

Versatile Filtered Power Entry Module



- Rated currents up to 6 A
- Single or dual-fuse holder
- Fuses ø6.3 x 32 mm ø5 x 20 mm
- 2-pole rocker switch
- General purpose application
- Optional medical versions (B type)



Performance indicators Attenuation performance standard high very high Rated current [A] 0 4 8 12 16 20 2 6

Technical Specifications

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Nominal operating voltage	230 VAC
Rated currents	2 to 6 A @ 40°C
Operating frequency	50 to 400 Hz DC to 400 Hz
High potential test voltage	P -> PE 2000 VAC for 2 sec (standard types) P -> PE 2500 VAC for 2 sec (B types) P -> N 760 VAC for 2 sec
Temperature range (operation and storage)	-25°C to +85°C (25/85/21)
Protection category	IP 40 according to IEC 60529
Flammability corresponding to	UL 94 V-0
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
MTBF (Mil-HB-217F)	>550,000 h @ 40°C/230 V
Switch ratings	
Function	2-pole, dark not illuminated Marking I - 0
Electrical specifications	Inrush current 51 A 6,000 on-off operations according to UL 1054, TV 5 10,000 on-off operations according to ENEC
Europe (ENEC)	6 A (4 A), 250 VAC*
USA (UL)	6 A, 125 VAC 4 A, 250 VAC 1/10 HP
Canada (CSA)	6 A, 125 VAC 4 A, 250 VAC 1/10 HP

* Value in () relates to the inductive current charge: cos(phi) = 0.65

Approvals & Compliances









The FN 380 power entry module combines an IEC inlet, a mains filter with a single or dual fuse holder and a 2-pole rocker switch. Choosing FN 380 product line brings you the rapid availability of a standard filter associated with the necessary safety acceptances. Standard IEC connector filters are a practical solution helping you to pass EMI system approval in a short time. A wide selection on amperage ratings, fuse options, mounting possibilities and filters for medical applications are designed to offer you the desired solution.

Features and Benefits

- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Front or snap-in mounting
- Single or dual-fuse holder
- USA Ø6.3 x 32 mm or EU Ø5 x 20 mm fuses
- 2-pole rocker switch

Typical Applications

- Portable electrical and electronic equipment
- Consumer goods
- EDP and office equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment
- Medical equipment

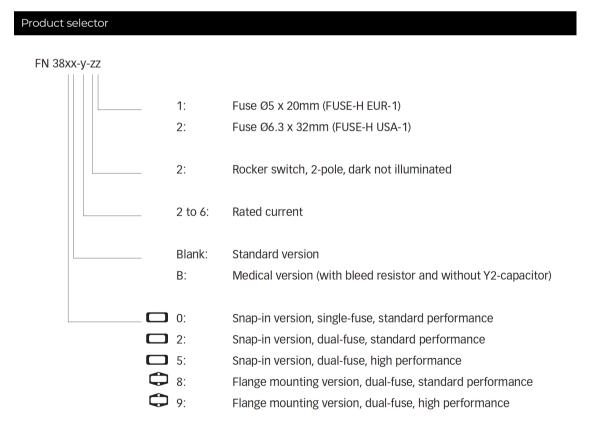
IEC Inlet Filters | Schaffner Group | DATA | SHEET | 29. Jan 2025

Filter Selection Table

Filter*	Rated current	Leakage current**	Inductance***	Capacitance***		Resistance***	Fuses****	Weight
	@ 40°C (25°C)	@ 230 VAC/50 Hz	L	Cx	Су	R		
	[A]	[μΑ]	[mH]	[nF]	[nF]	[kΩ]	[Qty]	[g]
FN 380-2-2 z	2 (2.4)	373	0.70	47	2.2		1	55
FN 380-4-2 z	4 (4.8)	373	0.30	47	2.2		1	55
FN 380-6-2 z	6 (7.2)	373	0.18	47	2.2		1	55
FN 382-2-2 z	2 (2.4)	373	0.70	47	2.2		2	55
FN 382-4-2 z	4 (4.8)	373	0.30	47	2.2		2	55
FN 382-6-2 z	6 (7.2)	373	0.18	47	2.2		2	55
FN 388-2-2 z	2 (2.4)	373	0.70	47	2.2		2	60
FN 388-4-2 z	4 (4.8)	373	0.30	47	2.2		2	60
FN 388-6-2 z	6 (7.2)	373	0.18	47	2.2		2	60
FN 389-2-2 z	2 (2.4)	373	2.00	47	2.2		2	70
FN 389-4-2 z	4 (4.8)	373	0.80	47	2.2		2	70
FN 389-6-2 z	6 (7.2)	373	0.50	47	2.2		2	70
FN 382 B-2-2 z	2 (2.4)	2	0.70	47		1000	2	55
FN 382 B-4-2 z	4 (4.8)	2	0.30	47		1000	2	55
FN 382 B-6-2 z	6 (7.2)	2	0.18	47		1000	2	55
FN 385 B-2-2 z	2 (2.4)	2	2.00	47		1000	2	65
FN 385 B-4-2 z	4 (4.8)	2	0.80	47		1000	2	65
FN 385 B-6-2 z	6 (7.2)	2	0.50	47		1000	2	65
	2 (2 1)			1=		1000		7.0
FN 389 B-2-2 z	2 (2.4)	2	2.00	47		1000	2	70
FN 389 B-4-2 z	4 (4.8)	2	0.80	47		1000	2	70
FN 389 B-6-2 z	6 (7.2)	2	0.50	47		1000	2	70

^{*} Select the requested fuse holder for fuse EUR-1 or USA-1 (z).

^{****} Filters are delivered without fuse.



^{**} Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

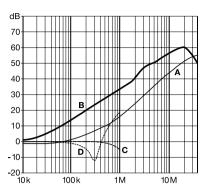
^{***} Tolerances apply: Inductance: -30/+50%, Capacitance: ±20%, Resistance: ±10%

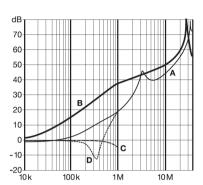
Typical Filter Attenuation

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

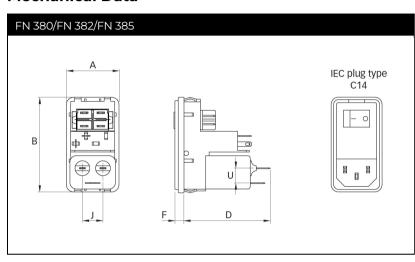
FN 380/FN 382/FN 388

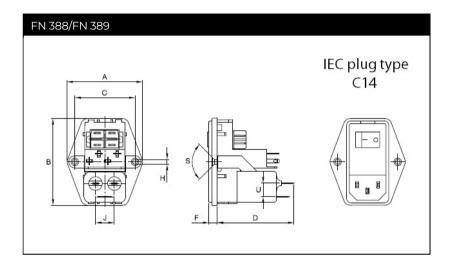
FN 385/FN 389





Mechanical Data

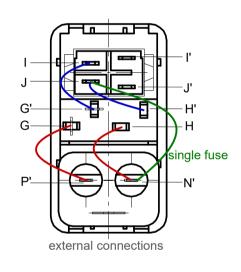


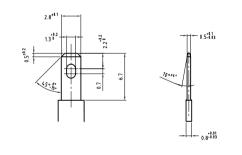


Connection designation

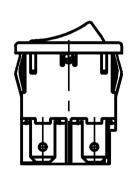
Output terminal (Filter and Fuse)

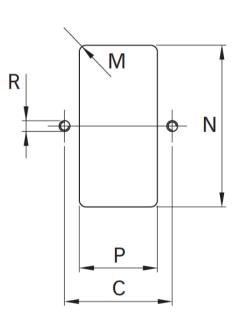
Panel cut out





Output terminal (Switch)





Blade terminals of switch acc. DIN 46 244-A4.8-0.8 (do not connect by soldering) 4 IEC Inlet Filters Schaffner GroupDATASHEET29. Jan 2025

Dimensions

	FN 380	FN 382	FN 385	FN 388	FN 389	Tolerances
Α	32	32	32	50	50	±0.3
В	58	58	58	58	58	±0.3
С				40	40	±0.1
D	51	51	61	51	61	
F	5.5	5.5	5.5	5.5	5.5	
н				Ø3.3	Ø3.3	
J	12.5	12.5	12.5	12.5	12.5	
М	R ≤2	±0.1				
N	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	55.9*/56.2**	+0.2/-0
P	28.5	28.5	28.5	28.5	28.5	+0.2/-0
R				M3	M3	
S				90°	90°	
U	9	9	9	9	9	

 $^{^{\}ast}$ For a back panel thickness between 0.8 and 2.0 mm ** For a back panel thickness between 2.1 and 3.2 mm

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

Please visit <u>www.schaffner.com</u> to find more details on filter connectors.

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