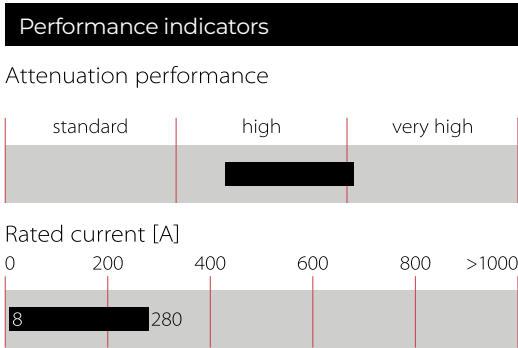
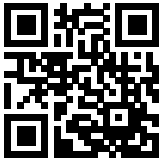


General Purpose EMC Filter



- EMC solution for industrial inverters and motor drives
- Rated currents from 8 to 280 A
- Voltage level up to 520 V
- High differential and common-mode attenuation



Technical Specifications

Maximum continuous operating voltage	3x 520/300 VAC
Operating frequency	DC to 60 Hz
Protection category	IP 20
Overload capability	4x rated current at switch on, 1.5x rated current for 1 minute, once per hour
Temperature range (operation and storage)	-25°C to +100°C (25/100/21)
Flammability corresponding to	UL 94 V-2 or better
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
Rated currents	8 to 280 A @ 40°C
High potential test voltage	P → P 2250 VDC for 2 sec P → E 2750 VDC for 2 sec

Approvals & Compliances



Approvals up to 110 A

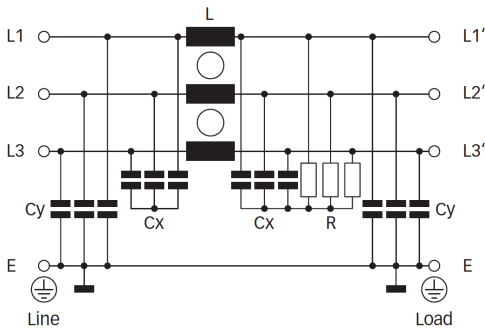
Features and Benefits

- Broad range of power ratings for fast and convenient filter selection
- FN351H filters provide a broadband common and differential-mode attenuation performance, which remains available also when high interference levels are present
- Solid, touch-safe filter terminals contribute to overall equipment safety
- Introduced as one of the very first motor drive EMC filters in the market, FN351H and its predecessor FN351 have been widely imitated and has successfully proven its function over more than 10 years

Typical Applications

- Three-phase motor drives
- Inverters and converters
- Industrial automation equipment
- UPS
- SMPS
- General purpose three-phase filtering

Typical electrical schematic



Filter Selection Table

Filter*	Rated current @ 40°C (25°C)	Typical drive power rating**	Leakage current*** @ 440/520 VAC/50 Hz	Power loss @ 25°C/50 Hz	Input/Output connections		Weight
	[A]	[kW]	[mA]	[W]			[kg]
FN351H-8-29	8 (9.2)	4	0.3	7	-29		1.1
FN351H-16-29	16 (18.5)	7.5	0.3	8	-29		1.3
FN351H-25-33	25 (28.9)	15	3.8	8	-33		1.4
FN351H-36-33	36 (41.6)	18.5	3.8	9	-33		1.5
FN351H-50-..	50 (57.7)	30	3.8	11	-33		1.6
FN351H-64-33	64 (73.9)	37	3.8	15	-33		1.7
FN351H-80-34	80 (92.3)	45	4.4	23	-34		5.6
FN351H-110-35	110 (127)	75	4.4	25	-35		5.8
FN351H-180-36	180 (208)	110	4.4	49	-36		13.0

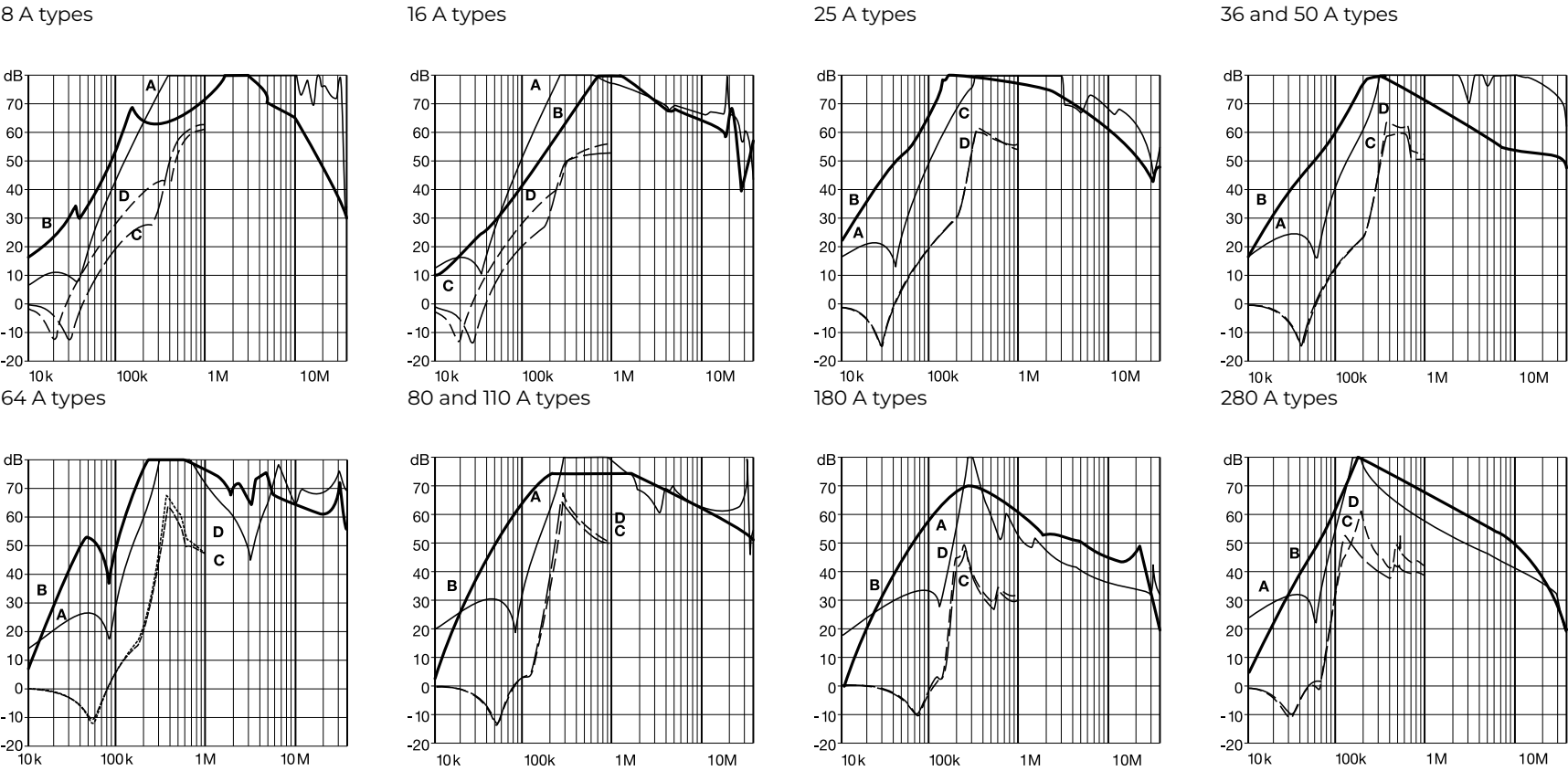
* To compile a complete part number, please replace the -.. with the required I/O connection style.

** Calculated at rated current, 480 VAC and cos phi=0.8. The exact value depends upon the efficiency of the drive, the motor and the entire application.

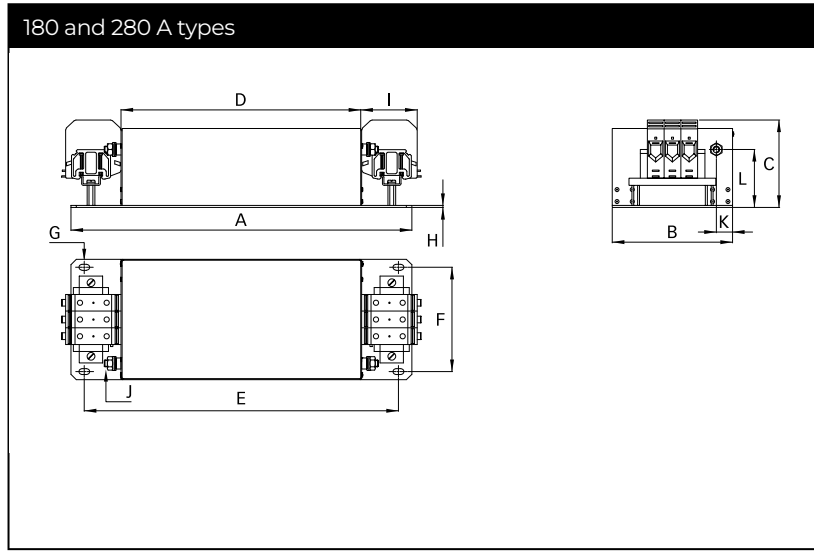
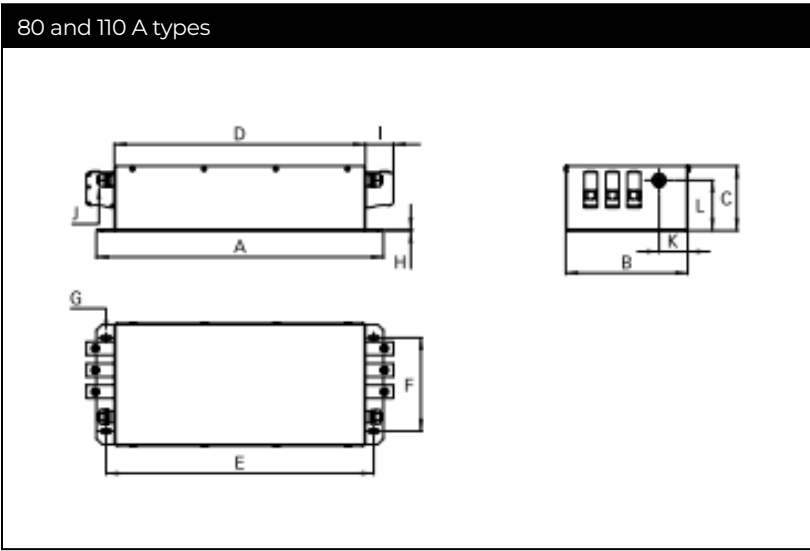
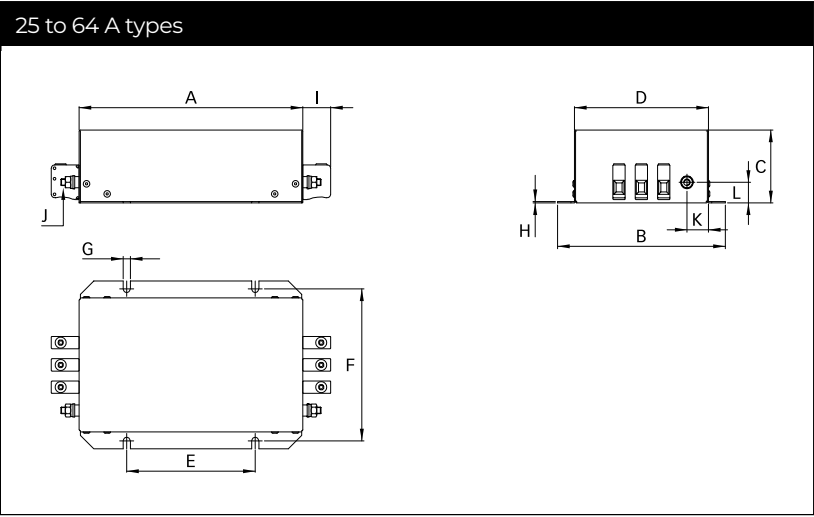
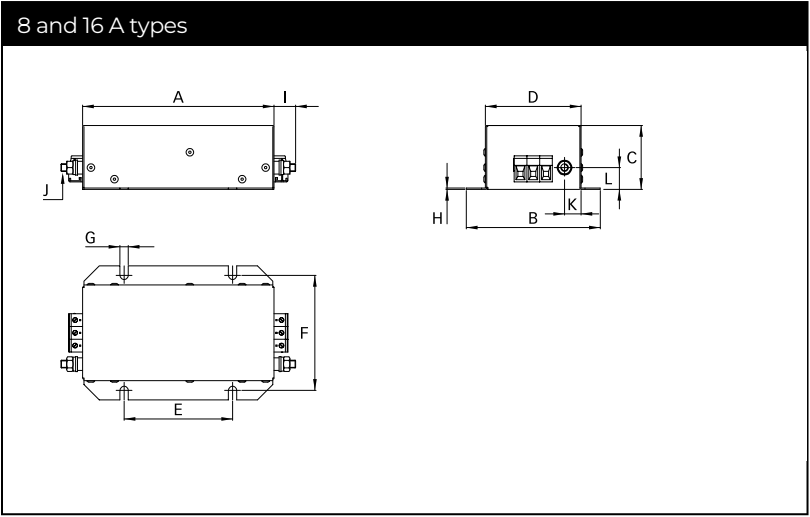
*** Standardized calculated leakage current acc. IEC60939 under normal operating conditions at 520 VAC.

Typical Filter Attenuation

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



Mechanical Data



Dimensions

	8 A	16 A	25 A	36 A	50 A (-33)	50 A (-34)	64 A (-33)	64 A (-34)	80 A	110 A	180 A	280 A
A	200	200	200	200	200	200	200	200	400	400	510	700
B	150	150	150	150	150	150	150	150	170	170	180	260
C	65	65	65	65	65	65	65	80	90	90	133	155
D	120	120	120	120	120	120	120	120	350	350	360	530
E	115	115	115	115	115	115	115	115	373	373	470	660
F	136	136	136	136	136	136	136	136	130	130	156	220
G	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	15 x 6.5	15 x 6.5	16 x 9	16 x 9
H	1	1	1	1	1	1	1	1	1	1	4	4
I	17	17	25	25	25	39	25	39	39	45	83	110
J	M6	M6	M6	M6	M6	M6	M6	M6	M10	M10	M10	M10
K	19.25	19.25	19.25	19.25	19.25	18.75	19.25	18.75	40	40	25	30
L	17	17	18.4	18.4	18.4	17	18.4	17	70	70	85	100

All dimensions in mm; 1 inch = 25.4 mm
Tolerances according: ISO 2768-m / EN 22768-m

Filter Input/Output Connector Cross Sections

	-29 	-33 	-34 	-35 	-36 	-37 
Solid wire	6 mm ²	16 mm ²	35 mm ²	50 mm ²	95 mm ²	150 mm ²
Flex wire	4 mm ²	10 mm ²	25 mm ²	50 mm ²	95 mm ²	150 mm ²
AWG type wire	AWG 10	AWG 6	AWG 2	AWG 1/0	AWG 4/0	AWG 6/0
Recommended torque	0.6-0.8 Nm	1.5-1.8 Nm	4.0-4.5 Nm	7-8 Nm	17-20 Nm	27-30 Nm

Please visit www.schaffner.com to find more details on filter connectors.

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