

3-phase + neutral filter

- 8 to 160A current ratings
- high attenuation
- Low leakage current
- very compact dimensions

- Nennströme von 8 bis 160A
- Hohe Dämpfung
- Geringer Ableitstrom
- Sehr kompakte Gehäusedimensionen

- courant de service entre 8 et 160A
- bonne atténuation
- faible courant de fuite
- encombrement très réduit

Technical specifications

Maximum operating voltage: 480VAC (520VAC versions also available) at 50°C

Operating frequency: DC to 60Hz at 50°C

Hipot test voltage: P/N → E 3000VDC for 2s; P/N → P 2100VDC for 2s


MTBF at 50°C, 400V per Mil-HB-217F: 8/16A 1,300,000 hours; 25/36/64A 600,000 hours

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 class: UL 94V2

Filter	Current ratings at 50°C (40°) A	Leakage current [†] (480V/50Hz) mA	Power loss W	Component values/phase					Phase connections 	Weight kg
				L mH	ΣC _x μF	ΣC _y μF	R1 MΩ	R2 MΩ		
FN 256 - 8 / ??	8 (9.1)	3.4	2.9	1.78	2.20	0.19	0.68	1.50	/46	1.0
FN 256 - 16 / ??	16 (18.1)	3.4	5.6	1.14	2.20	0.19	0.68	1.50	/46	1.1
FN 256 - 25 / ??	25 (28.3)	3.4	9.8	1.57	4.40	0.19	0.68	0.82	/47	1.4
FN 256 - 36 / ??	36 (40.8)	3.4	10.9	1.10	4.40	0.19	0.68	0.82	/47	1.5
FN 256 - 64 / ??	64 (72.6)	3.4	17.2	1.00	4.40	0.19	0.68	0.82	/52	2.2
FN 256 - 80 / ??	80 (90.4)	3.4	18.8	0.77	9.90	0.20	0.68	1.00	/28* /34	4.5
FN 256 - 120 / ??	120 (135.6)	5.0	25.1	0.65	13.20	0.29	0.68	1.00	/28* /35	6.1
FN 256 - 160 / ??	160 (180.8)	6.8	30.7	0.46	13.20	0.39	0.68	1.00	/28* /40	8.0

[†] Max leakage under normal circumstances. Note: if two phases are interrupted, worst-case leakage current could reach 6 times higher levels.

* 80A, 120A and 160A versions with screw connections for 40°C only.

Mechanical data

Current	-8, -16	-25, -36	-64	-80	-120	-160	Tol. mm
A	143	153	153	170	170	170	± 1
B	115	125	125	140	140	140	± 0.5
C	80	115	125	110	130 [†] /140 [§]	130 [†] /160 [§]	± 0.5
D	120	130	140	160	180	200	± 0.5
E	141.2	154.2	175	220 [†] /237 [§]	240 [†] /266 [§]	260 [†] /299 [§]	± 1
F	156	166	176	-	-	-	± 1
G	1	1	1.5	1.5	1.5	1.5	± 0.1
H	80	90	100	110	130	150	± 0.3
I	127.5	137.5	137.5	153.5	153.5	153.5	± 0.5
J	6.5	6.5	6.5	6.5	6.5	6.5	± 0.1
K	M6	M6	M6	M10	M10	M10	-
L	60.5	93	99.25	85 [†]	105 [†]	105 [†]	± 1
M	11.5	15	18	35 [†] /30 [§]	35 [†] /30 [§]	35 [†] /30 [§]	± 1

All dimensions in mm; 1 inch = 25.4mm

[†] with screw connections /28
[§] with safety terminals /34, /35, /40

FN 256

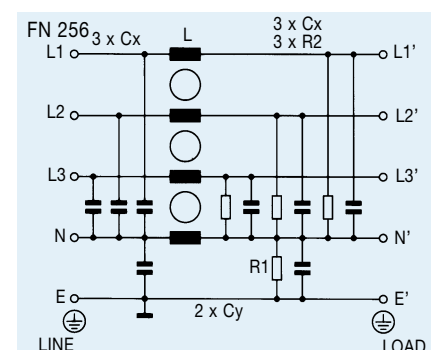


Approvals



Electrical schematic

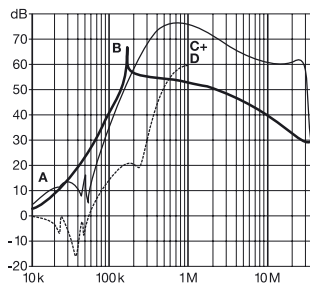
See table for component values



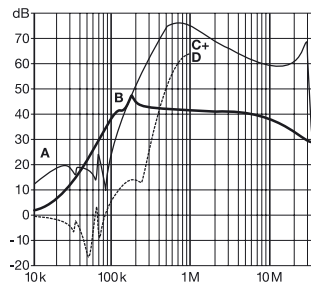
FN 256 insertion loss

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

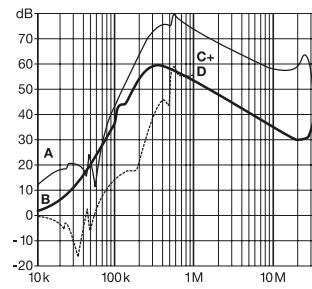
8 amp types



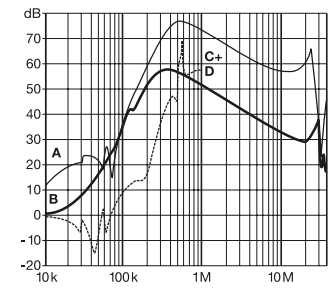
16 amp types



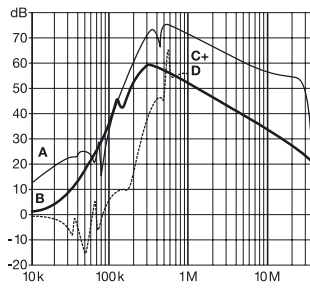
25 amp types



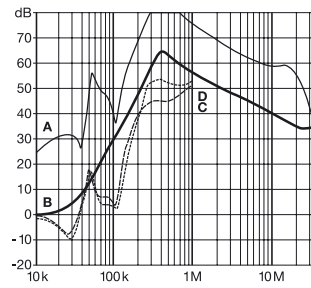
36 amp types



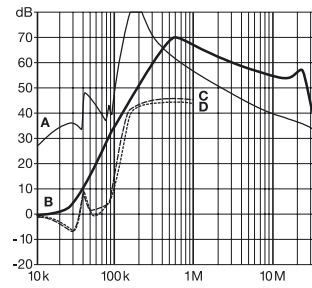
64 amp types



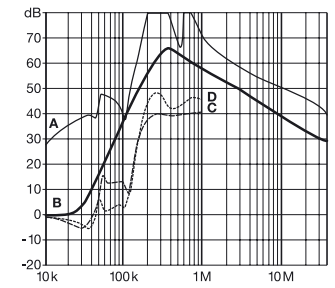
80 amp types



120 amp types



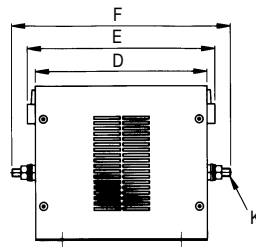
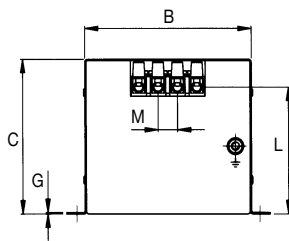
160 amp types



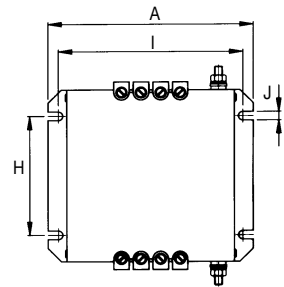
Mechanical drawings

See mechanical data table for dimensions

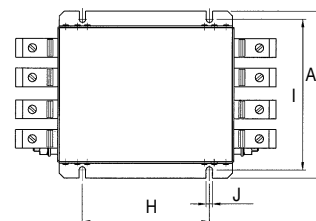
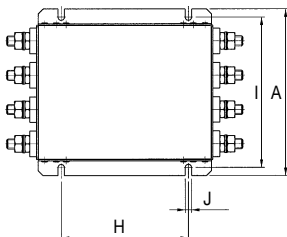
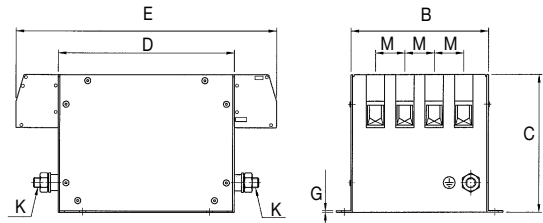
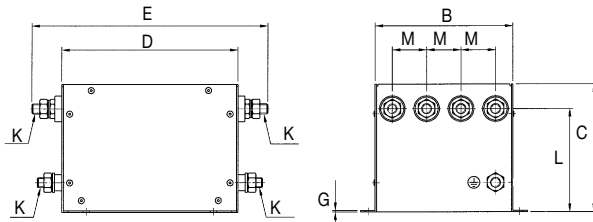
SIDE VIEW



TOP VIEW



FN 256 -8, -16, -25, -36, -64



FN 256 -80, -120, -160
with screw connections

FN 256 -80, -120, -160
with safety terminals