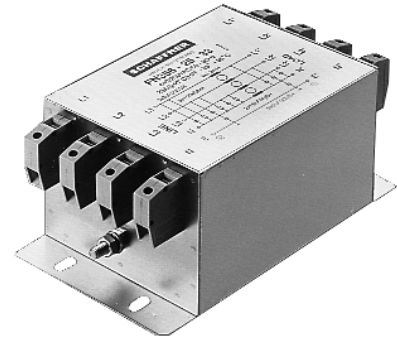


High-current filter

FN 356

- 16 to 150A current ratings
- Three phases + neutral + earth connections
- IEC 950 compliant
- Suitable for EN 55011/55014/55022
- Nennströme von 16 bis 150A
- Anschlüsse für drei Phasen, Nullleiter und Masse
- IEC 950 konform
- Geeignet für EN 55011/55014/55022
- Courants de service entre 16 et 150A
- Connexions pour trois phases, neutre et terre
- Conforme à CEI 950
- Conforme à EN55011/55014/55022



Technical specifications

Maximum operating voltage: 440VAC at 40°C; Operating frequency: DC to 60Hz at 40°C

Hipot test voltage: P → E 2000VAC; P → P 1900VDC

MTBF at 40°C, 400V per Mil-HB-217F: 220,000 hours

Protection category: IP20 for connections /29, /33 and /34

Overload: 4 times rated current at switch on, then 1.5 times rated current for 1 minute, once per hour

Approvals



Filter	Current ratings at 40°C (25°) A	Leakage current* (400V/50Hz) mA	Power loss W	Component values/phase					Phase connections	Weight kg
				L mH	C _x μF	C _{x1} μF	C _y nF	R kΩ		
FN 356 -16 / ??	16 (18.4)	0.43	8	1.2	0.68	1	15	220	/06 /29	1.2
FN 356 -25 / ??	25 (28.8)	0.43	28	1.3	2	2	15	100	/24 /33	1.5
FN 356 -36 / ??	36 (41.5)	0.43	30	0.95	2	2	15	100	/24 /33	1.6
FN 356 -50 / ??	50 (57.7)	0.43	13	0.55	2	2	15	100	/24 /33	2.3
FN 356 -100 / ??	100 (115.4)	1.33	14	0.32	2	2	47	100	/28 /34	6.0
FN 356 -150 / ??	150 (172.5)	8	34	0.6	6.6	6.6	470	680	/28	8.1

*Max. leakage under normal circumstances. Note: if two phases are interrupted, worst-case leakage current could reach 6.0 times higher levels.

Mechanical data

Current	-16 (/29)	-16 (/06)	-25, -36 (/24)	-50 (/24)	-25, -36 (/33)	-50 (/33)	-100 (/28)	-100 (/34)	-150 (/28)	Tol.* ± mm
A	189.5	149	140	143.25 ± 0.5	189.5	192 ± 0.5	250	249.6	340	± 1
B**	105	104	105	122 ± 0.5	105	122 ± 0.5	160 ± 0.8			± 1
C	80	50 ± 0.5	80	102	80	102	130			± 1
D	140				140	142.5	210		300	± 1
E	165.5	44 ± 0.2		44	165.5	168	232	230	322	± 0.3
F	80	75		75 ± 0.3	50	98 ± 0.3	120 ± 0.3	130 ± 0.3	120 ± 0.3	± 0.2
G	0.7				0.7		1			± 0.1
H	20	12.3	20		20		24			± 1
I		10.8	25.4							± 1
K	25	14 ± 0.5		14	20	35	65	40	65	± 1
L		27.5 ± 0.5		33.5			105		105	± 1
M	13	M5					13			± 0.2
N	6.5						6.5			± 0.2
P		M6					M10			-

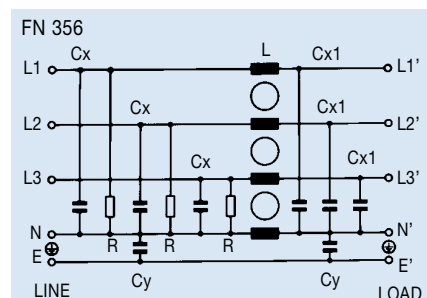
All dimensions in mm; 1 inch = 25.4mm

* Measurements share this common tolerance unless otherwise stated

** Rivets for lid-fixation exceed this measure by max. 1,3 mm on each side

Electrical schematic

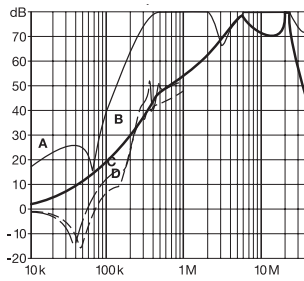
See table for component values



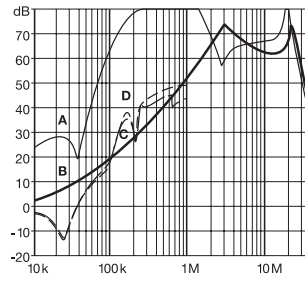
FN 356 insertion loss

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

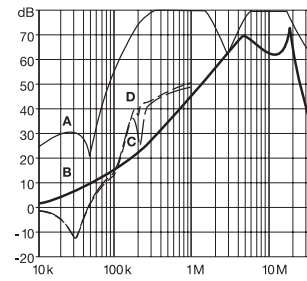
16 amp types



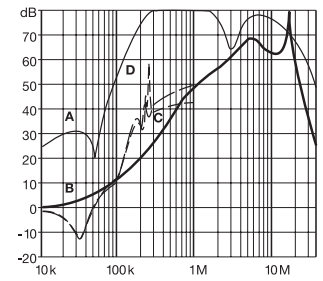
25 amp types



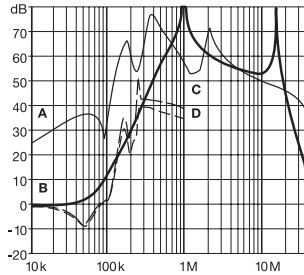
36 amp types



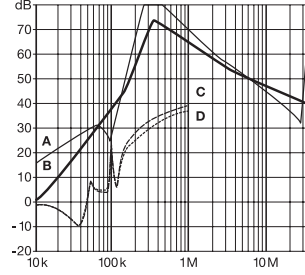
50 amp types



100 amp types



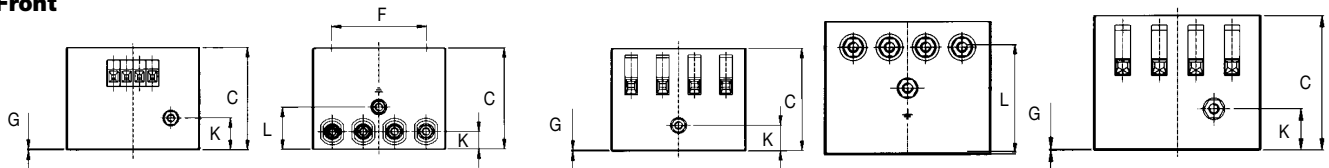
150 amp types



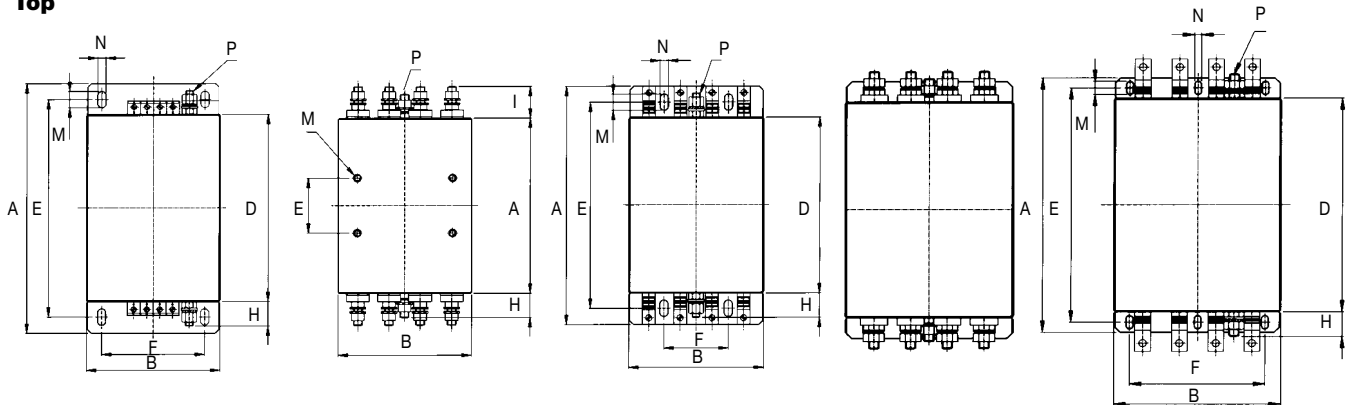
Mechanical drawings

See mechanical data table for dimensions

Front



Top



FN 356-16 with /29 connections

FN 356-16 /06 and FN 356-36, -50 with /24 connections (/24 shown)

FN 356-25, -36, -50 with /33 connections

FN 356-100, -150 with /28 connections (note centred earth terminal)

FN 356-100 with /34 connections