

1-phase filters FN 2330

Performance EMI filter

SCHAFFNER
safety for electronic systems



- Rated currents from 3 to 20A
- High differential and common-mode attenuation
- Compact housing
- UL-rated materials

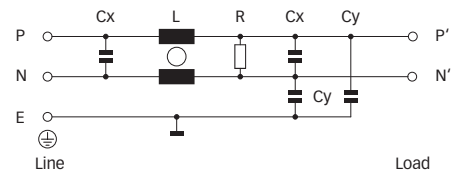
Approvals



Technical specifications

Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	3 to 20A @ 40°C max.
High potential test voltage:	P → E 2000VAC for 2 sec P → N 1100VDC for 2 sec
Temperature range (operation and storage):	-25°C to +100°C (25/100/21)
Flammability corresponding to:	UL 94V-2 or better
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
MTBF @ 40°C/230V (Mil-HB-217F):	1,400,000 hours

Typical electrical schematic







Features and benefits

- FN 2330 filters are designed for easy and fast chassis mounting.
- FN 2330 filters have a perfect performance/size ratio.
- All filters provide a high symmetrical and asymmetrical attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- Multiple terminal connections with wire, faston or screw.
- Custom-specific versions on request.

Typical applications

- Electrical and electronic equipment
- Consumer goods
- Power supplies
- Office automation equipment
- Datacom equipment

Filter selection table

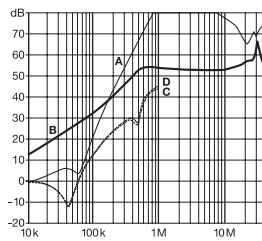
Filter	Rated current @ 40°C (25°C)	Leakage current* @ 230VAC/50Hz	Inductance		Capacitance		Resistance	Input/Output connections	Weight [g]
	[A]	[mA]	L [mH]	L1 [μH]	Cx [μF]	Cy [nF]	R [MΩ]		
FN 2330Y-3-07	3 (3.35)	0.95	7.3		0.33	5.5	1	 -07	170
FN 2330Y-10-06	10 (11.2)	0.95	7.3		0.33	5.5	1	 -06	420
FN 2330X-20-10	20 (22.4)	0.69	6		0.33	4	1	 -10	500
FN 2330H-20-10	20 (22.4)	1.72	6		0.33	10	1	 -10	500

* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

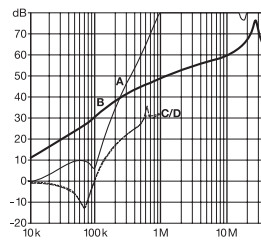
Typical filter attenuation

Per CISPR 17; A = 50Ω/50Ω sym; B = 50Ω/50Ω asym; C = 0.1Ω/100Ω sym; D = 100Ω/0.1Ω sym

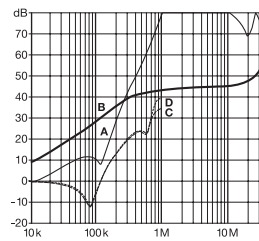
3A types



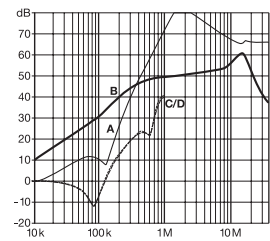
10A types



20A types (X types)

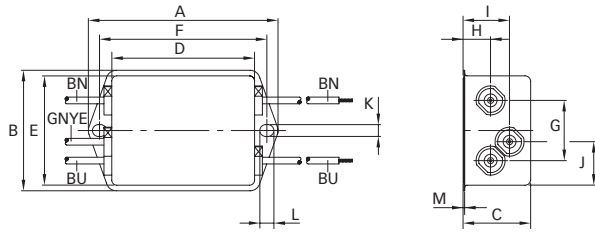


20A types (H types)

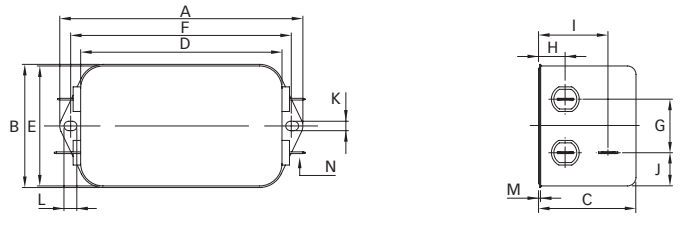


Mechanical data

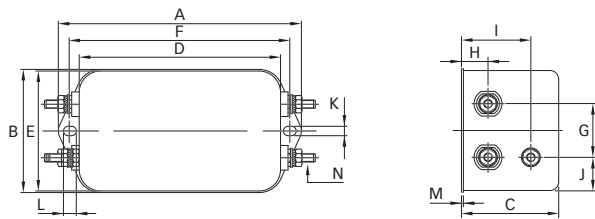
3A types



10A types



20A types



Dimensions

	3A	10A	20A	Tolerances
A	85	113.5 ±1	113.5 ±1	±0.5
B	54	57.5 ±1	57.5 ±1	±0.5
C	30.3	45.5 ±1	45.5 ±1	±0.5
D	64	94 ±1	94 ±1	±0.5
E	49.8	56	56	±0.5
F	75	103.5	103.5	±0.3
G	27	25	25	±0.2
H	12.3	12.4	12.4	±0.5
I	20.8	32.4	32.4	±0.5
J	19.9	15.5	15.5	±0.5
K	5.3	4.4	4.4	
L	6.3	6	6	
M	0.7	1	1	
N		6.3 x 0.8		

Connection style -07

AWG type wire	AWG 20	
Wire length	100	+5

Connection style -10

N	UNC 8-32
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All dimensions in mm; 1 inch = 25.4mm
Tolerances according: ISO 2768 / EN 22768