

Multi-stage EMI Filter



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

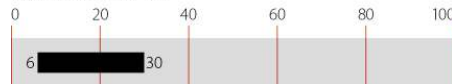


Performance indicators

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/230V (Mil-HB-217F)	230,000 hours
Surge pulse protection	2 kV IEC 61000-4-5

Approvals



Features and benefits

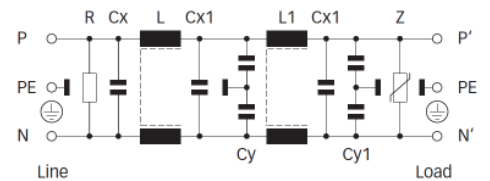
- | FN 352Z series is developed to meet high filter attenuation requirements by using multi-stage filter design
- | Additional high surge pulse voltage protection up to 2 kA is integrated to protect sensitive equipment
- | Choosing FN 352Z product line brings you the rapid availability of a standard 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

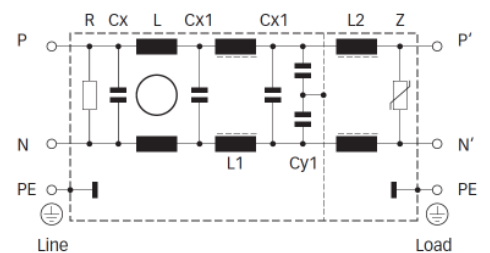
- | Facility management
- | Industrial
- | Telecommunication
- | Data processing
- | Electrical and electronic equipment

Typical electrical schematic

6A types



10 to 30A types



Filter selection table

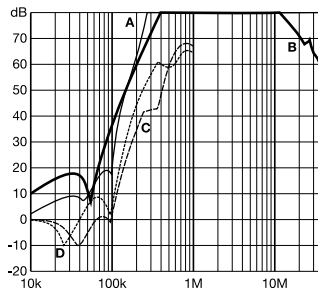
Filter	Rated current @ 40 °C (25 °C) [A]	Leakage current* @ 230 VAC/50 Hz [µA]	Inductance			Capacitance				Resistance R [MΩ]	Energy absorption [J]	Input/Output connections	Weight [g]
			L [mH]	L1 [mH]	L2 [mH]	Cx [nF]	Cx1 [nF]	Cy [nF]	Cy1 [nF]				
FN 352Z-6-06	6 (7.2)	420	3	3		470	220	3.3	1.5	0.47	40	-06	575
FN 352Z-10-29	10 (12)	1300	5	0.06	0.003	220	220	15	15	0.47	40	-29	1320
FN 352Z-20-29	20	1300	3.5	0.06	0.0035	220	220	15	15	0.47	40	-29	2950
FN 353Z-30-33	24 (30)	1300	2.3	0.025	0.035	470	220	15	15	0.23	40	-33	3100

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

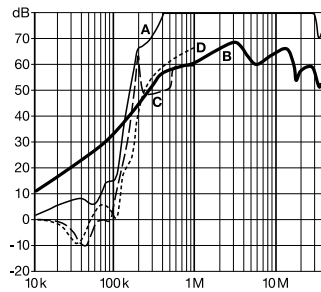
Typical filter attenuation

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

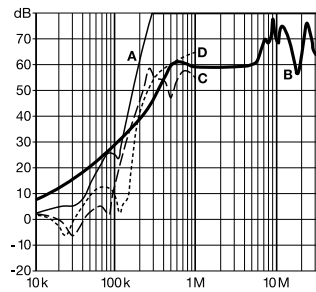
6 A types



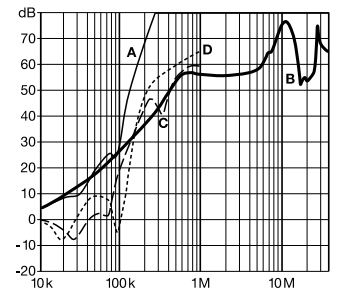
10 A types



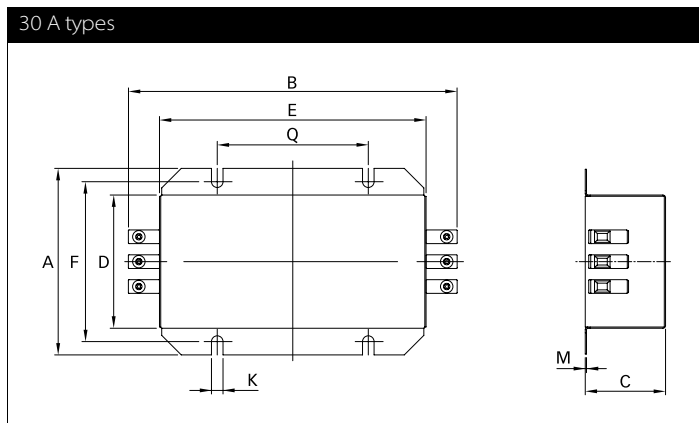
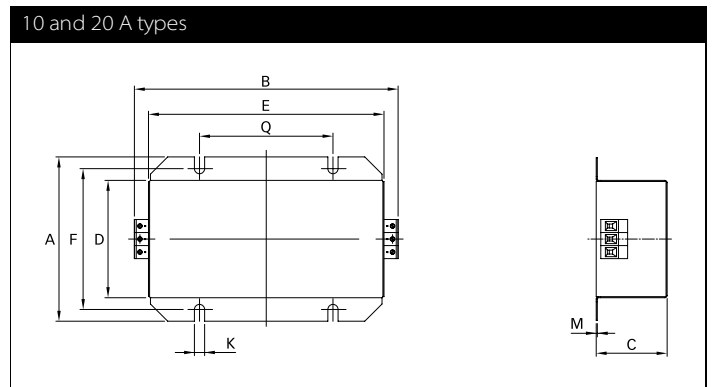
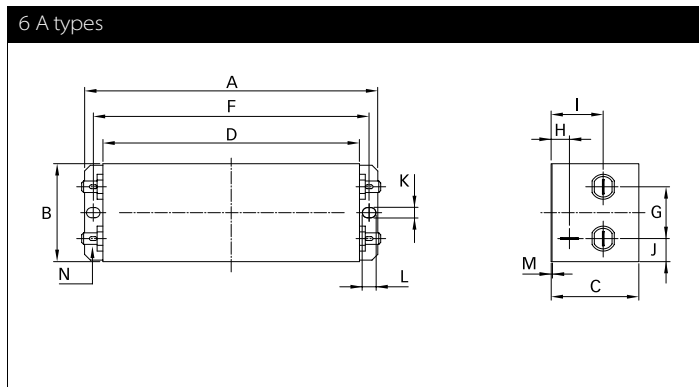
20 A types



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.



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