

## Versatile Filtered Power Entry Module



- Rated currents up to 6 A
- Single or dual-fuse holder
- Fuses Ø 6.3 x 32 mm or Ø 5 x 20 mm
- Voltage selector 100/120/230/240 V
- General purpose application
- Optional medical versions (B type)



### Performance indicators

Attenuation performance



Rated current [A]



### Technical specifications

|                                           |                                                                                                              |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Maximum continuous operating voltage      | 250 V, 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)<br>P → N 760 VAC for 2 sec<br>P → PE 2500 VAC for 2 sec (B types) |
| 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 94 V-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                                                                                                      |
| 2st                                       | b, c, e                                                                                                      |
| 3st                                       | a, d                                                                                                         |
| 4st                                       | b, d                                                                                                         |

\* Other selected voltage marking on request.

### Approvals



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 Ø 6.3 x 32mm or EU Ø 5 x 20mm 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

## Filter selection table

| Filter*       | Rated current<br>@ 40 °C (25 °C) | Leakage current**<br>@ 230 VAC/50 Hz | Inductance<br>L | Capacitance |            | Resistance | Output<br>connections | Fuses*** | Weight |
|---------------|----------------------------------|--------------------------------------|-----------------|-------------|------------|------------|-----------------------|----------|--------|
|               | [A]                              | [μA]                                 | [mH]            | Cx<br>[nF]  | Cy<br>[nF] | R<br>[kΩ]  |                       | [Qty]    | [g]    |
| FN 370-2-2.1  | 2 (2.4)                          | 373                                  | 0.70            | 47          | 2.2        |            | 13                    | 1        | 55     |
| FN 370-4-2.1  | 4 (4.8)                          | 373                                  | 0.30            | 47          | 2.2        |            | 13                    | 1        | 55     |
| FN 370-6-2.1  | 6 (7.2)                          | 373                                  | 0.18            | 47          | 2.2        |            | 13                    | 1        | 55     |
| FN 372-2-2.2  | 2 (2.4)                          | 373                                  | 0.70            | 47          | 2.2        |            | 13                    | 2        | 55     |
| FN 372-4-2.2  | 4 (4.8)                          | 373                                  | 0.30            | 47          | 2.2        |            | 13                    | 2        | 55     |
| FN 372-6-2.2  | 6 (7.2)                          | 373                                  | 0.18            | 47          | 2.2        |            | 13                    | 2        | 55     |
| FN 376-2-2.1  | 2 (2.4)                          | 373                                  | 0.70            | 47          | 2.2        |            | 13                    | 1        | 55     |
| FN 376-4-2.1  | 4 (4.8)                          | 373                                  | 0.30            | 47          | 2.2        |            | 13                    | 1        | 55     |
| FN 376-6-2.1  | 6 (7.2)                          | 373                                  | 0.18            | 47          | 2.2        |            | 13                    | 1        | 55     |
| FN 378-2-2.2  | 2 (2.4)                          | 373                                  | 0.70            | 47          | 2.2        |            | 13                    | 2        | 60     |
| FN 378-4-2.2  | 4 (4.8)                          | 373                                  | 0.30            | 47          | 2.2        |            | 13                    | 2        | 60     |
| FN 378-6-2.2  | 6 (7.2)                          | 373                                  | 0.18            | 47          | 2.2        |            | 13                    | 2        | 60     |
| FN 379-2-2.2  | 2 (2.4)                          | 373                                  | 2.00            | 47          | 2.2        |            | 13                    | 2        | 70     |
| FN 379-4-2.2  | 4 (4.8)                          | 373                                  | 0.80            | 47          | 2.2        |            | 13                    | 2        | 70     |
| FN 379-6-2.2  | 6 (7.2)                          | 373                                  | 0.50            | 47          | 2.2        |            | 13                    | 2        | 70     |
| FN 379B-2-2.2 | 2 (2.4)                          | 2                                    | 2.00            | 47          |            | 1000       | 13                    | 2        | 70     |
| FN 379B-4-2.2 | 4 (4.8)                          | 2                                    | 0.80            | 47          |            | 1000       | 13                    | 2        | 70     |
| FN 379B-6-2.2 | 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.

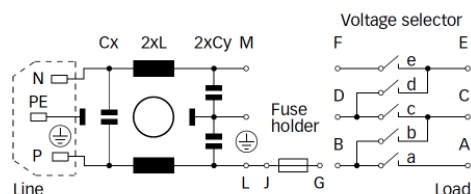
## Product selector

FN 37xx-y-zz

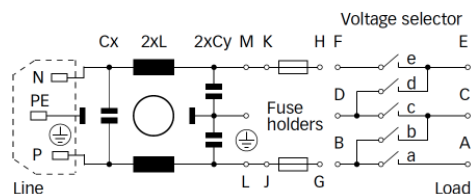
- 1: Fuse Ø5 x 20mm (FUSE-H EUR-1)  
 2: Fuse Ø6.3 x 32mm (FUSE-H USA-1)  
 2: Voltage selector, series / parallel 100/120/230/240V  
 2 to 6: Rated current  
 Blank: Standard version  
 B: Medical version (with bleed resistor and without Y2-capacitor)  
 0: Snap-in version, single-fuse, standard performance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

## Typical electrical schematic

FN 370 / FN 376



FN 372 / FN 378 / FN 379



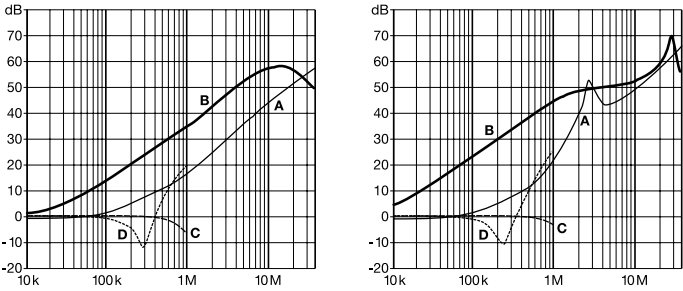
For example: FN 370-6-21, FN 378-4-22, FN 379B-2-22

Typical filter attenuation

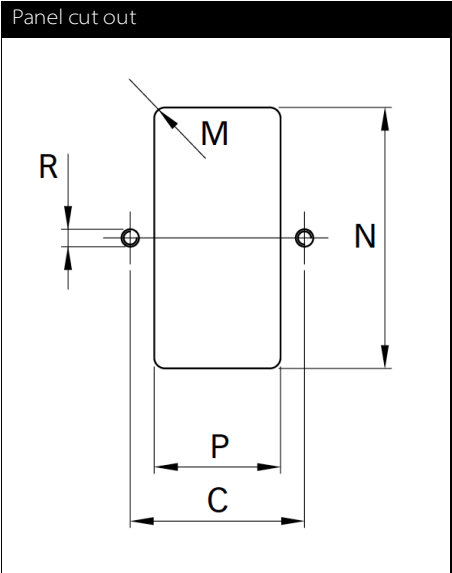
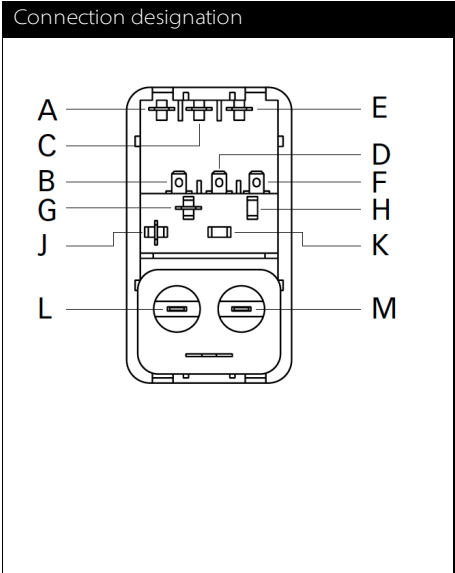
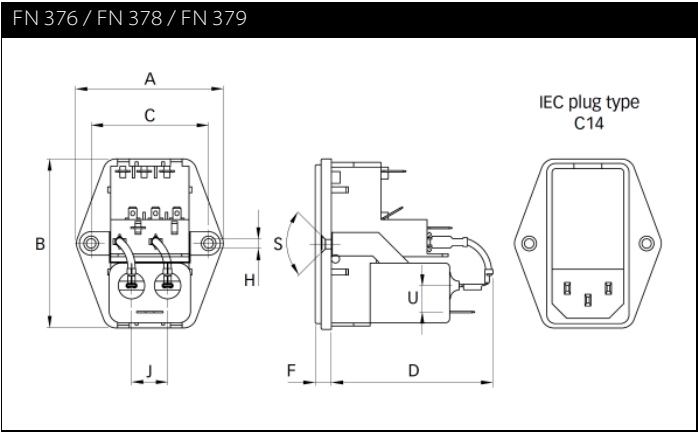
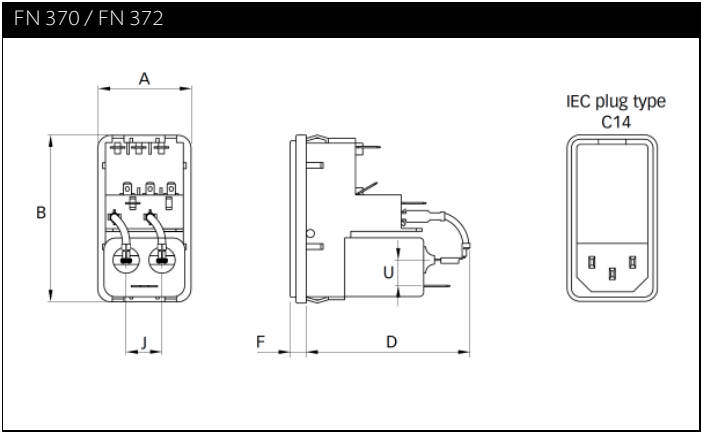
Per CISPR 17; A = 50 Ω/50 Ω sym; B = 50 Ω/50 Ω asym; C = 0.1 Ω/100 Ω sym; D = 100 Ω/0.1 Ω sym

FN 370 / FN 372 / FN 376 / FN 378

FN 379



Mechanical data



## Dimensions

|          | FN 370       | FN 372       | FN 376       | FN 378       | FN 379       | Tolerances |
|----------|--------------|--------------|--------------|--------------|--------------|------------|
| <b>A</b> | 32           | 32           | 50           | 50           | 50           | ±0.3       |
| <b>B</b> | 58           | 58           | 58           | 58           | 58           | ±0.3       |
| <b>C</b> |              |              | 40           | 40           | 40           | ±0.1       |
| <b>D</b> | 54           | 54           | 54           | 54           | 64.5         |            |
| <b>F</b> | 5.5          | 5.5          | 5.5          | 5.5          | 5.5          |            |
| <b>H</b> |              |              | Ø 3.3        | Ø 3.3        | Ø 3.3        |            |
| <b>J</b> | 12.5         | 12.5         | 12.5         | 12.5         | 12.5         |            |
| <b>M</b> | R ≤ 2        | R ≤ 2        | R ≤ 2        | R ≤ 2        | R ≤ 2        | ±0.1       |
| <b>N</b> | 55.9*/56.2** | 55.9*/56.2** | 55.9*/56.2** | 55.9*/56.2** | 55.9*/56.2** | +0.2/-0    |
| <b>P</b> | 28.5         | 28.5         | 28.5         | 28.5         | 28.5         | +0.2/-0    |
| <b>R</b> |              |              | M3           | M3           | M3           |            |
| <b>S</b> |              |              | 90°          | 90°          | 90°          |            |
| <b>U</b> | 9            | 9            | 9            | 9            | 9            |            |

\* For a panel thickness between 0.8 and 3 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 [www.schaffner.com](http://www.schaffner.com) to find more details on filter connectors.



## Headquarters, global innovation and development center

### Switzerland

#### Schaffner Group

Nordstrasse 11  
4542 Luterbach  
T +41 32 6816 626  
F +41 32 6816 630  
[info@schaffner.com](mailto:info@schaffner.com)  
<http://www.schaffner.com>



## Sales and application centers

### China

#### Schaffner EMC Ltd. Shanghai

T20-3, No 565 Chuangye Road  
Pudong New Area  
201201 Shanghai  
T +86 21 3813 9500  
F +86 21 3813 9501 / 02  
[cschina@schaffner.com](mailto:cschina@schaffner.com)  
<http://www.schaffner.com.cn/>

### Finland

#### Schaffner Oy

Sauvonrinne 19 H  
08500 Lohja  
T +358 19 35 72 71  
[finlandsales@schaffner.com](mailto:finlandsales@schaffner.com)

### France

#### Schaffner EMC S.A.S.

112, Quai de Bezons  
Boîte postale 133  
95103 Argenteuil  
T +33 1 34 34 30 60  
F +33 1 39 47 02 28  
[francesales@schaffner.com](mailto:francesales@schaffner.com)

### Germany

#### Schaffner Deutschland GmbH

Schoemperlenstrasse 12B  
76185 Karlsruhe  
T +49 721 56910  
F +49 721 569110  
[germanysales@schaffner.com](mailto:germanysales@schaffner.com)

### Italy

#### Schaffner EMC S.r.l.

Via Galileo Galilei 47  
20092 Cinisello Balsamo (MI)  
T +39 02 66 04 30 45/47  
F +39 02 61 23 943  
[italysales@schaffner.com](mailto:italysales@schaffner.com)

### Japan

#### Schaffner EMC K.K.

1-32-12, Kamiyama, Setagaya-ku  
7F Mitsui-seimei Sangenjaya Bldg.  
154-0011 Tokyo  
T +81 3 5712 3650  
F +81 3 5712 3651  
[japansales@schaffner.com](mailto:japansales@schaffner.com)  
<http://www.schaffner.jp>

### Singapore

#### Schaffner EMC Pte Ltd.

Blk 3015A Ubi Road 1  
05-09 Kampong Ubi Industrial Estate  
408705 Singapore  
T +65 6377 3283  
F +65 6377 3281  
[singaporesales@schaffner.com](mailto:singaporesales@schaffner.com)

### Spain

#### Schaffner EMC España

Calle Caléndula 93  
Miniparc III, Edificio E  
El Soto de la Moraleja  
Alcobendas  
28109 Madrid  
T +34 618 176 133  
[spainsales@schaffner.com](mailto:spainsales@schaffner.com)

### Sweden

#### Schaffner EMC AB

Turebergstorg 1, 6  
19147 Sollentuna  
T +46 8 5792 1121 / 22  
F +46 8 92 96 90  
[swedensales@schaffner.com](mailto:swedensales@schaffner.com)

### Switzerland

#### Schaffner EMV AG

Nordstrasse 11  
4542 Luterbach  
T +41 32 6816 626  
F +41 32 6816 641  
[sales@schaffner.ch](mailto:sales@schaffner.ch)

### Taiwan R.O.C.

#### Schaffner EMV Ltd.

6 Floor, No. 413  
Rui Guang Road  
114 Neihs District Taipei City  
T +886 2 87525050  
F +886 2 87518086  
[taiwansales@schaffner.com](mailto:taiwansales@schaffner.com)

### Thailand

#### Schaffner EMC Co. Ltd.

Northern Region Industrial Estate  
67 Moo 4 Tambon Ban Klang  
Amphur Muang P.O. Box 14  
51000 Lamphun  
T +66 53 58 11 04  
F +66 53 58 10 19  
[thailandsales@schaffner.com](mailto:thailandsales@schaffner.com)

### UK

#### Schaffner Ltd.

5 Ashville Way  
Molly Millars Lane  
Wokingham  
RG41 2PL Berkshire  
T +44 118 9770070  
F +44 118 9792969  
[uksales@schaffner.com](mailto:uksales@schaffner.com)  
<http://www.schaffner.uk.com>

### USA

#### Schaffner EMC Inc.

52 Mayfield Avenue  
08837 Edison, New Jersey  
T +1 800 367 5566  
T +1 732 225 9533  
F +1 732 225 4789  
[usasales@schaffner.com](mailto:usasales@schaffner.com)  
<http://www.schaffner.com/us>

#### Schaffner MTC LLC

6722 Thirlane Road  
24019 Roanoke, Virginia  
T +1 276 228 7943  
F +1 276 228 7953  
<http://www.schaffner-mtc.com>

#### Schaffner Trencos LLC

2550 Brookpark Road  
44134 Cleveland, Ohio  
T +1 216 741 5282  
F +1 216 741 4860  
[www.schaffner-trencos.com](http://www.schaffner-trencos.com)

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