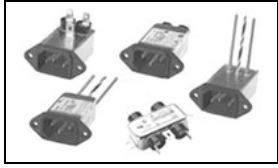


6609012-3 Product Details



6609012-3

TE Internal Number: 6609012-3



Active

EMI/RFI Filters and Accessories

 Always EU RoHS/ELV Compliant (Statement of Compliance)

Product Highlights:

- Filter - EMI/RFI
- Filter Type = Power Line
- H (3-15 Amp) Series
- Medical Application
- Mount Style = Flanged

Documentation & Additional Information

Product Drawings:

- [Customer Drawing 6EH1](#) (PDF, English)

Catalog Pages/Data Sheets:

- [1654001_CORCOM_PRODUCT_GUIDE_H_SERIES](#) (PDF, English)

Product Specifications:

- None Available

Application Specifications:

- None Available

Instruction Sheets:

- None Available

CAD Files: ([CAD Format & Compression Information](#))

- [2D Drawing](#) (DXF, Version C)
- [3D Model](#) (IGES, Version C)
- [3D Model](#) (STEP, Version C)

Additional Information:

- [Product Line Information](#)

Additional Product Images:

- [Insertion Loss/Specifications](#)

Related Products:

- [Tooling](#)

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- [Product Type](#) = Filter - EMI/RFI
- [Filter Type](#) = Power Line
- [Series](#) = H (3-15 Amp)
- [Ground Choke Option](#) = Without
- [Filtered](#) = Yes
- [Ground Option](#) = None

Electrical Characteristics:

- [Current Rating \(A\)](#) = 6
- [Voltage \$\leq\$ \(VAC\)](#) = 250
- [Leakage Current \(Line-to-Ground\) Max. @ 120 VAC 60 Hz \(\$\mu\$ A\)](#) = 2
- [Leakage Current \(Line-to-Ground\) Max. @ 250 VAC 50 Hz \(\$\mu\$ A\)](#) = 5

Termination Features:

- [Terminal Input - Output Combination](#) = 1/4" Faston - 1/4" Faston

Body Features:

- [Mount Style](#) = Flanged
- [Terminal Style Output](#) = Straight

Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS compliant, ELV compliant
- [Lead Free Solder Processes](#) = Not relevant for lead free process
- [RoHS/ELV Compliance History](#) = Always was RoHS compliant
- [Approved Standards](#) = VDE Approved, UL Recognized, CSA Certified

Conditions for Usage:

- [Facility Installation](#) = No
- [Need Min Size With IEC Connector](#) = No
- [Need Optional Switch, Fusing, Or Voltage Selector](#) = No

Operation/Application:

- [Application](#) = Medical

Other:

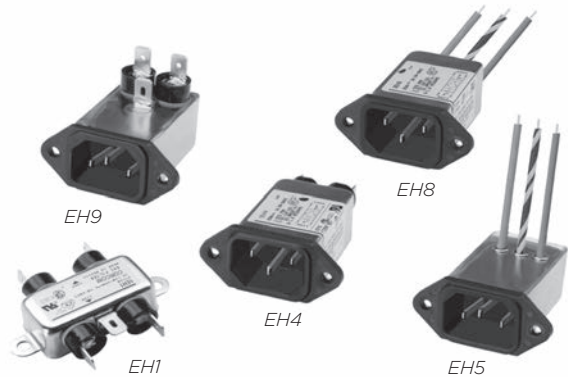
- [Brand](#) = Corcom

Power Inlet Line Filter for Medical Equipment

H Series



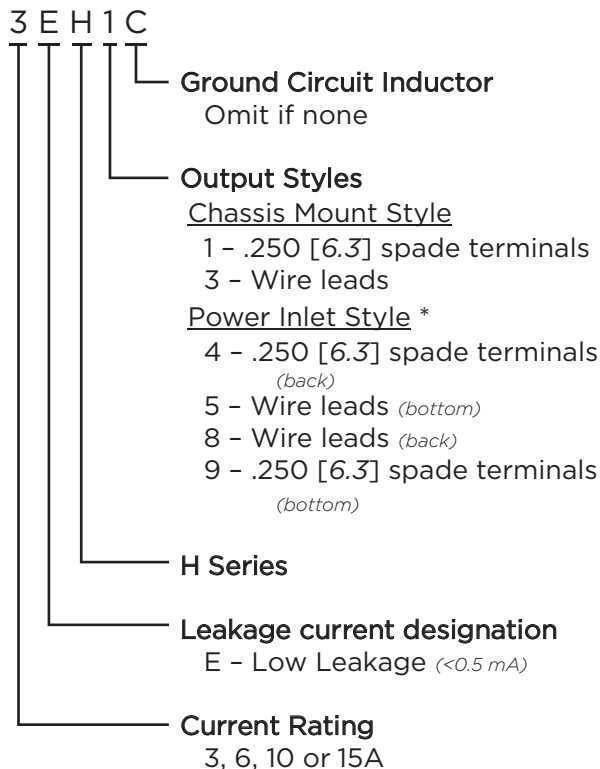
UL Recognized
CSA Certified
VDE Approved*



H Series

- Minimal leakage current suitable for medical equipment
- Two element circuit provides basic EMI attenuation above 1 MHz
- Available with an internal ground circuit inductor (C suffix versions) to isolate equipment chassis from power line ground at radio frequencies
- Flanged mounting the same as the EC, ED and EF Series
- Capacitive output (see EAH, EBH and EJH Series for capacitive input)

Ordering Information

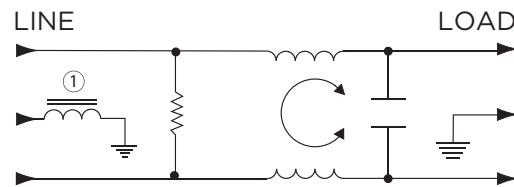


*IEC 60320-1 C14 inlet mates with C13 connector

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 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 √(85-T_a)/45

Electrical Schematic



Available Part Numbers

3EH1	6EH8
3EH3	6EH9
6EH1	10EH1
6EH3	10EH3
6EH4	10EH4
6EH5	15EH4
Ground Circuit Inductor Versions	
10EH4C	

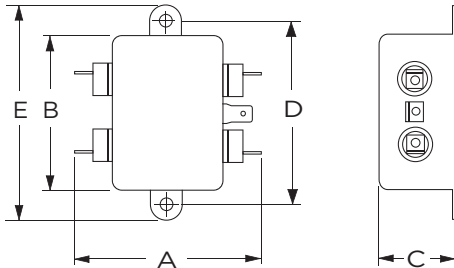
*15A versions are tested by Underwriters Laboratories to US and Canadian requirements and are VDE approved at 10A, 250VAC

Power Inlet Line Filter for Medical Equipment *(continued)*

H Series

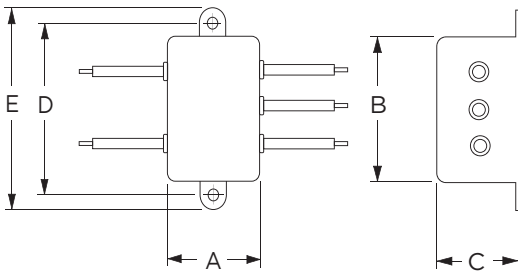
Case Styles

H1 (Chassis Mount)



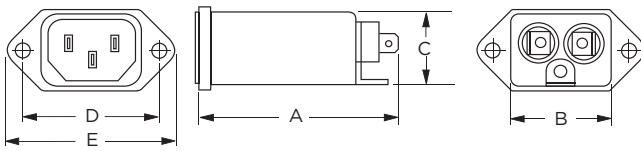
Typical Dimensions:
 Mounting Holes: .188 [4.78] Dia.
 Line / Load Terminals (4): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

H3 (Chassis Mount)



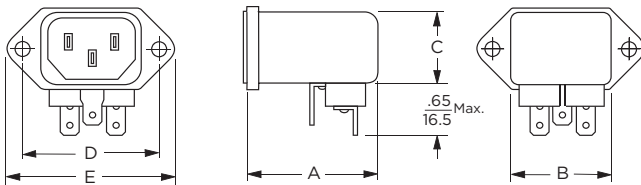
Typical Dimensions:
 Mounting Holes: .188 [4.78] Dia.
 Wire Leads(5): 4.0 [101.6] Min., 18AWG, UL1015

H4 & H4C



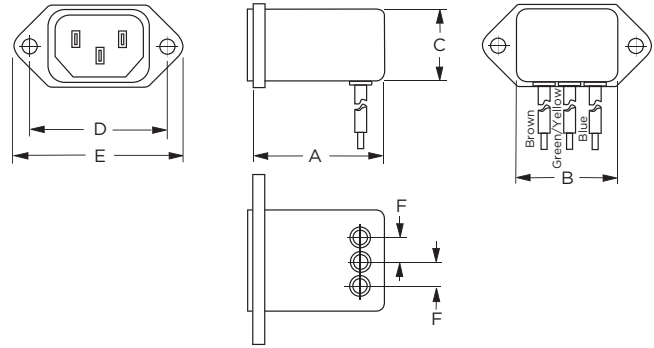
Typical Dimensions:
 Line Inlet (1): IEC 60320-1 C14
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

H9



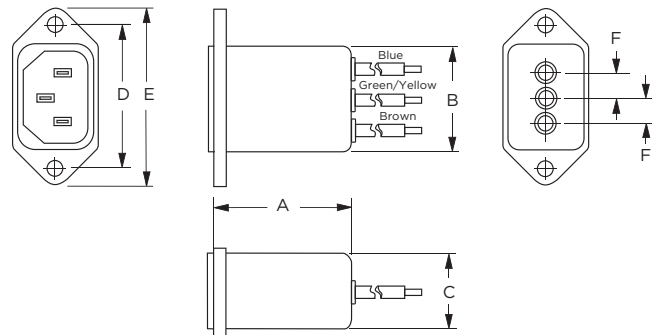
Typical Dimensions:
 Line Inlet (1): IEC 60320-1 C14
 Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole
 Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

H5



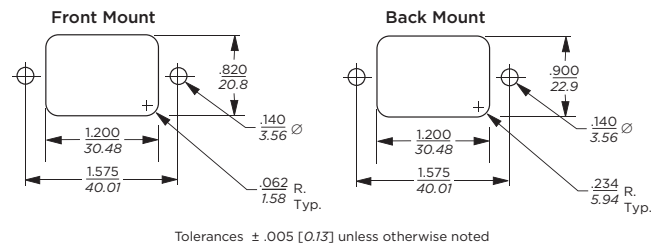
Typical Dimensions:
 Line Inlet (1): IEC 60320-1 C14
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

H8



Typical Dimensions:
 Line Inlet (1): IEC 60320-1 C14
 Wire Leads: 4.0 [101.6] Min., 18AWG, UL1015

Recommended Panel Cutouts



Note 1: H4, H4C and H8 allow for front or back mounting
 Note 2: H5 and H9 allow for back mounting only

Power Inlet Line Filter for Medical Equipment *(continued)*

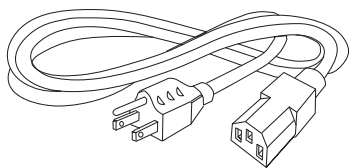
H Series

Case Dimensions

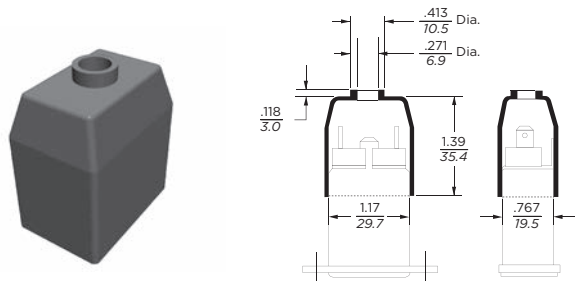
Part No.	A (max.)	B (max.)	C (max.)	D $\pm .015$ $\pm .38$	E (max.)	F (ref.)
H1	2.25 <i>57.2</i>	1.82 <i>46.1</i>	0.66 <i>16.7</i>	2.125 <i>53.98</i>	2.53 <i>64.2</i>	-
H3	.96 <i>24.40</i>	1.82 <i>46.1</i>	0.66 <i>16.7</i>	2.125 <i>53.98</i>	2.53 <i>64.2</i>	-
6EH4	2.20 <i>55.9</i>	1.19 <i>30.2</i>	0.81 <i>20.6</i>	1.575 <i>40.01</i>	1.98 <i>50.3</i>	-
10EH4, 10EH4C	2.62 <i>66.5</i>	1.19 <i>30.2</i>	0.81 <i>20.6</i>	1.575 <i>40.01</i>	1.98 <i>50.3</i>	-
15EH4	2.62 <i>66.5</i>	1.19 <i>30.2</i>	0.81 <i>20.6</i>	1.575 <i>40.01</i>	1.98 <i>50.3</i>	-
H5	1.55 <i>39.4</i>	1.19 <i>30.2</i>	0.85 <i>21.6</i>	1.575 <i>40.01</i>	1.98 <i>50.3</i>	.295 <i>7.5</i>
H8	1.56 <i>39.7</i>	1.19 <i>30.2</i>	0.81 <i>20.6</i>	1.575 <i>40.01</i>	1.98 <i>50.3</i>	.295 <i>7.5</i>
H9	1.55 <i>39.4</i>	1.19 <i>30.2</i>	0.85 <i>21.6</i>	1.575 <i>40.01</i>	1.98 <i>50.3</i>	-

Accessories

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



FA601: Insulating Shroud

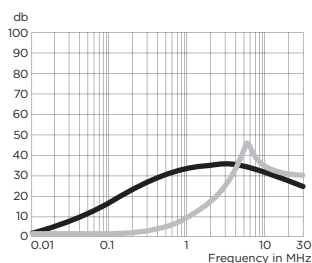


Performance Data

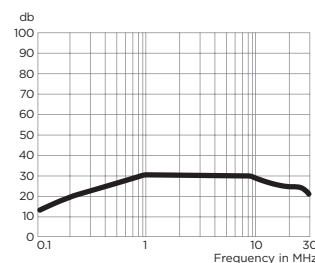
Typical Insertion Loss

Measured in closed 50 Ohm system

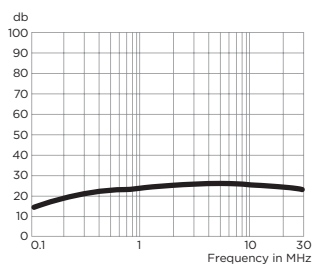
3EH



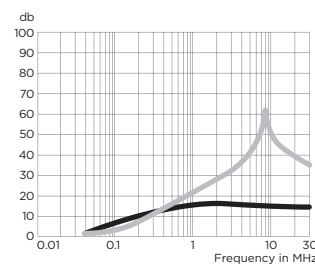
6EH



10EH



15EH



— 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					
	.15	.5	1	5	10	30
3A	18	27	30	30	27	18
6A	9	16	20	26	23	18
10A	7	13	15	17	16	14
15A	5	9	11	12	11	9

APPROVED BY/DATE
 C. Westoby 5-21-92
 REV 9

SAFETY ORGANIZATION(S).

THIS FILTER HAS BEEN FORMALLY RECOGNIZED, CERTIFIED OR APPROVED BY THE LISTED AGENCY. THEREFORE, ALL TEST/REQUIREMENTS SPECIFIED IN THE LATEST REVISION OF THE FOLLOWING AGENCY STANDARDS HAVE BEEN MET.

UL RECOGNIZED
 CSA CERTIFIED
 VDE APPROVED
 SEV APPROVED

UL 544
 CSA 22.2, NO. 0.0.4, 8
 VDE 565-3
 SEV 1055/TP1977/5.1.1

OPERATING SPECIFICATIONS.

LINE VOLTAGE/CURRENT:

5 AMP., 120/250 VAC
 6 AMP./40°C, 250 VAC
 50-60Hz
 40°C

LINE FREQUENCY:

MAX. CASE RISE @ RATED CURRENT,
 MAX. LEAKAGE CURRENT, EACH
 LINE TO GROUND

OPERATING AMBIENT TEMP. RANGE:

-10°C TO +40°C @ RATED CURRENT, I_r
 IN AN AMBIENT, T_0 , HIGHER THAN 40°C, THE MAXIMUM OPERATING CURRENT, I_0 , IS AS FOLLOWS:

$$I_0 = I_r \sqrt{\frac{85 - T_0}{45}}$$

RELIABILITY SPECIFICATIONS.

STORAGE TEMPERATURE:

-40°C TO +85°C
 21 DAYS @ 40°C 95% RH
 6 TIMES RATED CURRENT FOR 8 SECONDS

HUMIDITY:

21 DAYS @ 40°C 95% RH

CURRENT OVERLOAD TEST:

6 TIMES RATED CURRENT FOR 8 SECONDS

TEST SPECIFICATIONS.

INDUCTANCE:

.465 mH NOMINAL
 CAPACITANCE; (MEASURED @ 1 KHz, 0.25 VAC MAX., 25°C ±1°C)

LINE TO LINE:

.01µF ±20%

DISCHARGE RESISTOR:

1.5 MΩ

LINE/GROUND AND LINE/LINE

6000 MΩ (MIN) AT 100 VDC

INSULATION RESISTANCE

20°C AND 50% RH

(R/O DISCHARGE RESISTOR)

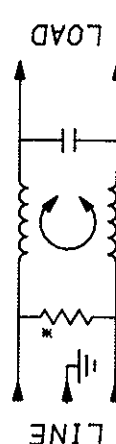
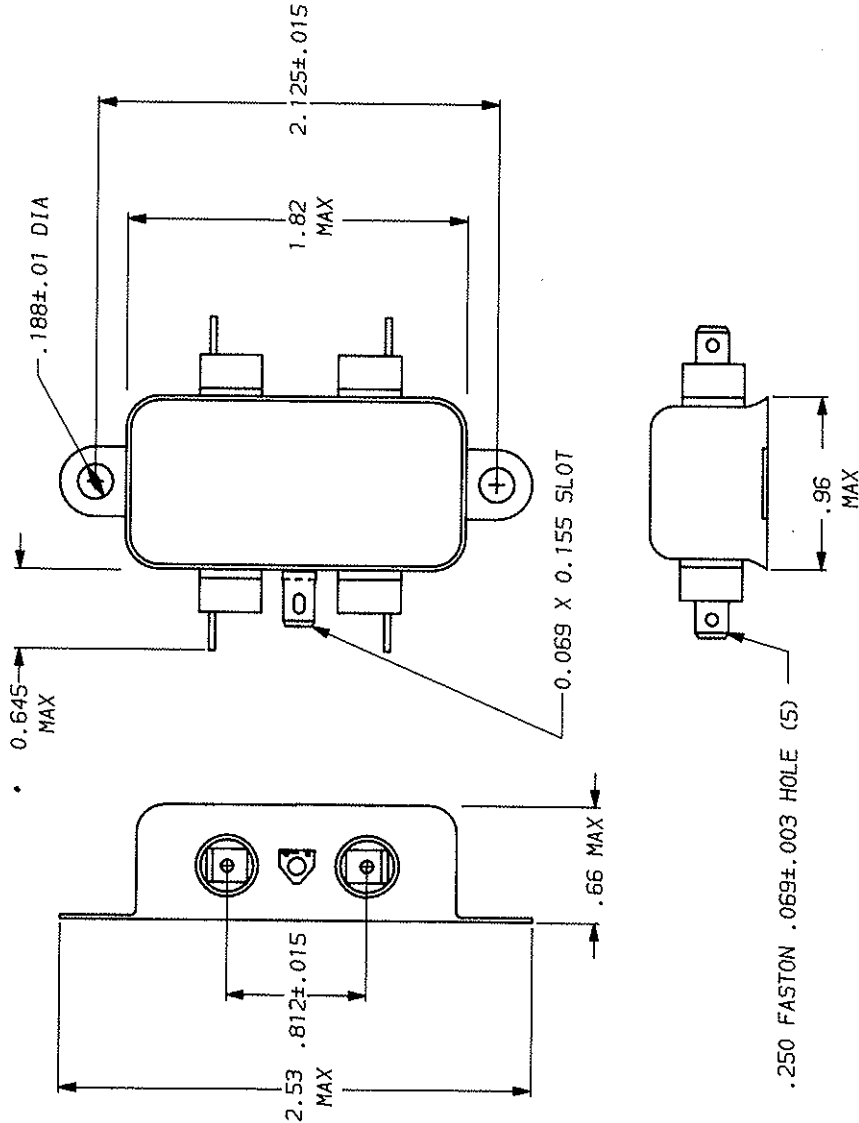
RECOMMENDED RECEIVING INSPECTION HIPOT.

2250 VDC FOR 1 MINUTE

1450 VDC FOR 1 MINUTE

FILTER APPROVAL.

THE BEST WAY TO SELECT AND QUALIFY A FILTER IS FOR YOUR ENGINEERING TO TEST THE UNIT IN YOUR EQUIPMENT.



FREQUENCY MHz	50Ω - 50α MINIMUM INSERTION LOSS					
	.15	.2	.5	1.0	10	30
COMMON	9	11	16	20	23	16
dB						

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corcom
 LIBERTYVILLE, IL 60048

POWER LINE FILTER

SCALE: NTS 9-12-89
 REV. NO. 6EH1.09
 TDL CM

*RESISTOR ADDED TO PRODUCT BUILT AFTER 3-30-92 (9212).