

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



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: $9 \times 10^9 \Omega$ 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

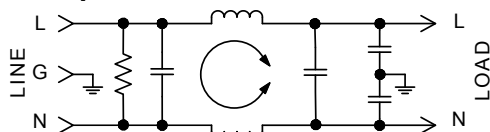
Maximum Leakage Current:

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

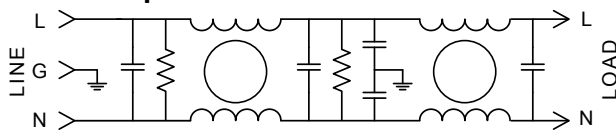
Agency Approvals:



F1700 Simplified Schematic



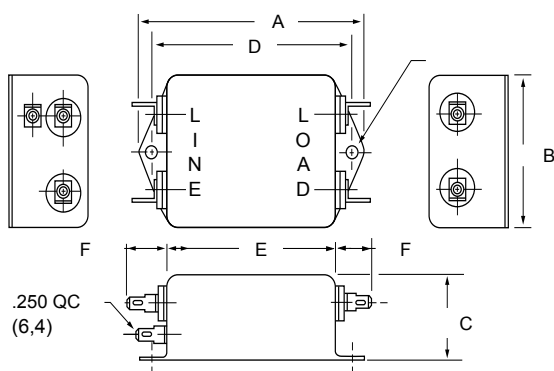
F1799 Simplified Schematic



Nominal Current Rating	Part Number	Termination Line/Load	MODE	MINIMUM INSERTION LOSS - dB (50 ohm Circuit)					
				.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.

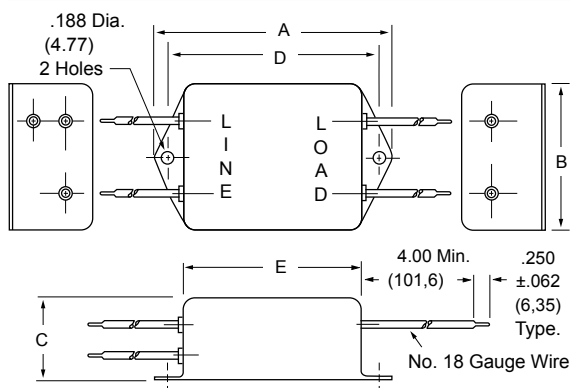
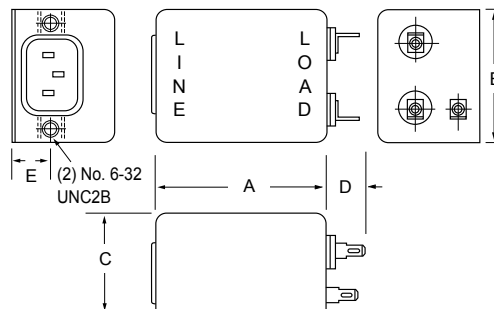


F1700AA, 1710, 1720, 1740 (3, 6 and 10Amp) Dimensions

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					

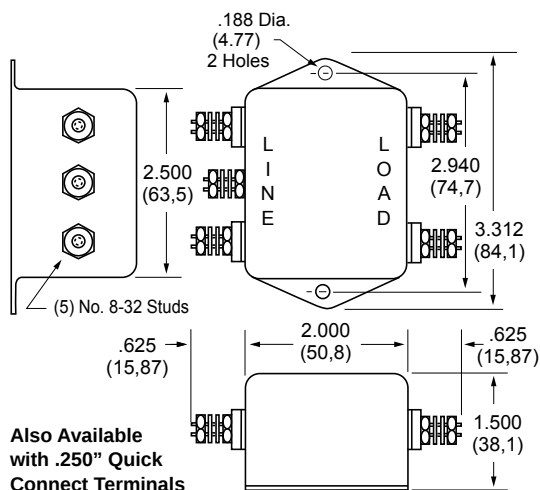
F1700BB (3, 6 and 10Amp) Dimensions

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)

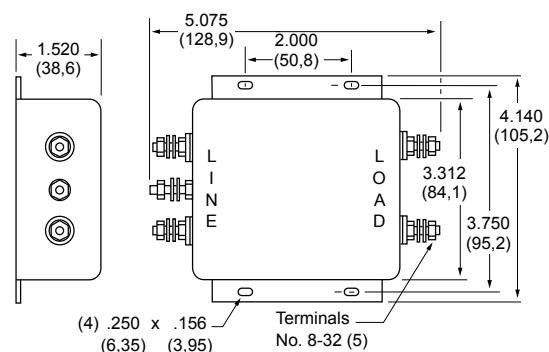
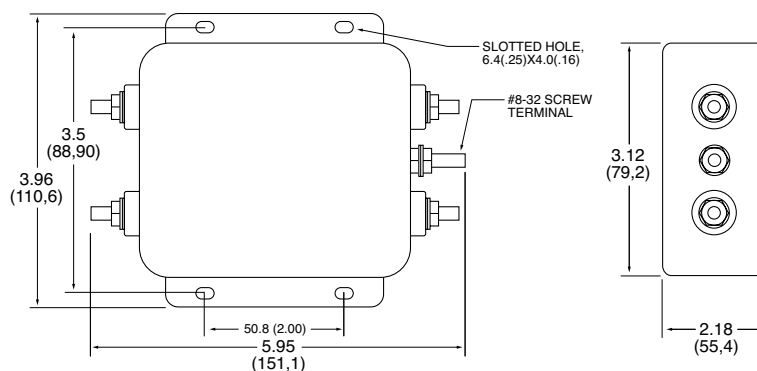
**F1700CA (3, 6 and 10Amp) Dimensions**

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)

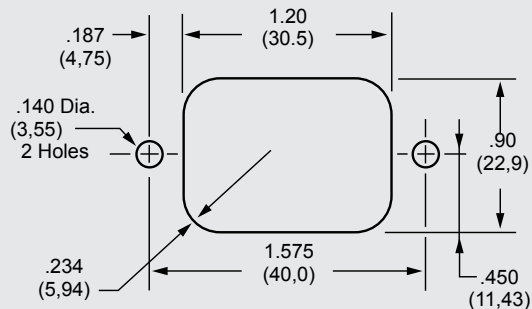
F1700DD20 (20Amp) Dimensions

Also Available
with .250" Quick
Connect Terminals

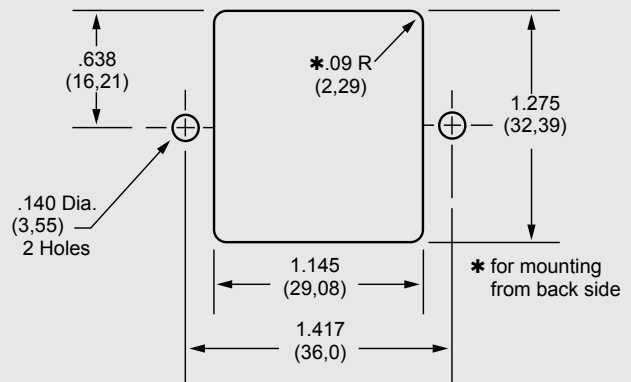
F1700DD30 (30Amp) Dimensions**F1799DD (30Amp) Dimensions**

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

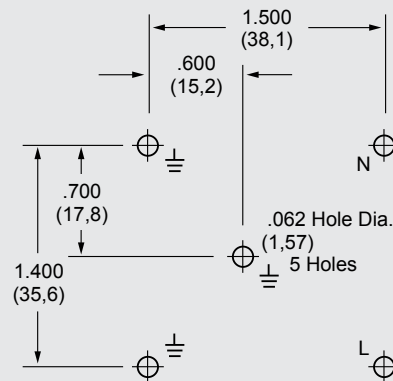
SERIES
PE = Power Entry
PM = Medical Power Entry

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

