

Multi-stage EMI Filter



- Rated currents from 6 to 30 A
- Surge pulse protection up to 2 kV
- Solder or screw connection

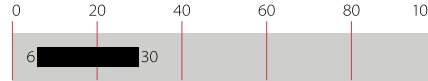


Performance indicators

Attenuation performance



Rated current [A]



Technical specifications

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Operating frequency	DC to 400 Hz
Rated currents	6 to 30 A @ 40°C max.
High potential test voltage	P → PE 2000 VAC for 2 sec P → N 350 VDC for 2 sec
Energy absorption	40J
Temperature range (operation and storage)	-25°C to +85°C (25/85/21)
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)	230,000 hours
Surge pulse protection	2 kV IEC 61000-4-5

Approvals & Compliances



Features and benefits

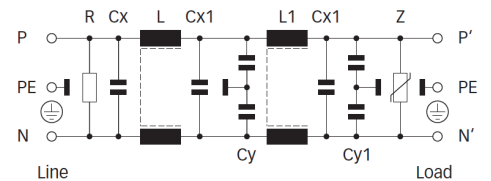
- FN352Z series is developed to meet high filter attenuation requirements by using multi-stage filter design
- Additional high surge pulse voltage protection up to 2 kV is integrated to protect sensitive equipment
- Choosing FN352Z product line brings you the rapid availability of a standard filter associated with the necessary safety acceptances
- Standard filters are a practical solution helping you to pass EMI system approval in a short time
- Exceptional conducted attenuation performance, based on multi-stage design and chokes with high saturation resistance and excellent thermal behavior
- Various connection options
- Custom-specific versions on request

Typical applications

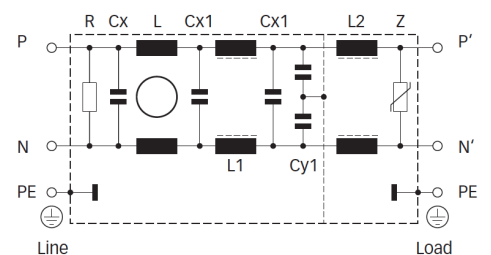
- Facility management
- Industrial
- Telecommunication
- Data processing
- Electrical and electronic equipment

Typical electrical schematic

6A types



10 to 30A types



Filter selection table

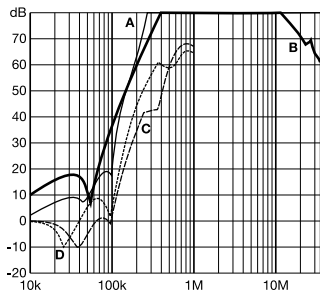
Filter	Rated current @ 40°C (25°C) [A]	Leakage current* @ 230 VAC/50 Hz [µA]	Inductance			Capacitance				Resistance R [MΩ]	Energy absorption [J]	Input/Output connections	Weight [g]
			L	L1	L2	Cx	Cx1	Cy	Cy1				
			[mH]	[mH]	[mH]	[nF]	[nF]	[nF]	[nF]				
FN352Z-6-06	6 (7.2)	420	3	3		470	220	3.3	1.5	0.47	40	-06	575
FN352Z-10-29	10 (12)	1300	5	0.06	0.003	220	220	15	15	0.47	40	-29	1320
FN352Z-20-29	20	1300	3.5	0.06	0.0035	220	220	15	15	0.47	40	-29	2950
FN353Z-30-33	30	1300	2.3	0.025	0.0035	470	470	15	15	0.23	40	-33	2450

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

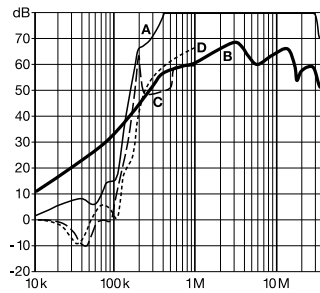
Typical filter attenuation

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

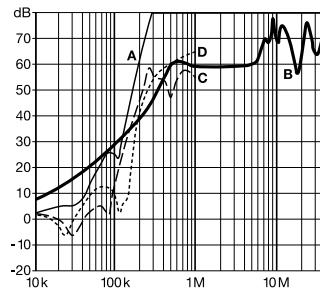
6 A types



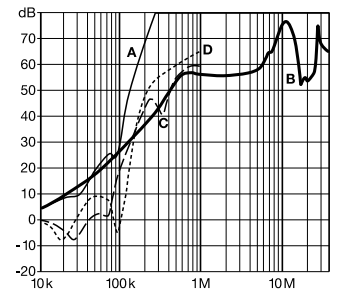
10 A types



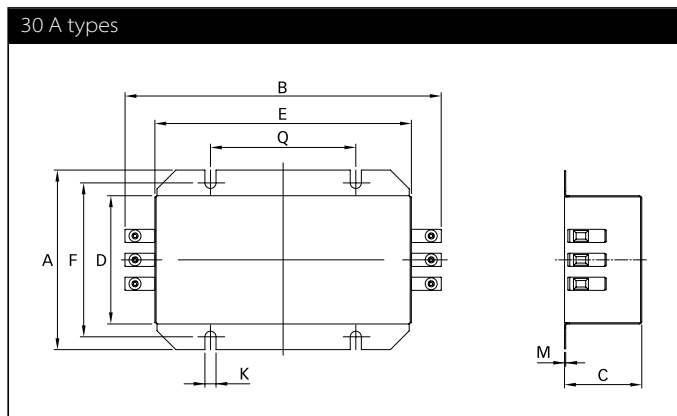
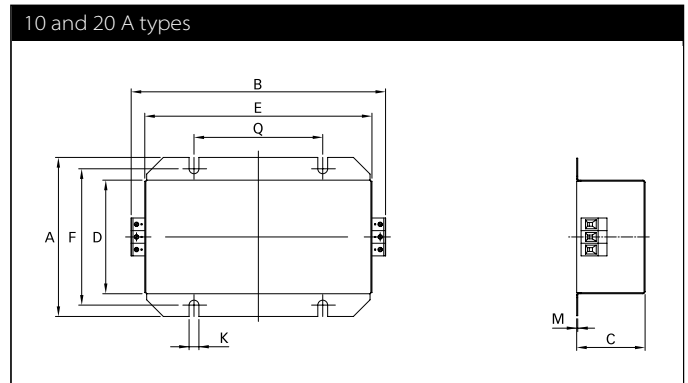
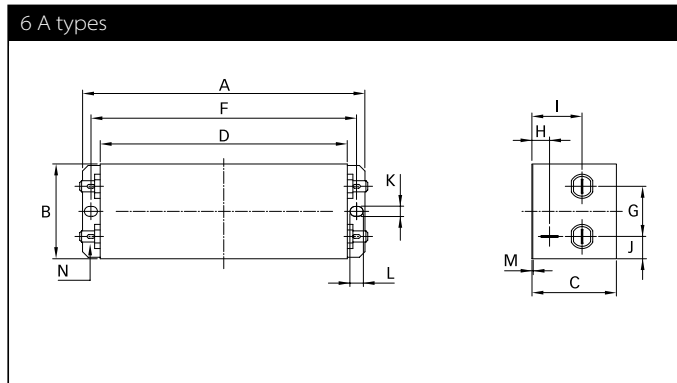
20 A types



30 A types



Mechanical data






Dimensions

	6 A	10 A	20 A	30 A	Tolerances
A	152	126	150	150	±0.5
B	51	172.3	221.8	250	±0.5
C	45	55.25	65	65	±0.5
D	133	100.5	119.5	119.5	±0.5
E		150.5	200	200	±0.5
F	143	112	135	135	±0.5
G	27				±0.5
H	9.5				±0.5
I	27				±0.5
J	12				±0.5
K	5.3	6.4	6.4	6.4	
L	7				
M	0.5				
N	6.3 x 0.8				
Q		85	115	115	±0.1

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

Filter input/output connector cross sections

	-06	-29	-33
			
Solid wire	n/a	6 mm ²	16 mm ²
Flex wire	n/a	4 mm ²	10 mm ²
AWG type wire	n/a	AWG 10	AWG 6
Recommended torque	n/a	0.6-0.8 Nm	1.5-1.8 Nm

Please visit www.schaffner.com to find more details on filter connectors.



Headquarters, global innovation and development

Switzerland

Schaffner Group

Industrie Nord
Nordstrasse 11e
4542 Luterbach
T +41 32 681 66 26
info@schaffner.com



Sales and application centers

China

Schaffner EMC Ltd. Shanghai

T20-3 C, No 565 Chuangye Road,
Pudong district
201201 Shanghai
T +86 21 3813 9500
cschina@schaffner.com
www.schaffner.com.cn

Finland

Schaffner Oy

Sauvonrinne 19 H
08500 Lohja
T +358 50 468 7284
finlandsales@schaffner.com

France

Schaffner EMC S.A.S.

16-20 Rue Louis Rameau
95875 Bezons
T +33 1 34 34 30 60
F +33 1 39 47 02 28
francesales@schaffner.com

Germany

Schaffner Deutschland GmbH

Schoemperlenstrasse 12B
76185 Karlsruhe
T +49 721 56910
germanysales@schaffner.com

India

Schaffner India Pvt. Ltd

REGUS WORLD TRADE CENTRE
WTC, 22nd Floor Unit No 2238, Brigade
Gateway Campus, 26/1, Dr. Rajkumar Road
Malleshwaram (W)
560055 Bangalore
T +91 80 67935355
indiasales@schaffner.com

Italy

Schaffner EMC S.r.l.

Via Ticino, 30
20900 Monza (MB)
T +39 039 21 41 070
italysales@schaffner.com

Japan

Schaffner EMC K.K.

Taiju-Seimei Sangenjaya Bldg.
1-32-12, Kamiyuma, Setagaya-ku
154-0011 Tokyo
T +81 3 5712 3650
F +81 3 5712 3651
japansales@schaffner.com
www.schaffner.jp

Singapore

Schaffner EMC Pte Ltd.

#05-09, Kg Ubi Ind. Estate
408705 Singapore
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 Moraleja, Alcobendas
28109 Madrid
T +34 917 912 900
F +34 917 912 901
spainsales@schaffner.com

Sweden

Schaffner EMC AB

Östermalmstorg 1
114 42 Stockholm
T +46 8 5050 2425
swedensales@schaffner.com
www.schaffner.com

Switzerland

Schaffner EMV AG

Industrie Nord
Nordstrasse 11e
4542 Luterbach
T +41 32 681 66 88
T +41 32 681 66 26
switzerlandsales@schaffner.com

Taiwan

Schaffner EMV Ltd.

20 Floor-2, No 97, Section 1, XinTai 5th Road
22175 XiZhi District New Taipei City 22175
T +886 2 2697 5500
F +886 2 2697 5533
taiwansales@schaffner.com
www.schaffner.com.tw

Thailand

Schaffner EMC Co. Ltd.

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

United Kingdom

Schaffner Ltd.

1, Oakmede Place
Binfield
RG42 4JF Berkshire
T +44 118 9770070
F +44 118 9792969
uksales@schaffner.com

USA

Schaffner EMC Inc.

52 Mayfield Avenue
Edison, New Jersey
T +1 732 225 9533
F +1 732 225 4789
usasales@schaffner.com
www.schaffnerusa.com

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