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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# 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

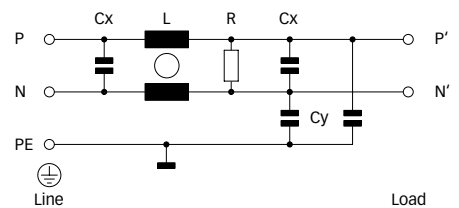


### Technical specifications

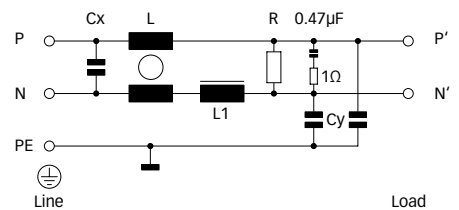
Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	3 to 10A @ 40°C max.
High potential test voltage:	P → PE 2000VAC for 2 sec P → N 1100VDC for 2 sec
Temperature range (operation and storage):	-25°C to +100°C (25/100/21)
Flammability corresponding to: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

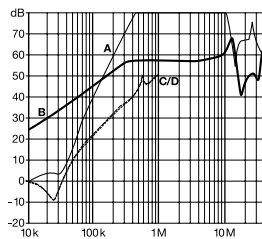
Filter	Rated current @ 40°C (25°C)	Leakage current* @ 230VAC/50Hz	Inductance		Capacitance		Resistance	Input/Output connections	Weight [g]
	[A]	[mA]	L [mH]	L1 [μH]	Cx [μF]	Cy [nF]	R [MΩ]		
FN 2310X-3-06	3 (3.35)	0.69	36.9		0.47	4	1	-06	240
FN 2310X-6-06	6 (6.7)	0.69	19.3		0.47	4	1	-06	250
FN 2310X-10-06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

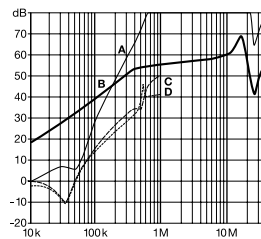
**Typical filter attenuation**

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

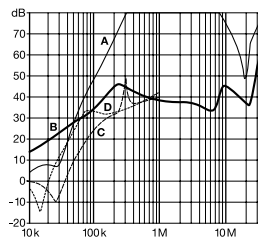
**3A types**



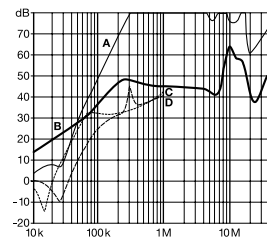
**6A types**



**10A types (X types)**

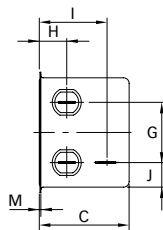
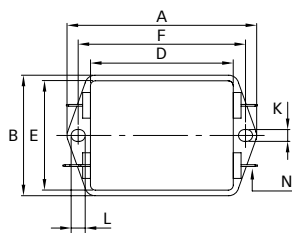


**10A types (H types)**

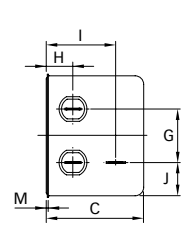
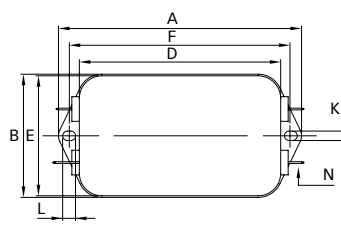


**Mechanical data**

**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



**Headquarters and  
global innovation and  
development center**

**Schaffner Group**  
Nordstrasse 11  
4542 Luterbach  
Switzerland  
T +41 32 681 66 26  
F +41 32 681 66 30  
info@schaffner.ch  
[www.schaffner.com](http://www.schaffner.com)

**Sales and application centers**

**China**  
**Schaffner EMC Ltd. Shanghai**  
Building 11, Lane 1365  
East Kangqiao Road  
Shanghai 201319  
T +86 21 6813 9855  
F +86 21 6813 9811  
cschina@schaffner.com  
[www.schaffner.com](http://www.schaffner.com)

**Germany**  
**Schaffner Deutschland GmbH**  
Schoemperlenstrasse 12B  
76185 Karlsruhe  
T +49 721 56910  
F +49 721 569110  
germanysales@schaffner.com

**Finland**  
**Schaffner Oy**  
Tynninkuja 7  
08700 Lohja  
T +358 19 35 72 71  
F +358 19 32 66 10  
finlandsales@schaffner.com

**France**  
**Schaffner EMC S.A.S.**  
112, Quai de Bezons  
95103 Argenteuil  
T +33 1 34 34 30 60  
F +33 1 39 47 02 28  
francesales@schaffner.com

**Italy**  
**Schaffner EMC S.r.l.**  
Via Galileo Galilei, 47  
20092 Cinisello Balsamo (MI)  
T +39 02 66 04 30 45/47  
F +39 02 61 23 943  
italysales@schaffner.com

**Japan**  
**Schaffner EMC K.K.**  
Mitsui-Seimei Sangenjaya Bldg. 7F  
1-32-12, Kamiyama, Setagaya-ku  
Tokyo 154-0011  
T +81 3 5712 3650  
F +81 3 5712 3651  
japansales@schaffner.com  
[www.schaffner.jp](http://www.schaffner.jp)

**Sweden**  
**Schaffner EMC AB**  
Turebergstorg 1, 6  
19147 Sollentuna  
T +46 8 5792 1121/22  
F +46 8 92 96 90  
swedensales@schaffner.com

**Switzerland**  
**Schaffner EMV AG**  
Nordstrasse 11  
4542 Luterbach  
T +41 32 681 66 26  
F +41 32 681 66 41  
sales@schaffner.ch

**Singapore**  
**Schaffner EMC Pte Ltd.**  
Blk 3015A Ubi Road 1  
05-09 Kampong Ubi Industrial  
Estate  
T +65 6377 3283  
F +65 6377 3281  
singaporesales@schaffner.com

**Spain**  
**Schaffner EMC España**  
Calle Caléndula 93,  
Miniparc III, Edificio E  
El Soto de la Moraleja,  
Alcobendas  
28109 Madrid  
T +34 618 176 133  
spainsales@schaffner.com

**Taiwan**  
**Schaffner EMV Ltd.**  
6th Floor, No 413  
Rui Guang Road  
Neihu District  
Taipei City 114  
T +886 2 87525050  
F +886 2 87518086  
taiwansales@schaffner.com

**Thailand**  
**Schaffner EMC Co. Ltd.**  
Northern Region Industrial Estate  
67 Moo 4 Tambon Ban Klang  
Amphur Muang P.O. Box 14  
Lamphun 51000  
T +66 53 58 11 04  
F +66 53 58 10 19  
thailandsales@schaffner.com

**UK**  
**Schaffner Ltd.**  
5 Ashville Way  
Molly Millars Lane  
Wokingham  
Berkshire RG41 2PL  
T +44 118 9770070  
F +44 118 9792969  
uksales@schaffner.com  
[www.schaffner.uk.com](http://www.schaffner.uk.com)

**USA**  
**Schaffner EMC Inc.**  
52 Mayfield Avenue  
Edison, New Jersey 08837  
T +1 732 225 9533  
F +1 732 225 4789  
usasales@schaffner.com  
[www.schaffner.com/us](http://www.schaffner.com/us)

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Schaffner's global network, please go to

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