1F, 6EF1F	2.21	1.19	0.81	1.575	1.98	-
1EF2F, 3EF2F, 6EF2F	1.55	1.19	0.85	1.575	1.98	-
1EF4, 3EF4, 6EF4	1.55	1.19	0.85	1.575	1.98	.295
1EF8, 3EF8, 6EF8	1.55	1.19	0.81	1.575	1.98	.295
10EF1F, 10EF1FC	2.62	1.19	0.81	1.575	1.98	-
15EF1F	2.62	1.19	0.81	1.575	1.98	-

Recommended Panel Cutouts



Tolerances $\pm .005$ [0.13] unless otherwise noted

Note 1: EF1F, EF1FC and EF8 allow for front or back mounting
Note 2: EF2F and EF4 allow for back mounting only

EMI Power Inlet Filter *(continued)*

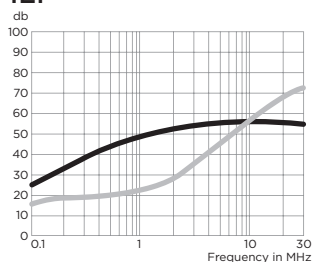
EF Series

Performance Data

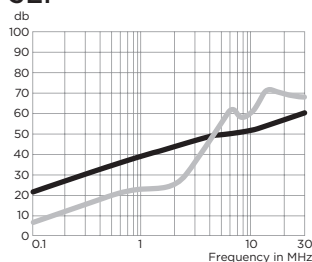
Typical Insertion Loss

Measured in closed 50 Ohm system

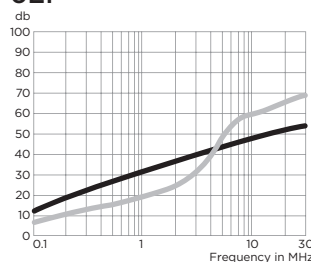
1EF



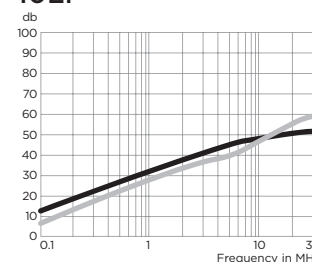
3EF



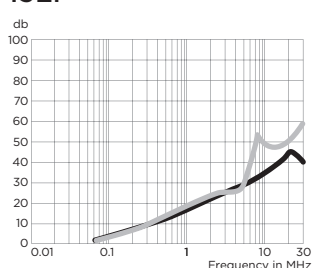
6EF



10EF



15EF



— Common Mode / Asymmetrical (L-G)
— Differential Mode / Symmetrical (L-L)

Minimum Insertion Loss

Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency – MHz					
	.15	.5	1	5	10	30
EF1F, EF2F						
1A	22	35	40	46	50	49
3A	15	25	30	45	50	54
6A	9	20	25	41	45	50
10A	8	15	20	34	39	44
15A	-	6	12	20	25	25
EF4, EF8						
1A	22	35	40	46	50	49
3A	15	25	30	45	50	54
6A	9	20	25	41	45	47
EF1FC						
10A	8	15	20	34	39	44