

## Dual Configuration Power Entry Module

# L Series



UL Recognized  
CSA Certified  
VDE Approved



EDL1S / EHL1S

EDL4C / EHL4C

## L Series

- Power entry module with switch or fuse
- For 10A capability and high performance filtering see the P Series on page 192
- Two element circuit provides extended EMI attenuation similar to EAB inlet filter
- North American or metric fuse holders
- Available with minimal leakage current for medical applications (HL models)

## Ordering Information

|   |   |   |   |   |   |   |   |                                          |
|---|---|---|---|---|---|---|---|------------------------------------------|
| 6 | E | D | L | 1 | S | C | M |                                          |
|   |   |   |   |   |   |   |   | Fuseholder Type ( <i>pre-installed</i> ) |
|   |   |   |   |   |   |   |   | M – Metric                               |
|   |   |   |   |   |   |   |   | Omit for North American                  |
|   |   |   |   |   |   |   |   | Mounting Type                            |
|   |   |   |   |   |   |   |   | C – Snap-In                              |
|   |   |   |   |   |   |   |   | Omit for flange mount                    |
|   |   |   |   |   |   |   |   | Switch Option                            |
|   |   |   |   |   |   |   |   | S – DPST on/off switch                   |
|   |   |   |   |   |   |   |   | Omit for none                            |
|   |   |   |   |   |   |   |   | Voltage Selection Positions              |
|   |   |   |   |   |   |   |   | 1 or 4                                   |
|   |   |   |   |   |   |   |   | L Series                                 |
|   |   |   |   |   |   |   |   | Filter Type                              |
|   |   |   |   |   |   |   |   | D – General Purpose                      |
|   |   |   |   |   |   |   |   | H – Medical                              |
|   |   |   |   |   |   |   |   | omit for none                            |
|   |   |   |   |   |   |   |   | Leakage current designation              |
|   |   |   |   |   |   |   |   | E – Low Leakage ( <i>&lt;0.5 mA</i> )    |
|   |   |   |   |   |   |   |   | Current Rating                           |
|   |   |   |   |   |   |   |   | 2, 4 or 6A                               |

## Specifications

### Maximum leakage current each Line to Ground:

|                  | <u>DL Models</u> | <u>HL Models</u> |
|------------------|------------------|------------------|
| @ 120 VAC 60 Hz: | .25 mA           | 2 µA             |
| @ 250 VAC 50 Hz: | .50 mA           | 5 µA             |

### Hipot rating (one minute):

|                 |          |
|-----------------|----------|
| Line to Ground: | 2250 VDC |
| Line to Line:   | 1450 VDC |

### Operating Voltage:

|                          |                           |
|--------------------------|---------------------------|
| 1S & 1SC models (fixed): | 250 VAC max.              |
| 4 & 4C Suffix:           | 100, 120, 220 or 240 VAC. |

### Operating Frequency:

50/60 Hz

### Rated Current:

2 to 6A

### Required Fuse(s):

|                 |                                         |
|-----------------|-----------------------------------------|
| North American: | one .25 x 1.25" ( <i>not included</i> ) |
| Metric:         | two 5 x 20mm ( <i>not included</i> )    |

### Switch:

DPST  
10,000 operations at 51A max. inrush

3

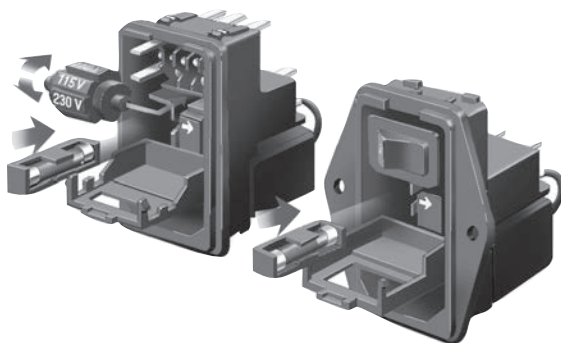
Power Inlet Filters &amp; Power Entry Modules

## Dual Configuration Power Entry Module *(continued)*

# L Series

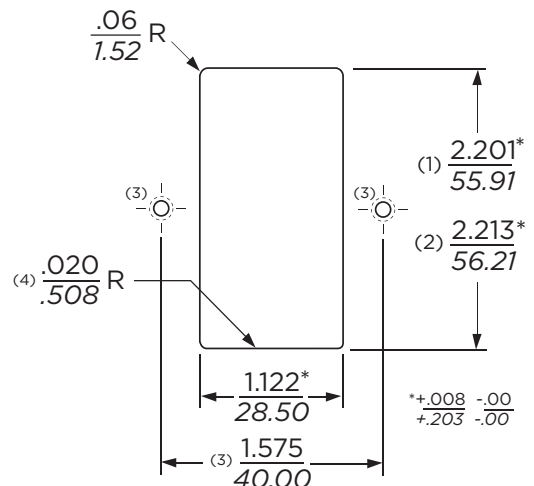
| Available Part Numbers |                             | North American Fusing |         | Metric Fusing |          |
|------------------------|-----------------------------|-----------------------|---------|---------------|----------|
|                        |                             | Flange Mount          | Snap-In | Flange Mount  | Snap-In  |
| Non-Filtered           | Single Voltage, Switched    | 6EL1S                 | 6EL1SC  | 6EL1SM        | 6EL1SCM  |
|                        | 4 Voltage Select, No Switch | 6EL4                  | 6EL4C   | 6EL4M         | 6EL4CM   |
| General Purpose Filter | Single Voltage, Switched    | 2EDL1S                | 2EDL1SC | 2EDL1SM       | 2EDL1SCM |
|                        |                             | 4EDL1S                | 4EDL1SC | 4EDL1SM       | 4EDL1SCM |
|                        |                             | 6EDL1S                | 6EDL1SC | 6EDL1SM       | 6EDL1SCM |
|                        | 4 Voltage Select, No Switch | 2EDL4                 | 2EDL4C  | 2EDL4M        | 2EDL4CM  |
|                        |                             | 4EDL4                 | 4EDL4C  | 4EDL4M        | 4EDL4CM  |
|                        |                             | 6EDL4                 | 6EDL4C  | 6EDL4M        | 6EDL4CM  |
| Medical Filter         | Single Voltage, Switched    | 6EHL1S                | 6EHL1SC | 6EHL1SM       | 6EHL1SCM |
|                        | 4 Voltage Select, No Switch | 6EHL4                 | 6EHL4C  | 6EHL4M        | 6EHL4CM  |

## Voltage Selection



To change selected voltage: disconnect the power cord; open cover using a small blade screwdriver or similar tool; insert the tool into the voltage selection slot and remove wheel from unit; select desired voltage; replace wheel into unit and close cover, making sure the selected voltage appears in connector window.

## Recommended Panel Cutouts



Notes:

- (1) For panel thickness of .031 – .079 [0.8 – 2.0]
- (2) For panel thickness of .083 – .126 [2.1 – 3.2]
- (3) Mounting Holes .126 [3.20] Dia. for flange mounted versions only
- (4) For Snap-In applications, the 1.12 [28.5] sides of the cutout must have a .02 [508] radius on the installation side. Not required for flange mount versions.

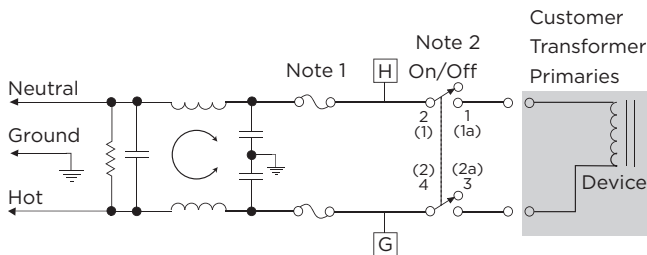
## Dual Configuration Power Entry Module *(continued)*

# L Series

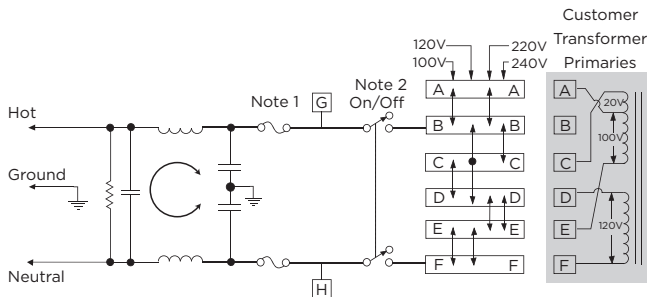
## Electrical Schematics

### DL Models

#### Single Voltage, Switched (DL1S)

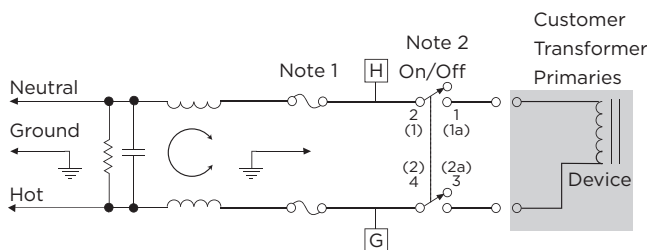


#### 4 Voltage Select, No-Switch (DL4)

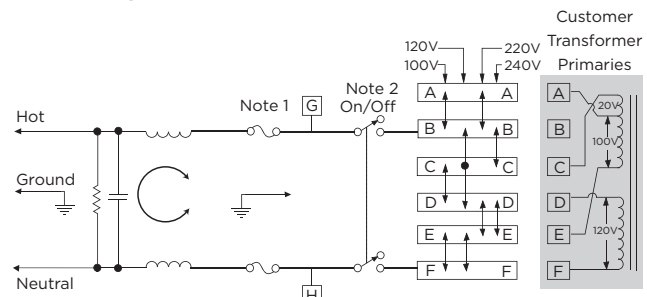


### HL Models

#### Single Voltage, Switched (HL1S)



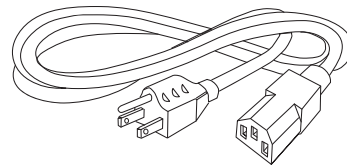
#### 4 Voltage Select, No-Switch (HL4)



Note 1: Provision for dual Metric style fusing  
Note 2: On/Off switch present only with "S" suffix models

## Accessories

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



**LA303:** Voltage Select Wheel, 3 position  
Selection drum for use with L4 models.  
Marked with 110V, 220V and 240V

**LA304:** Voltage Select Wheel, 4 position  
Selection drum for use with L4 models.  
Marked with 100V, 110V, 220V and 240V.  
One LA304 comes standard with each L4 model.



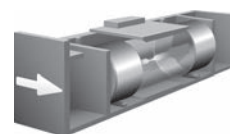
**LA400:** Blank insert  
Blank to replace switch in single voltage models

**LA601:** Insulating Boot  
Plastic shroud to cover back of module to prevent inadvertent access

## Replacement Fuse Holders

**LA200:** North American Fuseholder  
Accommodates one .25 x 1.25" fuse

**LA201:** Metric Fuseholder  
Accommodates one 5 x 20mm metric fuse

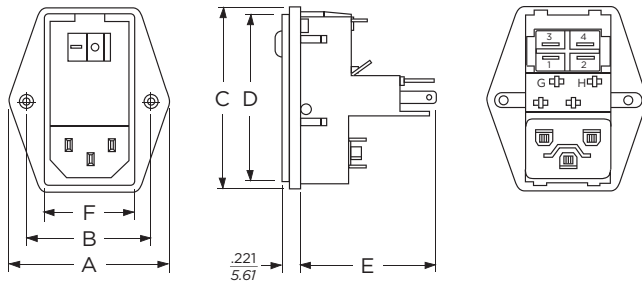


## Dual Configuration Power Entry Module *(continued)*

# L Series

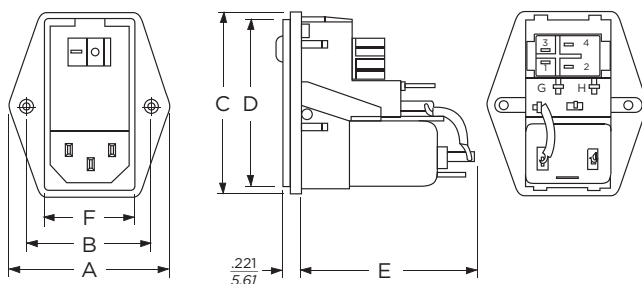
## Case Styles

### Flange Models, Non-filtered



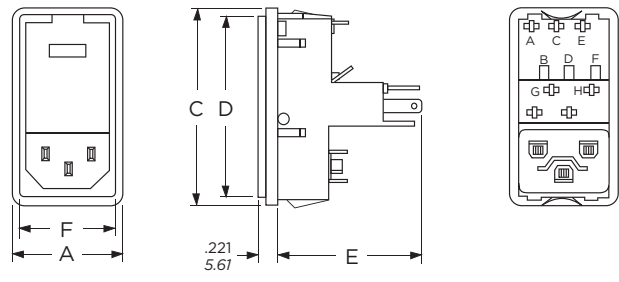
Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Backplate Terminals: .110 [2.79]  
Switch Terminals: .187 [4.765] with .07 x .16 [1.8 x 3.8] slot

### Flange Models, Filtered



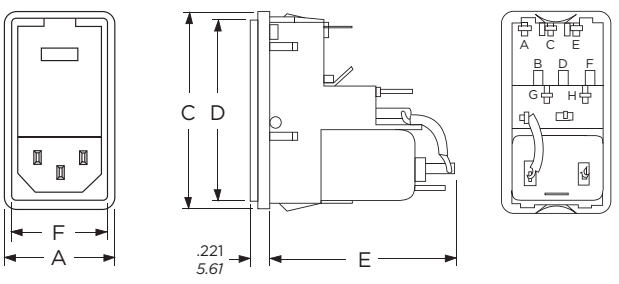
Switched model shown, for non-switched detail refer to snap-in models  
Metric fuse models have an additional jumper from filter to module  
Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Backplate Terminals: .110 [2.79]  
Switch Terminals: .187 [4.765] with .07 x .16 [1.8 x 3.8] slot

### Snap-in Models, Non-filtered



Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Backplate Terminals: .110 [2.79]  
Switch Terminals: .187 [4.765] with .07 x .16 [1.8 x 3.8] slot

### Snap-in Models, Filtered



Non-switched model shown, for switched detail refer to flange models  
Metric fuse models have an additional jumper from filter to module  
Typical Dimensions:  
Line Inlet (1): IEC 60320-1 C14  
Backplate Terminals: .110 [2.79]  
Switch Terminals: .187 [4.765] with .07 x .16 [1.8 x 3.8] slot

## Case Dimensions

| Model No.             | A<br>(max.)          | B<br>$\pm_{.015}$<br>$\pm_{.38}$ | C<br>(max.)         | D<br>(max.)          | E<br>(max.)          | F<br>(ref.)          |
|-----------------------|----------------------|----------------------------------|---------------------|----------------------|----------------------|----------------------|
| Flange<br>Unfiltered  | <b>1.98</b><br>50.29 | <b>1.575</b><br>40.0             | <b>2.3</b><br>58.42 | <b>2.14</b><br>54.36 | <b>1.66</b><br>42.16 | <b>1.11</b><br>28.19 |
| Snap-in<br>Unfiltered | <b>1.28</b><br>32.51 | -                                | <b>2.3</b><br>58.42 | <b>2.14</b><br>54.36 | <b>1.66</b><br>42.16 | <b>1.11</b><br>28.19 |
| Flange<br>Filtered    | <b>1.98</b><br>50.29 | <b>1.575</b><br>40.0             | <b>2.3</b><br>58.42 | <b>2.14</b><br>54.36 | <b>2.01</b><br>51.05 | <b>1.11</b><br>28.19 |
| Snap-in<br>Filtered   | <b>1.28</b><br>32.51 | -                                | <b>2.3</b><br>58.42 | <b>2.14</b><br>54.36 | <b>2.01</b><br>51.05 | <b>1.11</b><br>28.19 |

## Dual Configuration Power Entry Module *(continued)*

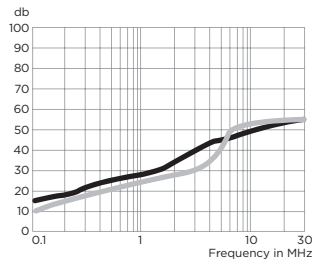
# L Series

## Performance Data

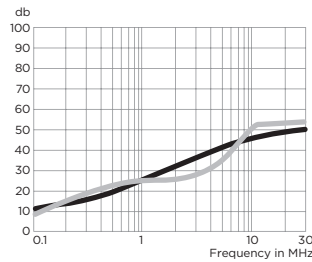
### Typical Insertion Loss

Measured in closed 50 Ohm system

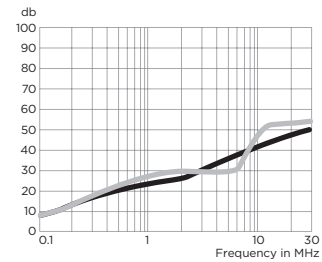
**2EDL**



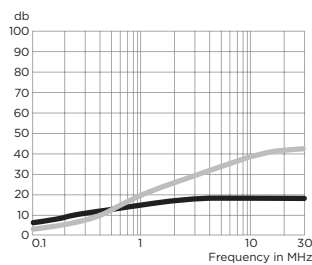
**4EDL**



**6EDL**



**6EHL**



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

## Minimum Insertion Loss

Measured in closed 50 Ohm system

### Common Mode / Asymmetrical (Line to Ground)

| Current<br>Rating | Frequency – MHz |     |    |    |    |    |
|-------------------|-----------------|-----|----|----|----|----|
|                   | .05             | .15 | 1  | 5  | 10 | 30 |
| <b>EDL Models</b> |                 |     |    |    |    |    |
| 1A                | 6               | 14  | 24 | 40 | 45 | 50 |
| 3A                | 2               | 8   | 18 | 32 | 38 | 45 |
| 6A                | 1               | 6   | 17 | 31 | 37 | 45 |
| <b>EHL Models</b> |                 |     |    |    |    |    |
| 6A                | 3               | 8   | 15 | 18 | 18 | 18 |

### Differential Mode / Symmetrical (Line to Line)

| Current<br>Rating | Frequency – MHz |       |    |    |    |    |    |
|-------------------|-----------------|-------|----|----|----|----|----|
|                   | .05             | .15.5 | 1  | 3  | 5  | 10 | 30 |
| <b>EDL Models</b> |                 |       |    |    |    |    |    |
| 1A                | 7               | 16    | 21 | 23 | 37 | 47 | 50 |
| 3A                | 6               | 14    | 18 | 23 | 26 | 45 | 47 |
| 6A                | 6               | 15    | 20 | 25 | 24 | 45 | 50 |
| <b>EHL Models</b> |                 |       |    |    |    |    |    |
| 6A                | 4               | 14    | 20 | 28 | 32 |    |    |