SCHAFFNER

Ultra-compact 3-phase filter

FN 3258

- 7 to 180A current ratings
- Exceptional attenuation from 150kHz to 30MHz
- Excellent saturation resistance to 50m cable length
- Very compact footprint and low weight

- Nennströme von 7 bis 180A
- Extrem hohe Einfügungsdämpfung von 150kHz–30MHz
- Hohe Sättigungsfestigkeit bis 50m Motorkabellänge
- Minimale Grundfläche und geringes Gewicht

- Courants de service de 7 à 180A
- Excellente atténuation de 150kHz à 30MHz
- Seuil de saturation élevé pour 50m de câble
- Encombrement très réduit et construction légère

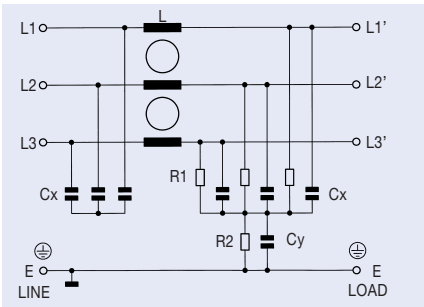
Technical specifications

Max. operating voltage:	480VAC at 50°C / 520VAC at 50°C (H-types)
Operating frequency:	DC to 60Hz at 50°C
Hipot test voltage:	P ⇒ E 2900VDC for 2s (factory test)
	P ⇒ P 2800VDC for 2s (factory test)
MTBF at 50°C, 400V	
per Mil-HB-217F:	300,000h for 30A, 42A, 55A, 75A, 130A, 180A
	500,000h for 7A, 16A and 100A types
Protection category:	IP20
Overload:	4 times rated current at switch on, then 1.5 times
	rated current for 1 minute, once per hour
Temperature range:	–25°C to +100°C
Flammability corresponding to:	UL 94V2
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, EN 133200

Approvals

C US

Electrical schematic



Filter	Current rating at 50°C (40°C) A	Leakage current† 400VAC/50Hz mA	Power loss W	I/O connections	Weight kg
FN 3258 – 7 – 45	7 (7.7)	33.04	3.80	45	0.5
FN 3258 – 16 – 45	16 (17.5)	33.04	6.05	45	0.8
FN 3258 – 30 – 47	30 (32.9)	33.04	11.83	47	1.2
FN 3258 – 42 – 47	42 (46.0)	33.04	15.70	47	1.4
FN 3258 – 55 – 52	55 (60.2)	33.04	25.88	52	1.8
FN 3258 – 75 – 52	75 (82.2)	33.04	32.21	52	3.2
FN 3258 – 100 – 35	100 (109.5)	33.04	34.50	35	4.3
FN 3258 – 130 – 35	130 (142.4)	33.04	43.10	35	4.5
FN 3258 – 180 – 40	180 (197.1)	33.04	58.30	40	6.0

† Max. leakage under normal circumstances. Note: if two phases are interrupted, worst case leakage could reach 5.8 times higher levels.

Dimensions

	7A	16A	30A	42A	55A	75A	100A	130A	180A	Tol.* mm
A	190	250	270	310	250	270			380	± 1
B	70±0.6		85		90	135±1	150±1		170±1	± 0.8
C	40	45	50		85	80	90±0.8		120±0.8	± 0.6
D	160	220	240	280	220	240			350	± 1
E	180	235	255	295	235	255			365	± 0.5
F	20	25	30		60		65		102	± 0.3
G	4.5	5.4				6.5				± 0.2
H	1					1.5±0.2				± 0.1
I	M5			M6			M10			–

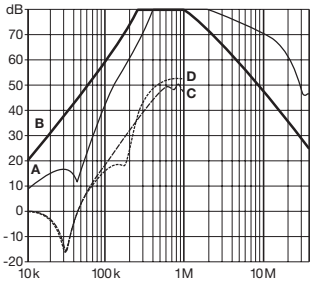
All dimensions in mm; 1 inch = 25.4 mm

*Measurements share this common tolerance unless otherwise stated.

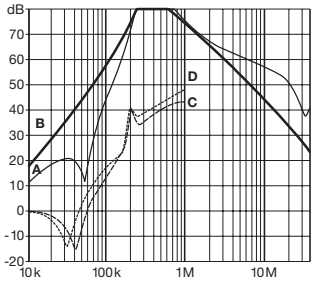
FN 3258 insertion loss

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

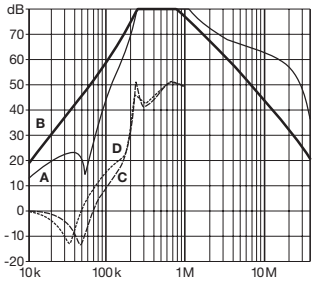
7A types



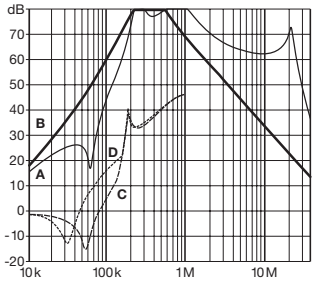
16A types



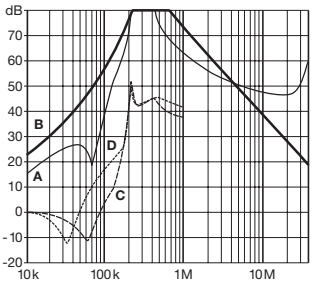
30A types



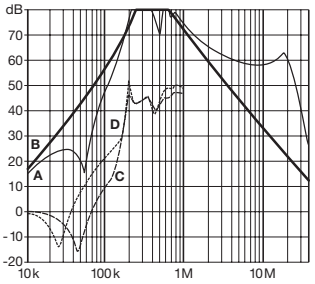
42A types



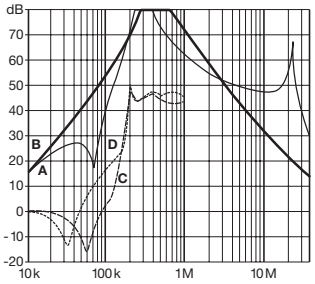
55A types



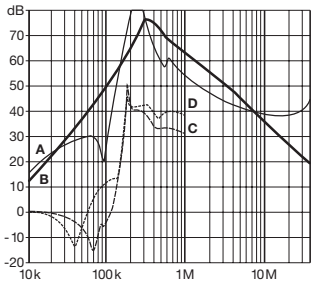
75A types



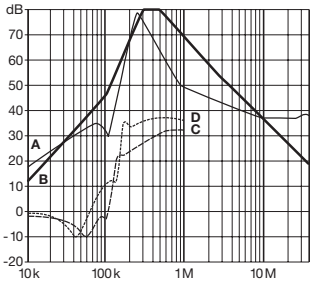
100A types



130A types



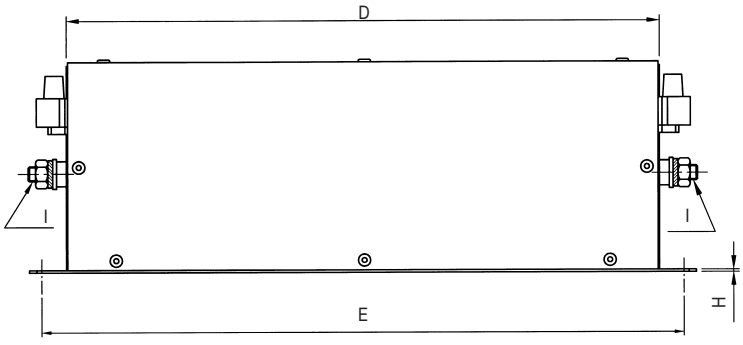
180A types



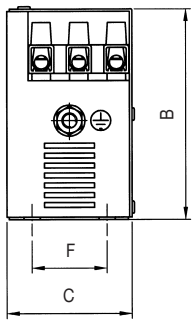
Note: the insertion loss values of the H-types may by different.

Mechanical data

Side



Front



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