schaffner
shaping electrical power

Performance EMI Filter



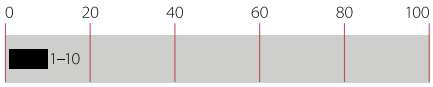
- Rated currents from 1 to 10 A
- Dual-stage filter
- Compact housing
- Integrated earth line choke

Performance indicators

Attenuation performance



Rated current [A]



Approvals

Technical specifications

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Operating frequency	DC to 400 Hz
Rated currents	1 to 10 A @ 40°C max.
High potential test voltage	P –> PE 2000 VAC for 2 sec P –> N 760 VAC for 2 sec
Temperature range (operation and storage)	-25°C to +100°C (25/100/21)
Flammability corresponding to	UL 94 V-2 or better
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
MTBF @ 40°C/230 V (Mil-HB-217F)	970,000 hours

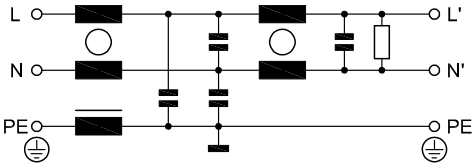
Features and benefits

- FN 343 filters are designed for easy and fast chassis mounting
- Increased attenuation performance based on dual-stage filter design and earth line choke
- All FN 343 single-phase filters provide an excellent attenuation performance, based on chokes with high saturation and excellent thermal behavior
- Faston connection
- Integrated earth line choke
- Compact design
- Custom-specific versions on request

Typical applications

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Power supplies
- Office automation equipment
- Datacom equipment
- Industrial equipment auxiliary supply

Typical electrical schematic



Filter selection table

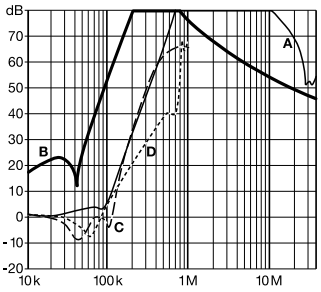
Filter	Rated current @ 40°C (25°C)	Leakage current* @ 230 VAC/50 Hz	Inductance L	Inductance L1	Inductance L2	Capacitance Cx	Capacitance Cy	Resistance R	Input/Output connections	Weight
	[A]	[µA]	[mH]	[mH]	[mH]	[nF]	[nF]	[MΩ]		[g]
FN 343-1-05	1 (1.15)	340	5.9	9.5	0.46	100	2.2	1	-05	160
FN 343-3-05	3 (3.4)	340	1.1	2	0.4	100	2.2	1	-05	160
FN 343-6-05	6 (6.9)	340	0.43	0.77	0.4	100	2.2	1	-05	160
FN 343-10-05	10 (11.5)	340	0.27	0.66	0.4	100	2.2	1	-05	160

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

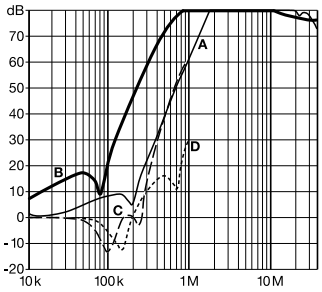
Typical filter attenuation

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

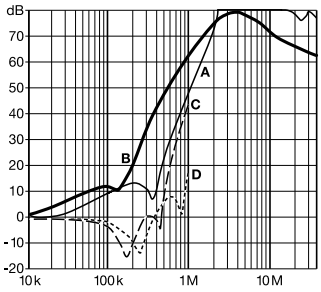
1 A types



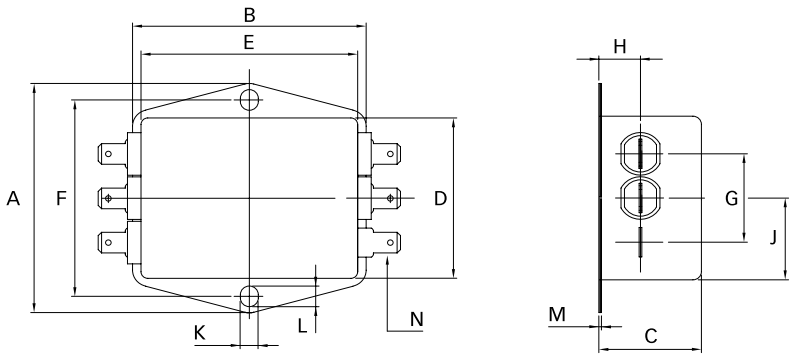
3 A types



6 and 10 A types



Mechanical data



Dimensions

	1 to 10 A	Tolerances
A	70	±0.5
B	69	±0.5
C	30.3	±1
D	50	±1
E	64.8	±1
F	60	±0.2
G	27	±0.5
H	12.3	±0.5
J	25	±0.5
K	5.3	
L	6.3	
M	0.7	
N	6.3 x 0.8	

All dimensions in mm; 1 inch = 25.4 mm
Tolerances according: ISO 2768-m/EN 22768-m

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