

## **Electronics**

#### High Performance RFI Power Line Filters for Medical Equipment

# **HT Series**



UL Recognized CSA Certified VDE Approved



The HT series power line filters provide superior commonmode and premium differential-mode attenuation to RFI noise on 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 leakage current.

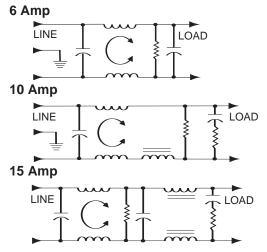
They are a size- and cost-effective solution to the problem of meeting both medical leakage current limits and conducted emissions limits in equipment with high noise sources (such as switching power supplies). HT series filters can meet the following Conducted Emissions standards:

- European Normalized Standards based on EN55022, Level A (in many cases, Level B also).
- FCC Part 15, Computing Devices, Class B.
- FCC Part 18, ISM Equipment, Industrial and Consumer.

Note: When using the models with an IEC connector, remember that the leakage current of the companion line cord, GA400, is more significant than that of the filter - which may disqualify this line cord from use in patient care applications.

For more information on UL2601, see Appendix C.

#### **Electrical Schematics**





## **Specifications**

@ 120 VAC 60 Hz:			2μΑ
@ 250 VAC 50 Hz:			5μΑ
Hipot rating (one minute)	):		
line-to-ground			1500 VAC
line-to-line			1450 VDC
Operating frequency:			50/60 Hz
Rated voltage (max.):			250 VAC

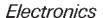
Minimum insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current	Frequency-MHz											
Rating	.01	.02	.05	.08	.15	.5	1	2	5	10	20	30
6A	16	23	32	41	46	41	33	26	15	9	6	2
10A	9	15	24	30	36	42	34	22	11	12	8	8
15A	4	9	18	22	27	41	34	22	12	12	5	2

Line-to-line in 50 ohm circuit

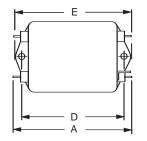
Current				Fred	quen	су-	MH	Z				
Rating	.01	.02	.05	.08	.15	.5	1	2	5	10	20	30
6A	4	1	14	45	51	70	70	65	55	47	37	37
10A	7	8	17	32	52	70	70	70	65	55	40	35
15A	12	16	15	10	51	70	70	70	70	70	65	55

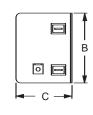


#### High Performance RFI Power Line Filters for Medical Equipment (Continued)

# **HT Series**

# Case Styles HT1 (6 and 10 Amp)

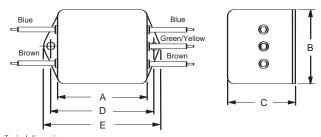




Typical dimensions:

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)

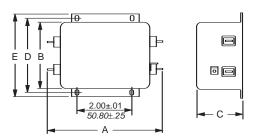
#### HT3



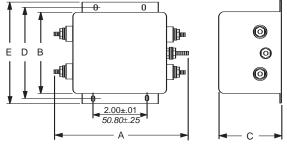
Typical dimensions: Wire leads: 4.0 [101.6] Min.

Mounting holes: .188 [4.78] Dia. (2)

#### HT1 (15 Amp)



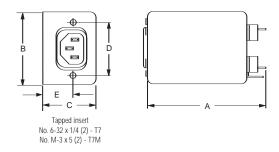
#### **HT6**



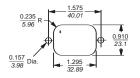
Typical dimensions: Terminals: No. 8-32 (5) Torque: 18±2 in.lb

Mounting holes: .203 x .156 [5.16 x 3.96] Dia. (4)

### HT7 & HT7M (with metric insert)



#### **Recommended Panel Cutout**



Panel Cutout (back mount)

Tolerance ±.005 [0.13]

#### **Case Dimensions**

	Α	В	С	D	Ε
Part No.	(max)	(max)	(max)	±.015 ±.38	(max)
6EHT1	3.56	2.15	1.81	2.938	3.38
OLITTI	90.4	54.6	46.0	74.63	85.9
6EHT3	2.55	2.15	1.81	2.938	3.38
OLITIO	64.8	54.6	46.0	74.63	85.9
6EHT7,	3.52	2.25	1.78	1.575	0.63
6EHT7M	89.4	57.2	45.2	40.01	16.0
10EHT1	4.69	2.27	1.8	4.063	4.47
IOLIIII	119.1	57.7	45.7	103.2	113.5
10EHT3	3.69	2.27	1.8	4.063	4.47
TOLITIO	93.7	57.7	45.7	103.2	113.5
15EHT1	5.45	3.12	2.18	3.5	3.96
IJLIIII	138.4	79.2	55.4	88.9	100.6
15EHT6	5.95	3.12	2.18	3.5	3.96
1021110	151.1	79.2	55.4	88.9	100.6

† ±.02 [±.5]

#### **Part Numbers**

6EHT1	10EHT1			
6EHT3	10EHT3			
6EHT7	15EHT1			
6EHT7M	15EHT6			
Line Cord No.	GA400			
71/2 foot, 3-conductor line cord to mate with T7 models				