#### Highest Performance RFI Filters for Medical Equipment

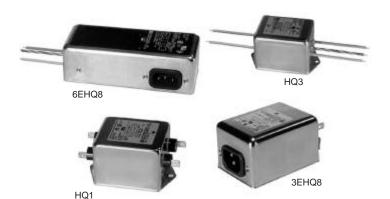
# **HQ** Series

Electronics

*≡* Tvco



**UL Recognized CSA** Certified **VDE** Approved



## **HQ** Series

The HQ series power line filters provide the highest available common-mode and differential-mode attenuation to RFI noise in the frequency range from 10kHz to 30MHz, for IEC 60601 and UL2601 patient-connected equipment, as well as all other electronic equipment that cannot tolerate any leakage current.

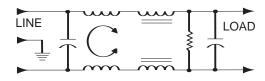
They are a size- and more cost-effective solution to the problem of meeting both medical leakage current limits and conducted emissions limits in equipment with high noise sources (such as switching power supplies). HQ series filters can help meet the following Conducted Emissions standards:

- European Normalized Standards based on EN55022, Level B
- FCC Part 15, Computing Devices, Class B.
- FCC Part 18, ISM Equipment, Industrial and Consumer.

For more information on UL2601, see Appendix C.

## **Electrical Schematics**

#### 3 Amp Models



#### 6 Amp Models



Resistor location for reference only.

**Specifications** Maximum leakage current, each line-to-ground @ 120 VAC 60 Hz: @ 250 VAC 50 Hz: Hipot rating (one minute): line to around

inie-to-ground	2230 VDC
line-to-line	1450 VDC
Operating frequency:	50/60 Hz
Rated voltage (max.):	250 VAC
Rated current:	
3EHQ	3A
6EHQ	6A
Maximum rated current peaks:	
3EHQ	10A
6EHQ	18A
Minimum insertion loss in dB:	

Line-to-ground in 50 ohm circuit

Current	Frequency–MHz											
Rating	.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

Line-to-line in 50 ohm circuit

Current	Frequency–MHz											
Rating	.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

# Line Cord

Line Cord No. GA400:

71/2 foot, 3-conductor line cord to mate with Q8 models.

Catalog 1654001 Revised 05-07

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.

USA Cust. Svc.: 1-800-468-2023 CORCOM Prods: 1-847-680-7400 Germany: 49-89-6089-0

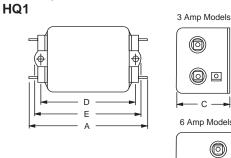
2µA

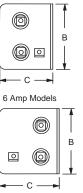
5μΑ

#### Highest Performance RFI Filters for Medical Equipment (Continued)

# **HQ Series**

Case Styles

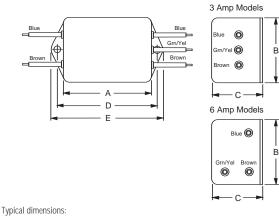




Typical dimensions:

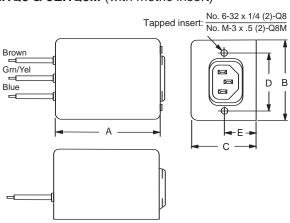
Terminals: .250 [6.35] (5) Holes: .07 [1.8] Dia.(4) Slot: .07 x .16 [1.8 x 4.1] Mounting holes: .188 [4.78] Dia. (2)

HQ3



 Wire leads: 4.0 [101.6] Min.
 Mounting holes: .188 [4.78] Dia. (2)

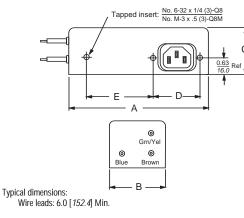
#### 3EHQ8 & 3EHQ8M (with metric insert)



Typical dimensions: Wire leads: 6.0 [*152.4*] Min.

Catalog 1654001 Revised 05-07 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. USA Cust. Svc.: 1-800-468-2023 CORCOM Prods: 1-847-680-7400 Germany: 49-89-6089-0

6EHQ8 & 6EHQ8M (with metric insert)



## Case Dimensions

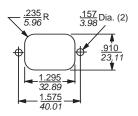
	Α	В	С	D	E
Part No.	(max)	(max)	(max)	± .015 ± .38	(max)
3EHQ1	3.85	2.07	1.78	2.938	3.34
	97.8	52.6	45.2	74.63	84.8
3EHQ3	2.56	2.07	1.78	2.938	3.34
	65.0	52.6	45.2	74.63	84.8
3EHQ8,	3.07	2.25	1.78	1.575	0.63
3EHQ8M	78.0	57.2	45.2	40.01	16.0
6EHQ1	4.98	2.27	1.8	4.063	4.47
	126.5	57.7	45.7	103.2	113.5
6EHQ3	3.69	2.27	1.8	4.063	4.47
	93.7	57.7	45.7	103.2	113.5
6EHQ8,	5.47	2.07	1.78	1.575	2.7
6EHQ8M	138.9	52.6	45.2	40.01	68.6

† ±.02 [±.5]

## Part Numbers

3EHQ1	6EHQ1
3EHQ3	6EHQ3
3EHQ8	6EHQ8
3EHQ8M	6EHQ8M
Line Cord No.	GA400

# **Recommended Panel Cutouts**



Panel Cutout (back mount) Tolerance ±.005 [0.13]

**RFI Power Line Filters** 

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