

Motor Drive Filters

F.LL.D3 series - BN type

Three phase, compact, bookend design

This wide range of compact, lightweight, three phase filters offer a very economical design solution for the suppression of inverters and powerdrive applications.

A high level of performance from 150Khz to 30Mhz is achieved. The filters operate very effectively on long motor cable runs.

- Current ratings from 7A to 130A
- High attenuation performance
- Space saving design
- Excellent saturation resistance
- Lightweight construction
- Screw terminals for quick and easy installation

Mechanical Specifications

Manufacture: aluminium enclosure

Connections: strip terminal block -

6mm² solid wire, 4mm² flex wire - 7A, 16A

16mm² solid wire, 10mm² flex wire - 30A, 42A

25mm² solid wire, 16mm² flex wire - 55A, 75A

safety terminal block -

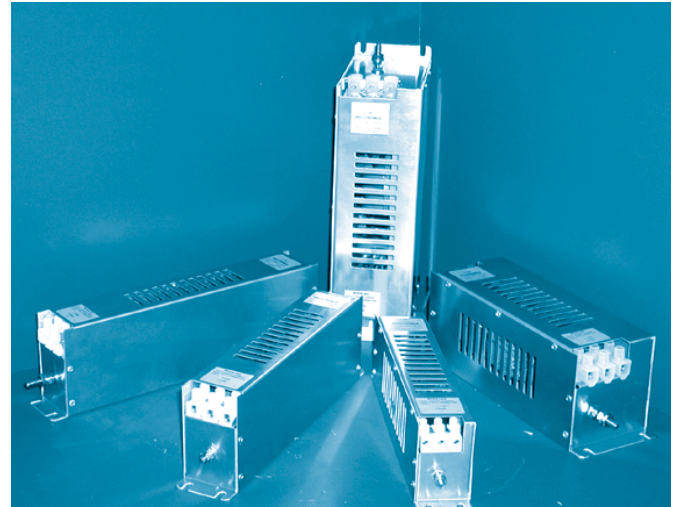
50mm² solid wire + flex wire - 100A, 130A

Dimensions

Code	A	B	C	D	E	F	G	H	I
F.LL.D3.007A.BN.R1	190	70	40	160	180	20	4.5	2	M5
F.LL.D3.016A.BN.R1	250	70	45	220	235	25	5.4	2	M5
F.LL.D3.030A.BN.R1	270	85	50	240	255	30	5.4	2	M5
F.LL.D3.042A.BN.R1	310	85	50	280	295	30	5.4	2	M6
F.LL.D3.055A.BN.R1	250	90	85	220	235	60	5.4	2	M6
F.LL.D3.075A.BN.R1	270	135	80	240	255	60	6.5	3	M6
F.LL.D3.100A.BN.R1	270	150	90	240	255	65	6.5	3	M10
F.LL.D3.130A.BN.R1	270	150	90	240	255	65	6.5	3	M10

Filter Range

Code	I _R (A)	L (mH)	C _{X1} (μF)	C _{X2} (μF)	C _Y (μF)	R (MΩ)
F.LL.D3.007A.BN.R1	7 (7.7)	3x2	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.016A.BN.R1	16 (17.5)	3x1.9	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.030A.BN.R1	30 (32.9)	3x1.4	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.042A.BN.R1	42 (46)	3x1.1	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.055A.BN.R1	55 (60.2)	3x0.7	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.075A.BN.R1	75 (82.2)	3x0.8	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.100A.BN.R1	100 (109.5)	3x0.7	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M
F.LL.D3.130A.BN.R1	130 (142.4)	3x0.5	3x5.6	3x3.3	1x3.3	3x1M + 1x0.66M



Electrical Specifications

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

Rated current (I_R): referred to 50°C (40°C)

Leakage current (I_l): Normal condition: < 3mA

Fault condition: 103mA (only one phase remaining)

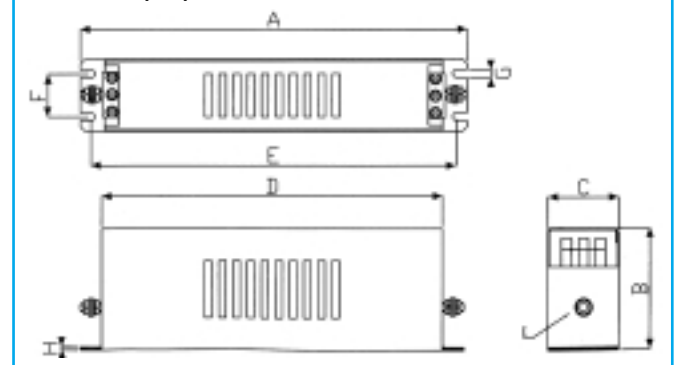
Voltage test (2s.): line to ground 3000 Vdc

line to line 1700 Vdc

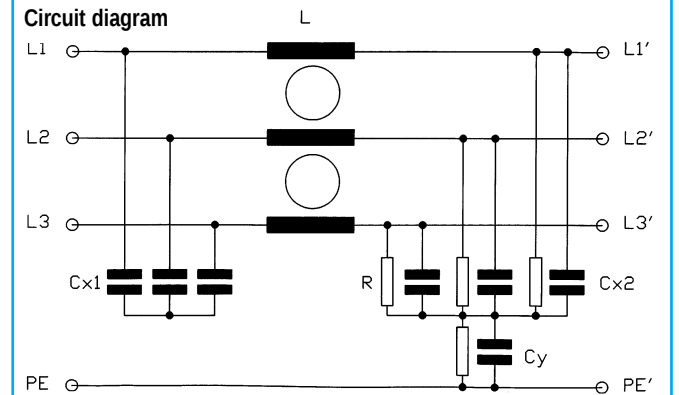
Climatic category: HMF (25/100/21):

Temperature range: -25°C to +100°C

Dimensions (mm) and connections



Circuit diagram

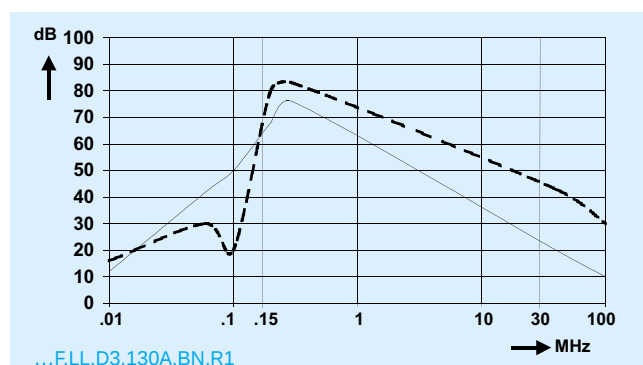
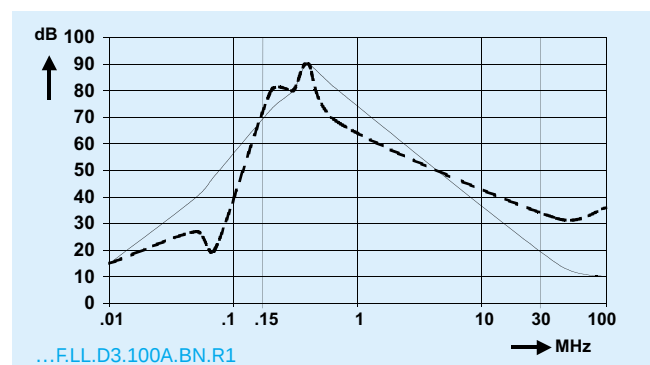
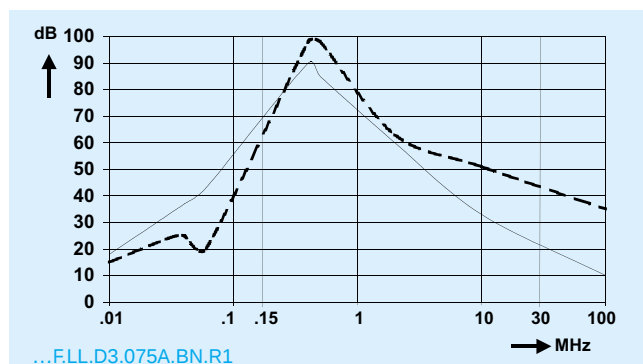
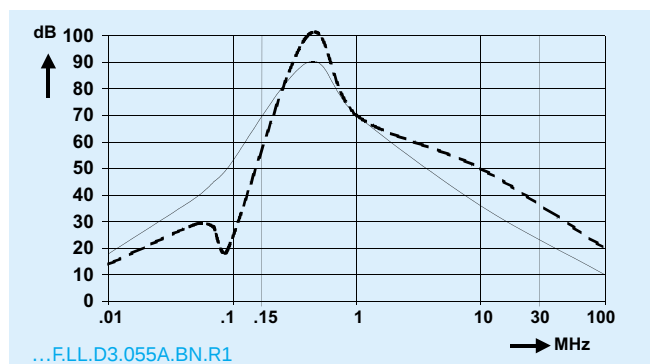
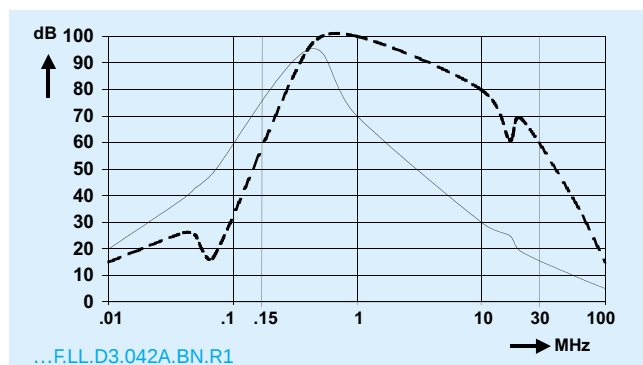
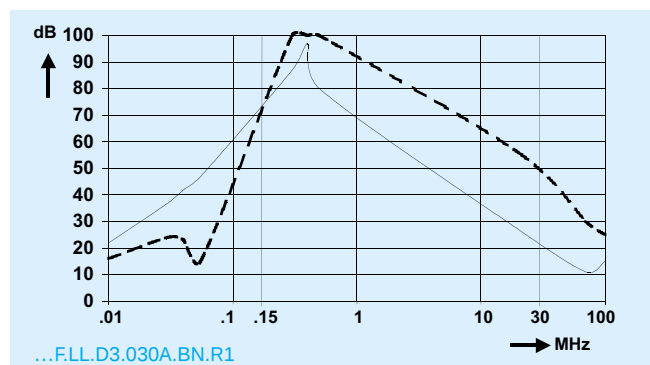
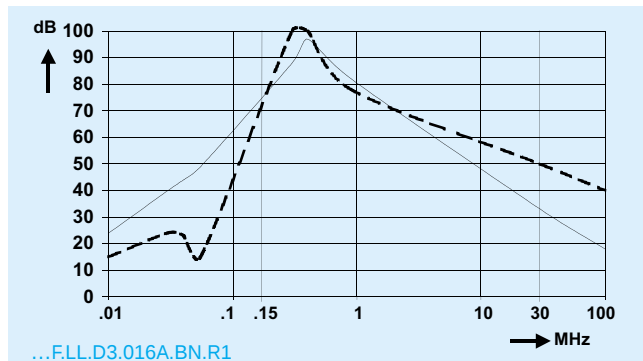
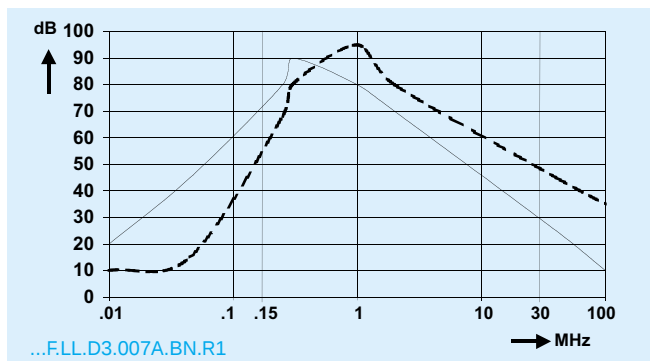


Approvals In accordance with UL 1283, CSA 22.2 No.8-1986, EN133200

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Insertion loss (typical): — Asymmetrical (line to ground) - - - Symmetrical (line to line)



Worldwide Sales Offices

FRANCE	Tel: +33 1 69536400	info@arcotronics.fr
GERMANY	Tel: +49 911 756184	roggenbuck@arcotronics.de
GREAT BRITAIN	Tel: +44 (0)1327 351515	twc.sales@arcouk.com
ITALY	Tel: +39 051 939111	arcoven@arcotronics.com
JAPAN	Tel: +81 3 34428151	s-ochiai@nissei-denki.co.jp
USA	Tel: +1 631 5639568	arcotronics@usa.net

HEAD OFFICE & MANUFACTURING

ARCOTRONICS LIMITED, Wood Burcote Trading Estate,
 Burcote Road, Towcester, Northants NN12 6LX. UK
 Tel: +44 (0)1327 351515
 Fax: +44 (0)1327 353761
 Web: www.arcotronics.ltd.uk
 Email: twc.sales@arcouk.com