

Medium Performance Compact EMI Power Inlet Filter

ED Series



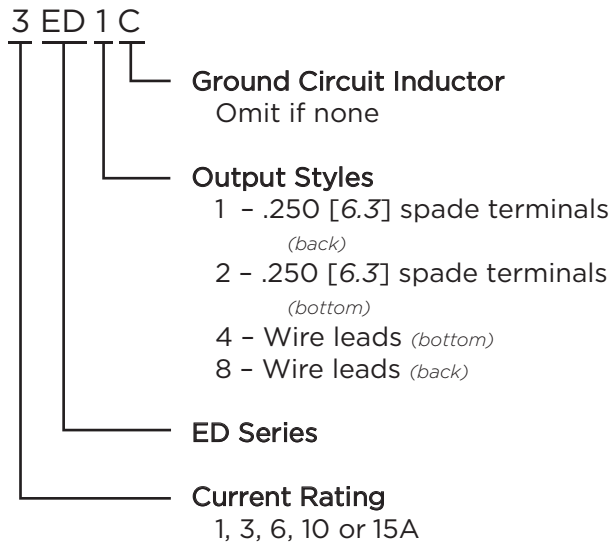
UL Recognized
CSA Certified
VDE Approved*



ED Series

- Two element circuit provides medium attenuation
- Available with an internal ground-circuit inductor (C versions) to isolate equipment chassis from power line ground at radio frequencies
- Versions up to 15A*
- Similar to EEJ Series with alternative termination options
- See the EC Series for better differential mode performance

Ordering Information



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

Specifications

Maximum leakage current each Line to Ground:
 @ 120 VAC 60 Hz: .22 mA
 @ 250 VAC 50 Hz: .38 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

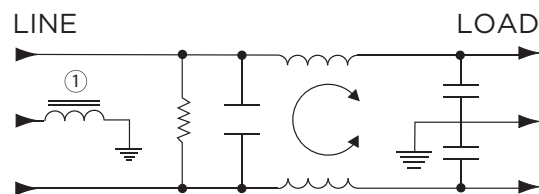
Rated Current: 1 to 15A*

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: $I_O = I_r \sqrt{(85 - T_a) / 45}$

Available Part Numbers

1ED1	1ED2	1ED4	1ED8
3ED1	3ED2	3ED4	3ED8
6ED1	6ED2	6ED4	6ED8
10ED1			
15ED1			15ED8
Ground Circuit Inductor Versions			
6ED1C		6ED4C	6ED8C
10ED1C			

Electrical Schematic



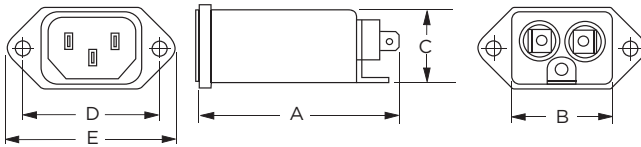
Note 1: C versions only

Medium Performance Compact EMI Power Inlet Filter (continued)

ED Series

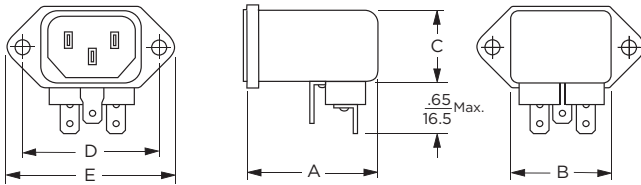
Case Styles

ED1 & ED1C



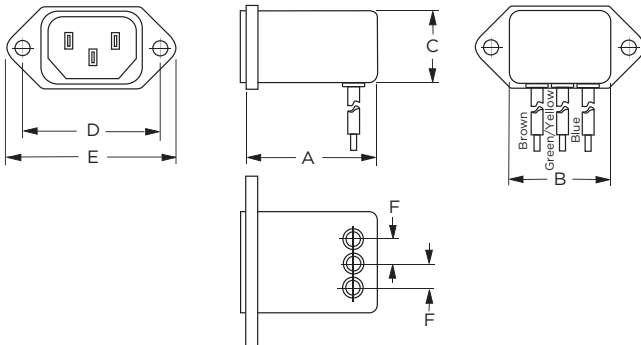
Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

ED2



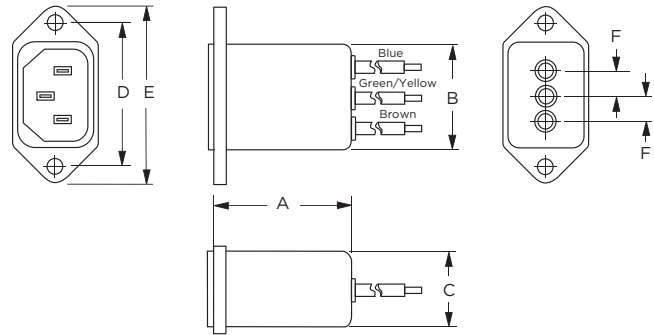
Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

ED4 & ED4C



Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

ED8 & ED8C



Typical Dimensions:
 Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90° countersink for #4 flathead screw
 Line Inlet (1): IEC 60320-1 C14
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

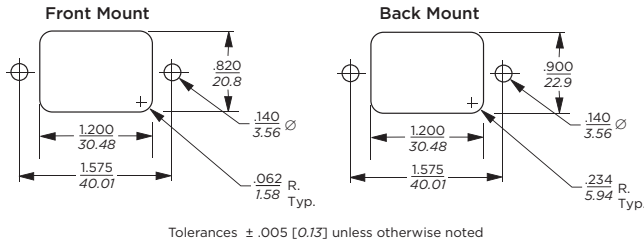
Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D $\pm .015$ $\pm .38$	E (max.)	F (ref.)
1ED1, 3ED1, 6ED1	2.21	1.19	0.81	1.575	1.98	-
1ED2, 3ED2, 6ED2	1.55	1.19	0.85	1.575	1.98	-
1ED4, 3ED4, 6ED4	1.55	1.19	0.85	1.575	1.98	.295
1ED8, 3ED8, 6ED8	1.55	1.19	0.81	1.575	1.98	.295
6ED1C	2.62	1.19	0.81	1.575	1.98	-
6ED4C	1.98	1.19	0.85	1.575	1.98	.295
6ED8C	1.98	1.19	0.81	1.575	1.98	.295
10ED1 /1C, 15ED1	2.62	1.19	0.81	1.575	1.98	-
15ED8	1.98	1.19	0.81	1.575	1.98	-

Medium Performance Compact EMI Power Inlet Filter *(continued)*

ED Series

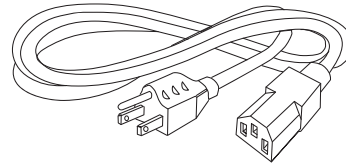
Recommended Panel Cutouts



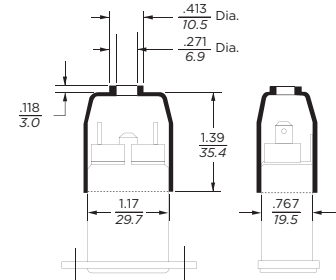
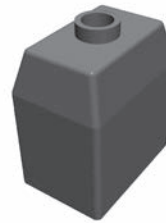
Note 1: ED1 and ED8 allow for front or back mounting
Note 2: ED2 and ED4 allow for back mounting only

Accessories

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



FA601: Insulating Shroud

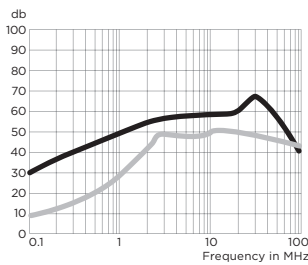


Performance Data

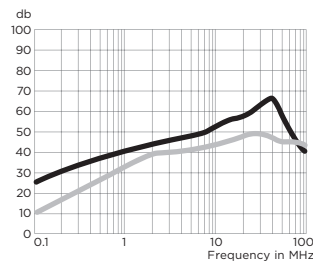
Typical Insertion Loss

Measured in closed 50 Ohm system

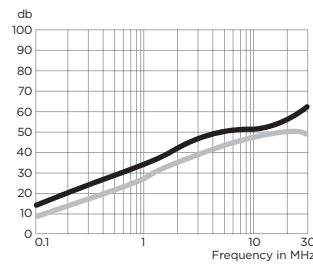
1ED



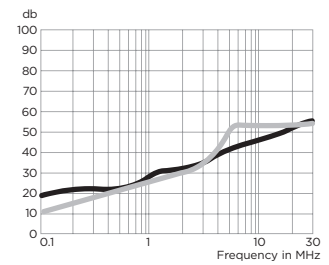
3ED



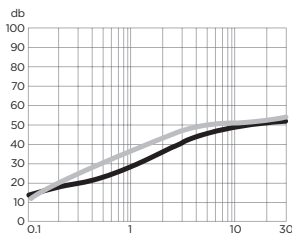
6ED



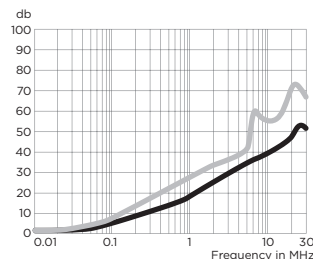
6ED1C



10ED1 & 10ED1C



15ED



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

Medium Performance Compact EMI Power Inlet Filter *(continued)*

ED Series

Performance Data *(continued)*

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
ED1, ED2, ED4 & ED8						
1A	24	35	42	49	52	54
3A	20	29	36	45	50	54
6A	14	23	30	41	45	50
10A	8	14	20	35	39	45
15A	4	9	12	28	34	40
ED1C						
6A	14	20	25	37	42	50
10A	8	14	20	35	39	45
ED4C & ED8C						
6A	14	20	25	37	42	50

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz					
	.15	.5	1	5	10	30
ED1, ED2, ED4 & ED8						
1A	3	15	20	37	37	36
3A	3	15	20	37	37	36
6A	3	15	20	31	35	34
10A	6	15	20	23	44	47
15A	6	18	23	33	44	47
ED1C						
6A	7	17	23	36	42	42
10A	6	15	20	23	44	47
ED4C & ED8C						
6A	7	17	23	29	38	42