

Highest Performance RFI Filters for Medical Equipment

# HQ Series



UL Recognized  
CSA Certified  
VDE Approved



## HQ Series

- Designed to provide the highest available attenuation of RFI noise in the frequency range from 10kHz to 30MHz for low leakage current applications
- Size and cost-effective

## Ordering Information



\*IEC 60320-1 C14 inlet mates with C13 connector

## Specifications

**Maximum leakage current each Line to Ground:**  
 @ 120 VAC 60 Hz: 2  $\mu$ A  
 @ 250 VAC 50 Hz: 5  $\mu$ A

**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 & 6A

**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

3EHQ1	6EHQ1
3EHQ3	6EHQ3
3EHQ8	6EHQ8
3EHQ8M	3EHQ8M

## Accessories

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



**Highest Performance RFI Filters for Medical Equipment** *(continued)*

# HQ Series

## Electrical Schematics

### 3EHQ



### 6EHQ



## Case Styles

### HQ1



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.

### HQ3



Typical Dimensions:  
 Wire Leads (5): 4.0 [101.6] Min.  
 Mounting Holes (2): .188 [4.78] Dia.

### 3EHQ8 & 3EHQ8M



Typical Dimensions:  
 Wire Leads (3): 4.0 [101.6] Min.  
 Line Inlet (1): IEC 60320-1 C14  
 HQ8 Tapped Inserts (2): 6-32 x 1/4  
 HQ8M Tapped Inserts (2): M3 x .5

### 6EHQ8 & 6EHQ8M



Typical Dimensions:  
 Wire Leads (3): 4.0 [101.6] Min.  
 Line Inlet (1): IEC 60320-1 C14  
 HQ8 Tapped Inserts (2): 6-32 x 1/4  
 HQ8M Tapped Inserts (2): M3 x .5

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# HQ Series

## Recommended Panel Cutout



## Case Dimensions

Part No.	A (max)	B (max)	C (max)	D $\pm .015$ $\pm .38$	E (max)
3EHQ1	<b>3.85</b> 97.8	<b>2.07</b> 52.6	<b>1.78</b> 45.2	<b>2.938</b> 74.63	<b>3.34</b> 84.8
3EHQ3	<b>2.56</b> 65.0	<b>2.07</b> 52.6	<b>1.78</b> 45.2	<b>2.938</b> 74.63	<b>3.34</b> 84.8
3EHQ8, 3EHQ8M	<b>3.07</b> 78.0	<b>2.25</b> 57.2	<b>1.78</b> 45.2	<b>1.575</b> 40.01	<b>0.63*</b> 16.0*
6EHQ1	<b>4.98</b> 126.5	<b>2.27</b> 57.7	<b>1.8</b> 45.7	<b>4.063</b> 103.2	<b>4.47</b> 113.5
6EHQ3	<b>3.69</b> 93.7	<b>2.27</b> 57.7	<b>1.8</b> 45.7	<b>4.063</b> 103.2	<b>4.47</b> 113.5
6EHQ8, 6EHQ8M	<b>5.47</b> 138.9	<b>2.07</b> 52.6	<b>1.78</b> 45.2	<b>1.575</b> 40.01	<b>2.7*</b> 68.6*

\*±0.02 [0.5]

1  
RFI Power Line Filters

## Performance Data

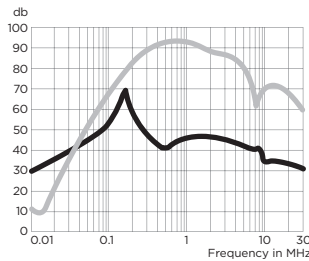
### Typical Insertion Loss

Measured in closed 50 Ohm system

**3EHQ**



**6EHQ**



— 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											
	.01	.02	.05	.15	.5	1	2	5	7	10	20	30
3A	19	24	32	44	44	40	38	28	25	22	13	10
6A	24	29	39	42	28	35	36	30	30	24	16	15

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz											
	.01	.02	.05	.15	.5	1	2	5	7	10	20	30
3A	1	18	43	68	75	75	72	70	66	65	60	60
6A	6	10	43	70	75	75	75	65	50	55	50	40