

# P Series

## The Chameleon Adaptable Module for General or Medical Applications



UL Recognized  
CSA Certified  
VDE Approved



PS Unfiltered



PE Filtered  
with "A" Shield



PS Filtered

## P Series

The P series power entry module offers full flexibility of design in the most compact package.

As the first 10 amp module to provide all five power entry functions in one compact design, the P Series readily adapts to its environment and the needs of international markets.

- Snap-in or flange mounting
- IEC power line connector
- Both North American and European fusing capabilities
- Two voltage selection
- Optional DPST on/off switch
- Filtering options for general purpose and medical applications.

The P Series compact design and modular construction will allow you to select all the power entry features you require – without altering the panel cutout. And the P Series, with adapters, will fit any standard panel cutout you currently have designed.

The P Series is available with a variety of filtering options:

**O Models** - This version does not include an RFI filter, but has all other options of the P Series. They are rated for applications up to 10 amps.

**S Models** - General purpose applications where line-to-ground and line-to-line noise must be controlled. These filters allow compliance with FCC limits for linear power supplies. They are available with current ratings of 3, 6, 10 amps.

**H Models** - Designed to help equipment meet UL544, UL2601 and EN60601 for patient care equipment and non-patient care equipment in medical applications, these filters provide susceptibility protection without leakage current associated with line-to-ground capacitors. They are available with current ratings of 3, 6 and 10 amps.

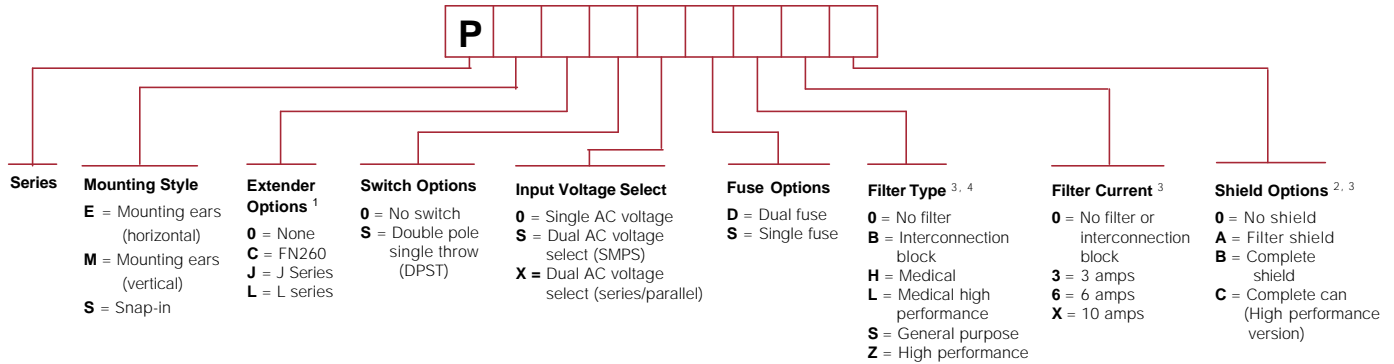
**B Models** - Included with these models is an interconnection block that reduces external wiring by connecting the switch with the fuse(s) and IEC receptacle. They are rated for applications up to 10 amps.

**Z Models** - High performance filter versions are designed to help bring most digital equipment (including switching power supplies) into compliance with EN55022, Level B (as well as FCC Part 15J, Class B) conducted emissions limits. They are available with current ratings of 6 and 10 amps. High performance versions are available with horizontal mounting ears, no extenders, single voltage, complete can shield with options for switch, fuses and current ratings only.

**L Models** - High performance Medical filter versions that are designed to help bring most digital equipment (including switching power supplies) into compliance with EN55022, Level B (as well as FCC Part 15J, Class B) conducted emissions limits while additionally allowing equipment to meet UL544, UL2601 and EN60601 for patient care equipment and non-patient care equipment. They are available with current ratings of 6 and 10 amps. High performance versions are available with horizontal mounting ears, no extenders, single voltage, complete can shield with options for switch, fuses and current ratings only.

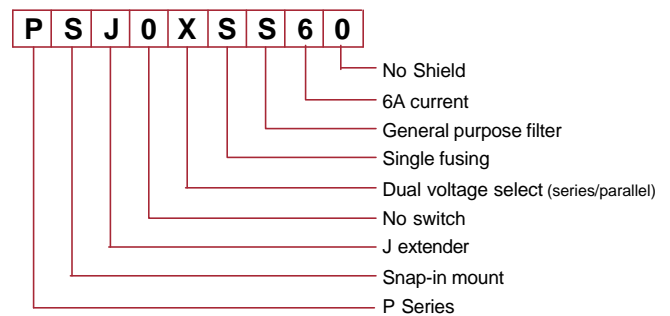
## P Series Part Number System

Part numbers are constructed by selecting the alphanumeric character which represents the desired feature.



### Notes:

- Extenders cannot be added to units with B or C shields. Extenders allow the P Series to fit other Corcom/competitor panel cutouts.
- Shields can only be used with filtered models.
- When using interconnection block, the last 3 digits of the part number are BX0.
- High performance versions are available with horizontal mounting ears, no extenders, single voltage, complete can shield with options for switch, fuses, filter type (L or Z) and current ratings only. (e.g PE0\_S\_\_C)



## Ordering Information

Consult your local Corcom sales representative for pricing.

### Most Popular Part numbers (Contact factory for availability of component combinations not listed)

Filtered	PS00D000	PS0S0DHX0	PS0S0SS6A	PS0SXS000	Unfiltered	PS00SD000
PE00XDS60	PS000S000	PS0S0DS60	PS0S0SSXB	PS0SXSH30	PE0SSS000	PS00SS000
PE0S0SS6B	PS000SH30	PS0S0DS6A	PS0SSSH30	PS0SXSH6A	PSJSXS000	PS00XD000
PE0SSSS60	PS000SS3B	PS0S0DS6B	PS0SXD000	PS0SXS30	PSJS0S000	PS00XS000
PE0S0DLXC	PS000SS60	PS0S0S000	PS0SXDH30	PS0SXS60	PSJ0XD000	PS000D000
PE0S0DL6C	PS000SS6B	PS0S0SBX0	PS0SXDH3A	PS0SXS6A	PSJ0XS000	PS000S000
PE0S0DZXC	PS000SSXB	PS0S0SH60	PS0SXDH60	PS0SXS6B	PS0SSD000	
PE0S0DZ6C	PS00XD000	PS0S0SH6B	PS0SXDH6A	PS0SXSX0	PS0SSS000	
PE0S0SLXC	PS00XS000	PS0S0SHXA	PS0SXDS30	PSJS0DH30	PS0SXD000	
PE0S0SL6C	PS0S0D000	PS0S0SS3A	PS0SXDS3A	PSJS0S000	PS0SXS000	
PE0S0SZXC	PS0S0DBX0	PS0S0SS3B	PS0SXDS60	PSJSXS000	PS0S0D000	
PE0S0SZ6C	PS0S0DH3B	PS0S0SS60	PS0SXDS6B		PS0S0S000	

## Mounting Styles

Corcom offers both flange mounting as well as snap-in mounting of the popular P Series. This allows OEM's to choose the part that best suits their production methods.



Flange Mount



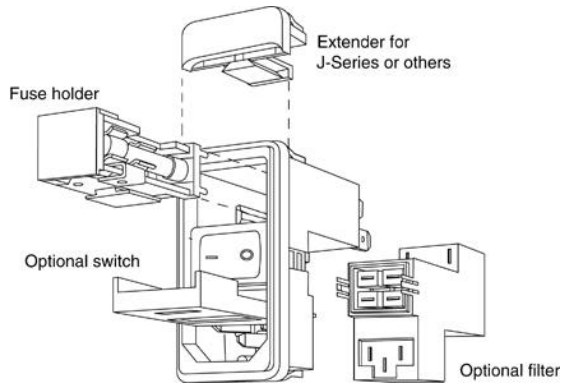
Snap-in Mount

## Extender Option

Extenders are available which allow the P series to adapt to Corcom's L or J series cutouts, as well as the panel cutout of Schaffner and Delta parts (C extender).

eg. The 'J' extender will allow the 'P' series to fit the Corcom 'J' series cutout

# P Series



Extenders cannot be added to units with B or C shields.

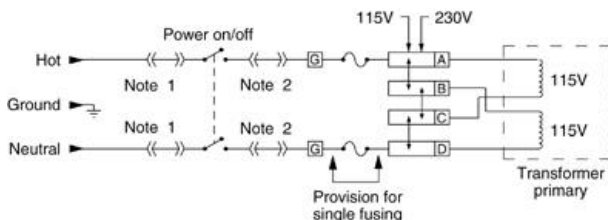
## Switch Option

Both switched (DPST) and unswitched wiring of the P Series are available.

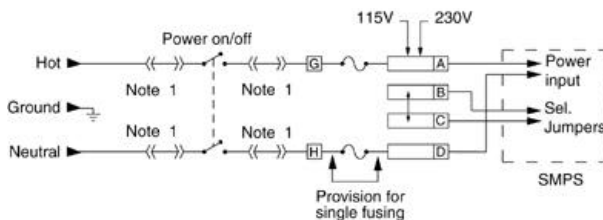
## Input Voltage Select

The P series of power entry modules provides a dual voltage selector which is integrated with the fuseholder. To simplify the wiring in each individual application, Corcom provides dedicated voltage selectors for different voltage selection schemes. The two most popular schemes are series/parallel for dual primary transformers and the "DPST switch" for switching mode power supplies (jumper types.) P series products with an "S" as the fifth digit are specifically designed for "jumper" type applications associated with switching mode power supplies.

### 1) Dual Primary Transformer Type:



### 2) Jumper Type



- Note 1: Jumpers are required if a filter or interconnection module is not used.  
 Note 2: Location of optional filter. Jumpers are required if a filter or interconnection module is not used.

(Voltage selection not available on L or Z models)

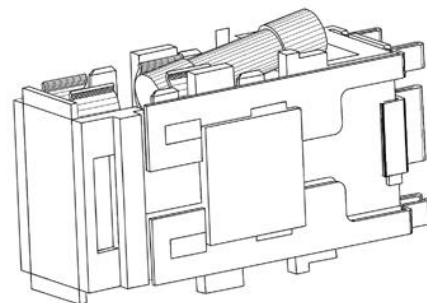
P series products with an "X" as the fifth digit are specifically designed for dual primary transformer

applications. The voltage selector installed will allow proper wiring from these applications. No matter what voltage selection scheme is used, wiring is always made to the same four terminals.

## Fuse / Fuseholder Options

Another feature of the P series power entry module is a versatile fusing arrangement. Its fuseholder can hold two 1/4" x 1-1/4" or 5 x 20mm fuses. It can also be converted to accept one fuse with a conversion clip that bridges one of the two fuse chambers.

The conversion clip is installed on the P Series power entry modules set for single fusing, those with part numbers with an "S" as the sixth digit. Units with a "D" as the sixth digit do not include a conversion clip.



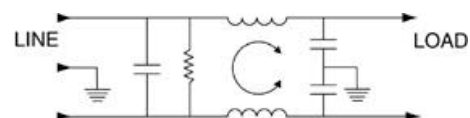
Shown is the fuseholder with a fuse held in the proper manner. **Note that the back end of the fuse slightly pretrudes out of the fuseholder in order to make contact with a terminal inside the power entry module.**

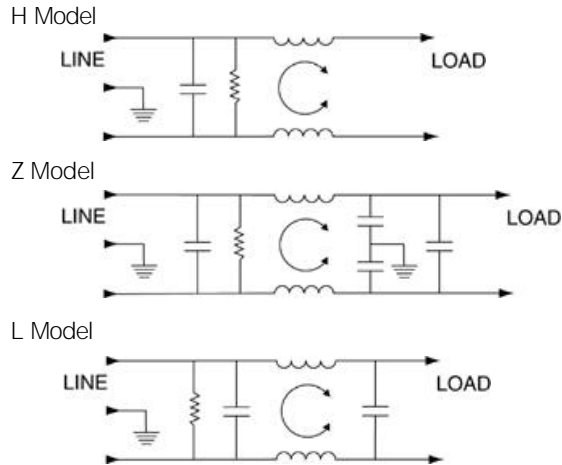
## Filter Type

Six options are available for the filter type: general purpose, medical applications, high performance, high performance medical as well as an unfiltered and unfiltered with an interconnection block.

**Filtered versions** include the S Models which are designed for general purpose applications where line-to-ground and line-to-line noise must be controlled. Z Models are a high performance filter designed to help bring most digital equipment (including switching power supplies) into compliance with EN55022, Level B (as well as FCC Part 15J, Class B) conducted emissions limits. H Models are the medical version of the S models and are designed to help equipment meet UL544, UL2601 and EN60601 for patient and non-patient care equipment in medical applications. L Models are the medical version of the Z models (high performance) that are designed to additionally allow equipment to meet UL544, UL2601 and EN 60601 for patient and non-patient care equipment.

### S Model





**Unfiltered versions** of the P series includes a standard version (0 Models) that does not have an RFI filter, but does have all other options of the P Series. It also includes an interconnection block version (B Models) which provides wiring of the IEC socket to the switch and the switch to the fuseholder. Labor can be eliminated by ordering the product with an interconnection block. This feature, designated by a BX0 at the end of the part number, prewires the module for easier installation. The wiring is protected with the plastic case to prevent access to the terminals and connections. Wiring can be further simplified by ordering a PA100 connector assembly, as shown in the accessories section. The dimensions of this alternative are the same as the filtered versions.

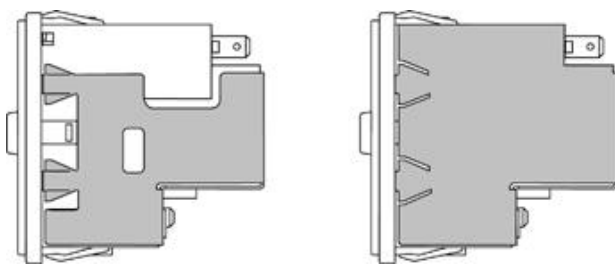
## Filter Current

The P Series is available without a filter (10A rating) or in 3, 6 and 10 ampere filtered versions.

## Shield Options

A feature available on the P series is an RF shield. The metal shield, available on filtered models, provides shielding from radiated emissions and provides an additional RF ground for the filter to the case.

The shield is available in two versions, a shield of the filter components (designated by A as the ninth digit) and a complete shield (designated by B as the ninth digit).



**A Shield**

**B Shield**

The A shield covers the filter portion of the module and increases performance of the filter by protecting the components from magnetic coupling. This shield improves RF ground connection to the case while still

allowing the use of the P Series extender. The B shield covers the entire power entry module with metal, protecting the equipment from all radiated noise. Used with the filter, the shield provides the most secure protection from RFI noise problems. The B shield cannot be used with any extender.

## Specifications – Filtered Models

**Minimum** insertion loss in dB:

Line-to-ground in 50 ohm circuit

Current Rating	Frequency-MHz								
	.03	.1	.15	.5	1	3	5	10	30

### S Models

3A	7	17	21	27	33	40	44	50	32
6A		8	12	17	23	32	36	44	30
10A		3	5	10	13	23	27	35	27

### H Models

3A	7	17	21	27	30	29	26	23	15
6A		8	11	15	17	19	18	16	13
10A	3	5	8	10	12	11	11	10	10

Line-to-ground in 50 ohm circuit

Current Rating	Frequency-MHz								
	.01	.05	.1	.15	0.5	1	5	10	30

### Z Models

6A	8	21	27	30	37	43	49	52	42
10A	5	17	22	24	27	32	52	47	40

### L Models

6A	8	21	27	29	34	35	25	21	16
10A	5	17	22	23	24	25	21	18	14

Line-to-line in 50 ohm circuit

Current Rating	Frequency-MHz								
	.10	.15	.5	1	3	5	10	30	

### S Models

3A	2	4	12	15	30	48	50	45	
6A	2	4	12	15	22	42	55	45	
10A	2	4	12	15	22	42	55	45	

### H Models

3A	2	4	12	18	31	40	48	41	
6A	2	4	12	16	26	35	40	35	
10A	2	4	12	16	26	33	40	32	

Line-to-line in 50 ohm circuit

Current Rating	Frequency-MHz								
	.01	.05	.1	.15	0.5	1	5	10	30

### Z Models

6A	10	15	34	44	75	75	75	70	60
10A	10	20	20	35	67	75	75	70	60

### L Models

6A	10	15	34	44	75	75	75	70	60
10A	10	20	20	35	67	75	75	70	60

# P Series

## Specifications – Unfiltered Models

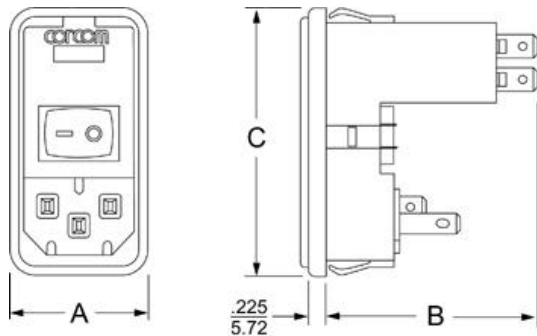
Hipot rating (one minute):	
line-to-ground	1500 VAC
line-to-line	1450 VDC
Operating frequency:	50/60 Hz
Rated voltage:	120/250 VAC
Rated current, all unfiltered models:	10A @ 120 VAC 10A @ 250 VAC
Operating voltages:	
Selectable or fixed	115/230 VAC
Fuseholder:	
Accepts one or two fuses*	1/4" x 1-1/4" or 5 x 20 mm
Switch:	
	Double-insulated rated for 10,000 operations at full load. 51 Amp inrush capability.
Terminals:	0.187" x 0.032" terminal tabs

\*Conversion clip provided on fuseholder for single fuse models.

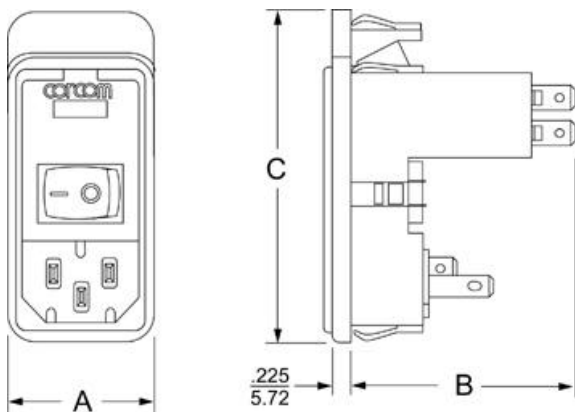
## Case Styles - Unfiltered Models

Metric shown in italics.

### PS/PSL



### PSC/PSJ



## Case Dimensions — Unfiltered Models

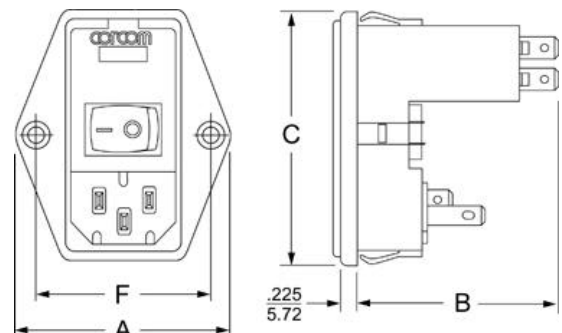
Metric shown in italics.

Part No.	A (max)	B (max)	C (max)	D ( $\frac{+.008}{-.000}$ )	E ( $\frac{+.008}{-.000}$ )	F
PE	$\frac{1.98}{50.29}$	$\frac{1.93}{49.02}$	$\frac{2.31}{58.67}$	$\frac{1.122}{28.5}$	$\frac{2.201}{55.91}$	$\frac{1.575}{40.0}$
PS	$\frac{1.24}{31.49}$	$\frac{1.93}{49.02}$	$\frac{2.31}{58.67}$	$\frac{1.06}{26.93}$	$\frac{2.201^*}{55.91}$	—
PSC	$\frac{1.24}{31.49}$	$\frac{1.93}{49.02}$	$\frac{2.81}{63.75}$	$\frac{1.06}{26.92}$	$\frac{2.52}{64.01}$	—
PSJ	$\frac{1.24}{31.49}$	$\frac{1.93}{49.02}$	$\frac{2.72}{69.09}$	$\frac{1.06}{26.92}$	$\frac{2.6 +}{66.0}$	—
PSL	$\frac{1.24}{31.49}$	$\frac{1.93}{49.02}$	$\frac{2.31}{58.67}$	$\frac{1.12}{28.45}$	$\frac{2.201^*}{55.91}$	—

\* Panel cutout for thickness of .031 - .079 (.80 - 2.0). For panel thickness .083-.114 (2.1-2.9) use 2.213 (56.21).

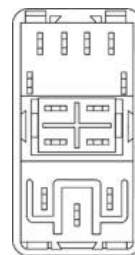
+ Panel cutout for thickness of 0.06-0.09 (0.76 - 2.29).

### PE

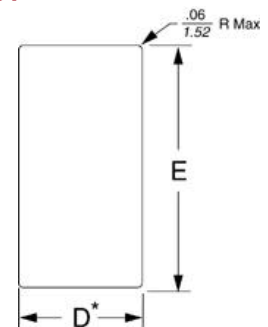


Mounting holes  $\frac{.125}{3.78}$  Dia. (2) Countersunk holes

### Back View



### Typical Panel Cutout



\* For snap-in applications, the Dsides of the cutout must have a .02 (.508) radius on the installation side.

Note: Snap-in models allow front mounting only. PS not recommended for plastic panels.



## Specifications – Filtered Models

Maximum leakage current, each line-to-ground:  
 @ 120 VAC 60 Hz: H, L models 2μA  
 S, Z models 0.25mA  
 @ 250 VAC 50 Hz: H, L models 5μA  
 S, Z models .50mA

Hipot rating (one minute):  
 line-to-ground 1500 VAC  
 line-to-line 1450 VDC

Operating voltages:  
 Selectable or fixed 115/230 VAC

Operating frequency: 50/60 Hz

Rated voltage: 120/250 VAC

Switch: Double-insulated rated for 10,000 operations at full load.  
 51 Amp inrush capability.

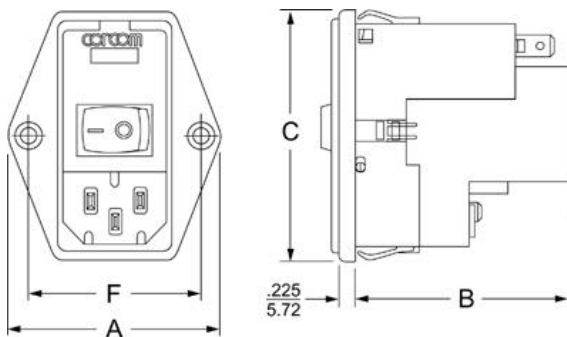
Terminals: 0.187" x 0.032" terminal tabs

Conversion clip provided on fuseholder for single fuse models.

## Case Styles – Filtered Models

Metric shown in italics.

### PE



## Case Dimensions – Filtered Models

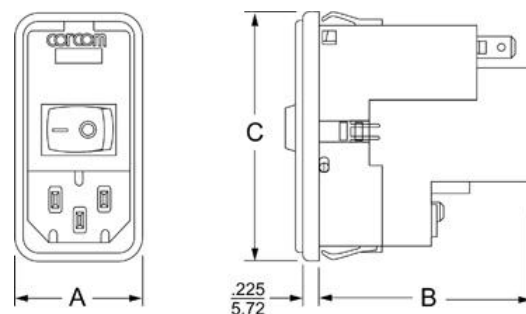
Metric shown in italics.

Part No.	A (max)	B (max)	C (max)	D ( $\frac{+.008}{-.000}$ )	E ( $\frac{+.008}{-.000}$ )	F
PE	1.98 <i>50.29</i>	2.13 <i>54.1</i>	2.31 <i>58.67</i>	1.122 <i>28.5</i>	2.201 <i>55.91</i>	1.575 <i>40.0</i>
PE (High Performance)	1.98 <i>50.29</i>	4.42 <i>112.3</i>	2.39 <i>60.7</i>	1.15 <i>29.21</i>	2.201 <i>55.91</i>	1.575 <i>40.0</i>
PS	1.24 <i>31.49</i>	2.13 <i>54.1</i>	2.31 <i>58.67</i>	1.06 <i>26.93</i>	2.201* <i>55.91</i>	—
PSC	1.24 <i>31.49</i>	2.13 <i>54.1</i>	2.51 <i>63.75</i>	1.06 <i>26.92</i>	2.52 <i>64.01</i>	—
PSJ	1.24 <i>31.49</i>	2.13 <i>54.1</i>	2.72 <i>69.09</i>	1.06 <i>26.92</i>	2.6+ <i>66.0</i>	—
PSL and Shielded Models	1.24 <i>31.49</i>	2.13 <i>54.1</i>	2.31 <i>58.67</i>	1.12 <i>28.45</i>	2.201* <i>55.91</i>	—

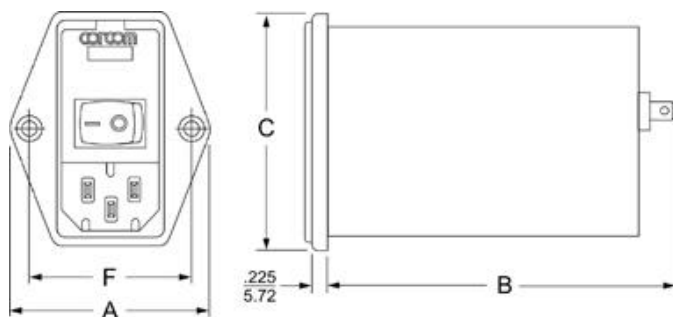
\* Panel cutout for thickness of .031 - .079 (0.8 - 2.0). For panel thickness at .083 - .114 (2.1 - 2.9) use 2.213 (56.21).

+ Panel cutout for thickness of 0.06 - 0.09 (0.76 - 2.29).

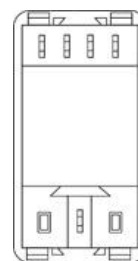
### PS



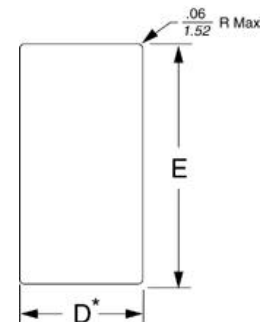
### PE (High Performance)



### Back View



### Typical Panel Cutout



For shielded models use D = 1.12  $\frac{+.008}{-.000}$ .

Shields can be used only with filtered models. Shields add approximately 0.06" to depth.

B shield may not be used with J or C extender.

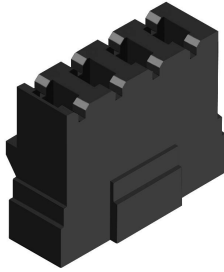
\* For snap-in applications, the D sides of the cutout must have a .02 (.508) radius on the installation side.

Note: Snap-in models allow front mounting only. PS not recommended for plastic panels.

PS not recommended for use with plastic panels.

## P Series Accessories

### Part No. PA100 Assembly



Power connector assembly for voltage select modules of the P series. Simplifies the connection of power entry module to power supply. Designed for use with either filtered or unfiltered modules. Includes 6 inch wires (4).

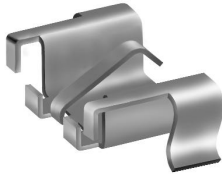
Part No. PA101 - Plug Only

Part No. PA102 - Pins Only

Part No. PA105 Same as PA100, except has 2 wires for no voltage selection models

### Part No. PA200 Fuse Clip

Provides solid jumper between fuse terminals in neutral line



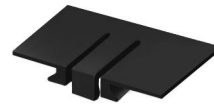
### Part No. PA400 J Extender

Extends P series module to fit J panel cutout.



### Part No. PA410 L Extender

Extends P series width to fit L panel cutout (use two per module).



### Part No. PA420 C Extender

Extends P series height by .20"



corcom

www.cor.com - Libertyville, IL (847) 680-7400

# EMI-RFI Solutions

# corcom

A Division of  **CII Technologies**<sup>™</sup>  
advanced control electronic solutions

**World Headquarters**  
844 East Rockland Road  
Libertyville, IL 60048  
Phone: (847) 680.7400  
Fax: (847) 680.8169  
Website: www.cor.com

**Corcom GmbH**  
Bunsenstr. 1  
82152 Martinsried  
Munich, Germany  
Phone: (+49) 89.85792.0  
Fax: (+49) 89.85792.58  
Website: www.corcom.de