

Three Phase Filters

Residential / Light industrial environments

F.LL.D3 series – SN/SH type

High performance slim design

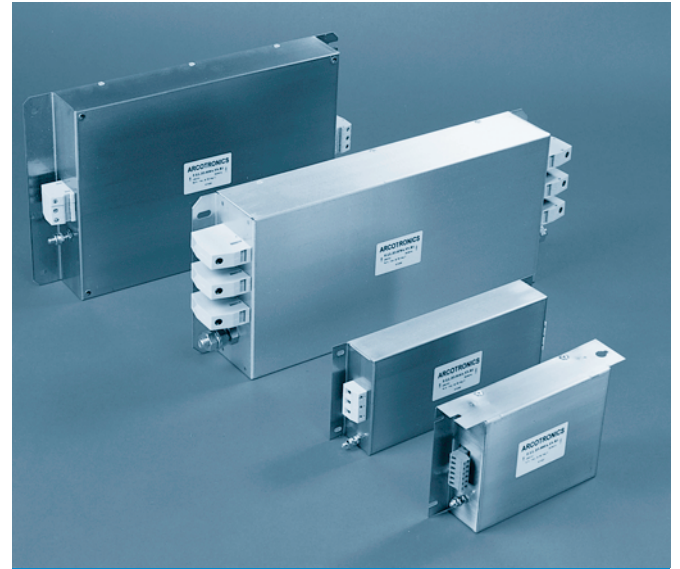
This range of three phase filters offer a state-of-the-art solution for the suppression of inverters and power drive systems. The multistage circuitry helps to maintain very high performance across a broad frequency range. In most installations, motor cable lengths of up to 20m can be achieved without additional output filtering. Available in 480Vac or 520Vac versions with terminal block connections on all models or optional threaded terminals on the 16 Amp to 100 Amp variants inclusive.

- Current ratings from 8A to 300A
- High attenuation performance
- Choice of voltage ratings for worldwide applications
- Safety block or threaded terminations
- Low earth leakage versions
- 3 phase + neutral designs available

Mechanical specifications

Manufacture: metal enclosure, electrical components sealed with self-extinguishing resin.

Connections: phases: threaded with nuts plus washers 16A to 100A inclusive.
terminal blocks all current ratings.
earth: threaded with nuts plus washers



Electrical specifications

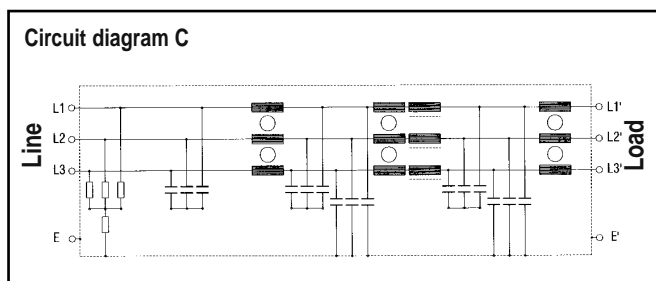
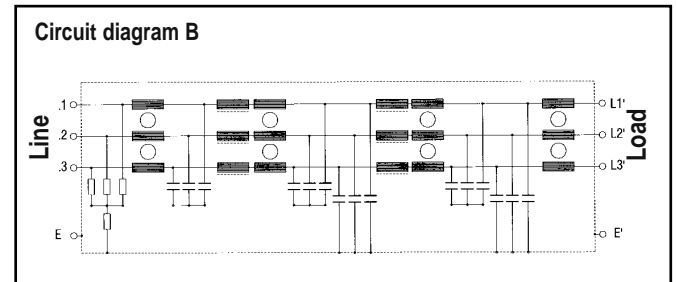
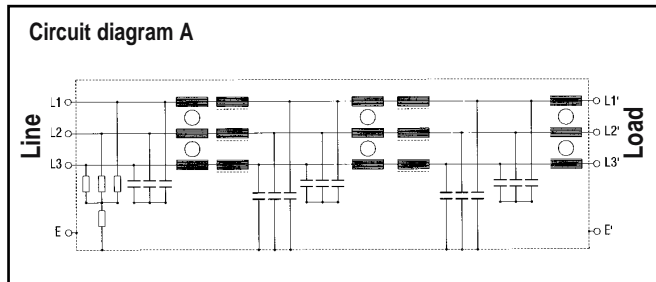
Rated voltage (V_R): SN: 480Vac 50/60Hz
SH: 520Vac 50/60Hz

Rated current (I_R): referred to room temperature = 40°C

Leakage current (I_L): at 440V / $\sqrt{3}$, 50Hz, max value

Voltage test (2s): lines to ground 'SN'-3200Vdc
'SH'-3470Vdc
line to line 1700Vdc

Climatic category: HPF (25/085/21);
temperature range: -25°C to +85°C



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Filter range

Code	I _r (A)	Δ I _L (mA)	C _x (μF)	C _y (nF)	L – per phase (mH)	R (MΩ)	L _R (mΩ)	Circ' diag'
F.LL.D3.008A.SN.R1	8	77	9x1	6x110	0.5	3x0.33 + 1 x 0.62	< 35	A
F.LL.D3.016A.S - -1	16	77	9x1	6x110	0.5	3x0.33 + 1 x 0.62	< 15	A
F.LL.D3.030A.S - -1	30	77	9x1	6x110	0.5	3x0.33 + 1 x 0.62	< 15	A
F.LL.D3.036A.S - -1	30	77	9x1	6x110	0.5	3x0.33 + 1 x 0.62	< 15	A
F.LL.D3.050A.S - -1	50	77	9x1	6x110	0.5	3x0.33 + 1 x 0.62	< 9	A
F.LL.D3.070A.S - -1	70	77	9x2.2	6x110	0.27	3x0.33 + 1 x 0.62	< 4	B
F.LL.D3.100A.S - -1	100	77	9x2.2	6x110	0.27	3x0.33 + 1 x 0.62	< 3	B
F.LL.D3.140A.S - -1	140	77	3x1.5 + 6x3.7	6x110	0.27	3x0.33 + 1 x 0.62	< 1	C
F.LL.D3.200A.S - -1	200	77	3x2.2 + 6x4.4	6x110	0.27	3x0.33 + 1 x 0.62	< 0.7	C
F.LL.D3.300A.S - -1-*	300	235	9x2.2	6x340	0.27	3x0.33 + 1 x 0.62	< 0.5	B

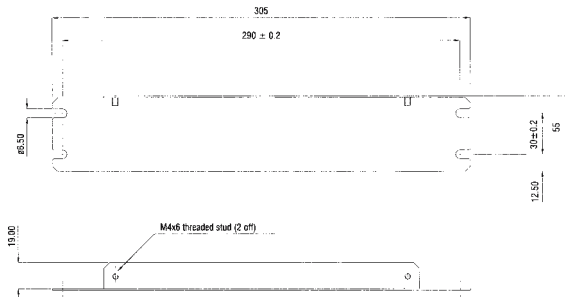
6 = low earth leakage design available, details on request

I = Threaded terminals ≤ 100A
R = Terminal blocks - all ratings

N = 480Vac
H = 520Vac

Δ = See leakage current note on page two

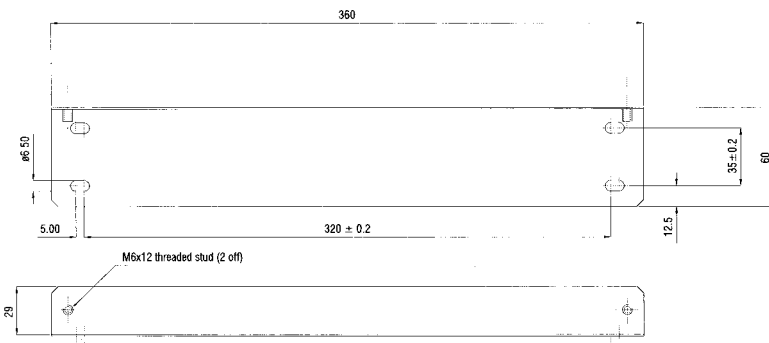
16A SN.I1/R1



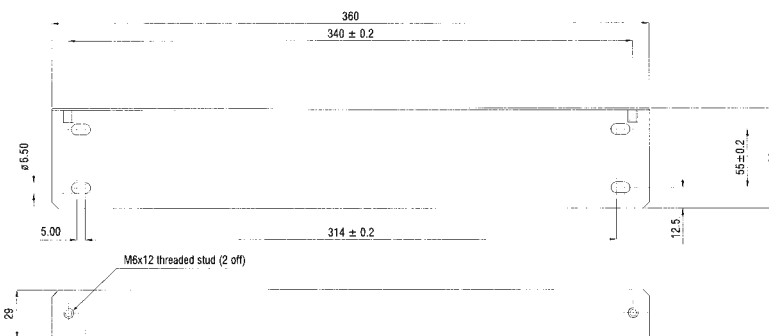
Adapter Brackets

The adapter brackets are designed to allow mounting of the 16 - 50A products in a vertical plane in order to minimise on space occupied within the control panel. The 8A product has this option built into the standard enclosure design.

30 - 36A SN.I1/R1



50A SN.I1/R1



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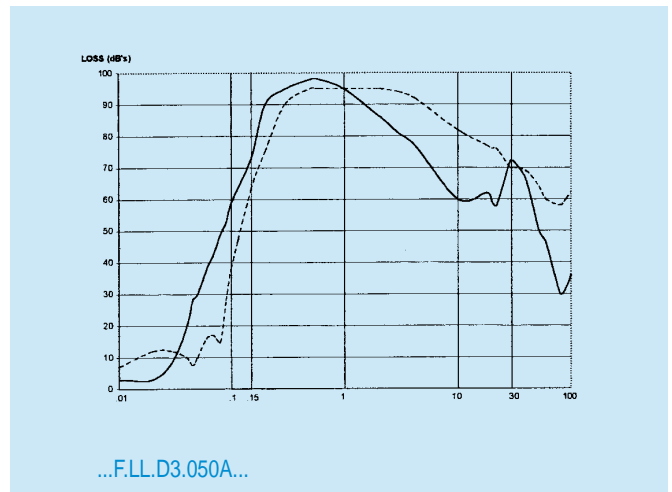
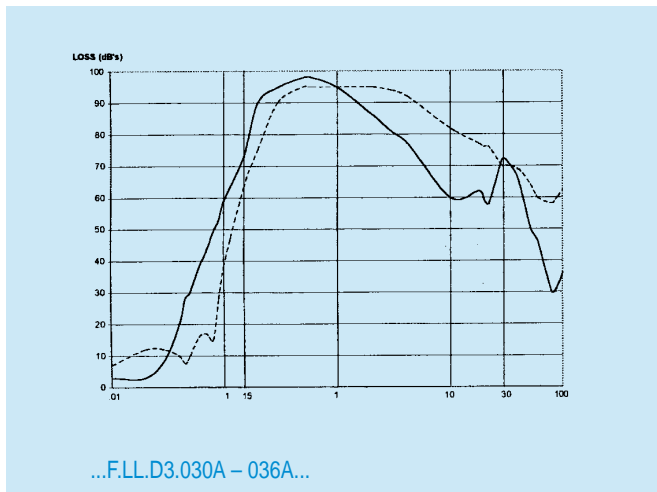
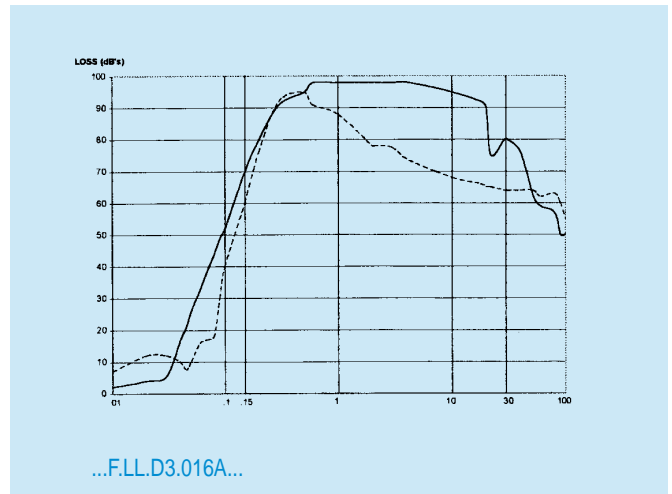
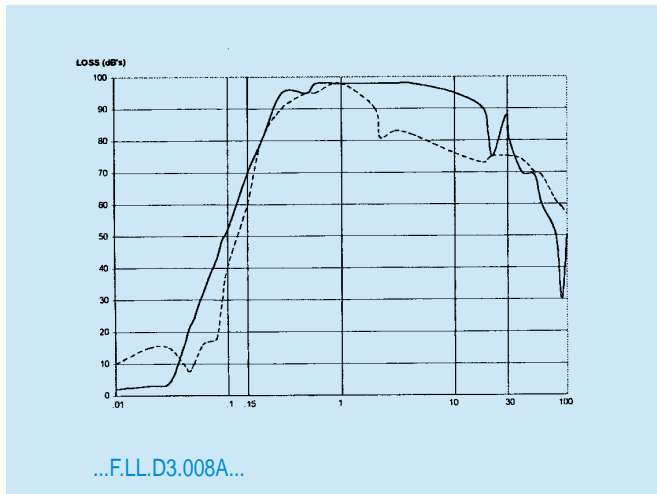
Dimensions

Code	A	B	C	D	E	F	G	H	J	K	L	M	Case	Line Terminal	Earth Terminal
F.LL.D3.008A.SN.R1	137	112	38	163	86	24	-	-	177	21	-	-	R	4mm ²	M4
F.LL.D3.016A.S-.I1	199	98	38	213	80	6	-	24	230	18	-	-	S	M4	M4
F.LL.D3.016A.S-.R1	199	98	38	213	80	6	-	10	230	18	-	-	S	4mm ²	M4
F.LL.D3.030A.S-.I1	300	210	39	340	180	-	30	60	360	-	-	-	T	M5	M5
F.LL.D3.030A.S-.R1	300	210	39	340	180	-	30	20	360	-	-	-	T	10mm ²	M5
F.LL.D3.036A.S-.I1	300	210	39	340	180	-	30	60	360	-	-	-	T	M5	M5
F.LL.D3.036A.S-.R1	300	210	39	340	180	-	30	20	360	-	-	-	T	10mm ²	M5
F.LL.D3.050A.S-.I1	300	210	50	340	180	-	30	60	360	-	-	-	T	M6	M6
F.LL.D3.050A.S-.R1	300	210	50	340	180	-	30	20	360	-	-	-	T	10mm ²	M6
F.LL.D3.070A.S-.I1	350	170	65	375	130	-	35	30	420	32.5	-	400	U	M8	M8
F.LL.D3.070A.S-.R1	350	170	65	375	130	-	36	32	436	32.5	-	400	U	25mm ²	M8
F.LL.D3.100A.S-.I1	350	170	65	375	130	-	35	30	420	32.5	-	400	U	M8	M8
F.LL.D3.100A.S-.R1	350	170	65	375	130	-	36	32	436	32.5	-	400	U	50mm ²	M10
F.LL.D3.140A.S-.R1	350	170	90	375	130	-	36	32	436	45	-	400	U	50mm ²	M10
F.LL.D3.200A.S-.R1	450	220	153	500	180	-	36	32	550	75	-	550	U	95mm ²	M10
F.LL.D3.300A.S-.R1	450	260	153	660	220	-	28	31	742	103	47	700	V	150mm ²	M10

I = Threaded terminals ≤ 110A
 R = Terminal blocks - all ratings
 N = 480Vac
 H = 520Vac

Insertion loss (Typical)

--- Symmetrical (line to line) — Asymmetrical (line to ground)



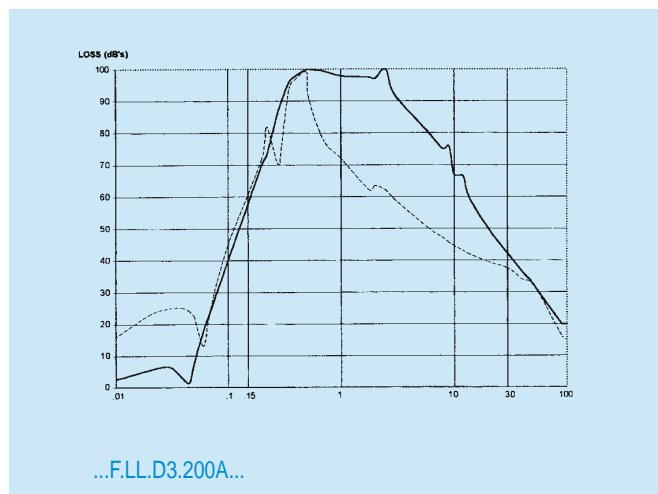
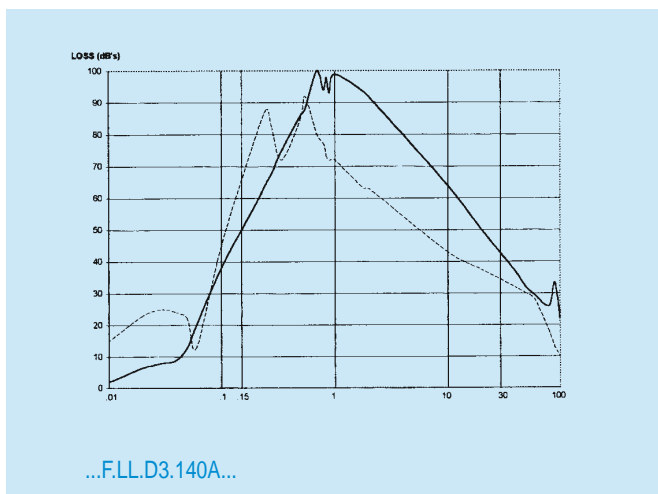
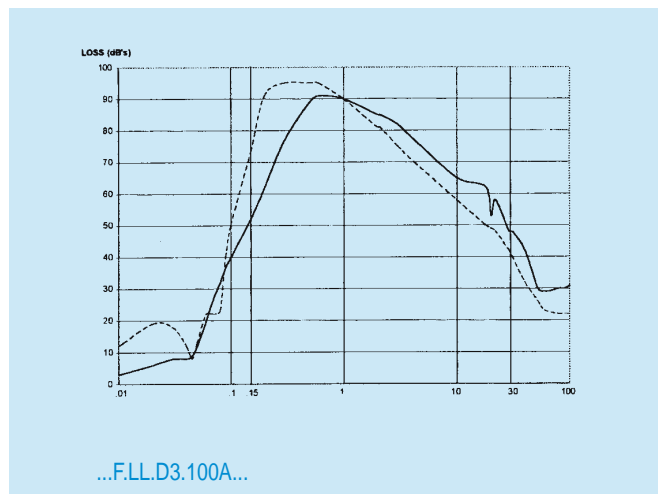
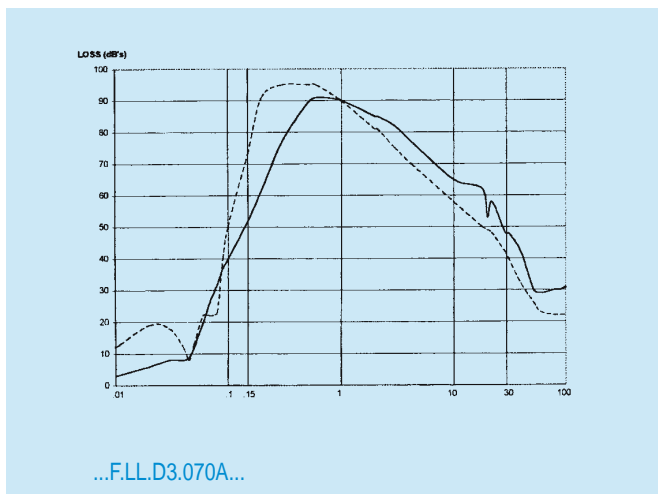
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Note: 300A performance data available on request