

## **Versatile Filtered Power Entry Module**



- Rated currents up to 6 A
- Single or dual-fuse holder
- Fuses Ø6.3 x 32 mm or Ø5 x 20 mm
- Voltage selector 100/120/230/240 V
- General purpose application

Performance indicators

Optional medical versions (B type)



# 

#### **Technical Specifications**

Maximum continuous operating voltage	250 VOLT, 50/60 Hz
Operating frequency	DC to 400 Hz
Rated currents	2 to 6 A @ 40°C max.
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
Protection category	IP 40 according to IEC 60529
Temperature range (operation and storage)	-25°C to +85°C (25/85/21)
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
Flammability corresponding to	UL 94 V-2 or better
MTBF @ 40°C/230 V (Mil-HB-217F)	550,000 hours
Voltage selector description	VOL-SE 4SP-4
Function	Series/parallel
Voltage marking	
1st	100
2nd	120
3rd	230
4st	240
Closed internal contact corresponding to	
lst	a, c, e
2st	b, c, e
3st	3st a, d
4st	b, d

\* Other selected voltage marking on request.

#### Approvals & Compliances









The FN 370 power entry module combines an IEC inlet, a mains filter with a single or dual- fuse holder and a voltage selector. Choosing FN 370 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**

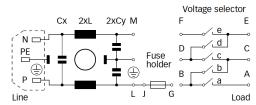
- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear/front or snap-in mounting
- Single or dual-fuse holder
- USA Ø6.3 x 32 mm or EU Ø5 x 20 mm fuses
- Two attenuation performance ranges
- Voltage selector 100/120/230/240 V
- Custom-specific versions are available on request

#### **Typical Applications**

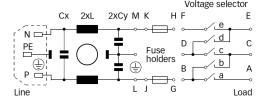
- Portable electrical and electronic equipment
- Consumer goods
- EDP and office equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment
- Medical equipment

## Typical electrical schematic

FN 370 / FN 376



FN 372 / FN 378 / FN 379



#### **Filter Selection Table**

Filter*	Rated current	Leakage current**	Inductance	Cap	acitance	Resistance	Output	Fuses***	Weight
	@ 40°C (25°C)	@ 230 VAC/50 Hz	L	Cx	Су	R	connections		
	[A]	[μΑ]	[mH]	[nF]	[nF]	[kΩ]		[Qty]	[g]
FN 370-2-2 z	2 (2.4)	373	0.70	47	2.2		13	1	55
FN 370-4-2 z	4 (4.8)	373	0.30	47	2.2		13	1	55
FN 370-6-2 z	6 (7.2)	373	0.18	47	2.2		13	1	55
FN 372-2-2 z	2 (2.4)	373	0.70	47	2.2		13	2	55
FN 372-4-2 z	4 (4.8)	373	0.30	47	2.2		13	2	55
FN 372-6-2 z	6 (7.2)	373	0.18	47	2.2		13	2	55
FN 378-2-2 z	2 (2.4)	373	0.70	47	2.2		13	2	60
FN 378-4-2 z	4 (4.8)	373	0.30	47	2.2		13	2	60
FN 378-6-2 z	6 (7.2)	373	0.18	47	2.2		13	2	60
FN 379-2-2 z	2 (2.4)	373	2.00	47	2.2		13	2	70
FN 379-4-2 z	4 (4.8)	373	0.80	47	2.2		13	2	70
FN 379-6-2 z	6 (7.2)	373	0.50	47	2.2		13	2	70
FN 379 B-2-2 z	2 (2.4)	2	2.00	47		1000	13	2	70
FN 379 B-4-2 z	4 (4.8)	2	0.80	47		1000	13	2	70
FN 379 B-6-2 z	6 (7.2)	2	0.50	47		1000	13	2	70

 $<sup>^{*}</sup>$  Select the requested fuse holder for fuse EUR-1 or USA-1 (z).

## Product selector FN 37xx-y-zz 1: Fuse Ø5 x 20mm (FUSE-H EUR-1) Fuse Ø6.3 x 32mm (FUSE-H USA-1) 2: Voltage selector, series / parallel 100/120/230/240V 2: Rated current 2 to 6: Blank: Standard version B: Medical version (with bleed resistor and without Y2-capacitor) Snap-in version, single-fuse, standard performance Snap-in version, dual-fuse, standard performance Flange mounting version, dual-fuse, standard performance Flange mounting version, dual-fuse, high performance

For example: FN 370-6-21, FN 378-4-22, FN 379 B-2-22

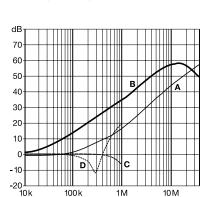
<sup>\*\*</sup> Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

<sup>\*\*\*</sup> Filters are delivered without fuse.

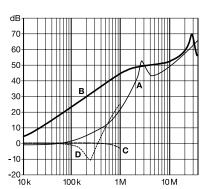
## **Typical Filter Attenuation**

Per CISPR 17; A=50  $\Omega$ /50  $\Omega$  sym; B=50  $\Omega$ /50  $\Omega$  asym; C=0.1  $\Omega$ /100  $\Omega$  sym; D=100  $\Omega$ /0.1  $\Omega$  sym

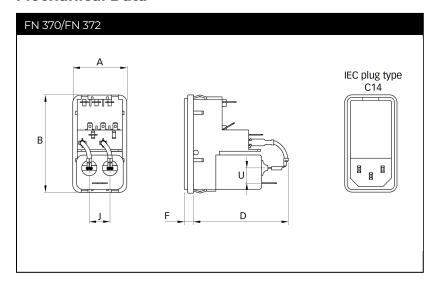
#### FN 370/FN 372/FN 378

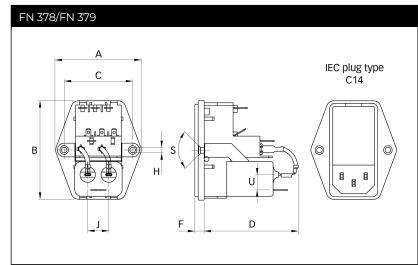


FN 379



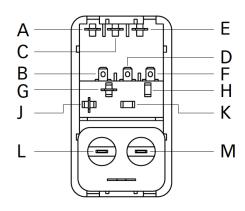
## **Mechanical Data**

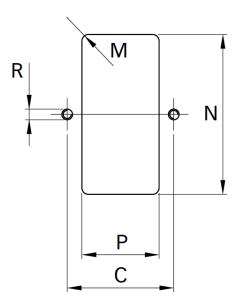




## Connection designation

## Panel cut out





## **Dimensions**

	FN 370	FN 372	FN 378	FN 379	Tolerances
Α	32	32	50	50	±0.3
В	58	58	58	58	±0.3
С			40	40	±0.1
D	54	54	54	64.5	
F	5.5	5.5	5.5	5.5	
Н			Ø3.3	Ø3.3	
J	12.5	12.5	12.5	12.5	
М	R ≤2	R ≤2	R ≤2	R ≤2	±0.1
N	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	+0.2/-0
R			M3	M3	
S			90°	90°	
U	9	9	9	9	

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

Please visit  $\underline{www.schaffner.com}$  to find more details on filter connectors.

<sup>\*</sup> For a panel thickness between 0.8 and 3 mm
\*\* For a back panel thickness between 2.1 and 3.2 mm