

High Performance Power Line Filter for Medical Applications

HZ Series



UL Recognized
CSA Certified
VDE Approved



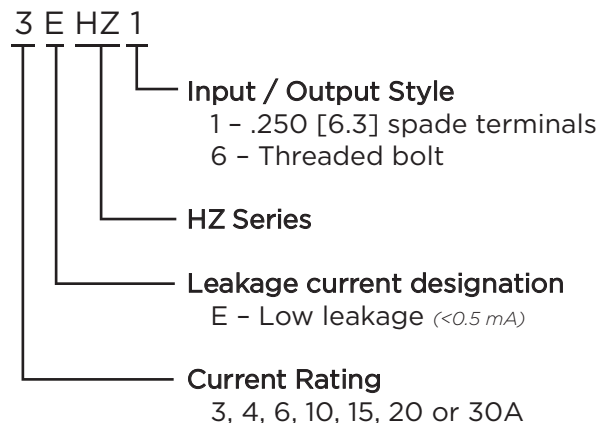
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RFI Power Line Filters

HZ Series

- Designed to provide good attenuation to RFI noise in the frequency range from 10kHz to 30MHz
- Size and cost-effective
- Low leakage current
- New versions up to 30A

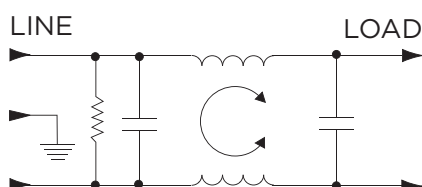
Ordering Information



Available Part Numbers

3EHZ1	4EHZ1
6EHZ1	10EHZ1
15EHZ1	20EHZ1
30EHZ6	

Electrical Schematic



Specifications

Maximum leakage current each Line to Ground:

@ 120 VAC 60 Hz:	2 μA
@ 250 VAC 50 Hz:	5 μA

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:

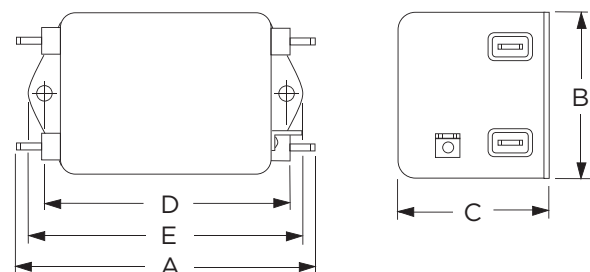
3 to 30A

Operating Ambient Temperature Range

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

Case Styles

3EHZ1



Typical Dimensions:

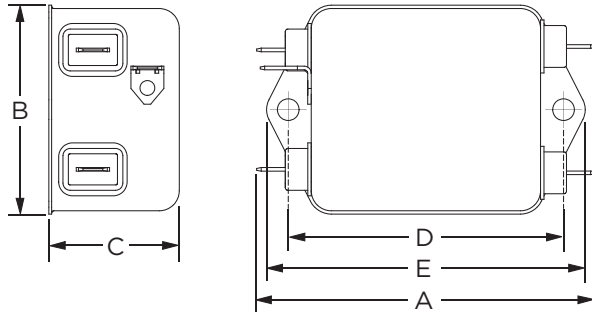
Line/Load Terminals (4):	.250 [6.3] with .07 [1.8] Dia. hole
Ground Terminal (1):	.250 [6.3] with .07 x .16 [1.8 x 3.8] slot
Mounting Holes (2):	.188 [4.78] Dia.

High Performance Power Line Filter for Medical Applications *(continued)*

HZ Series

Case Styles *(continued)*

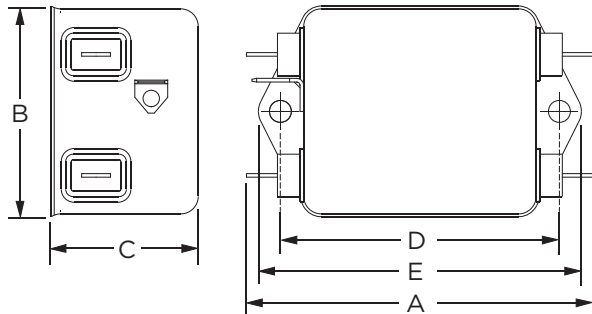
4EHZ1



Typical Dimensions:

Line/Load Terminals (4): .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
Mounting Holes (2): .188 [4.78] Dia.

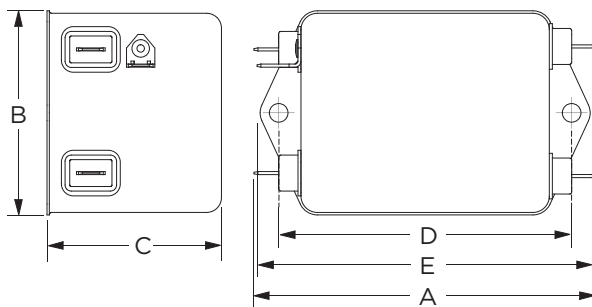
6EHZ1



Typical Dimensions:

Line/Load Terminals (4): .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
Mounting Holes (2): .188 [4.78] Dia.

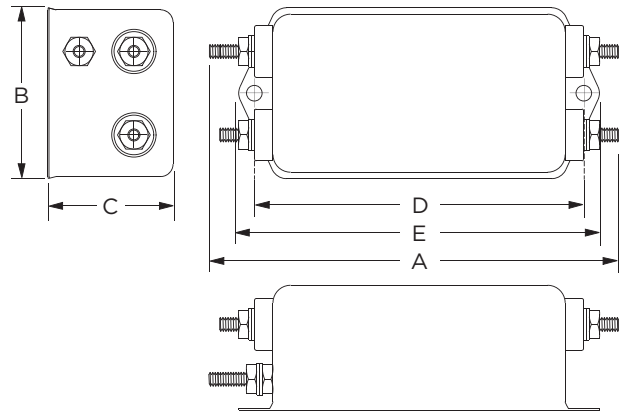
10, 15 & 20EHZ1



Typical Dimensions:

Line/Load Terminals (4): .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
Mounting Holes (2): .188 [4.78] Dia.

30EHZ6



Typical Dimensions:

Terminals (5): 8-32, Torque 18 lbf-in. [2.03 N-m] max. ± 2 [2.2]
Mounting Holes (4): .188 [4.75] Dia.

Case Dimensions

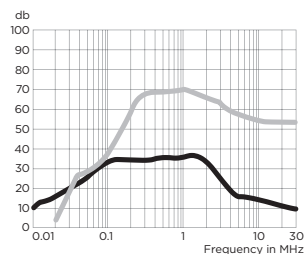
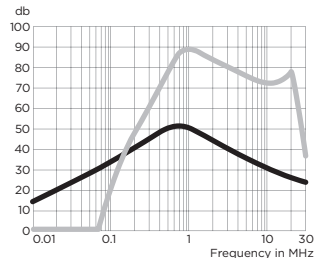
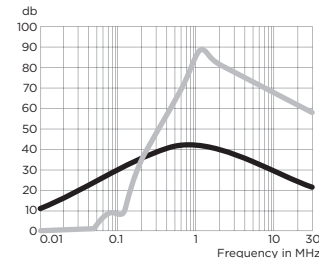
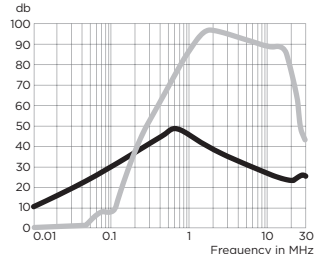
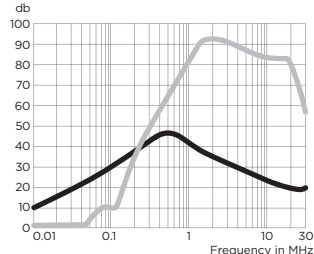
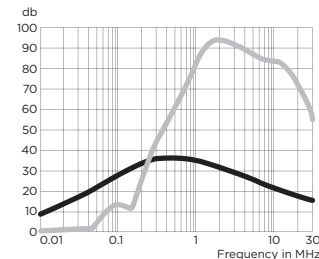
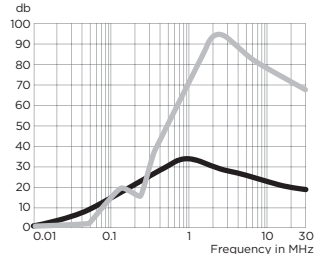
Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3EHZ1	3.54 89.91	2.08 52.8	1.31 33.3	2.938 74.63	3.35 85.1
4EHZ1	3.07 77.98	1.82 46.23	1.16 29.46	2.375 60.33	2.78 70.61
6EHZ1	3.07 77.98	1.82 46.23	1.28 32.51	2.375 60.33	2.78 70.61
10EHZ1 15EHZ1 20EHZ1	3.54 89.92	2.047 51.99	1.805 45.85	2.938 74.63	3.54 89.92
30EHZ6	4.92 124.97	2.07 52.58	1.53 38.86	3.947 100.25	4.33 109.98

High Performance Power Line Filter for Medical Applications *(continued)*

Performance Data

Typical Insertion Loss

Measured in closed 50 Ohm system

3EHZ1

4EHZ1

6EHZ1

10EHZ1

15EHZ1

20EHZ1

30EHZ6


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

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RFI Power Line Filters

Minimum Insertion Loss

Common Mode / Asymmetrical (Line to Ground)

Part No.	Frequency – MHz								
	.01	.05	.1	.15	.5	1	5	10	30
3EHZ1	10	24	30	34	34	35	15	10	5
4EHZ1	12	24	31	35	47	47	30	25	18
6EHZ1	9	21	27	30	36	34	27	22	16
10EHZ1	7	21	25	31	43	40	26	21	14
15EHZ1	7	27	27	30	43	37	24	17	12
20EHZ1	5	19	24	28	31	29	14	9	4
30EHZ6	-	5	11	14	27	30	20	17	14

Differential Mode / Symmetrical (Line to Line)

Part No.	Frequency – MHz								
	.01	.05	.1	.15	.5	1	5	10	30
3EHZ1	10	25	30	54	70	70	65	55	55
4EHZ1	-	-	14	32	72	83	68	63	30
6EHZ1	-	-	7	17	59	80	67	60	52
10EHZ1	-	-	4	21	63	80	80	74	36
15EHZ1	-	-	7	15	51	77	80	74	48
20EHZ1	-	-	11	9	54	77	74	69	47
30EHZ6	-	-	13	14	47	67	76	70	58