

## 6609116-2 Product Details



**6609116-2**

TE Internal Number: 6609116-2



Active

### EMI/RFI Filters and Accessories

 Always EU RoHS/ELV Compliant (Statement of Compliance)

#### Product Highlights:

- Filter - EMI/RFI
- Filter Type = Power Entry (Filtered/Unfiltered)
- HG (1-6 Amp) Series
- Medical Application
- Mount Style = Flanged

### Documentation & Additional Information

#### Product Drawings:

- [CUSTOMER DRAWING 3EHG1-2](#) (PDF, English)

#### Catalog Pages/Data Sheets:

- [1-1654250-1\\_CORCOM\\_EMI\\_RFI\\_QRG](#) (PDF, English)
- [1654001\\_CORCOM\\_PRODUCT\\_GUIDE\\_GG\\_HG](#) (PDF, English)

#### Product Specifications:

- None Available

#### Application Specifications:

- None Available

#### Instruction Sheets:

- None Available

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

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

#### 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 Entry (Filtered/Unfiltered)
- [Series](#) = HG (1-6 Amp)
- [Ground Choke Option](#) = Without
- [Filtered](#) = Yes

#### Electrical Characteristics:

- [Current Rating \(A\)](#) = 3
- [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](#) = IEC - 1/4" Faston

#### Body Features:

- [Mount Style](#) = Flanged

#### Configuration Features:

- [Fuse Options](#) = Dual
- [Fuse Holder Type](#) = Metric

#### 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](#) = CSA Certified, VDE Approved, UL Recognized

#### Conditions for Usage:

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

#### Operation/Application:

- [Application](#) = Medical

#### Other:

- [Brand](#) = Corcom

Smallest Power Entry Module with Metric Fuse Holders

# GG & HG Series



UL Recognized  
CSA Certified  
VDE Approved



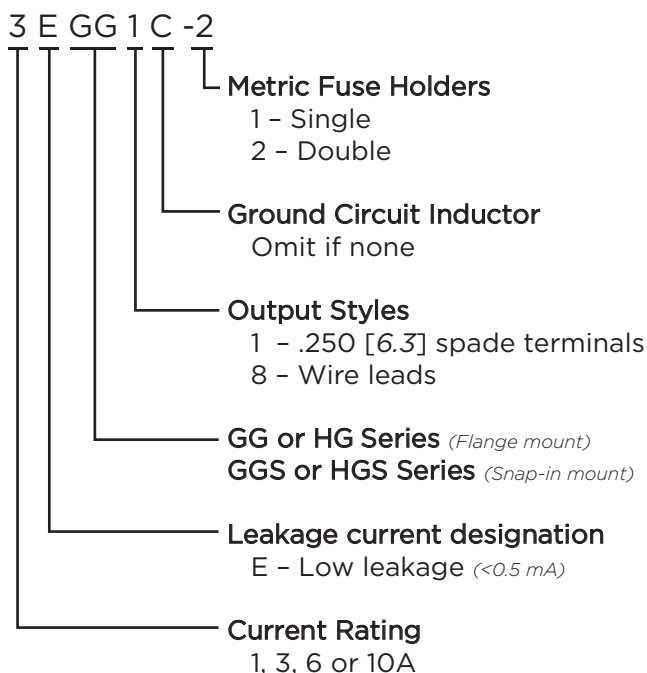
## GG Series

- Power entry module with enhanced EMI filter
- Single or dual fusing
- Two element circuit provides basic attenuation
- Available with an internal ground-circuit inductor (C versions) to isolate equipment chassis from power line ground at radio frequencies
- Multiple termination and mounting styles

## HG Series

- Medical version of our GG Series
- Mechanically identical to GG Series
- Available only with dual fusing

## Ordering Information



## Specifications

### Maximum leakage current each Line to Ground:

	HG Models	GG Models
@ 120 VAC 60 Hz:	2 $\mu$ A	.25 mA
@250 VAC 50 Hz:	5 $\mu$ A	.42 mA

### 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:** 1 to 10A

**Required Fuse(s):** 5 x 20mm  
*(not included)*

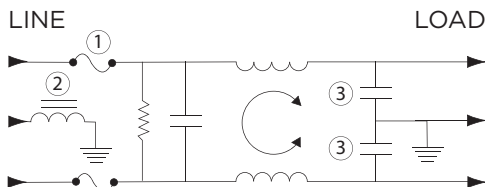
## Available Part Numbers

Filtered modules			
1EGG1-1	3EGG1-1	6EGG1-1	10EGG1-1
1EGG1-2	3EGG1-2	6EGG1-2	10EGG1-2
1EGG8-1	3EGG8-1	6EGG8-1	10EGG8-1
1EGG8-2	3EGG8-2	6EGG8-2	10EGG8-2
1EGS1-1	3EGS1-1	6EGS1-1	10EGS1-1
1EGS1-2	3EGS1-2	6EGS1-2	10EGS1-2
Filtered modules with ground circuit inductor			
1EGG1C-1	3EGG1C-1	6EGG1C-1	
1EGG1C-2	3EGG1C-2	6EGG1C-2	
1EGG8C-1	3EGG8C-1	6EGG8C-1	
1EGG8C-2	3EGG8C-2	6EGG8C-2	
Medical filter modules			
1EHG1-2	3EHG1-2	6EHG1-2	10EHG1-2
1EHG8-2	3EHG8-2	6EHG8-2	10EHG8-2
1EHGS1-2	3EHGS1-2	6EHGS1-2	10EHGS1-2

Smallest Power Entry Module with Metric Fuse Holders *(continued)*

# GG & HG Series

## Electrical Schematic

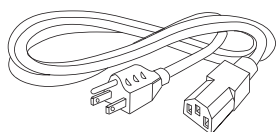


Note 1: Second fuse only in -2 version  
Note 2: C versions only  
Note 3: Not present in HG versions

Warning: Do not attempt to operate a single-fused model without the fuse door in place.

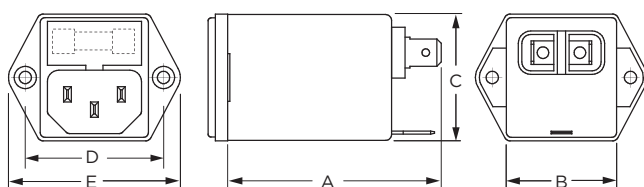
## Accessories

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



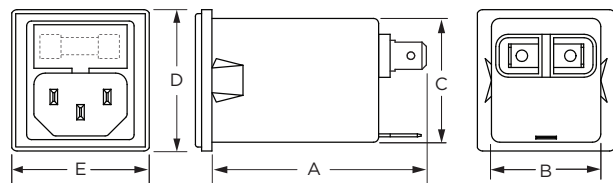
## Case Styles

### GG1, GG1C & HG1



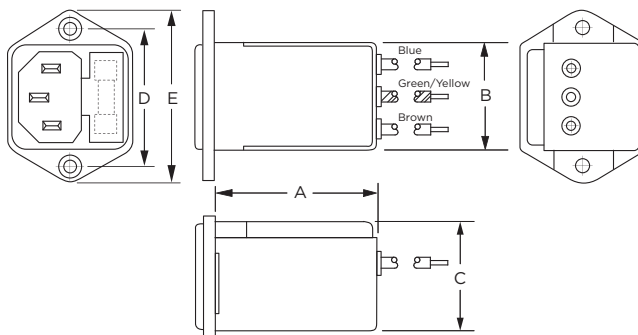
Typical Dimensions:  
Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90°  
countersink for #4 flathead screw  
Line Inlet (1): IEC 60320-1 C14  
Load Terminals (2): .250 [6.3] with .07 [1.8] Dia. hole  
Ground Terminal (1): .250 [6.3] with .07 x .16 [1.8 x 3.8] slot

### GS1 & HGS1



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

## GG8 & HG8



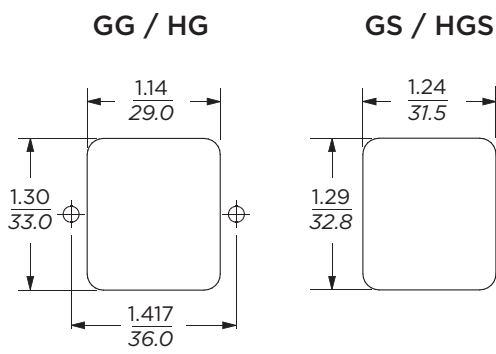
Typical Dimensions:  
Mounting holes (2): .132 [3.35] Dia. with .236 [5.99] Dia. x 90°  
countersink for #4 flathead screw  
Line Inlet (1): IEC 60320-1 C14  
Wire Leads: 5.0 [127.0] Min., 18AWG, UL1015

## Case Dimensions

Part No.	A (max.)	B (max.)	C (max.)	D $\pm .015$ $\pm .38$	E (max.)
GG1 & HG1	<b>2.13</b> <i>54.5</i>	<b>1.13</b> <i>28.7</i>	<b>1.29</b> <i>32.8</i>	<b>1.417</b> <i>36.0</i>	<b>1.76</b> <i>44.7</i>
GG1C	<b>2.45</b> <i>62.23</i>	<b>1.13</b> <i>28.7</i>	<b>1.28</b> <i>32.5</i>	<b>1.417</b> <i>36.0</i>	<b>1.76</b> <i>44.7</i>
GS1, HGS1	<b>2.13</b> <i>54.0</i>	<b>1.13</b> <i>28.7</i>	<b>1.28</b> <i>32.5</i>	<b>1.46*</b> <i>36.0*</i>	<b>1.42</b> <i>36.1</i>
GG8, HG8	<b>2.02</b> <i>51.1</i>	<b>1.13</b> <i>28.7</i>	<b>1.29</b> <i>32.8</i>	<b>1.417</b> <i>36.0</i>	<b>1.76</b> <i>44.7</i>

\*max. dimension

## Recommended Panel Cutouts



Typical Dimensions:  
GS / HGS panel thickness: 0.032 – 0.080 [0.81 – 2.03]  
Corner radius: 0.138 [0.35]

**Smallest Power Entry Module with Metric Fuse Holders** *(continued)*

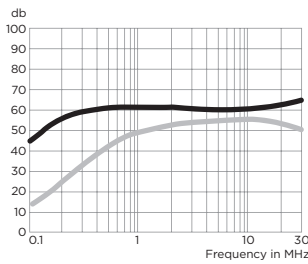
# GG & HG Series

## Performance Data

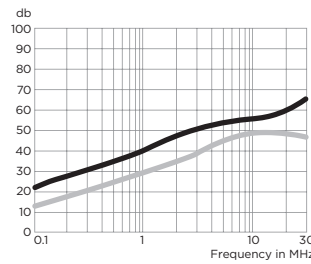
**Typical Insertion Loss** Measured in closed 50 Ohm system

### GG & GS Models

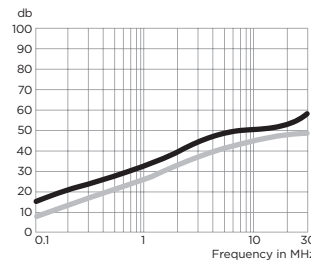
#### 1A



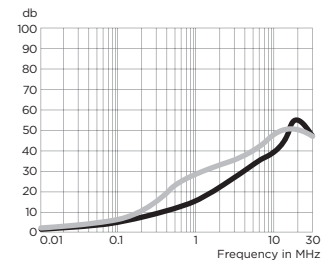
#### 3A



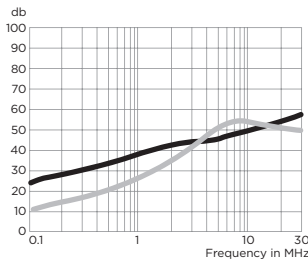
#### 6A



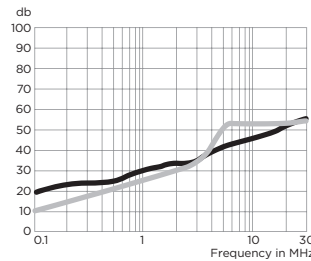
#### 10A



#### 3A GGIC



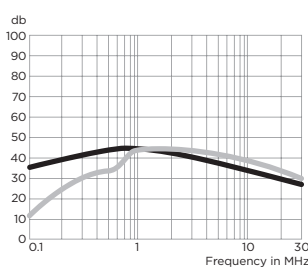
#### 6A GGIC



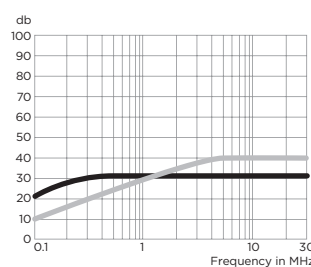
— Common Mode / Asymmetrical (L-G)  
— Differential Mode / Symmetrical (L-L)

### HG Models

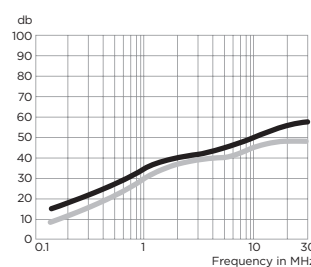
#### 1A



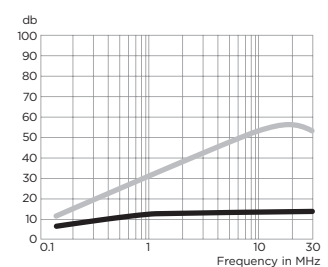
#### 3A



#### 6A



#### 10A



**Minimum Insertion Loss** Measured in closed 50 Ohm system

Common Mode / Asymmetrical (Line to Ground)

Current Rating	Frequency – MHz								
	.01	.05	.10	.15	.5	1	5	10	30
<b>GG &amp; GS Models</b>									
1A	12	23	29	32	41	47	50	50	55
3A	-	10	15	19	30	36	48	50	53
6A	-	1	4	10	16	22	36	40	50
10A	-	1	2	4	6	8	26	33	28
<b>HG Models</b>									
1A	12	23	29	32	40	40	28	22	18
3A	-	10	15	19	25	26	22	21	21
6A	-	4	10	14	18	18	14	14	14
10A	1	-	-	3	5	6	8	9	10

Differential Mode / Symmetrical (Line to Line)

Current Rating	Frequency – MHz							
	.10	.15	.5	1	3	5	10	30
<b>GG &amp; GS Models</b>								
1A	1	3	14	23	41	47	50	44
3A	1	2	11	14	25	38	44	40
6A	1	2	10	13	23	33	39	42
10A	4	7	17	23	-	22	43	38
<b>HG Models</b>								
1A	2	6	19	26	30	35	35	20
3A	1	7	16	23	30	30	30	30
6A	4	7	16	23	30	30	30	30
10A	-	8	16	22	-	37	43	28

**CATALOG #3EHG1-2**

ECN #	APPRVD.	DATE
0631-0447-03	KAW	25OCT03

**SAFETY ORGANIZATIONS**

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: UL 1283
- CSA CERTIFIED: CSA 22.2, # 8
- VDE APPROVED: EN133 200

**OPERATING SPECIFICATIONS**

LINE CURRENT/VOLTAGE: 3 AMP/40°C, 120/250 VAC

LINE FREQUENCY: 50-60Hz

MAXIMUM LEAKAGE CURRENT,  
EACH LINE TO GROUND: 2.0 µA @ 120V 60Hz  
5.0 µA @ 250V 50Hz

OPERATING AMBIENT TEMP. RANGE: -10°C TO +40°C @ RATED CURRENT, I<sub>r</sub>.

IN AN AMBIENT, T<sub>0</sub>, HIGHER THAN 40°C, THE MAXIMUM OPERATING CURRENT, I<sub>0</sub>, IS AS FOLLOWS:

$$I_0 = I_r \sqrt{\frac{100 - T_0}{60}}$$

**RELIABILITY SPECIFICATIONS:**

STORAGE TEMPERATURE: -40°C TO +85°C  
HUMIDITY: 21 DAYS @ 40°C 95% RH.  
CURRENT OVERLOAD TEST: 6 TIMES I<sub>r</sub> FOR 8 SECONDS

**TEST SPECIFICATIONS:**

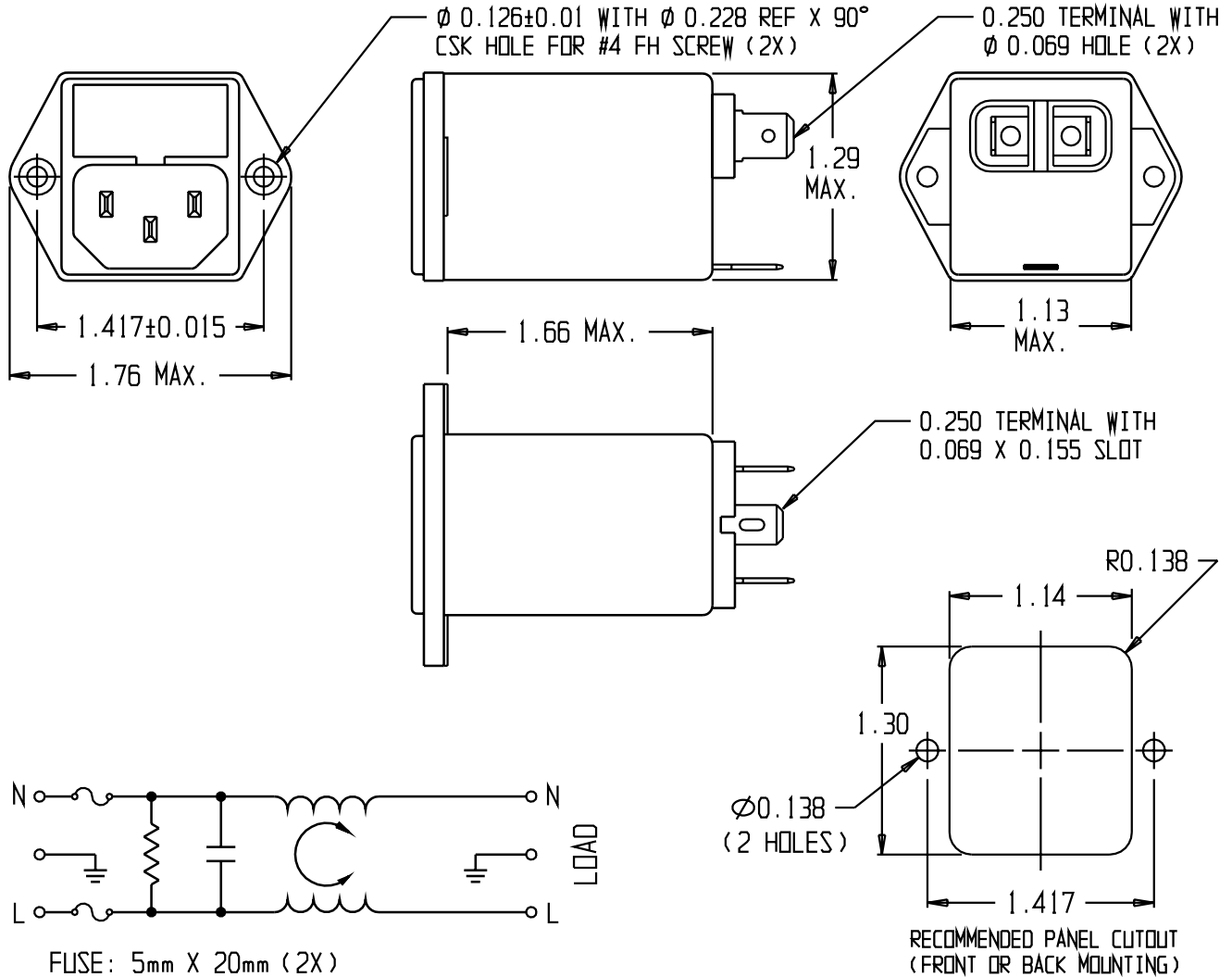
INDUCTANCE: 1.99 mH NOMINAL  
CAPACITANCE: (MEASURED @ 1KHz, 0.250VAC MAX., 25°C±1°C)  
LINE TO GROUND: N/A µF ±20%  
LINE TO LINE: 0.10 µF ±20%  
DISCHARGE RESISTOR: 1.5M Ω  
L/G AND L/L I.R.:  
NO DISCHARGE RESISTOR: 6000MΩ (MIN.) @ 100VDC, 20°C AND 50% RH

**RECOMMENDED RECEIVING INSPECTION HIPOT:**

LINE TO GROUND: 1500VAC OR 2250VDC FOR 1 MINUTE  
LINE TO LINE: 1450VDC 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.



**50Ω - 50Ω (MINIMUM) INSERTION LOSS**

FREQUENCY MHz	0.01	0.05	0.10	0.15	0.5	1.0	3.0	5.0	10	30
COMMON dB	-	11	16	20	25	26	-	22	21	21
DIFF. dB	4	-	-	23	30	30	30	30	30	30

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED, TOLERANCE TO BE ±.025 MATERIAL & FINISH: AS SUPPLIED

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**CUSTOMER DRAWING 3EHG1-2**

TYCO: 0-1609116-2	SCALE: NTS	DATE: 10OCT03	CATALOG NO. 3EHG1-2	REV. B
DRW. BY: JF	DRG: KAW			