# POWER ENTRY MODULES }-

# General Purpose Combination





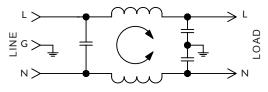
# F2100/F2200 RFI Filters



#### Features:

- General Purpose Filters Designed for Common Mode Emissions or Susceptibility Applications
- · Integral IEC Connector in Space-Efficient Package
- · Ideal for Linear Power Supplies in Digital Equipment

#### F2100/F2200 Simplified Schematic



#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz
Rated Current: 115VAC 250VAC
1A 1A

1A 1A 3A 3A 6A 6A 10A 8A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

Insulation Resistance:  $9 \times 10^9 \Omega$  at 100VDCAmbient Temperature:  $40^{\circ}C$  Max. at rated current

Humidity Range: 0% to 95% R.H.

Termination:

A: QC – Quick Connect C: IEC Receptacle Maximum Leakage Current:

Each Line to Ground 115VAC, 60Hz: 0.25mA 250VAC, 50Hz: 0.40mA

**Agency Approvals:** 









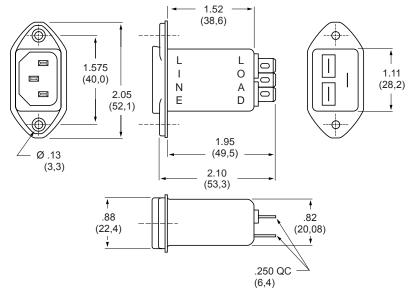
Nominal	Part	Termination		MINIMUM I	NSERTION	LOSS - dB	(50 ohm Ci	rcuit)			
Current Rating	Number	Line/Load	MODE	Frequency - MHz							
rating				.15	.50	1.0	5.0	10	30		
1A	F2100CA01 F2200CA01	IEC/QC IEC/QC	Common Differential	22 —	35 <b>2</b>	40 <b>3</b>	46 <b>35</b>	50 <b>40</b>	50 <b>40</b>		
3A	F2100CA03 F2200CA03	IEC/QC IEC/QC	Common Differential	15 —	25 <b>2</b>	30 <b>3</b>	45 <b>35</b>	50 <b>40</b>	50 <b>40</b>		
6A	F2100CA06 F2200CA06	IEC/QC IEC/QC	Common Differential	10 —	20 <b>2</b>	29 <b>7</b>	43 <b>28</b>	45 <b>46</b>	50 <b>57</b>		
10A	F2100CA10	IEC/QC	Common Differential	9 —	17 <b>2</b>	23 <b>7</b>	39 <b>12</b>	45 <b>37</b>	45 <b>60</b>		



#### F2100CA

(1, 3 and 6Amp) Dimensions

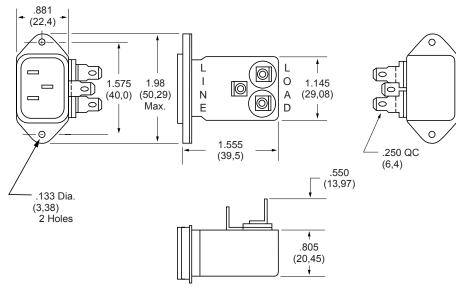
Refer to Page 62 for Standard Mounting Cutouts



#### **F2200CA**

(1, 3 and 6Amp) Dimensions

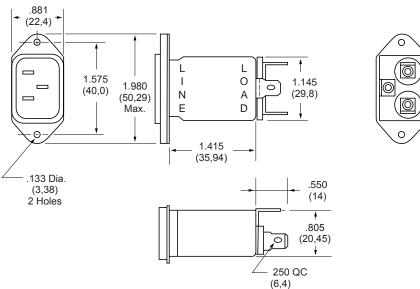
Refer to Page 62 for Standard Mounting Cutouts



#### F2100CA10

(10Amp) Dimensions

Refer to Page 62 for Standard Mounting Cutouts





# F2300 RFI Filters



#### Features:

- · Effective Protection from Pulsed, Intermittent or Continuous RFI for FCC "A" Applications
- · High-Performance Low-Leakage Filter in Low Profile Package with Integral IEC Connector
- Increased Inductance and Line-to-Line Capacitance Provide Enhanced Common Mode and Differential Mode Attenuation

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz **Rated Current:** 115VAC 250VAC 6A 6A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

Insulation Resistance: 9 x 109 Ω at 100VDC Ambient Temperature: 40°C Max at rated current

Humidity Range: 0% to 95% R.H.

Termination:

A: QC - Quick Connect C: IEC Receptacle

#### **Maximum Leakage Current:**

Each Line to Ground F2300 115VAC, 60Hz: 0.25mA 250VAC, 50Hz: 0.40mA

#### **Agency Approvals:**

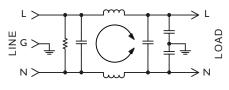






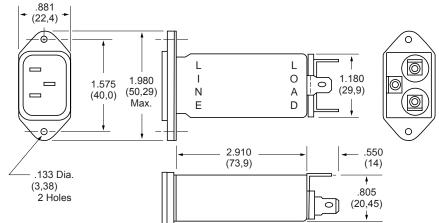


#### F2300CA Simplified Schematic



#### F2300CA (6Amp) **Dimensions**

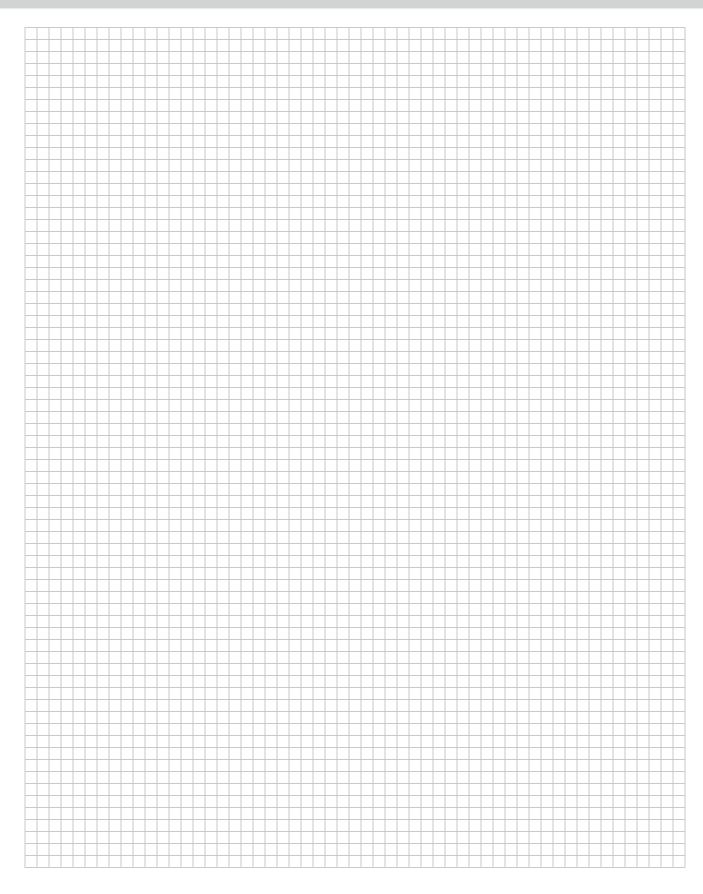
Refer to Page 62 for Standard Mounting Cutouts



	Nominal Part Current Number	Port	Termination		MINIMUM I	NSERTION	LOSS - dB	(50 ohm Ci	rcuit)	
			Line/Load	MODE			Frequen	cy - MHz		
				MODE	.15	.50	1.0	5.0	10 ; 45 4	30
	6A	F2300CA06	IEC/QC	Common Differential	25 <b>12</b>	37 <b>30</b>	45 <b>50</b>	45 <b>65</b>		45 <b>60</b>



# Curtis Industries Engineering Notes



## F2400/2500 RFI Filters

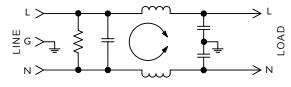




#### Features:

- Higher Performance Filters Designed for Common Mode and Differential Mode Applications
- 4X Greater Differential Mode Insertion Loss at 1 MHz than F2100/F2200 Series with No Increase in Physical Size
- Especially Suited for Use with Linear Power Supplies and FCC "A" Applications

#### F2400/2500 Simplified Schematic



#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz Rated Current: 115VAC 250VAC

3A 1.5A 6A 3A 10A 10A 15A 10A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

**Insulation Resistance:**  $9 \times 10^9 \Omega$  at 100VDC **Ambient Temperature:**  $40^{\circ}C$  Max. at rated current

**Humidity Range:** 0% to 95% R.H.

Termination:

A: QC – Quick Connect C: IEC Receptacle

#### Maximum Leakage Current:

Each Line to Ground 115VAC, 60Hz: 0.25mA 250VAC, 50Hz: 0.40mA

**Agency Approvals:** 







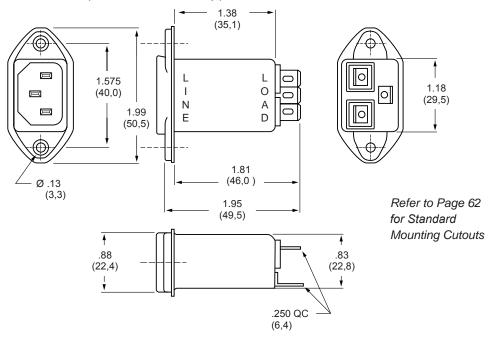




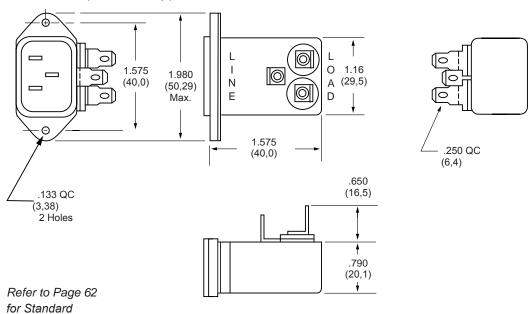
MINIMUM INSERTION LOSS - dB (50 ohm Circuit) **Nominal** Termination Part Current Frequency - MHz Number Line/Load MODE Rating .15 .50 1.0 5.0 10 30 IEC/QC 50 50 F2400CA03 Common 22 35 40 46 3A F2500CA03 IEC/QC Differential 8 18 24 40 50 40 F2400CA06 IEC/QC 15 24 31 42 45 50 Common 6A F2500CA06 IEC/QC **Differential** 40 8 18 24 40 50 F2400CA10 IEC/QC Common 4 10 13 28 35 40 10/15A F2400CA15 IEC/QC **Differential** 2 15 30 35 35



#### **F2400CA** (3, 6, 10 and 15Amp) Dimensions



#### F2500CA (3 and 6Amp) Dimensions



**Mounting Cutouts** 

# F2600 RFI Filters



#### Features:

- · General Purpose "L-Type" Circuit Effective in Reducing Both Incoming and Outgoing Powerline Noise Levels in FCC "A" Applications
- Integral 5 X 20mm Single or Dual Fused IEC Connector
- · Optional SST Switched IEC Connector
- All Series Available in Labor-Saving PC Mounted Case Style

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz **Rated Current:** 115VAC 250VAC 3A 3A

6A 6A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

Insulation Resistance: 9 x 109 Ω at 100VDC Ambient Temperature: 40°C Max at rated current

Humidity Range: 0% to 95% R.H.

Termination:

A: QC - Quick Connect

F: Fused IEC J: Switched IEC P: PC - P.C. Board W: Dual Fused IEC

**Maximum Leakage Current:** 

Each Line to Ground F2600 115VAC, 60Hz: 0.25mA 250VAC, 50Hz: 0.40mA

**Agency Approvals:** 

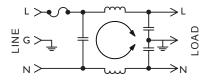








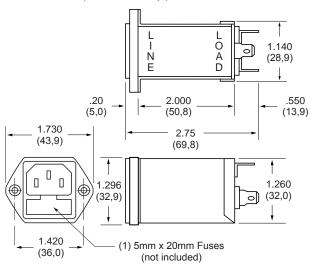
#### **F2600F Simplified Schematic**



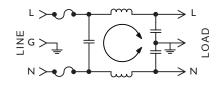
Nominal	D	Townshootless		MINIMUM	INSERTIO	N LOSS - dl	B (50 ohm C	Circuit)	
Current Rating	Part Number	Termination Line/Load	MODE			Frequen	cy - MHz		
				.15	.50	1.0	5.0	10	30
3A	F2600FA03 F2600FP03	Fused IEC/QC Fused IEC/PC	Common Differential	21 <b>8</b>	35 <b>18</b>	41 <b>24</b>	50 <b>40</b>	50 <b>50</b>	50 <b>40</b>
6A	F2600FA06 F2600FP06	Fused IEC/QC Fused IEC/PC	Common Differential	18 <b>8</b>	34 <b>18</b>	41 <b>24</b>	45 <b>40</b>	45 <b>50</b>	45 <b>50</b>
3A	F2600WA03 F2600WP03	Dual Fused IEC/QC Dual Fused IEC/PC	Common Differential	21 <b>8</b>	35 <b>18</b>	41 <b>24</b>	45 <b>40</b>	45 <b>50</b>	50 <b>40</b>
6A	F2600WA06 F2600WP06	Dual Fused IEC/QC Dual Fused IEC/PC	Common Differential	18 <b>8</b>	34 <b>18</b>	41 <b>24</b>	40 <b>40</b>	40 <b>50</b>	45 <b>50</b>
3A	F2600JA03 F2600JP03	Switched IEC/QC Switched IEC/PC	Common Differential	21 <b>8</b>	35 <b>18</b>	41 <b>24</b>	45 <b>40</b>	45 <b>50</b>	50 <b>40</b>
6A	F2600JA06 F2600JP06	Switched IEC/QC Switched IEC/PC	Common Differential	18 <b>8</b>	34 <b>18</b>	41 <b>24</b>	40 <b>40</b>	40 <b>50</b>	45 <b>50</b>



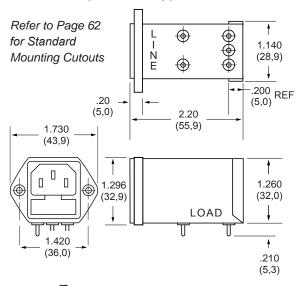
#### F2600FA (3 and 6Amp) Dimensions

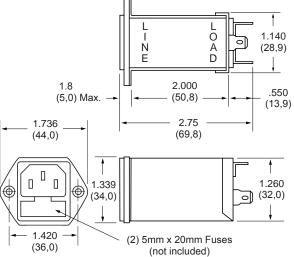


# **F2600WA** (3 and 6Amp) Dimensions **F2600W Simplified Schematic**

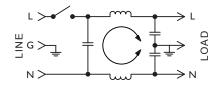


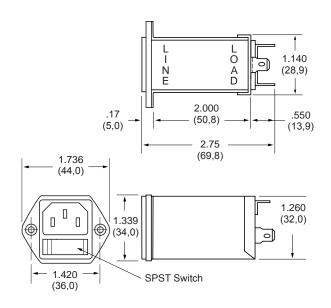
#### F2600FP (3 and 6Amp) Dimensions





# **F2600JA** (3 and 6Amp) Dimensions **F2600J Simplified Schematic**





# F2700 RFI Filters



#### Features:

- Designed for FCC "B" and VDE "B" Switching Power Supply Applications
- Very High Inductance Design with Differential Mode Choke to Provide Improved Performance Below 100KHz
- Compact, Space-Efficient Package Available in 3 and 6Amp Ratings
- Also Available with Integal Fused IEC Connector and "ON/OFF" Power Switch

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz
Rated Current: 115VAC 250VAC
3A 2A
6A 4A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

**Insulation Resistance**:  $9 \times 10^9 \Omega$  at 100VDC

Ambient Temperature: 40°C Max. at rated current

Humidity Range: 0% to 95% R.H.

Termination:

A: QC - Quick Connect

B: Wire

C: IEC Receptacle

F: Fused IEC

#### **Maximum Leakage Current:**

Each Line to Ground 115VAC, 60Hz: 0.25mA 250VAC, 50Hz: 0.40mA

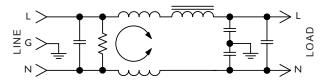
#### **Agency Approvals:**



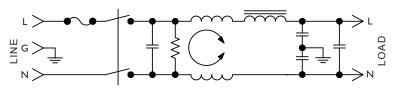




#### F2700 Without Switch Simplified Schematic



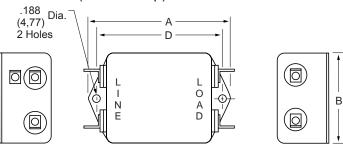
#### F2700 Without Switch Simplified Schematic (3Amp Only)

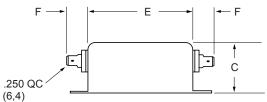


Nominal	Part	Termination	MINIMUM INSERTION LOSS - dB (50 ohm Circuit)								cuit)					
Current Rating	Number	Line/Load	MODE Frequency - MHz													
rating				.01	.02	.05	.15	.50	1.0	5.0	10	30				
3A	F2700AA03	QC/QC	Common Differential	20 <b>5</b>	27 <b>27</b>	36 <b>52</b>	45 <b>70</b>	42 <b>70</b>	42 <b>70</b>	42 <b>70</b>	40 <b>60</b>	38 <b>58</b>				
SA	F2700CA03 F2700FB03	IEC/QC Fused IEC/Wire	Common Differential	20 <b>5</b>	27 <b>27</b>	36 <b>52</b>	45 <b>70</b>	42 <b>70</b>	42 <b>70</b>	42 <b>70</b>	40 <b>60</b>	38 <b>58</b>				
6A	F2700AA06 F2700CA06	QC/QC IEC/QC	Common Differential	10 <b>5</b>	18 <b>20</b>	28 <b>48</b>	39 <b>70</b>	42 <b>70</b>	45 <b>70</b>	45 <b>70</b>	45 <b>70</b>	45 <b>65</b>				



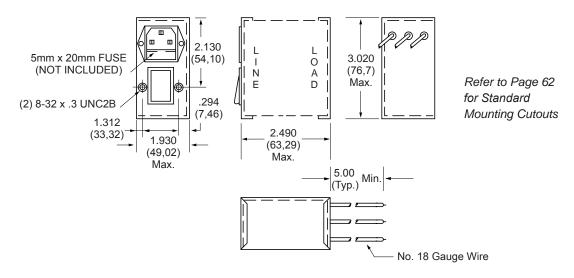
#### F2700AA (3 and 6Amp) Dimensions



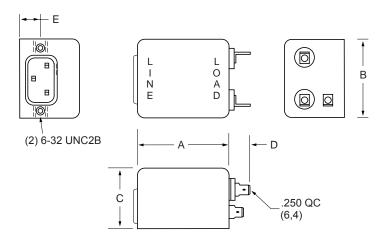


Amps	Α	В	C	D	E	F
3A	3.315	2.000	1.500	2.940	2.500	.550
	(84,2)	(50,8)	(38,1)	(74,7)	(63,5)	(14,0)
6A	4.440	2.250	1.750	4.063	3.620	.550
	(112,8)	(57,2)	(44,5)	(103,2)	(91,9)	(14,0)

#### F2700FB03 (3Amp) Dimensions



#### F2700CA (3 and 6Amp) Dimensions



Refer to Page 62 for Standard Mounting Cutouts

Amps	Α	В	С	D	E
3A	2.880	2.125	1.719	.550	.575
	(73,2)	(54,0)	(43,6)	(14,0)	(14,6)
6A	3.750	2.250	1.750	.550	.640
	(95,2)	(57,1)	(44,4)	(14,0)	(16,29)

# F3000/3100/3200/3400/3500 RFI Filters



#### Features:

- Designed to Meet UL544 Specification for Medical and Dental Equipment. Available to UL/IEC 60601 Standard
- F3400/F3500 Have Enhanced Differential Mode Performance
- Effective in Other Low-Leakage Current Applications

F3000/F3100/F3200 Series

**Simplified Schematic** 

### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz

Rated Current: 115VAC 250VAC

3A 3A 6A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

**Insulation Resistance**:  $9 \times 10^9 \Omega$  at 100VDC **Ambient Temperature**:  $40^{\circ}C$  Max at rated current

Humidity Range: 0% to 95% R.H.

**Termination:** 

A: QC – Quick Connect C: IEC Receptacle

#### Maximum Leakage Current:

Each Line to Ground **F3000 Series** 115VAC, 60Hz: 2 μA 250VAC, 50Hz: 5 μA

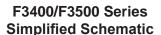
**Agency Approvals:** 

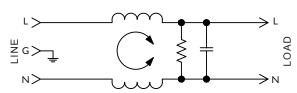












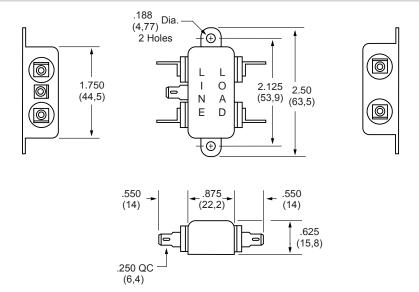
#### MINIMUM INSERTION LOSS - dB (50 ohm Circuit) **Nominal Part Termination** Current Line/Load Frequency - MHz Number MODE Rating .15 .50 1.0 5.0 10 30 F3400CA03 IEC/QC Common 22 32 35 30 25 20 3A F3500CA03 IEC/QC **Differential** 35 35 35 8 18 24 F3000AA06 QC/QC 25 Common 10 20 23 23 15 F3100CA06 IEC/QC **Differential** 2 8 32 34 23 IEC/QC F3200CA06 6A F3400CA06 IEC/QC 21 24 Common 15 24 22 26 F3500CA06 IEC/QC 35 35 35 **Differential**





#### F3000AA

(6Amp) Dimensions



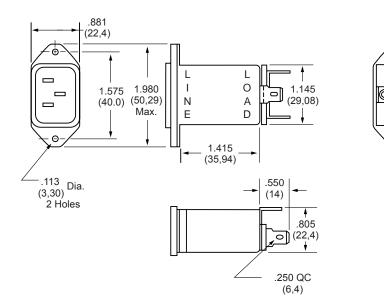
#### F3100CA

(6Amp)

#### F3400CA

(3 and 6Amp) Dimensions

Refer to Page 62 for Standard Mounting Cutouts



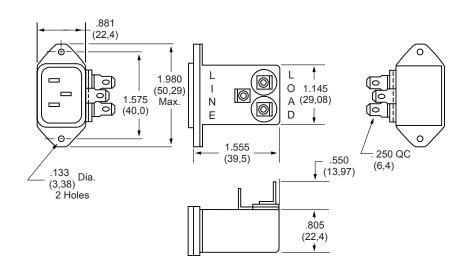
#### F3200CA

(6Amp)

#### F3500CA

(3 and 6Amp) Dimensions

Refer to Page 62 for Standard Mounting Cutouts



## F3300 RFI Filters



#### Features:

- · General Purpose "L-Type" Circuit Effective in Reducing Both Incoming and Outgoing Powerline Noise Levels in FCC "A" Applications
- Integral 5 X 20mm Single or Dual Fused IEC Connector
- · Optional SST Switched IEC Connector
- · Low-Leakage
- Available to UL/IEC 60601 Standard and Meets UL 544 Specification for Medical and Dental Applications
- · Available in Labor-Saving PC Mounted Case Style

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz 115VAC 250VAC **Rated Current:** 3A 3A

6A 6A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

Insulation Resistance: 9 x 10<sup>9</sup> Ω at 100VDC Ambient Temperature: 40°C Max. at Rated Current

Humidity Range: 0% to 95% R.H.

Termination:

A: QC - Quick Connect

F: Fused IEC J: Switched IEC P: PC - P.C. Board W: Dual Fused IEC

**Maximum Leakage Current:** 

Each Line to Ground F3300 .015mA 115VAC, 60Hz: .025mA 250VAC, 50Hz:

**Agency Approvals:** 

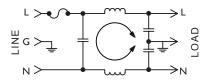








#### F3300F Simplified Schematic

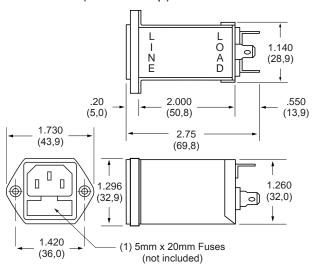


Nominal	Dout	Townsia oti ou		MINIMUM INSERTION LOSS - dB (50 ohm Circuit)							
Current Rating	Part Number	Termination Line/Load	MODE	Frequency - MHz							
				.15	.50	1.0	5.0	10	30		
2 ^	F3300FA03	Fused IEC/QC	Common	21	32	36	30	28	28		
3A	F3300FP03	Fused IEC/PC	Differential	8	18	24	35	35	35		
C A	F3300FA06	Fused IEC/QC	Common	18	30	34	26	25	25		
6A	F3300FP06	Fused IEC/PC	Differential	8	18	24	35	35	35		
2 /	F3300WA03	Dual Fused IEC/QC	Common	21	32	36	30	28	28		
3A	F3300WP03	Dual Fused IEC/PC	Differential	8	18	24	35	35	35		
C A	F3300WA06	Dual Fused IEC/QC	Common	18	30	34	26	25	25		
6A	F3300WP06	Dual Fused IEC/PC	Differential	8	18	24	35	35	35		
2.4	F3300JA03	Switched IEC/QC	Common	21	32	36	30	28	28		
3A	F3300JP03	Switched IEC/PC	Differential	8	18	24	35	35	35		
C A	F3300JA06	Switched IEC/QC	Common	18	30	34	26	25	25		
6A	F3300JP06	Switched IEC/PC	Differential	8	18	24	35	35	35		



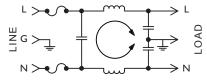


#### F3300FA (3 and 6Amp) Dimensions



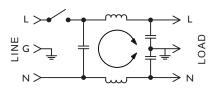
#### F3300WA (3 and 6Amp) Dimensions

#### F3300W Simplified Schematic

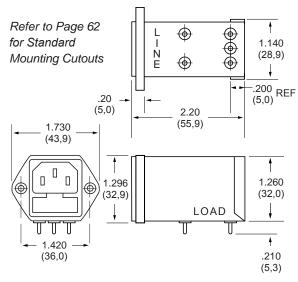


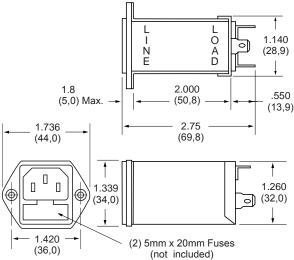
#### F3300JA (3 and 6Amp) Dimensions

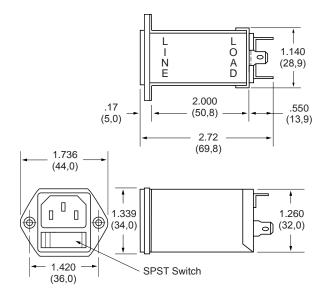
#### F3300J Simplified Schematic



#### F3300FP (3 and 6Amp) Dimensions







## PE7/PM7 Series





#### Features:

- RFI Filter Module Combines IEC Connector, Fusing, and Voltage Select Features in One Unit
- PE7 Series Filters Provide 20% More Differential Mode Attenuation Than Comparable Units
- · Accepts Either U.S. or European Standard Fuse Sizes
- Available to UL/IEC 60601 Standard and Meets UL 544 Specification for Medical and Dental Applications

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz
Rated Current: 115VAC 250VAC
3A 3A

6A 6A

Current Overload: 6X for 8 Seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

**Insulation Resistance:**  $9 \times 10^9 \Omega$  at 100VDC**Ambient Temperature:**  $40^{\circ}C$  Max. at Rated Current

Humidity Range: 0% to 95% R.H.

Termination:

IEC ReceptacleWire Wrap/Solder

#### **Maximum Leakage Current:**

Each Line to Ground 115VAC, 60Hz: 0.25mA 0.002mA 0.005mA 0.005mA

Voltage Select Card: Installed in 120VAC position unless otherwise specified

#### **Agency Approvals:**



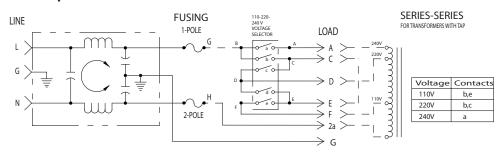






Refer to Page 59 for Ordering Instructions

#### PE7/PM7 Series Simplified Schematic

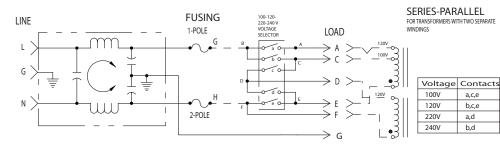


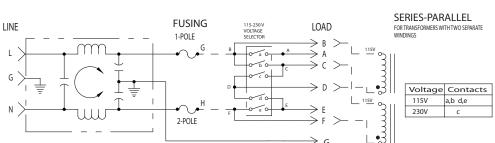
Nominal	Part	Termination		MINIMUM INSERTION LOSS - dB (50 ohm Circuit)  Frequency - MHz					
Current Rating	Number	Line/Load	MODE						
- raamg				.15	.50	1.0	5.0	10	30
3A	PE7XXX03	IEC/Solder Tabs	Common Differential	18 <b>8</b>	24 <b>18</b>	30 <b>24</b>	45 <b>46</b>	45 <b>50</b>	50 <b>40</b>
	PM7XXX03	IEC/Solder Tabs	Common Differential	14 <b>8</b>	20 <b>18</b>	22 <b>24</b>	24 <b>32</b>	22 <b>30</b>	15 <b>30</b>
6A	PE7XXX06	IEC/Solder Tabs	Common Differential	10 <b>8</b>	19 <b>18</b>	24 <b>24</b>	39 <b>39</b>	44 <b>40</b>	50 <b>40</b>
бА	PM7XXXX0	IEC/Solder Tabs	Common Differential	10 <b>8</b>	15 <b>18</b>	18 <b>24</b>	18 <b>32</b>	18 <b>28</b>	15 <b>25</b>







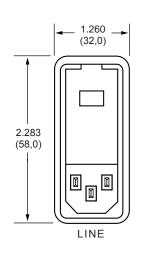


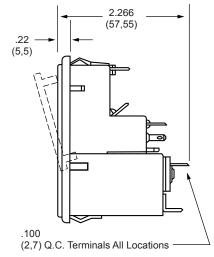


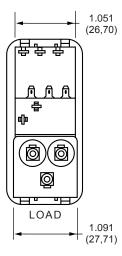
#### PE7/PM7 **Snap-Mount Series**

(3 and 6Amp) **Dimensions** 

Refer to Page 59 for Standard Mounting Cutouts







a,c,e

b,c,e

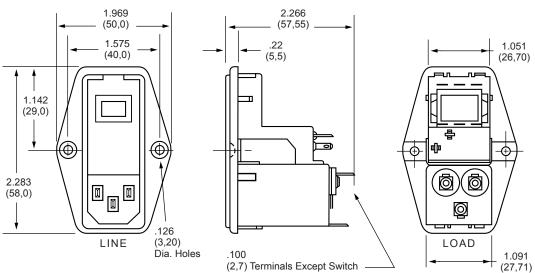
a,d

b,d

#### PE7/PM7 **Screw-Mount Series**

(3 and 6Amp) **Dimensions** 

Refer to Page 59 for Standard Mounting Cutouts



### PE8/PM8 Series





#### Features:

- RFI Filter Module Combines IEC Connector, Fusing and On/Off Switch in One Unit
- Accepts Either U.S. or European Standard Fuse Sizes
- PE8 Series Filters Provide 20% More Differential Mode Attenuation than Comparable Units
- Available to UL/IEC 60601 Standard and Meets UL 544 Specification for Medical and Dental Applications

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz
Rated Current: 115VAC 250VAC
3A 3A

6A 6A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

Insulation Resistance:  $9 \times 10^9 \Omega$  at 100VDCAmbient Temperature:  $40^{\circ}C$  Max. at rated current

Humidity Range: 0% to 95% R.H.

Termination:

IEC ReceptacleWire Wrap/Solder

#### **Maximum Leakage Current:**

Each Line to Ground PE8 PM8
115VAC, 60Hz: 0.25mA 0.002mA
250VAC, 50Hz: 0.40mA 0.005mA

#### **Agency Approvals:**



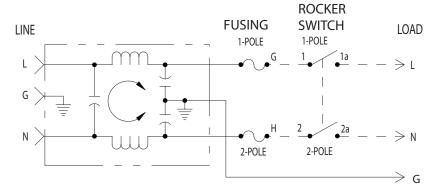






Refer to Page 59 for Ordering Instructions

#### PE8/PM8 Simplified Schematic



Nominal	Part	Termination		MINIMUM INSERTION LOSS - dB (50 ohm Circuit)							
Current Rating	Number	Line/Load	MODE	Frequency - MHz							
				.15	.50	1.0	5.0	10	30		
3A	PE8XXX03	IEC/Solder Tabs	Common Differential	18 <b>8</b>	24 <b>18</b>	30 <b>24</b>	45 <b>46</b>	45 <b>50</b>	50 <b>40</b>		
	PM8XXX03	IEC/Solder Tabs	Common Differential	14 <b>8</b>	20 <b>18</b>	22 <b>24</b>	24 <b>32</b>	22 <b>30</b>	15 <b>30</b>		
6.1	PE8XXX06	IEC/Solder Tabs	Common Differential	10 <b>8</b>	19 <b>18</b>	24 <b>24</b>	39 <b>39</b>	44 <b>40</b>	50 <b>40</b>		
6A	PM8XXX06	IEC/Solder Tabs	Common Differential	10 <b>8</b>	15 <b>18</b>	18 <b>24</b>	18 <b>32</b>	18 <b>28</b>	15 <b>25</b>		

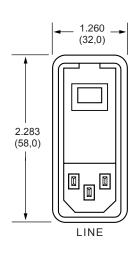


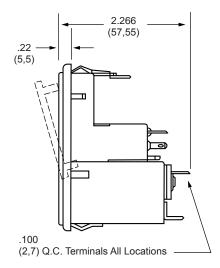


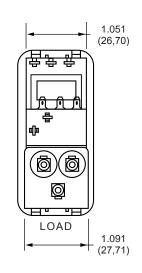
#### PE8/PM8 Snap-Mount Series

(3 and 6Amp) Dimensions

Refer to Page 59 for Standard Mounting Cutouts



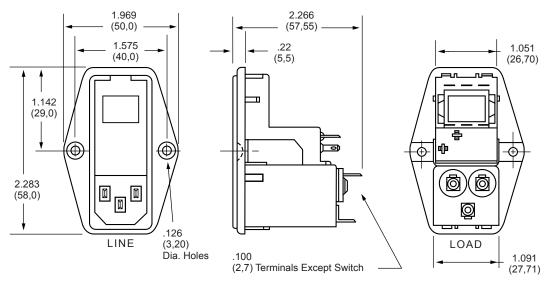




#### PE8/PM8 Screw-Mount Series

(3 and 6Amp) Dimensions

Refer to Page 59 for Standard Mounting Cutouts



# PE9/PM9 Series



#### Features:

- RFI Filter Module Combines IEC Connector, Fusing, Voltage Select and On/Off Switch into a Single, Space-Efficient Assembly
- PE90 Series Filters Provide 20% More Differential Mode Attenuation Than Comparable Units
- · Accepts Either U.S. or European Standard Fuse Sizes
- Available to UL/IEC 60601 Standard and Meets UL 544 Specification for Medical and Dental Applications

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz
Rated Current: 115VAC 250VAC
3A 3A

6A 6A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 1768VDC

Insulation Resistance:  $9 \times 10^9 \Omega$  at 100VDCAmbient Temperature:  $40^{\circ}C$  Max at rated current

Humidity Range: 0% to 95% R.H.

Termination:

IEC ReceptacleWire Wrap/Solder

#### Maximum Leakage Current:

Each Line to Ground **PE9 PM9**115VAC, 60Hz: 0.25mA 0.002mA
250VAC, 50Hz: 0.40mA 0.005mA

**Voltage Select Card:** Installed in 120VAC position unless otherwise specified

**Agency Approvals:** 

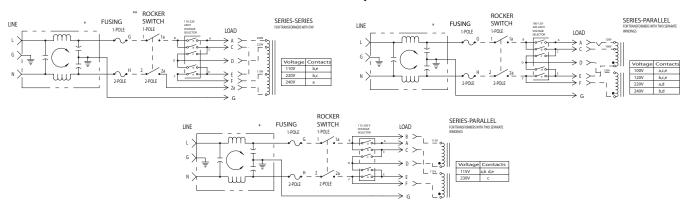








#### PE9/PM9 Series Simplified Schematic



Nominal	Part	Termination		MINIMUM INSERTION LOSS - dB (50 ohm Circuit)					
Current Rating	Number	Line/Load	MODE						
rading				.15	.50	1.0	5.0	10	30
3A	PE9XXXX03	IEC/Solder Tabs	Common Differential	18 <b>8</b>	24 <b>18</b>	30 <b>24</b>	45 <b>46</b>	45 <b>50</b>	50 <b>40</b>
	PM9XXXX03	IEC/Solder Tabs	Common Differential	14 <b>8</b>	20 <b>18</b>	22 <b>24</b>	24 <b>32</b>	22 <b>30</b>	15 <b>30</b>
61	PE9XXXX06	IEC/Solder Tabs	Common Differential	10 <b>8</b>	19 <b>18</b>	24 <b>24</b>	39 <b>39</b>	44 <b>40</b>	50 <b>40</b>
6A	PM9XXXX06	IEC/Solder Tabs	Common Differential	10 <b>8</b>	15 <b>18</b>	18 <b>24</b>	18 <b>32</b>	18 <b>28</b>	15 <b>25</b>

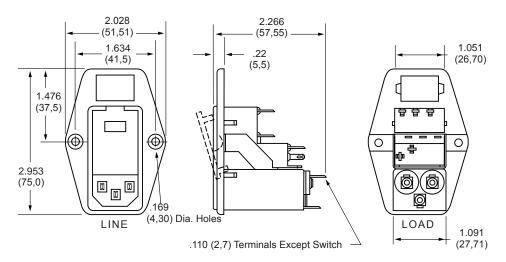




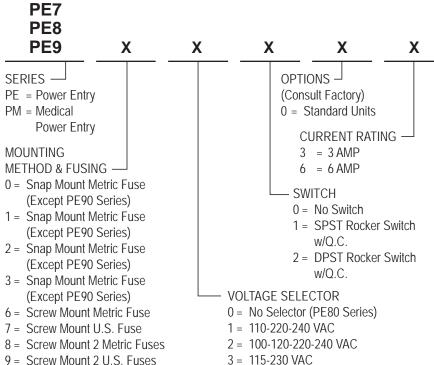
#### PE9/PM9

(3 and 6Amp) Dimensions

Refer to Standard Mounting Cutouts Below



#### How to Order



#### INSTALLATION INSTRUCTION IMPORTANT – CHANGING FUSE/VOLTAGE

#### PE7/PE8/PE9

To change fuse, remove power cord and open the front cover on the module. Remove fuse holder and replace fuse. Reinsert fuse holder and close cover. To change the operating voltage on the PE7/PM7 and PE9/PM9 Series, remove the power cord and open front cover. Rotate voltage select wheel until desired voltage appears in window of cover.

· Filter shipped without fuse.

Always use caution when selecting and changing fuses and voltage requirements. Curtis Industries is not responsible for malfunction due to improper installation/selection of fuse and/or voltage select.

#### **Standard Mounting Cutouts** 2.764 2.20 (70,2)2.20 \*See Below 1.398 (55,9).08 1.10 → (35,5)(2,0)(55,9)(27,9) Filter Switch 1.634 1.122 Fnd End 1.575 1.122 (41,50) 1.122 (28,50)(28,50)(40,0)(28,5)\*Panel Thickness Cutout .031" - .079" use 2.20" .ug (2,0) R 4-40 6-32 .080" - .125" use 2.22" (M3)(M3,5)PE/PM7/8 **PE/PM7/8** PE/PM9 **Snap-Mount Series Screw-Mount Series Screw-Mount Series**

## PE1/PM1 Series



#### Features:

- · RFI Filter Module Combines IEC Connector, Fusing, Optional Voltage Select and On/Off Switch into a Single, Space-Efficient Assembly
- · Enhanced Low Frequency Response with No Resonant Peaks
- · Fully Shielded for Radiative Noise Control
- Accepts Either U.S. or European Standard Fuse Sizes. Dual or Single Power Line Fusing
- Available to UL/IEC 60601 Standard and Meets UL 544 Specification for Medical and Dental Applications

#### Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz **Rated Current:** 250VAC 115VAC 10A 10A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground 1500VAC Line to Line 2250VDC

**Insulation Resistance**:  $9 \times 10^9 \Omega$  at 100VDCAmbient Temperature: 40°C Max at rated current

Humidity Range: 0% to 95% R.H.

**Termination:** 

• QC - Quick Connect · IEC Receptacle

#### **Maximum Leakage Current:**

Each Line to Ground **PE1** PE1-PO PM1-PO 115VAC, 60Hz: 0.25mA 0.002mA 0.4mA 0.015mA 250VAC, 50Hz: 0.40mA 0.005mA .75mA 0.025mA

Voltage Select Card: Installed in 120VAC position

unless otherwise specified

**Agency Approvals:** 

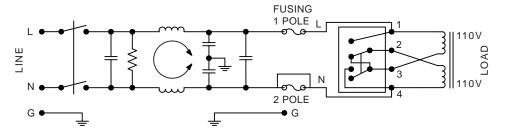








#### PE1/PM1 Series Simplified Schematic with Voltage Selector



Nominal	Part	Termination		MINIMUM INSERTION LOSS - dB (50 ohm Circuit)						
Current Rating	Number	Line/Load	MODE	quency - I	y - MHz					
- raing				.05	.15	.50	.10	5.0	10	30
10A	PE1XXX10	IEC/QC	Common Differential	10 <b>10</b>	20 <b>20</b>	30 <b>30</b>	38 <b>35</b>	45 <b>55</b>	50 <b>60</b>	50 <b>55</b>
	PM1XXX10	IEC/QC	Common Differential	10 <b>10</b>	20 <b>20</b>	30 <b>30</b>	33 <b>33</b>	25 <b>55</b>	20 <b>60</b>	15 <b>55</b>
	PM1XXXP0	IEC/QC	Common Differential	12 <b>10</b>	23 <b>20</b>	30 <b>30</b>	35 <b>33</b>	25 <b>55</b>	25 <b>60</b>	30 <b>55</b>
	PE1XXXP0	IEC/QC	Common Differential	13 <b>10</b>	24 <b>20</b>	33 <b>30</b>	38 <b>35</b>	48 <b>65</b>	54 <b>65</b>	54 <b>55</b>

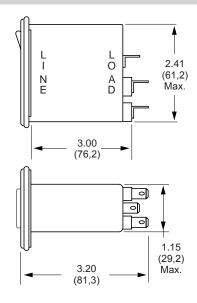


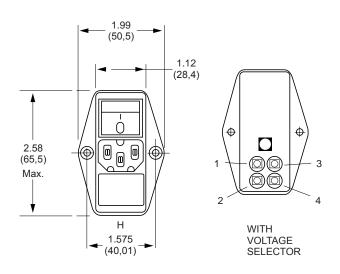


#### **PE1/PM1**

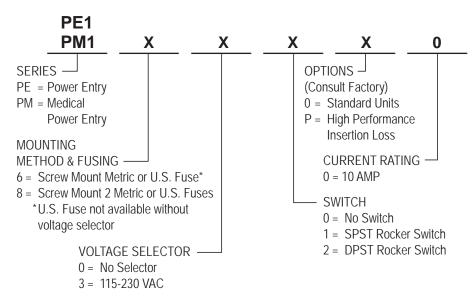
(10Amp) Dimensions

Refer to Standard Mounting Cutouts Below





#### How to Order



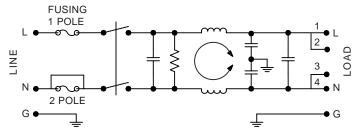
#### INSTALLATION INSTRUCTION IMPORTANT – CHANGING FUSE/VOLTAGE

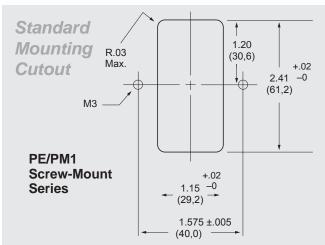
#### PE1/PM1

To change fuse, remove power cord. Remove voltage selector and replace fuse. Reinsert fuse holder. To change the operating voltage on the PE1/PM1 Series, remove the power cord and rotate fuse holder block until desired voltage aligns with the mark on the module housing.

 Filter shipped without fuse.
 Always use caution when selecting and changing fuses and voltage requirements. Curtis Industries is not responsible for malfunction due to improper installation/selection of fuse and/or voltage select.

# PE1/PM1 Series Simplified Schematic without Voltage Selector

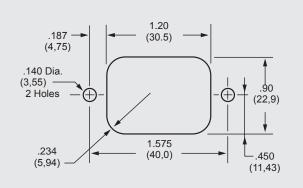




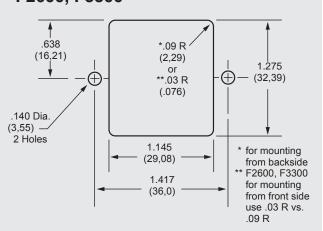


# **Standard Mounting Cutouts**

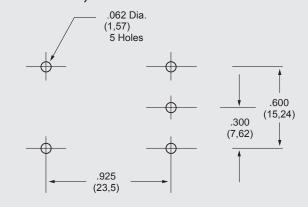
# F2200CA, F2300CA, F2500CA, F2700CA, F3200CA, F3500CA



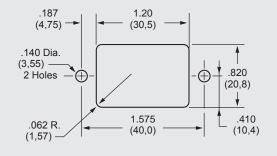
#### F2600, F3300



#### F2600FP, F3300FP



#### F2100CA, F2400CA, F3100CA, F3400CA



#### F2700FB

