SCHAFFNER

Input filter for motor drives

FN 250

- 6 to 20A current ratings
- compact housings with long wire connections
- meets EN55011(A) for drives with motor cables <20m

- Nennströme von 6 bis 20 A
- Kompaktgehäuse mit langen Anschlußleitungen
- Erfüllt EN55011(A) für Antriebe mit Motorkabel <20m

- courant de service entre 6 et 20 A
- boîtier compact avec longs fils
- conforme à EN55011(A) pour commandes avec câbles moteur <20m

Filter selection table

Choose the family FN xxx with the required current rating and features, and add /?? to determine input/output (line/load) connection style. Example: FN 250-6/07 is a 6A filter with wire connections.

Approvals

EN 133200

Family	Connections	Current ratings at 40°C (25°) A	Capacitance Cx/Cx1 µF	Capacitance Cy nF	Res. R MΩ	Power loss W	Inductance L mH	Housing	Weight g
FN 250 -6 /??	/07	6 (6.9)	0.47/0.47	15	0.47	2.5	5.7	K11	240
FN 250 -12 /??	/07	12 (13.8)	1/1	15	0.47	6	2.7	K22	310
FN 250 -20 /??	/07	20 (23)	2.2/2	15	0.22	8	1.9	L4	600

Additional specifications

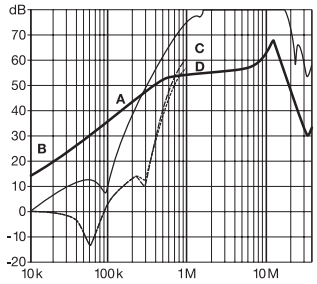
Filter type	Maximum leakage µA/phase	Maximum operating voltage VAC	Maximum operating voltage Hz	Operating frequency Hz	Hipot test voltage PN→E VAC	Hipot test voltage P→N VDC
Standard types	1300	250	50/60	DC to 400	2000	1100

MTBF at 40°C, 230V, per Mil-HB-217F: 295,000 hours.

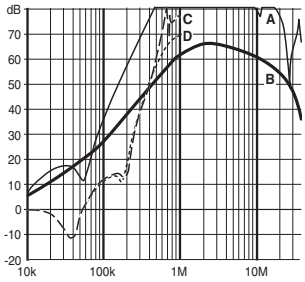
FN 250 insertion loss

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

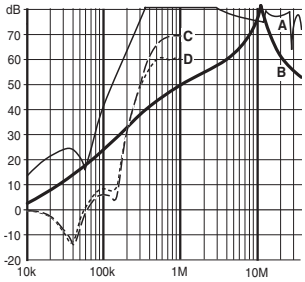
6 amp types



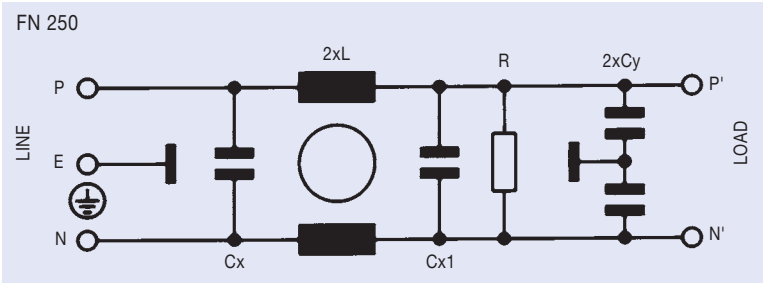
12 amp types



20 amp types



Electrical schematic



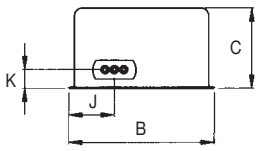
See tables for component values.

Mechanical data

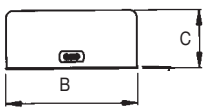
	FN 250-6	FN 250-12	FN 250-20	Tol.* mm
	K11	K22	L4	
A	85		119	± 0.5
B	54		84.5 ± 1	± 0.5
C	30	40	38	± 1
D	65		98.5 ± 0.5	± 1
E			66	± 0.5
F	75		109	± 0.2
G			51	± 0.1
J	17			± 0.5
K	7			± 0.5
M	5.3		4.4	± 0.1
N	6.3		7.5	± 0.1
W	AWG 16		AWG 14	-
Y	6			± 1
Z	300			+ 10

* Measurements share this common tolerance unless otherwise stated.

FRONT VIEW

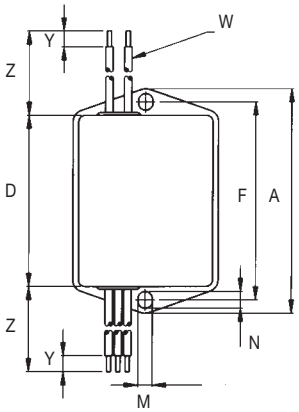


Housing K11, K22

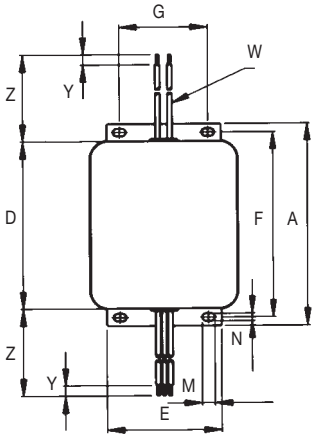


Housing L4

TOP VIEW



Housing K11, K22



Housing L4

All dimensions in mm; 1 inch = 25.4 mm