

## High-power filter

## FN 351

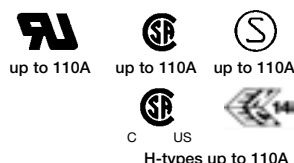
- 5 to 280A current ratings, 440V and 520V versions
- High differential/common mode attenuation
- IEC 950 compliant
- Nennströme von 5 bis 280A; 440V und 520V Versionen
- Hohe differentielle/Gleichtakt-Dämpfung
- IEC 950 konform
- Courants de service de 5 à 280A, versions pour 440V et 520V
- Bonne atténuation en modes symétrique et asymétrique
- Conforme à CEI 950



### Technical specifications

Maximum operating voltage: 440VAC at 40°C for standard types; 520VAC at 40°C for H types  
 Hipot test voltage: standard: P → E 2600VDC; P → P 1900VDC; H: P → E 2800VDC, P → P 2300VDC  
 MTBF at 40°C, 400Vper Mil-HB-217F: 135,000 hours standard types, 100,000 hours H types (at 500 V)  
 Protection category: IP20; Operating frequency: DC to 60 Hz  
 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† IEC 1000-2-4 mA at 50Hz	Power loss W	Component values/phase				Phase connections	Weight kg
				L mH	ΣCx μF	ΣCy μF	R1 MΩ		
FN 351 -5 /??	5 (5.8)	1.9	6	12	1.6	0.17	2	/29	1.1
FN 351 -8 /??	8 (9.2)	1.9	7	7.6	1.6	0.17	2	/29	1.8
FN 351H -8 /??	8 (9.2)	2.5	7	7.6	1.6	0.17	2	/29	1.6
FN 351 -16 /??	16 (18.4)	1.9	8	5.2	3.4	0.17	1.5	/29 /46	1.8
FN 351H -16 /??	16 (18.4)	2.5	8	5.2	3.3	0.17	1.5	/29	1.6
FN 351 -25 /??	25 (28.8)	28.0	8	2.2	4.4	1.8	1.5 1.1	/33 /46	3
FN 351H -25 /??	25 (28.8)	35.4	8	2.2	3.3	2	1.5 1.1	/33	1.6
FN 351 -36 /??	36 (41.5)	28.0	9	1.3	4.4	1.8	1.5 1.1	/33 /47	3
FN 351H -36 /??	36 (41.5)	35.4	9	1.3	3.3	2	1.5 1.1	/33	1.6
FN 351 -50 /??	50 (57.7)	29.6	11	0.8	4.4	2	1.5 1.1	/33 /34 /47 /52	3.1
FN 351H -50 /??	50 (57.7)	35.4	11	0.8	3.3	2	1.5 1.1	/33 /34	1.6
FN 351 -64 /??	64 (73.8)	29.6	15	0.65	4.4	2	1.5 1.1	/33 /34 /47 /52	3.3
FN 351H -64 /??	64 (73.8)	35.4	15	0.65	3.3	2	1.5 1.1	/33	1.8
FN 351 -80 /??	80 (92.3)	31.8	23	0.85	6.7	2.2	1.5 1.1	/34	5.8
FN 351H -80 /??	80 (92.3)	41.3	23	0.85	6.1	2.2	1.5 1.1	/34	5.8
FN 351 -110 /??	110 (127)	31.8	25	0.5	6.7	2.2	1.5 1.1	/35	5.8
FN 351H -110 /??	110 (127)	41.3	25	0.5	6.1	2.2	1.5 1.1	/35	5.8
FN 351 -180 /??	180 (207)	31.3	49	0.5	5	2.2	1.5 1.1	/36	13
FN 351H -180 /??	180 (207)	40.7	49	0.5	5	2.2	1.5 1.1	/36	13
FN 351 -280 /??	280 (323)	35.8	70	0.3	10	2.6	1.5 1.1	/37	28
FN 351H -280 /??	280 (323)	46.5	70	0.3	10	2.6	1.5 1.1	/37	28

†Max. leakage under normal circumstances. Note: if two phases are interrupted, worst case leakage current could reach 7.6 times (5A to 16A types) or 6.0 times (25A to 280A types) higher levels. Measured at: standard types 400VAC; H types 520VAC.

### Mechanical data

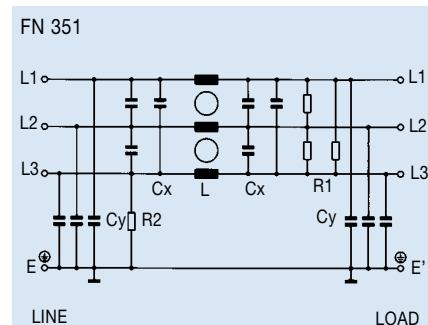
Current	-5	-8 (std voltage)	-8, -16 (H type)	-25, -36, -50, -64	-80, -110	-180	-280	Tol.* ± mm
A	150	180		200	400	510	700	± 1
B	105	115		150	170 ± 1	180 ± 1	260 ± 1	± 0.5
C	50	60	65	75 <sup>†</sup>	90 ± 1	115 ± 1	130 ± 1	± 0.5
D	75	85		120	350	360	530	± 1
E	85		115		373	470 ± 0.5	660 ± 0.5	± 0.3
F	90	100 ± 0.5		136	130 ± 0.2	156 ± 0.5	220 ± 0.5	± 0.3
G		0.7	0.7/1.0	1.0		4 ± 0.2		± 0.1
H	19		20 ± 2			25		± 1
K	17		17 ± 0.5		20		30	± 1
M	6.5		6.4		15		16	± 0.2
N					6.5		9 ± 0.2	± 0.2
P			M6			M10		-

All dimensions in mm; 1 inch = 25.4mm

<sup>†</sup>for connections /34 and /52 only  
 \* Measurements share this common tolerance unless otherwise stated

### Electrical schematic

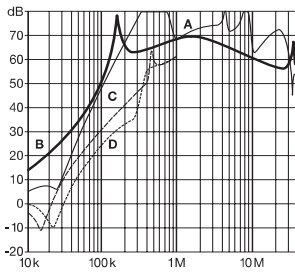
See table for component values



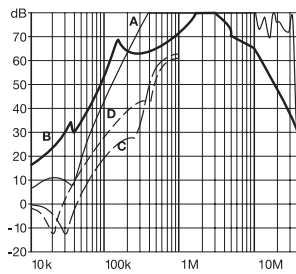
## FN 351 insertion loss

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

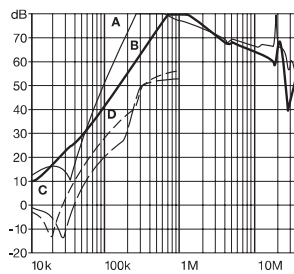
### 5 amp types



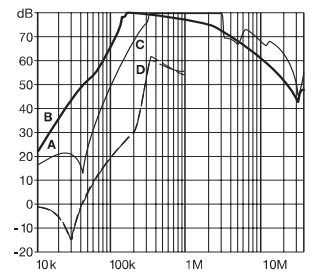
### 8 amp types



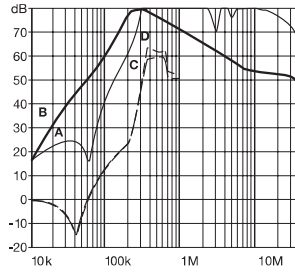
### 16 amp types



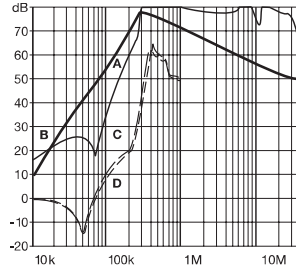
### 25 amp types



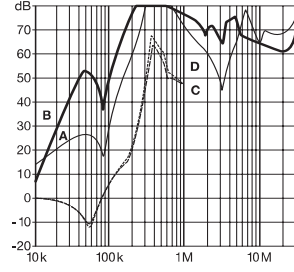
### 36 amp types



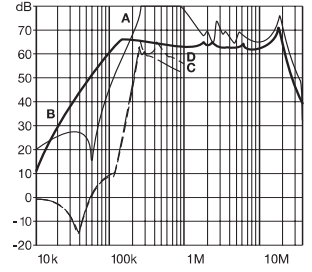
### 50 amp types



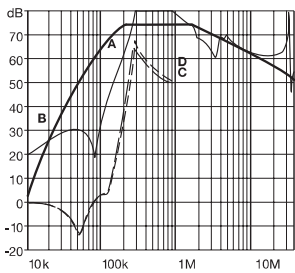
### 64 amp types



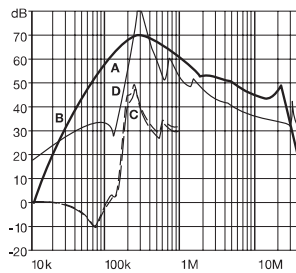
### 80 amp types



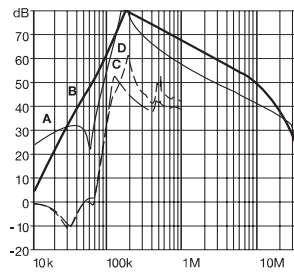
### 110 amp types



### 180 amp types



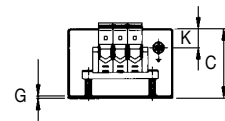
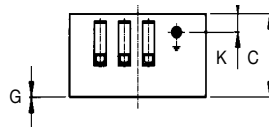
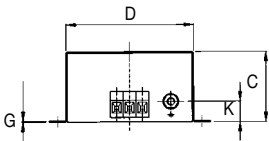
### 280 amp types



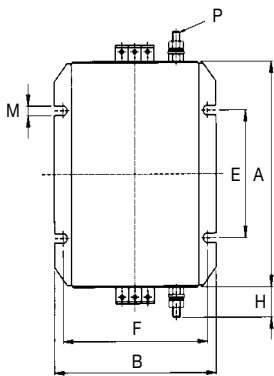
## Mechanical drawings

See mechanical data table for dimensions

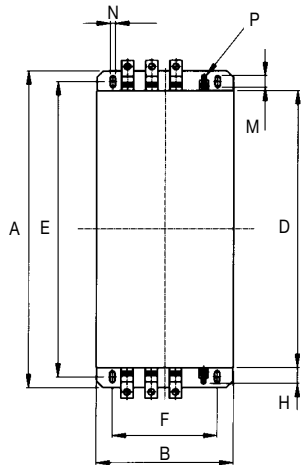
### Front



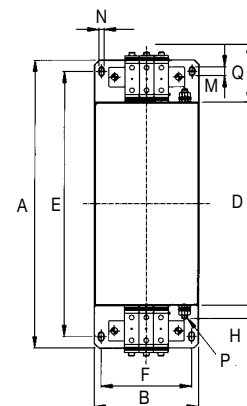
### Top



FN 351-5, -8, -16, -25, -36, -50, -64  
/29 connections shown



FN 351-80, -110



FN 351-180, -280