

1-6609122-1 Product Details



1-6609122-1
(4EDL1S)

TE Internal Number: 1-6609122-1



Active

EMI/RFI Filters and Accessories



Always EU RoHS/ELV Compliant (Statement of Compliance)

Product Highlights:

- Filter - EMI/RFI
- Filter Type = Power Entry (Filtered/Unfiltered)
- L (2-6 Amp) Series
- General Purpose Application
- Mount Style = Flanged

Documentation & Additional Information

Product Drawings:

- [CUSTOMER DRAWING 4EDL1S](#) (PDF, English)

Catalog Pages/Data Sheets:

- [1654001_CORCOM_PRODUCT_GUIDE_L_SERIES](#) (PDF, English)

Product Specifications:

- None Available

Application Specifications:

- None Available

Instruction Sheets:

- None Available

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

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

Additional Information:

- [Product Line Information](#)

Additional Product Images:

- [Insertion Loss/Specifications](#)

Related Products:

- [Tooling](#)

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- [Product Type](#) = Filter - EMI/RFI
- [Filter Type](#) = Power Entry (Filtered/Unfiltered)
- [Series](#) = L (2-6 Amp)
- [Filtered](#) = Yes
- [Type of Connector](#) = IEC 320/C-14

Electrical Characteristics:

- [Current Rating \(A\)](#) = 4
- [Voltage Selection](#) = Single
- [Voltage \$\leq\$ \(VAC\)](#) = 120, 240
- Leakage Current (Line-to-Ground) Max. @ 250 VAC 50 Hz (mA) = 0.5
- Leakage Current (Line-to-Ground) Max. @ 120 VAC 60 Hz (mA) = 0.25

Termination Features:

- [Terminal Input - Output Combination](#) = IEC - .110 Faston

Body Features:

- [Mount Style](#) = Flanged
- [Switch Type](#) = DPST

Configuration Features:

- [Fuse Options](#) = Single
- [Fuse Holder Type](#) = North American

Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS compliant, ELV compliant
- [Lead Free Solder Processes](#) = Not relevant for lead free process
- RoHS/ELV Compliance History = Always was RoHS compliant
- Approved Standards = CSA Certified, VDE Approved, UL Recognized

Conditions for Usage:

- Facility Installation = No
- Need Min Size With IEC Connector = Yes
- Need Optional Switch, Fusing, Or Voltage Selector = Yes

Operation/Application:

- [Application](#) = General Purpose

Other:

- Brand = Corcom
- Comment = Voltage Fixed

Dual Configuration Power Entry Module

L Series



UL Recognized
CSA Certified
VDE Approved



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><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 μ A
@ 250 VAC 50 Hz:	.50 mA	5 μ A

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

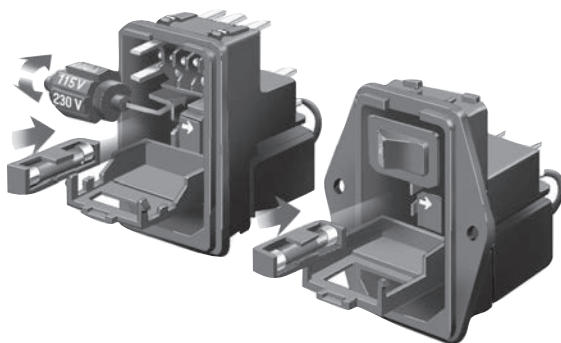
Power Inlet Filters & Power Entry Modules

Dual Configuration Power Entry Module *(continued)*

L Series

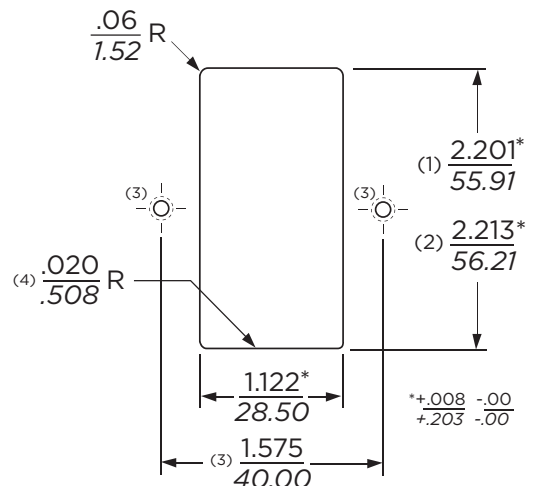
Available Part Numbers		North American Fusing		Metric Fusing	
		Flange Mount	Snap-In	Flange Mount	Snap-In
Non-Filtered	Single Voltage, Switched	6EL1S	6EL1SC	6EL1SM	6EL1SCM
	4 Voltage Select, No Switch	6EL4	6EL4C	6EL4M	6EL4CM
General Purpose Filter	Single Voltage, Switched	2EDL1S	2EDL1SC	2EDL1SM	2EDL1SCM
		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.

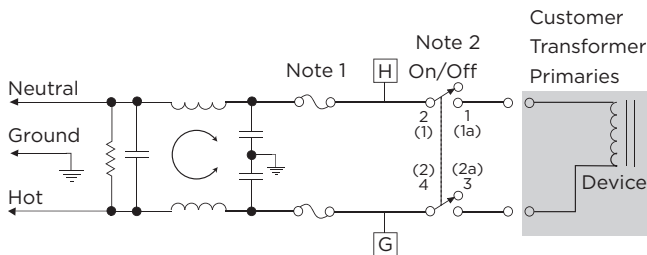
Dual Configuration Power Entry Module *(continued)*

L Series

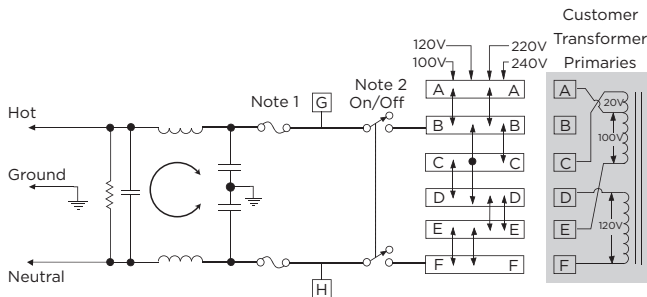
Electrical Schematics

DL Models

Single Voltage, Switched (DL1S)

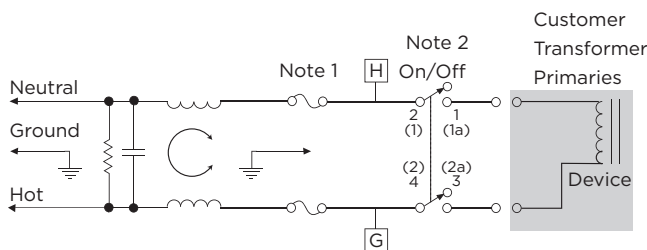


4 Voltage Select, No-Switch (DL4)

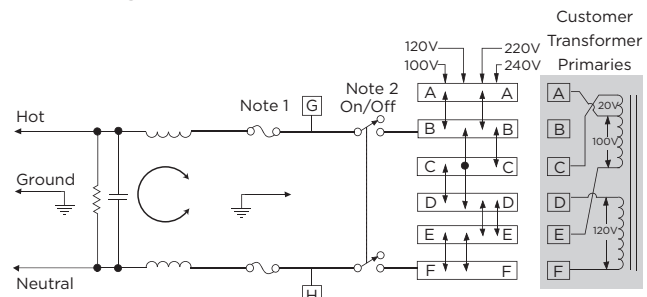


HL Models

Single Voltage, Switched (HL1S)



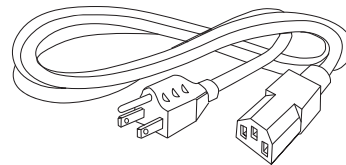
4 Voltage Select, No-Switch (HL4)



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.



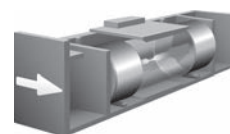
LA400: Blank insert
Blank to replace switch in single voltage models

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

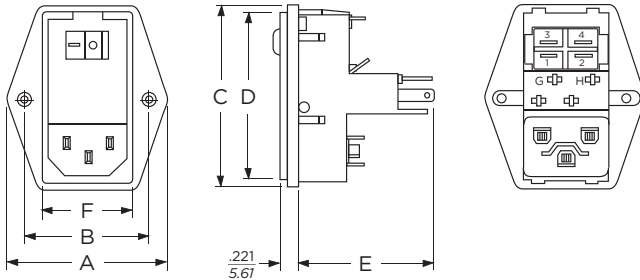


Dual Configuration Power Entry Module *(continued)*

L Series

Case Styles

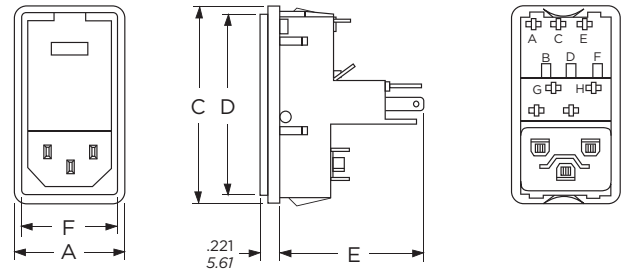
Flange Models, Non-filtered



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

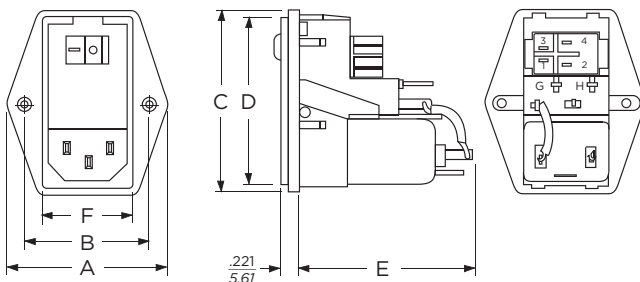
Snap-in Models, Non-filtered



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

Flange Models, Filtered

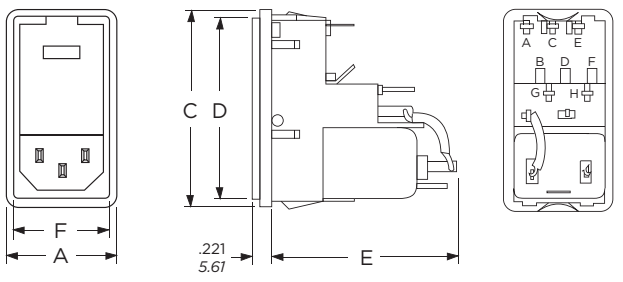


Switched model shown, for non-switched detail refer to snap-in models
Metric fuse models have an additional jumper from filter to module

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, 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 (max.)	B $\pm .015$ $\pm .38$	C (max.)	D (max.)	E (max.)	F (ref.)
Flange Unfiltered	1.98 50.29	1.575 40.0	2.3 58.42	2.14 54.36	1.66 42.16	1.11 28.19
Snap-in Unfiltered	1.28 32.51	-	2.3 58.42	2.14 54.36	1.66 42.16	1.11 28.19
Flange Filtered	1.98 50.29	1.575 40.0	2.3 58.42	2.14 54.36	2.01 51.05	1.11 28.19
Snap-in Filtered	1.28 32.51	-	2.3 58.42	2.14 54.36	2.01 51.05	1.11 28.19

Dual Configuration Power Entry Module *(continued)*

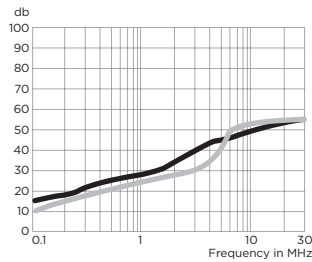
L Series

Performance Data

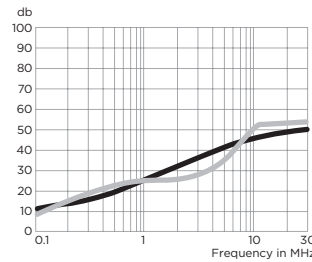
Typical Insertion Loss

Measured in closed 50 Ohm system

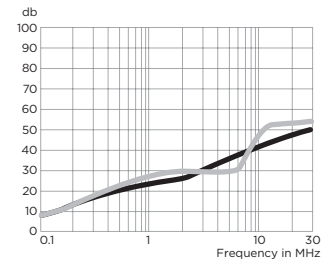
2EDL



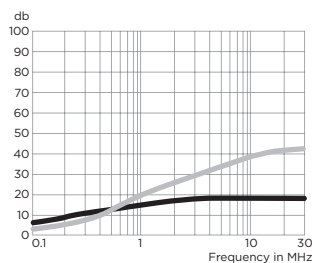
4EDL



6EDL



6EHL



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

Minimum Insertion Loss

Measured in closed 50 Ohm system

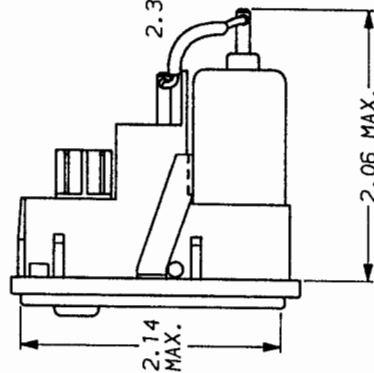
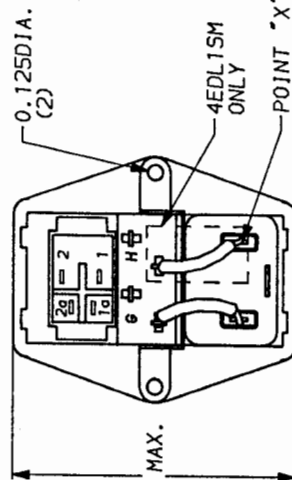
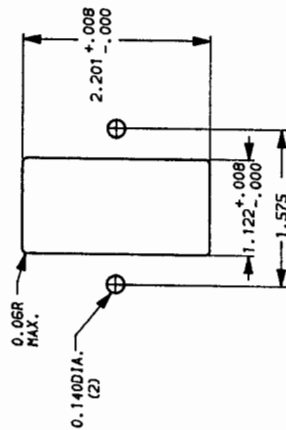
Common Mode / Asymmetrical (Line to Ground)

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

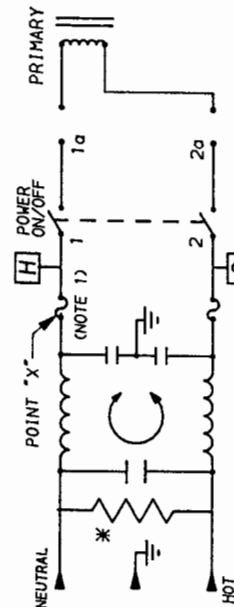
Differential Mode / Symmetrical (Line to Line)

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

RECOMMENDED PANEL CUTOUT (NOT TO SCALE)



ALTERNATE SWITCH



- NOTE,
1.) PROVISION FOR DUAL EUROPEAN STYLE FUSING.
2.) 4EDL1S JUMPER FROM POINT X TO 1 AND FROM G TO 2. 2EDL1SC JUMPER FROM H TO 1 AND FROM G TO 2.

50Ω - 50Ω (MINIMUM) INSERTION LOSS		FREQUENCY		MHz		COMMON		DIFF.		dB	
0.05	15	0.50	1.0	3.0	5.0	10	30	38	45	47	47
2	8	14	18	27	32	38	45	47	47	47	47
6	15	18	23	26	32	38	45	47	47	47	47

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APPROVED BY: *C. W. [Signature]* 4-30-92 DATE: 5 REV: 5

SAFETY ORGANIZATION(S).

THIS FILTER HAS BEEN FORMALLY RECOGNIZED, CERTIFIED OR APPROVED BY THE LISTED AGENCY. THEREFORE, ALL TEST/REQUIREMENTS SPECIFIED IN THE LATEST REVISION OF THE FOLLOWING AGENCY STANDARDS HAVE BEEN MET.

UL 1283
CSA 22.2, NO. 0, 0.4, 8
VDE 565-3, 625
SEN 432901
SEV 1055/TP1977/S.1.1

OPERATING SPECIFICATIONS.

LINE VOLTAGE/CURRENT,
4 AMP., 120/250 VAC
4 AMP./40°C, 250 VAC

LINE FREQUENCY,
50-60Hz

MAX. LEAKAGE CURRENT, EACH
LINE TO GROUND
.25mA @ 120V 60Hz
.40mA @ 250V 50Hz

OPERATING AMBIENT TEMP. RANGE,
-10°C TO +40°C @ RATED CURRENT, I_o

IN AN AMBIENT, T_o , HIGHER THAN 40°C, THE MAXIMUM OPERATING CURRENT, I_o , IS AS FOLLOWS,
 $I_o = I_r \sqrt{\frac{85-T_o}{45}}$

RELIABILITY SPECIFICATIONS,
STORAGE TEMPERATURE,
-25°C TO +85°C

HUMIDITY,
21 DAYS @ 40°C 95% RH

CURRENT OVERLOAD TEST,
6 TIMES RATED CURRENT FOR 8 SECONDS

TEST SPECIFICATIONS,
INDUCTANCE,
.35mH NOMINAL

CAPACITANCE, (MEASURED @ 1 KHz, 0.25 VAC MAX., 25°C ± 1°C)
LINE TO GROUND,
.0028μF ± 20%

LINE TO LINE,
.047μF ± 20%

DISCHARGE RESISTOR,
1.5 MΩ

LINE/GROUND AND LINE/LINE
INSULATION RESISTANCE
6000 MΩ (MIN) AT 100 VDC
20°C AND 50% RH

RECOMMENDED RECEIVING INSPECTION HIPOUT,
LINES TO GROUND,
2250 VDC FOR 1 MINUTE

LINE TO LINE,
1450 VDC FOR 1 MINUTE

FILTER APPROVAL,
THE BEST WAY TO SELECT AND QUALIFY A FILTER IS FOR YOUR ENGINEERING TO TEST THE UNIT IN YOUR EQUIPMENT.

TOLERANCE EXCEPT AS NOTED
DECIMAL, .XXX .XX .X ANGLES
ENGLISH, ±.025
METRIC, ±

corcom
LIBERTYVILLE, IL 60048

POWER LINE FILTER

DATE: 3-4-87
REV: 5
BY: LJD
CFW

*RESISTOR ADDED TO PRODUCT BUILT AFTER 3-30-92 (9212).