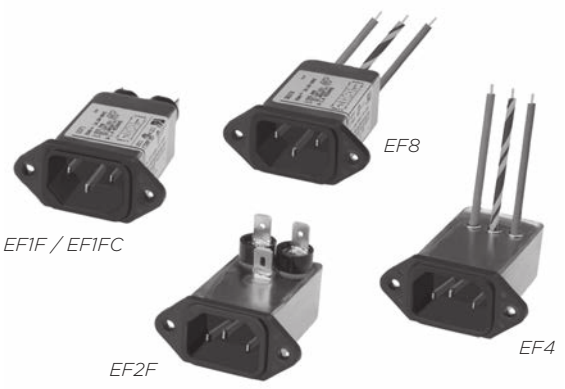
# EF Series

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- Superseded by the EEA Series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

3 EF 1F C

**Ground Circuit Inductor**
Omit if none

**Output Styles**
1F – .250 [*6.3*] spade terminals *(back)*
2F – .250 [*6.3*] spade terminals *(bottom)*
4 – Wire leads *(bottom)*
8 – Wire leads *(back)*

**EF Series**

**Current Rating**
1, 3, 6, 10 or 15A

## 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

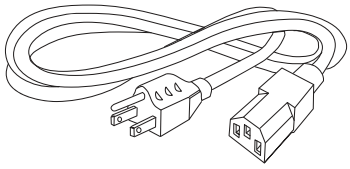
**Operating Frequency:** 50/60 Hz

**Rated Current:** 1 to 15A*

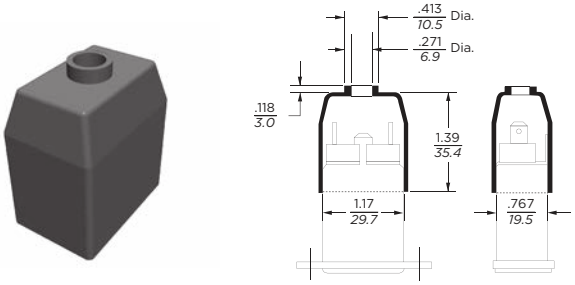
**Operating Ambient Temperature Range (at rated current $I_r$):** -10°C to +40°C
In an ambient temperature ($T_a$) higher than +40°C the maximum operating current ($I_o$) is calculated as follows: $I_o = I_r \sqrt{(85-Ta)/45}$

## 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*



Dimensions are in inches and millimeters unless otherwise specified. Values in italics are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

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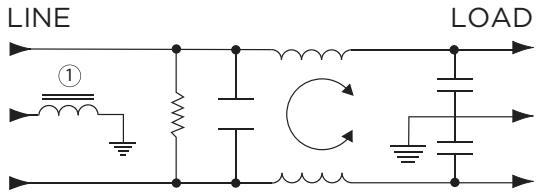
**corcom.com**

# EF Series

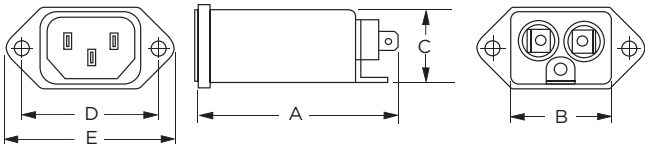
## Electrical Schematic




Note 1: C Suffix (ground choke) versions only

## Case Styles

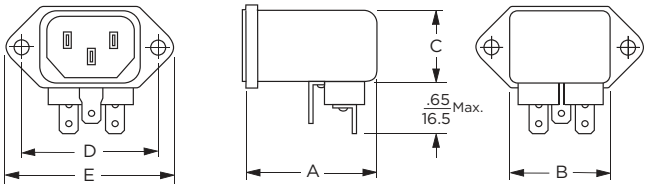
### EF1F & EF1FC




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 |

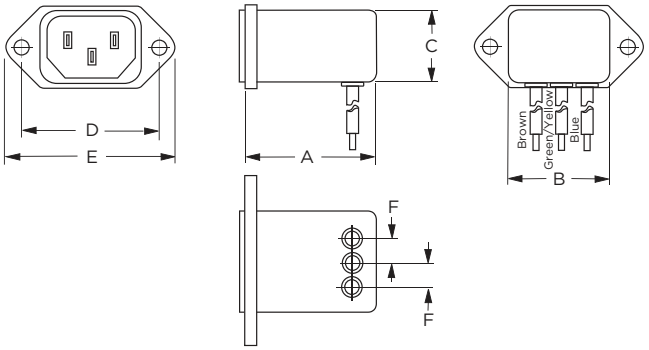
### EF2F




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 |

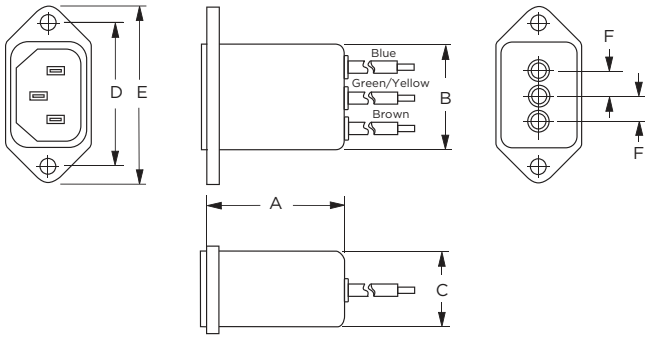
### EF4




Typical Dimensions:

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

### EF8



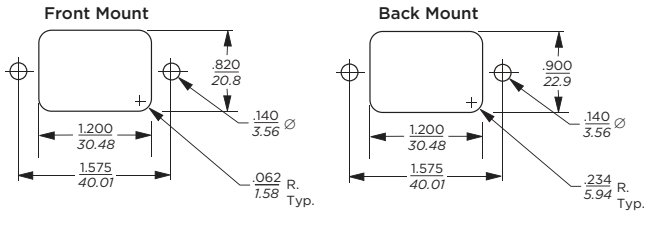

Typical Dimensions:

| | |
|---|---|
| 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 ± .015 ± .38 | E (max.) | F (ref.) |
|---|---|---|---|---|---|---|
| 1EF1F, 3EF1F, 6EF1F | **2.21** *56.0* | **1.19** *30.2* | **0.81** *20.6* | **1.575** *40.01* | **1.98** *50.3* | - |
| 1EF2F, 3EF2F, 6EF2F | **1.55** *39.4* | **1.19** *30.2* | **0.85** *21.6* | **1.575** *40.01* | **1.98** *50.3* | - |
| 1EF4, 3EF4, 6EF4 | **1.55** *39.4* | **1.19** *30.2* | **0.85** *21.6* | **1.575** *40.01* | **1.98** *50.3* | **.295** *7.5* |
| 1EF8, 3EF8, 6EF8 | **1.55** *39.4* | **1.19** *30.2* | **0.81** *20.06* | **1.575** *40.01* | **1.98** *50.3* | **.295** *7.5* |
| 10EF1F, 10EF1FC | **2.62** *66.5* | **1.19** *30.2* | **0.81** *20.6* | **1.575** *40.01* | **1.98** *50.3* | - |
| 15EF1F | **2.62** *66.5* | **1.19** *30.2* | **0.81** *20.6* | **1.575** *40.01* | **1.98** *50.3* | - |

## Recommended Panel Cutouts




Tolerances ± .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

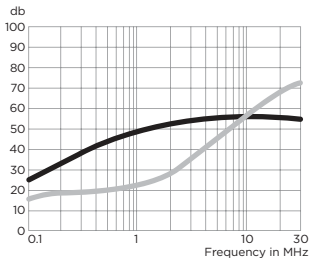
# EF Series

## Performance Data

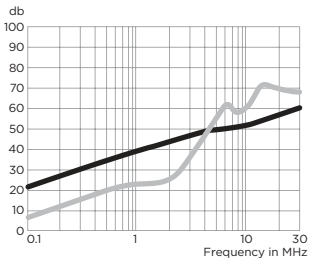
### Typical Insertion Loss

Measured in closed 50 Ohm system

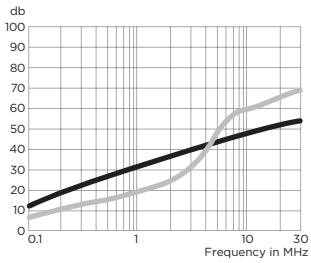
**1EF**



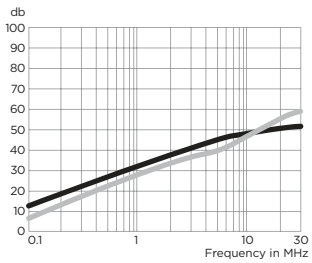

**3EF**



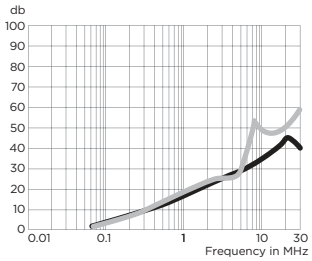

**6EF**




**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 |