# Mains Filters

Designed to reduce conducted mains borne EMI, this extensive range provides many solutions to EMI problems. To meet individual design requirements the filters are available with two attenuation options – standard and medical. Current ratings are from 1 to 10 amps with single or twin fused types also available.

The choice of mounting options will suit most applications with flange, snap to panel or base/bulkhead.


Flange and Snap Fit
PS00 Series 314-315
PS01 Series 314-315

Base Mounting and Bulkhead
PS02 Series 316-317
PS03 Series 316-317

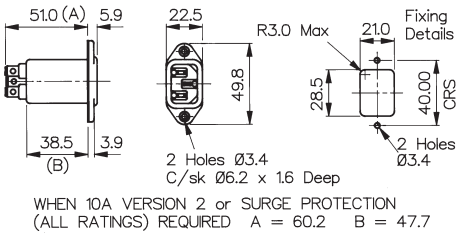
Fused Inlets
PS20 Series 318-319
PS21 Series 318-319
PS25 Series 320-321
PS26 Series 320-321

# IEC Power Inlets Flange and Snap Fit

## Panel Mounting

Flange PS00/A

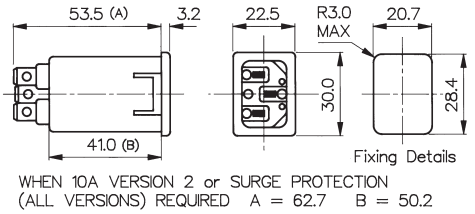
- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs




## Snap Fit

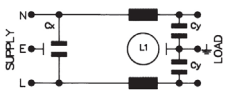
Snap Fit PS01/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels




## How to order -

| PS00/A or PS01/A | XX | X | 0 | / | 63 | XX |
|---|---|---|---|---|---|---|

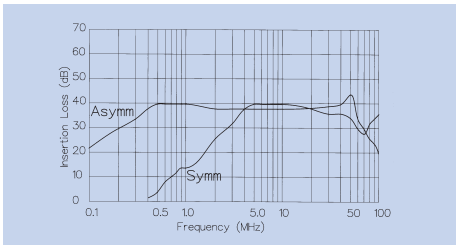
| Series | Rating | L/C Circuit | Additional Components | Tag Type and Configuration | Panel Thickness | Circuit Board Diagram |
|---|---|---|---|---|---|---|
| PS00/A | 01 = 1A | 1 = Version 1 | 0 = None | 63 = 6.3mm tabs | 00 = Flange |  |
| PS01/A | 03 = 3A | 2 = Version 2 | | | 10 = 1.0mm | |
| | 06 = 6A | 3 = Version 3 | | | 15 = 1.5mm | |
| | 10 = 10A | | | | 20 = 2.0mm | |
| | | | | | 30 = 3.0mm | |

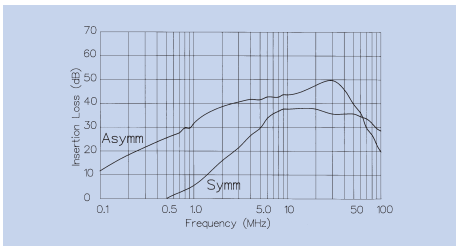


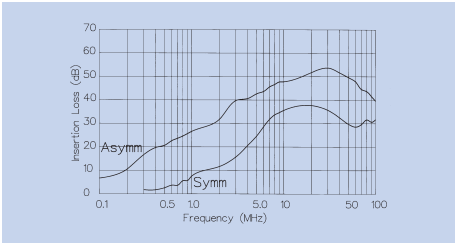
| Specification | PS00/Axxxx/xx00 | PS01/Axxxx/xxxx | Part No. Example |
|---|---|---|---|
| Max. Working Voltage: | 250V a.c. 50-400Hz | 250V a.c. 50-400Hz | **PS00/A0120/6300** |
| Earth Leakage Current: | <0.35mA (250V, 50Hz) | <0.35mA (250V, 50Hz) | PS00 series, flange fitting, standard filtered IEC power inlet, rated at 1 ampere. L/C circuit version 2, i.e. L1 = 2 x 10mH, Cx = 15nF, Cy = 2 x 2.2nF. 6.3mm tabs. |
| Temperature Range: | –25ºC to +85ºC | –25ºC to +85ºC | |
| Max. Ambient Temp: (@ Full Load) | 40ºC (derate linearly to 0A @ 85ºC) | 40ºC (derate linearly to 0A @ 85ºC) | |
| Test Voltage: | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | |
| Approvals: | | | |
| Mating Connectors: | PX0587, PX0587/SE, PX0588 | PX0587, PX0587/SE, PX0588 | |
| RoHS | Compliant | Compliant | |

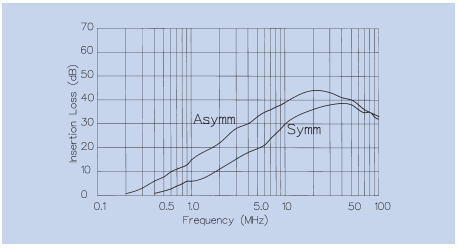
| Rating | Version | L1 | Cx | Cy |
|---|---|---|---|---|
| 1 AMP | 1 | 2 x 2.8mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 10mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 10mH | 1 x 47nF | 2 x 2.2nF |
| 3 AMP | 1 | 2 x 0.75mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 1.8mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 1.8mH | 1 x 47nF | 2 x 2.2nF |
| 6 AMP | 1 | 2 x 0.3mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 0.7mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 0.7mH | 1 x 47nF | 2 x 2.2nF |
| 10 AMP | 1 | 2 x 0.17mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 0.35mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 0.17mH | 1 x 47nF | 2 x 2.2nF |

## Version 1

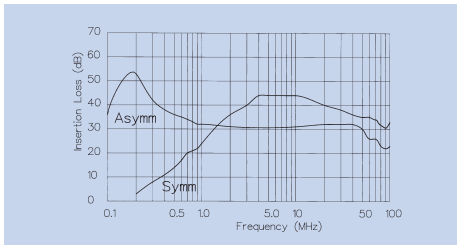


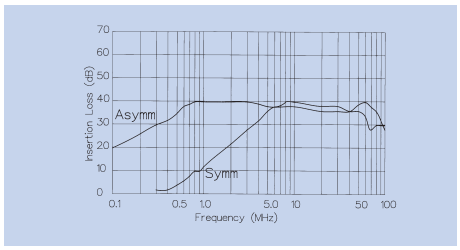



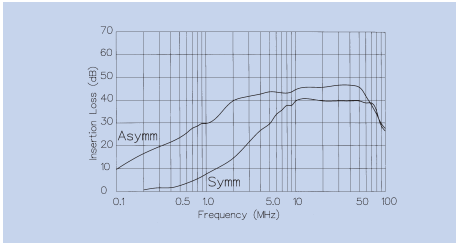



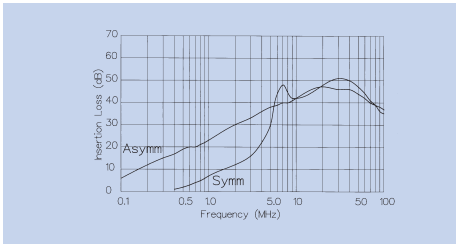




## Version 2

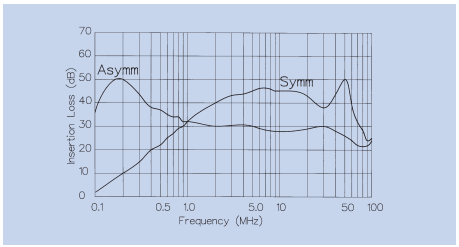


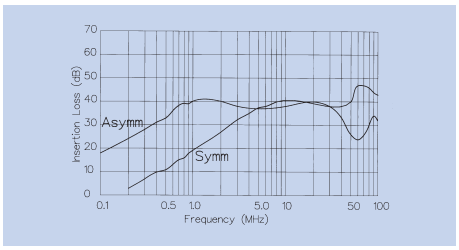



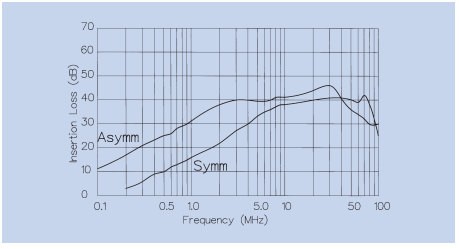



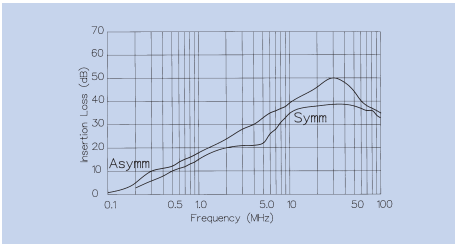




## Version 3



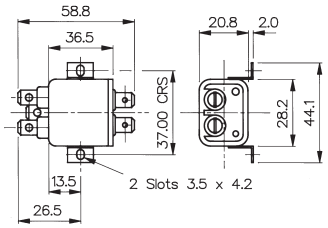



# Base Mounting and Bulkhead

## Base Mounting

Base Mounting PS02/A

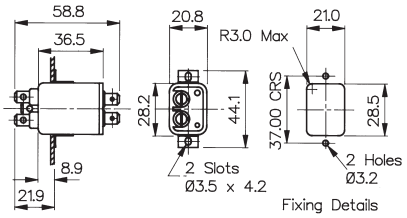
- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs




## Bulkhead Mounting

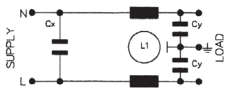
Bulkhead Mounting PS03/A

- 1, 3, 6 or 10 Amp Current Rating
- 3 Alternative Circuits
- No additional components
- 6.3mm tabs




## How to order -

| PS02/A or PS03/A | XX | X | 0 | / | 63 |
|---|---|---|---|---|---|

| Series | Rating | L/C Circuit | Additional Components | Tag Type and Configuration | Circuit Board Diagram |
|---|---|---|---|---|---|
| PS02/A | 01 = 1A | 1 = Version 1 | 0 = None | 63 = 6.3mm tabs |  |
| PS03/A | 03 = 3A | 2 = Version 2 | | | |
| | 06 = 6A | 3 = Version 3 | | | |
| | 10 = 10A | | | | |



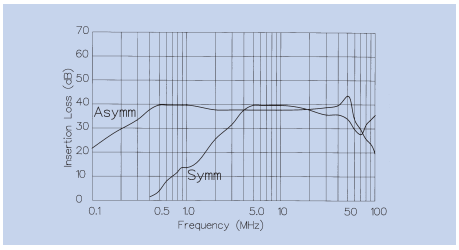
| Specification | PS02/Axxxx/xx | PS03/Axxxx/xx | Part No. Example |
|---|---|---|---|
| Max. Working Voltage: | 250V a.c. 50-400Hz | 250V a.c. 50-400Hz | PS02/A0120/63 |
| Earth Leakage Current: | <0.35mA (250V, 50Hz) | <0.35mA (250V, 50Hz) | PS02 series, standard base mounting filter, rated at 3 amperes. L/C circuit version 1, i.e. L1 = 2 x 0.75mH, Cx = 15nF, Cy = 2 x 2.2nF with 2.8mm tabs. |
| Temperature Range: | –25ºC to +85ºC | –25ºC to +85ºC | |
| Max. Ambient Temp: (@ Full Load) | 40ºC (derate linearly to 0A @ 85ºC) | 40ºC (derate linearly to 0A @ 85ºC) | |
| Test Voltage: | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | |
| Approvals: | | | |
| RoHS | Compliant | Compliant | |

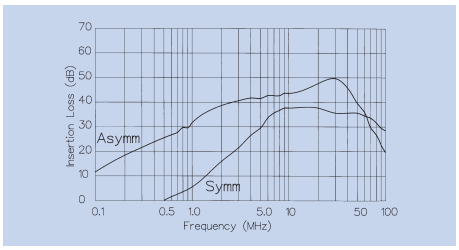
# PS02/Axxxx/xx & PS03/Axxxx/xx

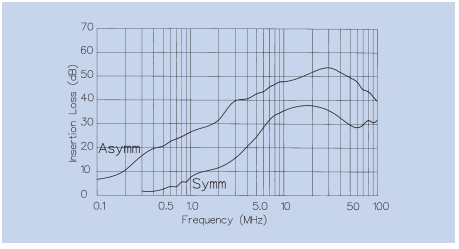
Rating & Version Table

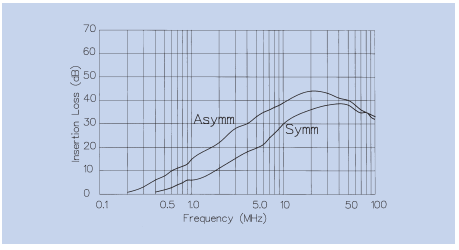
| Rating | Version | L1 | Cx | Cy |
|---|---|---|---|---|
| 1 AMP | 1 | 2 x 2.8mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 10mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 10mH | 1 x 47nF | 2 x 2.2nF |
| 3 AMP | 1 | 2 x 0.75mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 1.8mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 1.8mH | 1 x 47nF | 2 x 2.2nF |
| 6 AMP | 1 | 2 x 0.3mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 0.7mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 0.7mH | 1 x 47nF | 2 x 2.2nF |
| 10 AMP | 1 | 2 x 0.17mH | 1 x 15nF | 2 x 2.2nF |
| “ | 2 | 2 x 0.35mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 0.17mH | 1 x 47nF | 2 x 2.2nF |

## Version 1

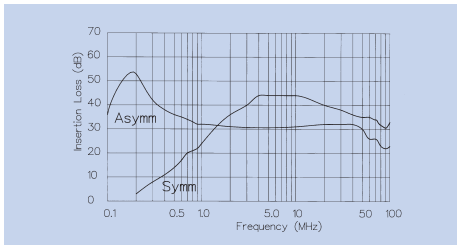


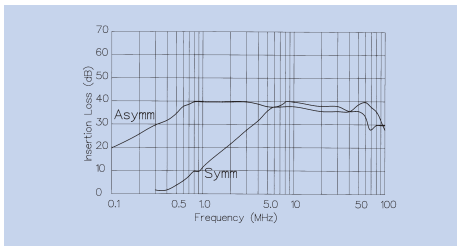



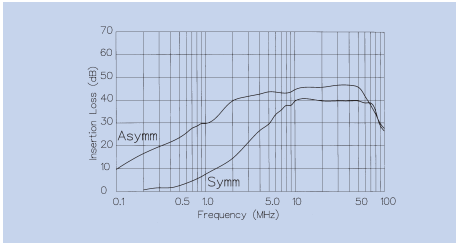



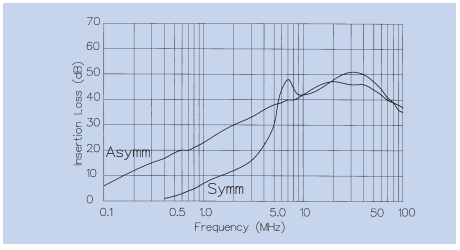




## Version 2

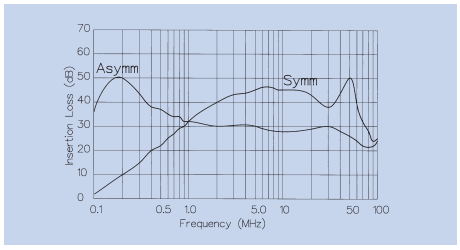


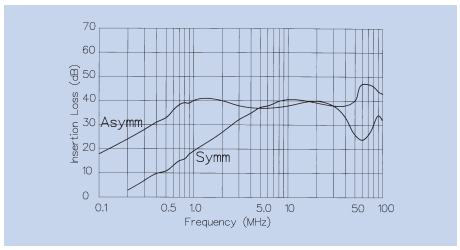



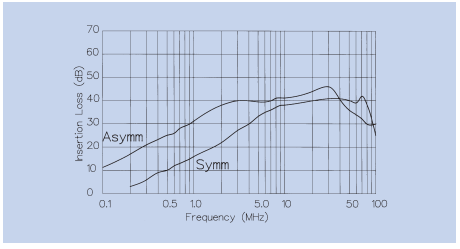



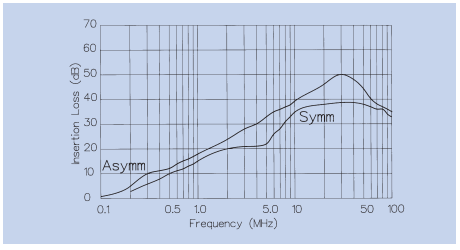




## Version 3



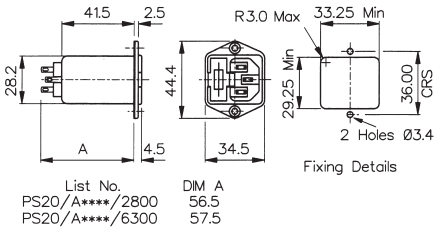



# IEC Power Inlets (Single Fused)

## Panel Mounting

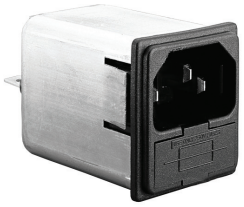
PS20/A

- 1, 3, or 6 Amp Current Rating
- Single Fused
- 2 Alternative Circuits
- 6.3mm tabs



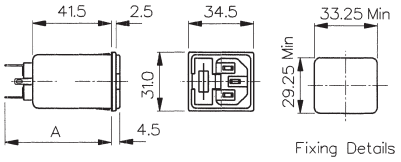

| List No. | DIM A |
|---|---|
| PS20/A****/2800 | 56.5 |
| PS20/A****/6300 | 57.5 |

## Snap Fit



PS21/A

- 1, 3, or 6 Amp Current Rating
- Single Fused
- 2 Alternative Circuits
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels

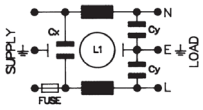



| List No. | DIM A |
|---|---|
| PS21/A****/28** | 56.5 |
| PS21/A****/63** | 57.5 |

## How to order -

| PS02/A or PS03/A | XX | X | 0 | / | 63 | / | XX |
|---|---|---|---|---|---|---|---|
| **Series** | **Rating** | **L/C Circuit** | **Additional Components** | | **Tag Type and Configuration** | | **Panel Thickness** |
| PS00/A | 01 = 1A | 2 = Version 2 | 0 = None | | 63 = 6.3mm tabs | | 00 = Flange |
| PS01/A | 03 = 3A | 3 = Version 3 | | | | | 10 = 1.0mm |
| | 06 = 6A | | | | | | 15 = 1.5mm |
| | | | | | | | 20 = 2.0mm |
| | | | | | | | 30 = 3.0mm |

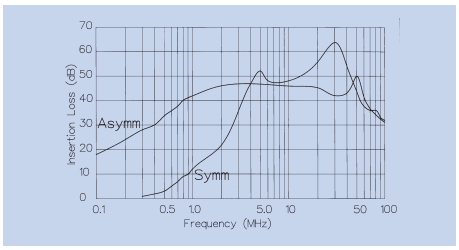
**Circuit Board Diagram**

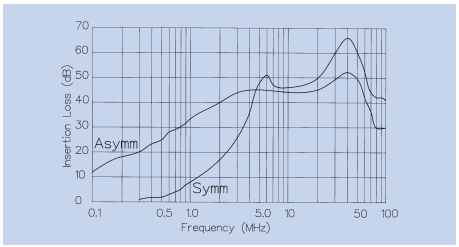



| Specification | PS20/Axxx0/xx00 | PS21/Axxx0/xxxx | Part No. Example |
|---|---|---|---|
| Max. Working Voltage: | 250V a.c. 50-400Hz | 250V a.c. 50-400Hz | PS20/A0620/63 |
| Earth Leakage Current: | <0.35mA (250V, 50Hz) | <0.35mA (250V, 50Hz) | PS20 series, flange fitting, standard filtered IEC power inlet, single fused, rated at 6 amperes. L/C circuit version 2, i.e L1 = 2 x 0.7mH, Cx = 1 x 15nF, Cy = 2 x 2.2nF. 6.3mm tabs. |
| Temperature Range: | –25ºC to +85ºC | –25ºC to +85ºC | |
| Max. Ambient Temp: (@ Full Load) | 40ºC (derate linearly to 0A @ 85ºC) | 40ºC (derate linearly to 0A @ 85ºC) | |
| Test Voltage: | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | |
| Approvals: | | | |
| RoHS | Compliant | Compliant | |

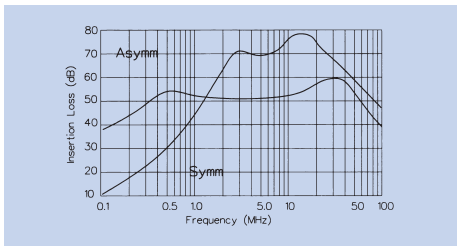
| Rating | Version | L1 | Cx | Cy |
|---|---|---|---|---|
| 1 AMP | 1 | | | |
| “ | 2 | | | |
| “ | 3 | 2 x 10mH | 1 x 47nF | 2 x 2.2nF |
| 3 AMP | 1 | | | |
| “ | 2 | 2 x 1.8mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 6.5mH | 1 x 47nF | 2 x 2.2nF |
| 6 AMP | 1 | | | |
| “ | 2 | 2 x 0.7mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | 2 x 2mH | 1 x 47nF | 2 x 2.2nF |

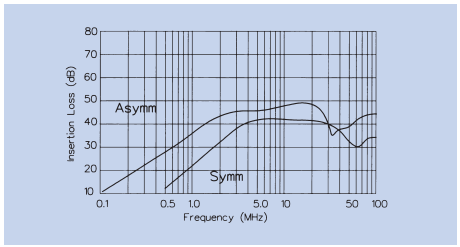
## Version 2

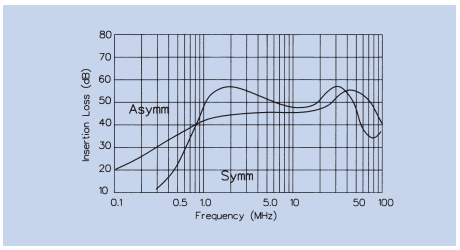



## Version 3

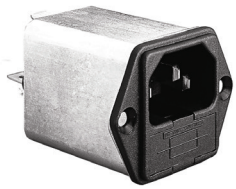


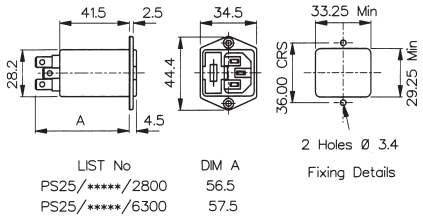
# IEC Power Inlets Flange and Snap Fit (Twin Fused)

## Base Mounting



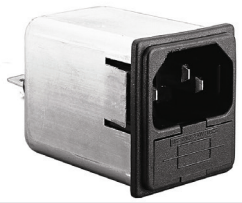
PS25/A

- 2 or 4 Amp Current Rating
- Twin Fused
- No additional components
- 6.3mm tabs



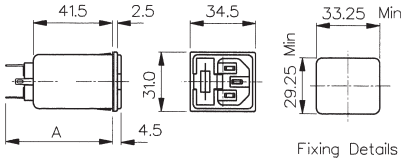

| LIST No | DIM A |
|---|---|
| PS25/*****/2800 | 56.5 |
| PS25/*****/6300 | 57.5 |

## Snap Fit



PS26/A

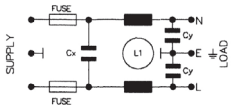
- 2 or 4 Amp Current Rating
- Twin Fused
- No additional components
- 6.3mm tabs
- 1, 1.5, 2 or 3mm panels




| List No. | DIM A |
|---|---|
| PS23/A****/28** | 56.5 |
| PS23/A****/63** | 57.5 |

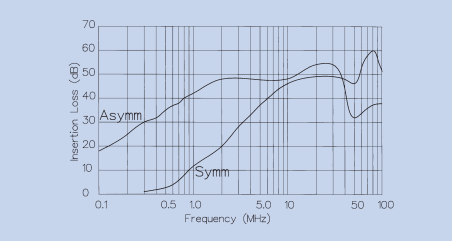
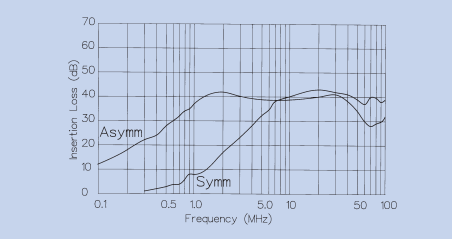
## How to order -

| PS25/A or PS26/A | X | 2 | 0 | / 63 | / XX |
|---|---|---|---|---|---|

| Series | Rating | L/C Circuit | Additional Components | Tag Type and Configuration | Panel Thickness | Circuit Board Diagram |
|---|---|---|---|---|---|---|
| PS25/A | 02 = 2A | 2 = Version 2 | 0 = None | 63 = 6.3mm tabs | 00 = Flange |  |
| PS26/A | 04 = 4A | | | | 10 = 1.0mm | |
| | | | | | 15 = 1.5mm | |
| | | | | | 20 = 2.0mm | |
| | | | | | 30 = 3.0mm | |



| Specification | PS25/Axx2x/xx00 | PS26/Axx2x/xxxx | Part No. Example |
|---|---|---|---|
| Max. Working Voltage: | 250V a.c. 50-400Hz | 250V a.c. 50-400Hz | PS20/A0620/63 |
| Earth Leakage Current: | 2.5W per fuse | 2.5W per fuse | PS20 series, flange fitting, standard filtered IEC power inlet, single fused, rated at 6 amperes. L/C circuit version 2, i.e L1 = 2 x 0.7mH, Cx = 1 x 15nF, Cy = 2 x 2.2nF. 6.3mm tabs. |
| Temperature Range: | <0.35mA (250V, 50Hz) | <0.35mA (250V, 50Hz) | |
| Max. Ambient Temp: (@ Full Load) | 40ºC (derate linearly to 0A @ 85ºC) | 40ºC (derate linearly to 0A @ 85ºC) | |
| Test Voltage: | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | 2700V d.c. 2 secs. Lines to Earth<br>1100V d.c. 2 secs. Live to Neutral | |
| Approvals: | | | |
| Mating Connectors | PX0587, PX0587/SE, PX0588 | PX0587, PX0587/SE, PX0588 | |
| Accessories | P.No. 14340 (see page 151) | P.No. 14340 (see page 151) | |
| RoHS | Compliant | Compliant | |

| Rating | Version | L1 | Cx | Cy |
|---|---|---|---|---|
| 1 AMP | 1 | | | |
| “ | 2 | 2 x 1.8mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | | | |
| 3 AMP | 1 | | | |
| “ | 2 | 2 x 0.7mH | 1 x 15nF | 2 x 2.2nF |
| “ | 3 | | | |

## Version 2