

# 1-phase filters FN 2310

## Performance EMI filter

**SCHAFFNER**

energy efficiency and reliability



- Rated currents from 3 to 10A
- High differential and common-mode attenuation
- Compact housing
- UL-rated materials

### Approvals

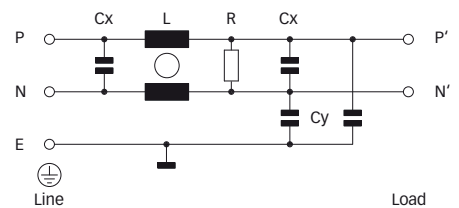


### Technical specifications

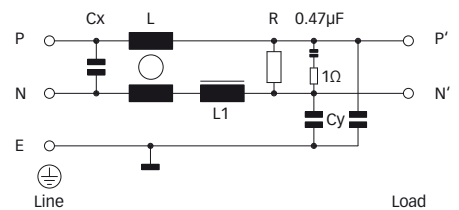
Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	3 to 10A @ 40°C max.
High potential test voltage:	P → E 2000VAC for 2 sec P → N 1100VDC for 2 sec
Temperature range (operation and storage):	-25°C to +100°C (25/100/21)
Flammability corresponding to:	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):	1,700,000 hours

### Typical electrical schematic

#### 3 and 6A types



#### 10A types



### Features and benefits

- FN 2310 filters are designed for easy and fast chassis mounting.
- FN 2310 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.
- Faston terminal connection with additional spade solder possibility.
- Custom-specific versions on request.

### Typical applications

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

Filter selection table

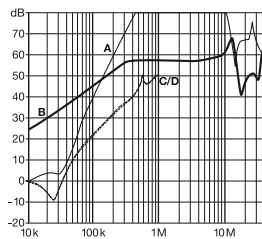
Filter	Rated current @ 40°C (25°C)	Leakage current* @ 230VAC/50Hz	Inductance		Capacitance		Resistance	Input/Output connections	Weight [g]
	[A]	[mA]	L [mH]	L1 [μH]	Cx [μF]	Cy [nF]	R [MΩ]		
FN 2310X-3-06	3 (3.35)	0.69	36.9		0.47	4	1	-06	240
FN 2310X-6-06	6 (6.7)	0.69	19.3		0.47	4	1	-06	250
FN 2310X-10-06	10 (11.2)	1.73	9.6	75	1.5	4	1	-06	470
FN 2310H-10-06	10 (11.2)	0.69	9.6	75	1.5	10	1	-06	470

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

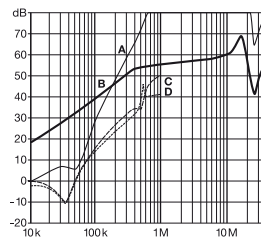
Typical filter attenuation

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

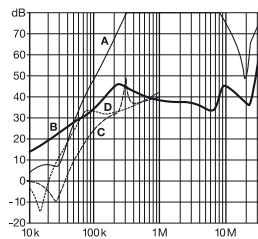
3A types



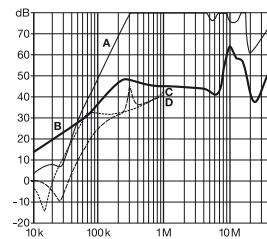
6A types



10A types (X types)

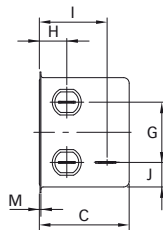
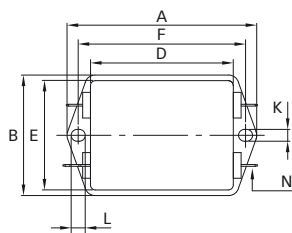


10A types (H types)

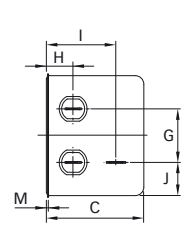
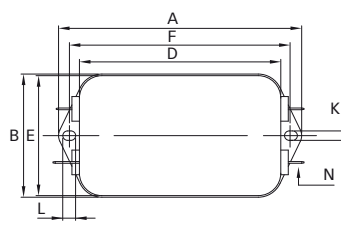


Mechanical data

3 and 6A types



10A types



Dimensions

	3A	6A	10A	Tolerances
A	85	85	113.5	±0.5
B	54	54	57.5	±0.5
C	40.3	40.3	45.5	±0.5
D	64.8	64.8	94	±0.5
E	49.8	49.8	56	±0.5
F	75	75	103.5	±0.3
G	27	27	25	±0.2
H	12.3	12.3	12.4	±0.5
I	29.8	29.8	32.4	±0.5
J	11.4	11.4	15.5	±0.5
K	5.3	5.3	4.4	
L	6.3	6.3	6	
M	0.7	0.7	1	
N	6.3 x 0.8	6.3 x 0.8	6.3 x 0.8	

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