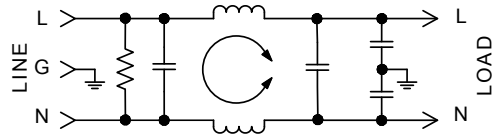
F1700/F1799 RFI Filters

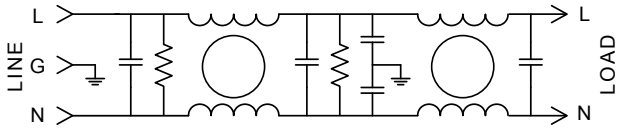
Features:

- General Purpose — Designed for Applications with Higher Differential Mode Noise
- Higher Line-to-Line Capacitance for Protection from Pulsed, Intermittent or Continuous RFI
- A Cost-Effective Replacement for Independent Coil Design in Many SMPS Applications
- Available with Integral IEC Connector

F1700 Simplified Schematic



F1799 Simplified Schematic



Specifications:

Rated Voltage: 250VAC Maximum - 50/60 Hz

Rated Current:

115VAC	250VAC
3A	2.5A
6A	4A
10A	6A
20A	10A
30A	15A

Current Overload: 6X for 8 seconds

Hi-Pot Test (1 min):

Line to Ground	1500VAC
Line to Line	1768VDC

Insulation Resistance: 9 x 10^9 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
B: Wire	D: Screw

Maximum Leakage Current:

Each Line to Ground	F1700	F1710	F1720	F1740	F1799
115VAC, 60Hz:	0.40mA	.15mA	.002mA	.060mA	0.25mA
250VAC, 50Hz:	0.75mA	.25mA	.005mA	.120mA	0.45mA

Agency Approvals:

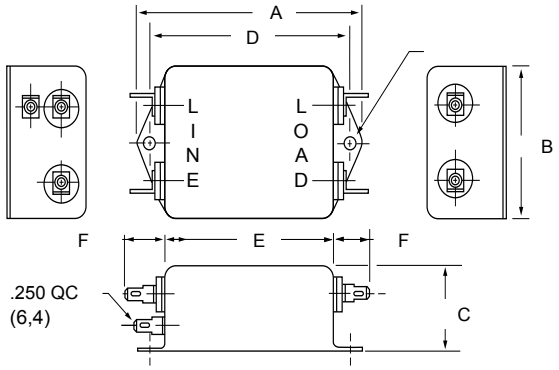
Except 30Amp

Nominal Current Rating	Part Number	Termination Line/Load	MINIMUM INSERTION LOSS - dB (50 ohm Circuit)						
			MODE	.15	.50	1.0	5.0	10	30
3A	**F1700AA03** **F1700BB03** **F1700CA03**	QC/QC Wire/Wire IEC/QC	Common **Differential**	20 **25**	35 **60**	43 **65**	52 **65**	55 **50**	50 **50**
	F1710AA03	QC/QC	Common **Differential**	20 **25**	34 **60**	40 **65**	45 **65**	45 **50**	40 **50**
	F1720AA03	QC/QC	Common **Differential**	20 **35**	32 **60**	35 **65**	35 **60**	35 **55**	40 **40**
	F1740AA03	QC/QC	Common **Differential**	20 **35**	30 **60**	35 **65**	35 **60**	35 **55**	40 **40**
6A	**F1700AA06** **F1700BB06** **F1700CA06**	QC/QC Wire/Wire IEC/QC	Common **Differential**	10 **15**	22 **50**	30 **65**	46 **60**	50 **60**	45 **60**
10A	**F1700AA10** **F1700BB10** **F1700CA10**	QC/QC Wire/Wire IEC/QC	Common **Differential**	10 **20**	22 **45**	30 **60**	46 **65**	50 **60**	45 **55**
20A	**F1700AA20**	QC/QC Screw/Screw	Common **Differential**	10 **15**	22 **45**	30 **60**	42 **65**	47 **60**	40 **55**
	F1700DD20 **F1720DD20**	Screw/Screw	Common **Differential**	10 **15**	22 **45**	30 **60**	42 **65**	47 **60**	52 **55**
30A	**F1700DD30**	Screw/Screw	Common **Differential**	7 **15**	15 **45**	20 **60**	34 **65**	42 **60**	40 **55**
	F1799DD30	Screw/Screw	Common **Differential**	10 **15**	45 **65**	55 **65**	60 **65**	60 **60**	50 **55**

NOTE: Other combinations of terminals may be specified on special order.

Specifications subject to change.
Dimensions are shown for reference purposes only.

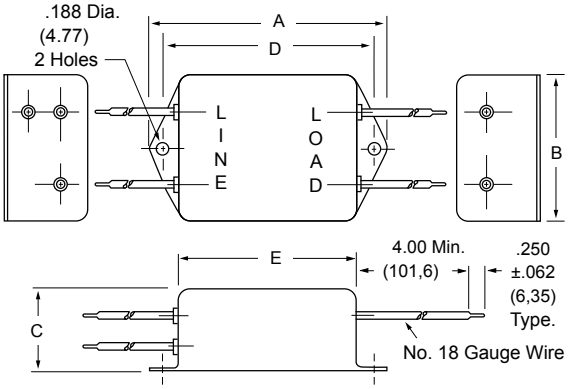
F1700AA, 1710, 1720, 1740 (3, 6 and 10Amp) Dimensions



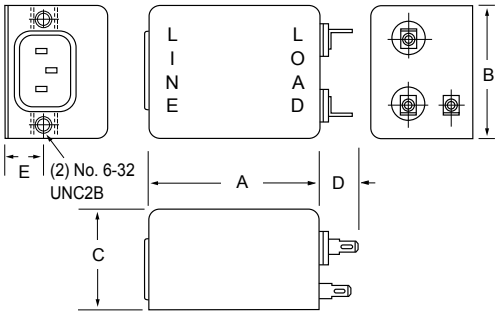
Amps	A	B	C	D	E	F
3A	2.750 (69,8)	1.750 (44,4)	1.125 (28,5)	2.375 (60,3)	2.000 (50,8)	.550 (14,0)
6A	3.312 (84,1)	2.000 (50,8)	1.125 (28,5)	2.940 (74,7)	2.500 (63,5)	.550 (14,0)
10A	3.312 (84,1)	2.000 (50,8)	1.500 (38,2)	2.940 (74,7)	2.500 (63,5)	.550 (14,0)
20A	See 1700DD20 for Case Dimensions					

F1700BB (3, 6 and 10Amp) Dimensions

Amps	A	B	C	D	E
3A	2.750 (69,8)	1.750 (44,4)	1.125 (28,5)	2.375 (60,3)	2.000 (50,8)
6A	3.312 (84,1)	2.000 (50,8)	1.125 (28,5)	2.940 (74,7)	2.500 (63,5)
10A	3.312 (84,1)	2.000 (50,8)	1.500 (38,1)	2.940 (74,7)	2.500 (63,5)



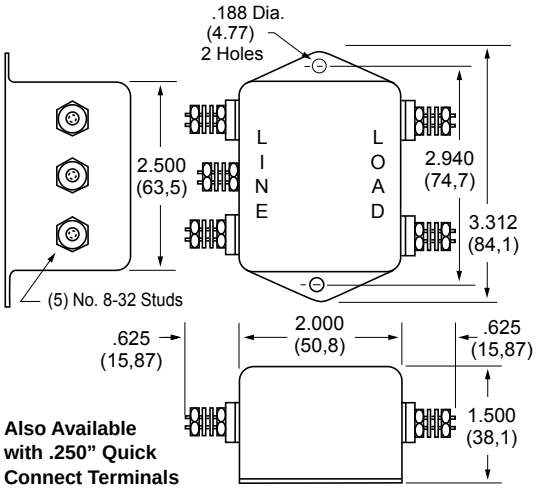
F1700CA (3, 6 and 10Amp) Dimensions



Refer to Page 40 for Standard Mounting Cutouts

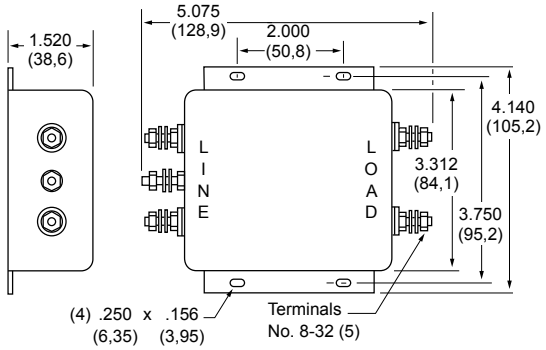
Amps	A	B	C	D	E
3A	2.000 (50,8)	2.000 (50,8)	1.500 (38,1)	.550 (14,0)	.565 (14,3)
6A	2.500 (63,5)	2.000 (50,8)	1.500 (38,1)	.550 (14,0)	.565 (14,3)
10A	2.500 (63,5)	2.000 (50,8)	1.500 (38,1)	.550 (14,0)	.565 (14,3)

F1700DD20 (20Amp) Dimensions

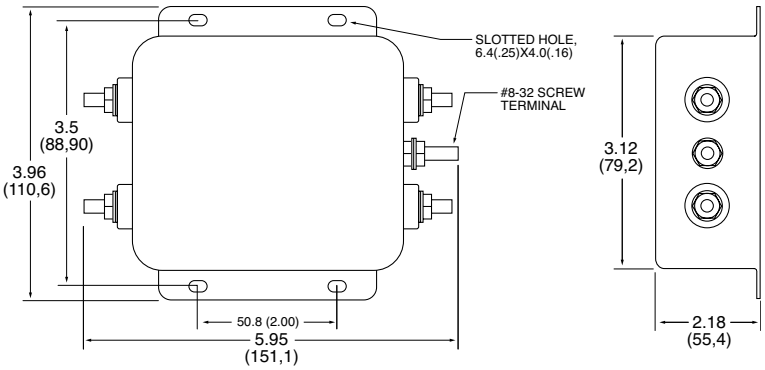


Also Available with .250" Quick Connect Terminals

F1700DD30 (30Amp) Dimensions



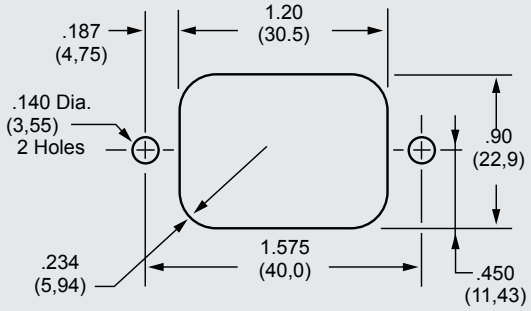
F1799DD (30Amp) Dimensions



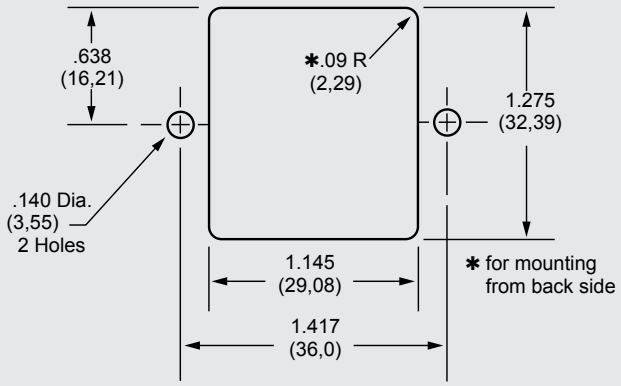
Dimensions are in inches and millimeters unless otherwise specified.
Values in parentheses are metric equivalents.

Standard Mounting Cutouts

F1200CA, F1300CA, F1400CA, F1500CA, F1600CA, F1700CA



F1500FA, F1600FA,



How to Order

The Curtis part numbering system is made up of four elements. Each element denotes a specific requirement (mechanical or electrical) which, when properly sequenced, fully identifies the required catalog filter. As shown, the first five alpha/numeric characters denote the series type; the sixth character (alpha) denotes the type of line termination; the seventh character (alpha) denotes the type of load termination; the last two characters (numeric) denote the current rating.

Compose your part number as follows: Select the series required, add two alpha character for the line and load termination, followed by two numeric characters for the required current rating. For example, F1100AB06 completely identifies an F1100 series filter with quick connects on line side and wire leads on load side, with a 6-amp rating.

F1100 X X X

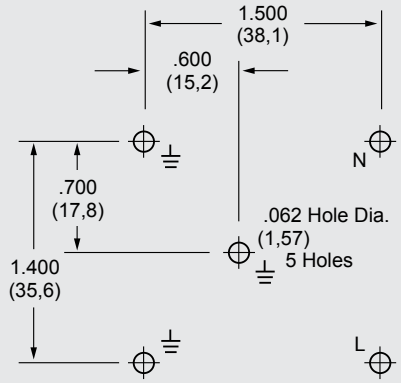
SERIES
PE = Power Entry
PM = Medical Power Entry

LINE TERMINATION
A = Quick Connects
B = Wire Leads
C = IEC Connector
D = Screw Terminals (20 & 30 amp only)
F = Fused IEC
P = Printed Circuit Pins
W = Dual Fused IEC
J = Switched IEC

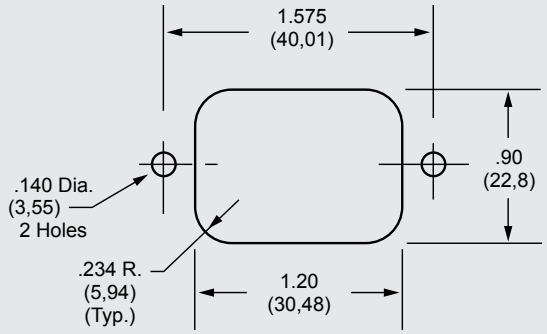
LOAD TERMINATION
A = Quick Connects
B = Wire Leads
D = Screw Terminals (20 & 30 amp only)
P = Printed Circuit Pins
S = Solder Tab

CURRENT RATING
01 = 1 Amp
03 = 3 Amps
06 = 6 Amps
10 = 10 Amps
15 = 15 Amps
20 = 20 Amps
30 = 30 Amps

F1300CP, F1600CP



F5500/5600/5700 SERIES



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