

### Versatile filtered power entry module

## IEC inlet filters **FN 370**

# IIISCHAFFNER

energy efficiency and reliability



#### Rated currents up to 6A

- Single or dual-fuse holder
- Fuses Ø6.3 x 32mm or Ø5 x 20mm
- Voltage selector 100/120/230/240V
- General purpose application
- Optional medical versions (B type)

Approvals



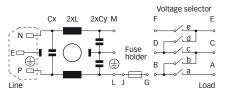


#### Typical electrical schematic

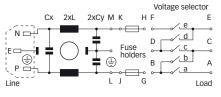
FN 370 / FN 376

#### Technical specifications

Maximum continuous operating voltage:	250VAC, 50/60Hz				
Operating frequency:	dc to 400Hz				
Rated currents:	1 to 6A @ 40°C max.				
High potential test voltage:	P -> E 2000VAC for 2 sec (standard types)				
	P -> E 2500VAC for 2 sec (B types)				
	P -> N 760VAC for 2 sec				
Protection category:	IP40 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 94V-2 or better				
MTBF @ 40°C/230V (Mil-HB-217F):	550,000 hours				
Voltage selector description:	VOL-SE 4SP-4				
Function:	Series/parallel				
Voltage marking*:					
1st:	100				
2nd:	120				
3rd:	230				
4th:	240				
Closed internal contact corresponding to:					
1st:	a, c, e				
2nd:	b, c, e				
3rd:	a, d				
4th:	b, d				



#### FN 372 / FN 375 / FN 378 / FN 379



\* Other selected voltage marking on request.

The FN 570 power entry module combines an IEC inlet, a mains filter with a single or dualfuse holder and a voltage selector. Choosing FN 570 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 32mm or EU Ø5 x 20mm fuses.
- Two attenuation performance ranges.
- Voltage selector 100/120/230/240V.
- 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

Filter*	Rated current @ 40°C (25°C)	Leakage current** @ 230VAC/50Hz [µA]	Inductance	Capac Cx	Capacitance Cx Cy		Output connections	Fuses***	Weight
	[A]		- (mH)	[nF]	(nF)	R [kΩ]		[Qty]	[g]
FN 370-2-2.	2 (2.4)	373	0.70	47	2.2	[]	13	1	55
FN 370-4-2.	4 (4.8)	373	0.30	47	2.2		13	1	55
FN 370-6-2.	6 (7.2)	373	0.18	47	2.2		13	1	55
FN 372-2-2.	2 (2.4)	373	0.70	47	2.2		13	2	55
FN 372-4-2.	4 (4.8)	373	0.30	47	2.2		13	2	55
FN 372-6-2.	6 (7.2)	373	0.18	47	2.2		13	2	55
FN 375-2-2.	2 (2.4)	373	2.00	47	2.2		13	2	65
FN 375-4-2.	4 (4.8)	373	0.80	47	2.2		13	2	65
FN 375-6-2.	6 (7.2)	373	0.50	47	2.2		13	2	65
FN 376-2-2.	2 (2.4)	373	0.70	47	2.2		13	1	55
FN 376-4-2.	4 (4.8)	373	0.30	47	2.2		13	1	55
FN 376-6-2.	6 (7.2)	373	0.18	47	2.2		13	1	55
FN 378-2-2.	2 (2.4)	373	0.70	47	2.2		13	2	60
FN 378-4-2.	4 (4.8)	373	0.30	47	2.2		13	2	60 60
FN 378-6-2.	6 (7.2)	373	0.18	47	2.2		13	2	60
FN 379-2-2.	2 (2.4)	373	2.00	47	2.2		13	2	70
FN 379-4-2.	4 (4.8)	373	0.80	47	2.2		13	2	70
FN 379-6-2.	6 (7.2)	373	0.50	47	2.2		13	2	70
FN 375B-2-2.	2 (2.4)	2	2.00	47		1000	13	2	65
FN 375B-4-2.	4 (4.8)	2	0.80	47		1000	13	2	65
FN 375B-6-2.	6 (7.2)	2	0.50	47		1000	13	2	65
FN 379B-2-2.	2 (2.4)	2	2.00	47		1000	13	2	70
FN 379B-4-2.	4 (4.8)	2	0.80	47		1000	13	2	70
FN 379B-6-2.	6 (7.2)	2	0.50	47		1000	13	2	70

\* Select the requested fuse holder for fuse EUR-1 or USA-1.
 \*\* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

\*\*\* Filters are delivered without fuse.

#### Product selector

#### FN 37xx-y-zz

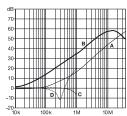
1: 2:	Fuse Ø5 x 20mm (FUSE-H EUR-1) Fuse Ø6.3 x 32mm (FUSE-H USA-1)
2:	Voltage selector, series / parallel 100/120/230/240V
1 to 6:	Rated current
Blank: B:	Standard version Medical version (with bleed resistor and without Y2-capacitor)
<ul> <li>0:</li> <li>2:</li> <li>5:</li> <li>6:</li> <li>8:</li> <li>9:</li> </ul>	Snap-in version, single-fuse, standard performance Snap-in version, dual-fuse, standard performance Snap-in version, dual-fuse, high performance Flange mounting version, single-fuse, standard performance Flange mounting version, dual-fuse, standard performance Flange mounting version, dual-fuse, high performance

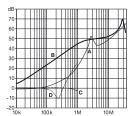
For example: FN 370-6-21, FN 378-4-22, FN 375B-2-22

#### 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

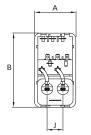
FN 370 / FN 372 / FN 376 / FN 378 FN 375 / FN 379

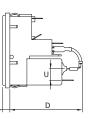




Mechanical data

FN 370 / FN 372

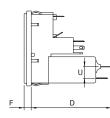




FN 375

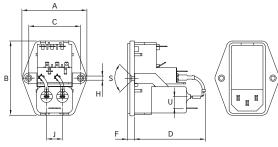
А

J\_

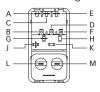


FN 376 / FN 378 / FN 379

F

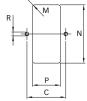


Connection designation





Panel cut out



#### Dimensions

	FN 370	FN 372	FN 375	FN 376	FN 378	FN 379	Tolerances
A	32	32	32	50	50	50	±0.3
В	58	58	58	58	58	58	±0.3
С				40	40	40	±0.1
D	54	54	61	54	54	64.5	
F	5.5	5.5	5.5	5.5	5.5	5.5	
Н				Ø3.3	Ø3.3	Ø3.3	
l	12.5	12.5	12.5	12.5	12.5	12.5	
M	R ≤ 2	R ≤ 2	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**	55.9*/56.2**	55.9*/56.2**	+0.2/-0
Р	28.5	28.5	28.5	28.5	28.5	28.5	+0.2/-0
R				M3	M3	M3	
S				90°	90°	90°	
U	9	9	9	9	9	9	

For a back panel thickness between 0.8 and 2.0mm
 For a back panel thickness between 2.1 and 3.2mm

All dimensions in mm; 1 inch = 25.4mm

Tolerances according: ISO 2768-m / EN 22768-m