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

<table>
<thead>
<tr>
<th>Attenuation performance</th>
<th>standard</th>
<th>high</th>
<th>very high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current [A]</td>
<td>0 4 8 12 16 20</td>
<td></td>
<td></td>
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</tbody>
</table>

Technical specifications

- **Maximum continuous operating voltage**: 250 VAC, 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
- **Function**: 2-pole, dark not illuminated
  - Marking I - 0
- **Electrical specifications**:
  - Inrush current 51 A
  - 10,000 on-off operations according to ENEC
  - 6,000 on-off operations according to UL 1054, TV 5
- **Mechanical life**: 50,000 cycles
- **Switch ratings**:
  - 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
- **Output connections**: Blade terminals acc. DIN 46 244-A4.8-0.8 (do not connect by soldering)

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

Approvals

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
- 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

*Value in () relates to the inductive current charge: cos φ=0.65*
Filter selection table

<table>
<thead>
<tr>
<th>Filter</th>
<th>Rated current @ 40°C (25°C)</th>
<th>Leakage current** @ 230 VAC/50 Hz</th>
<th>Inductance***</th>
<th>Capacitance***</th>
<th>Resistance***</th>
<th>Output connections</th>
<th>Fuses****</th>
<th>Weight</th>
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<tbody>
<tr>
<td>FN 380-2-2 z</td>
<td>2 (2.4)</td>
<td>373</td>
<td>0.70</td>
<td>47</td>
<td>2.2</td>
<td>16</td>
<td>1</td>
<td>55</td>
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<tr>
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<td>4 (4.8)</td>
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<td>1000</td>
<td>16</td>
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<td>70</td>
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</tbody>
</table>

* Select the requested fuse holder for fuse EUR-1 or USA-1 (z).
** 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%
**** Filters are delivered without fuse.

Product selector

1. Fuse Ø5 x 20mm (FUSE-H EUR-1)
2. Fuse Ø6.3 x 32mm (FUSE-H USA-1)
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
5: Snap-in version, dual-fuse, high performance
8: Flange mounting version, dual-fuse, standard performance
9: Flange mounting version, dual-fuse, high performance
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  6A type only

Mechanical data

FN 380/FN 382/FN 385  FN 388/FN 389

Connection designation  Panel cut out  Output terminal -16
### Dimensions

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<th>FN 380</th>
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<th>FN 385</th>
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<th>FN 389</th>
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<td>55.9*/56.2**</td>
<td>55.9*/56.2**</td>
<td>55.9*/56.2**</td>
<td>55.9*/56.2**</td>
<td>+0.2/-0</td>
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<tr>
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<td>28.5</td>
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<td>+0.2/-0</td>
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<td>9</td>
<td>9</td>
<td>9</td>
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</tr>
</tbody>
</table>

* 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 [www.schaffner.com](http://www.schaffner.com) to find more details on filter connectors.
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