

# Three Phase Filters

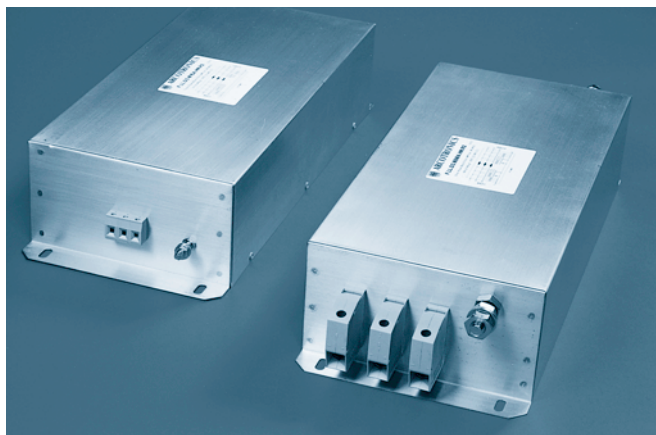
Industrial environments

F.LL.D3 series – HN.R2 type

## High performance, high voltage, general applications

Offered as an extension to the standard AN/HN.\*1 series, these products are rated at 600Vac, whilst still maintaining performance characteristics required for industrial frequency inverter and motor drive applications.

- Current ratings from 8A to 450A
- High voltage design - 600Vac
- High attenuation performance
- Safety terminal blocks for easy installation
- 3 phase + neutral designs available



## Mechanical specifications

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

Connections: Phases: terminal blocks – all current ratings.

Earth: threaded with nuts plus washer:

8A to 50A = M6; 80A to 280A = M10; 450A = M16

## Electrical specifications

Rated voltage ( $V_R$ ): 600Vac, 50/60Hz at 40°C

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

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

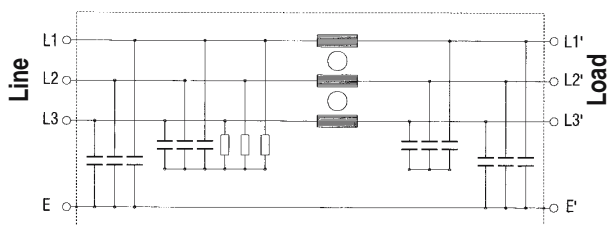
Voltage test ( $2s$ ): line to ground 3470Vdc

line to line 1700Vdc

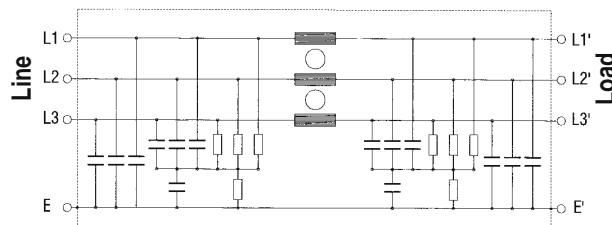
Climatic category: HPF (25/085/21);

temperature range: -25°C to +85°C

Circuit diagram A



Circuit diagram B



## Filter range

Code	$I_R$ (A)	$\Delta I_L$ (mA)	Cx ( $\mu F$ )	Cy (nF)	L (mH)	R (M $\Omega$ )	$L_R$ (m $\Omega$ )	Circ diag
F.LL.D3.008A.HN.R2	8	24	3x2.2 + 3x1.0	3x10 + 3x47	3x7.6	3 x 1	< 38	A
F.LL.D3.016A.HN.R2	16	24	3x4.4 + 3x2.2	3x10 + 3x47	3x5.2	3 x 1	< 10	A
F.LL.D3.025A.HN.R2	25	275	3x4.4 + 3x4.4	3x10 + 2x1 $\mu F$ + 3x94	3x2.2	6 x 1.5 + 2 x 0.68	< 4.3	B
F.LL.D3.036A.HN.R2	36	275	3x4.4 + 3x4.4	3x10 + 2x1 $\mu F$ + 3x94	3x1.3	6 x 1.5 + 2 x 0.68	< 2.4	B
F.LL.D3.050A.HN.R2	50	275	3x4.4 + 3x4.4	3x10 + 2x1 $\mu F$ + 3x94	3x0.8	6 x 1.5 + 2 x 0.68	< 1.5	B
F.LL.D3.080A.HN.R2	80	315	3x6.7 + 3x6.7	3x94 + 2x1 $\mu F$ + 3x94	3x0.9	6 x 1.5 + 2 x 0.68	< 1.2	B
F.LL.D3.110A.HN.R2	110	315	3x6.7 + 3x6.7	3x94 + 2x1 $\mu F$ + 3x94	3x0.5	6 x 1.5 + 2 x 0.68	< 0.7	B
F.LL.D3.180A.HN.R2	180	335	3x5 + 3x5	3x94 + 2x1 $\mu F$ + 3x94	3x0.5	6 x 1.5 + 2 x 0.68	< 0.5	B
F.LL.D3.280A.HN.R2	280	470	3x10 + 3x10	3x282 + 2x1 $\mu F$ + 3x282	3x0.31	6 x 1.5 + 2 x 0.68	< 0.3	B
F.LL.D3.450A.HN.R2*	450	470	3x10 + 3x10	3x282 + 2x1 $\mu F$ + 3x282	3x0.075	6 x 1.5 + 2 x 0.68	< 0.25	B

$\Delta$  = See leakage current note on page two

Approvals 1283 22.2 N°8

**KEMET**  
CHARGED

Except model marked\*

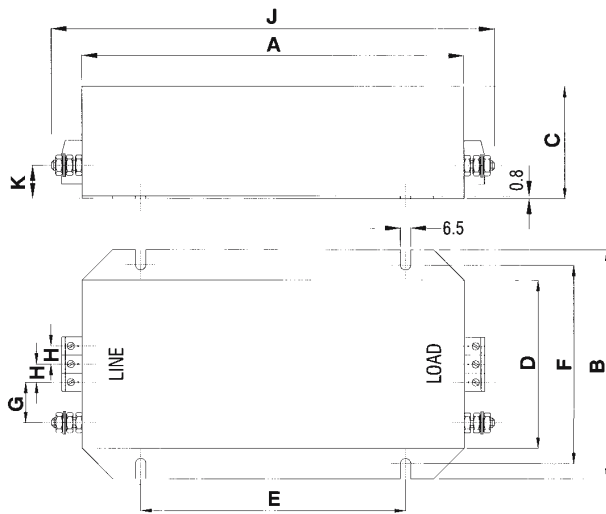
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Industrial environments

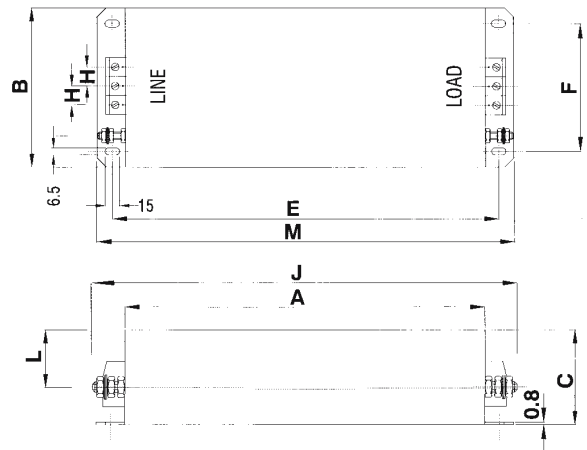
F.LL.D3 series – HN.R2 type

## Dimensions (mm) and connections

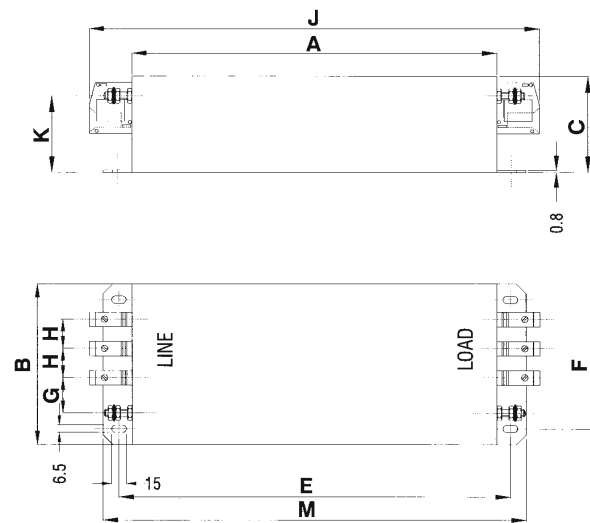
Case R ...F.LL.D3...008A...



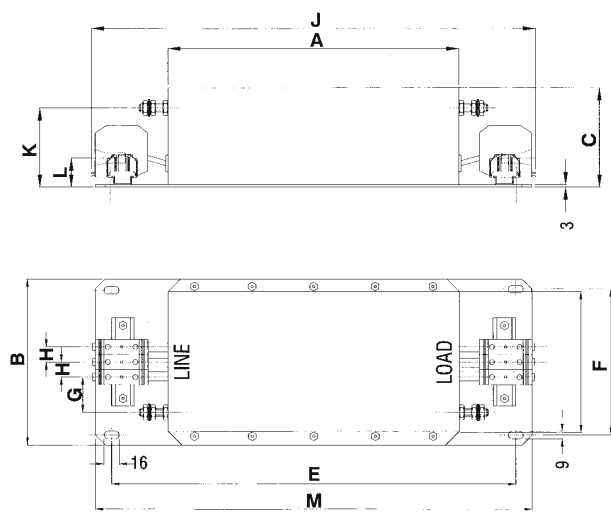
Case S ...F.LL.D3...016A...



Case T ...F.LL.D3...025 – 110A...



Case U ...F.LL.D3...180 – 450A...



## Dimensions

Code	A	B	C	D	E	F	G	H	J	K	L	M	Case	Terminal Size
F.LL.D3.008A.HN.R2	200	150	65	120	115	135	31	10	230	17	-	-	R	4mm <sup>2</sup>
F.LL.D3.016A.HN.R2	350	170	90	-	375	130	-	10	380	-	60	400	S	4mm <sup>2</sup>
F.LL.D3.025A.HN.R2	350	170	90	-	375	130	35	30	400	70	-	400	T	10mm <sup>2</sup>
F.LL.D3.036A.HN.R2	350	170	90	-	375	130	35	30	400	70	-	400	T	10mm <sup>2</sup>
F.LL.D3.050A.HN.R2	350	170	90	-	375	130	35	30	400	70	-	400	T	10mm <sup>2</sup>
F.LL.D3.080A.HN.R2	350	170	90	-	375	130	35	30	427	70	-	400	T	25mm <sup>2</sup>
F.LL.D3.110A.HN.R2	350	170	90	-	375	130	36	32	436	70	-	400	T	50mm <sup>2</sup>
F.LL.D3.180A.HN.R2	300	180	128	-	470	156	50	25	537	88	38	510	U	95mm <sup>2</sup>
F.LL.D3.280A.HN.R2	450	260	153	-	660	220	64	31	702	103	47	700	U	150mm <sup>2</sup>
F.LL.D3.450A.HN.R2	450	260	153	-	660	220	64	31	702	103	47	700	U	240mm <sup>2</sup>

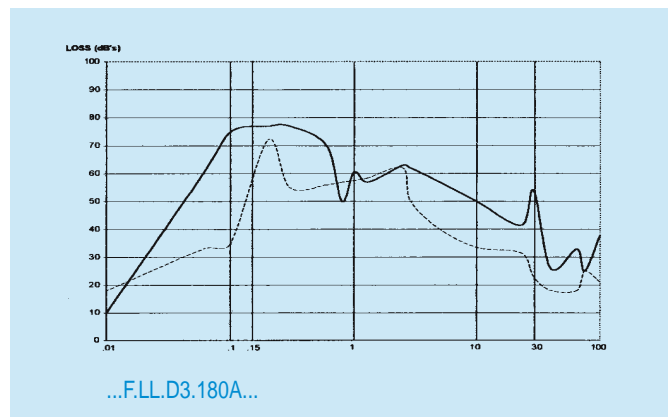
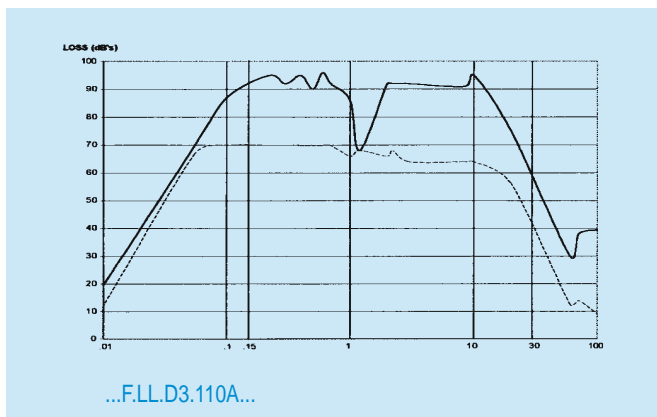
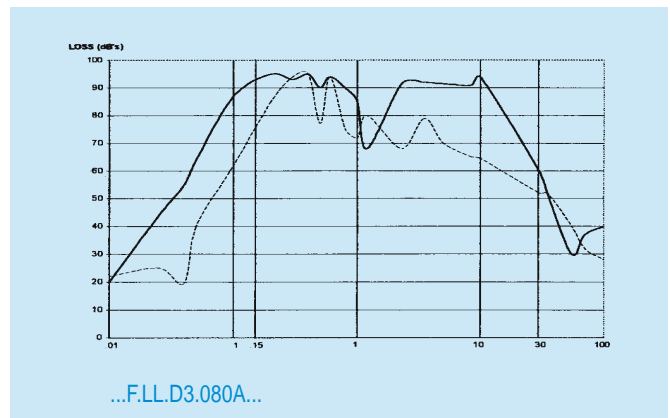
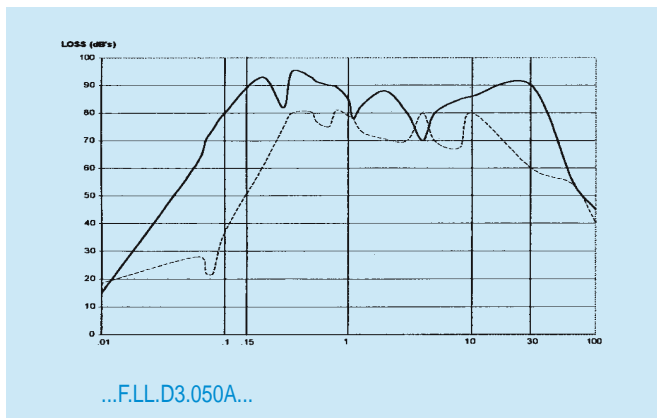
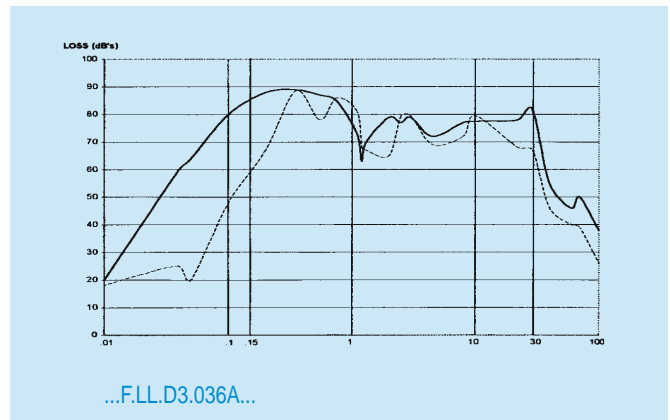
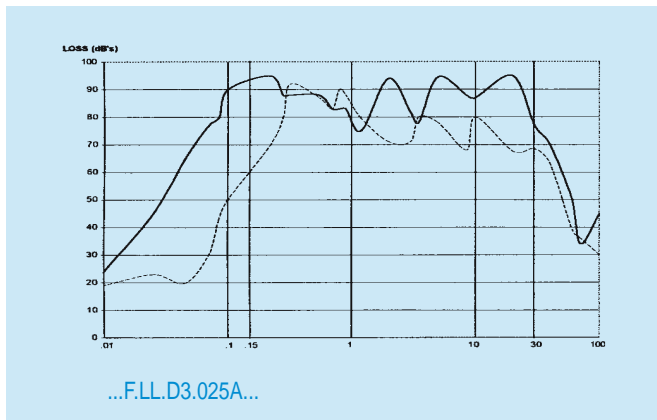
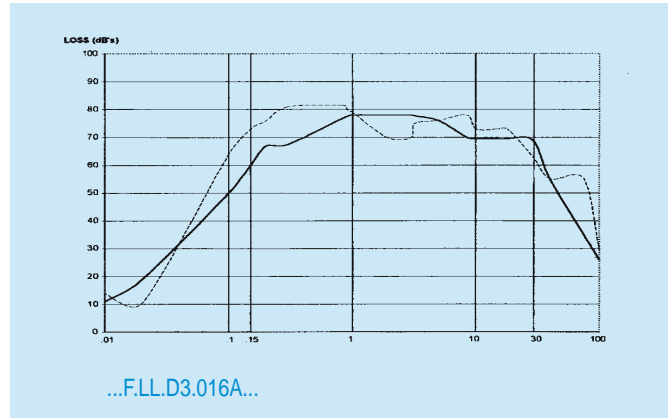
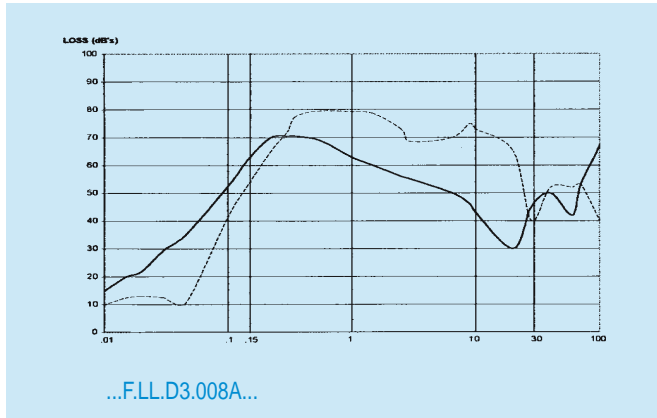
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## Insertion loss (Typical)

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



Note: 280A and 450A performance data available on request