# General purpose power entry module with fuses 



- Rated currents up to 10A
- For one or two fuses
- Optional medical versions (B type)
- Snap-in versions (S type)


## Technical specifications

| Maximum continuous operating voltage: | 250VAC, $50 / 60 \mathrm{~Hz}$ |
| :---: | :---: |
| Operating frequency: | dc to 400Hz |
| Rated currents: | 1 to 10A @ $40^{\circ} \mathrm{C}$ max. |
| High potential test voltage: | $\mathrm{P} \rightarrow$ E 2000VAC for 2 sec (standard types) |
|  | $P \rightarrow$ E 2500VAC for 2 sec (B types) |
|  | $\mathrm{P} \rightarrow \mathrm{N} 760 \mathrm{VAC}$ for 2 sec (standard types) |
|  | $\mathrm{P} \rightarrow$ N 1700VDC for 2 sec (B types) |
| Air clearance: | $>3 \mathrm{~mm}$ according to EN 60601-1 |
| Creepage distance: | $>4 \mathrm{~mm}$ according to EN 60601-1 |
| Protection category: | IP40 according to IEC 60529 |
| Temperature range (operation and storage): | $-25^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}(25 / 85 / 21)$ |
| Design corresponding to: | UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939 |
| Flammability corresponding to: | UL 94V-2 or better |
| MTBF @ $40^{\circ} \mathrm{C} / 230 \mathrm{~V}$ (Mil-HB-217F): | 2,200,000 hours |
| Fuse holder: | 1 or 2 fuses (05 x 20mm) |

## Features and benefits

The FN 9260 power entry module combines an IEC inlet, mains filter with excellent filter attenuation and fuses in a small form factor. Choosing FN 9260 product line brings you 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, output connections, mounting possibilities and filters for medical applications are designed to offer you the desired solution.

- Exceptional conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- All versions are available with low leakage currents for medical applications. Air and creepage distance $>4 \mathrm{~mm}$ fulfills

EN 60601-1 requirements for patient coupled devices.

- Versions up to 10A are available with fuse holder for one or two fuses.
- Custom-specific versions are available on request.


## Approvals



## RoHS

2002/95/EC

## Typical electrical schematic



## Typical applications

- Portable electrical and electronic equipment
- Medical equipment
- Small to medium-sized machines and household equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment

Filter selection table

| Filter | Rated current <br> @ $40^{\circ} \mathrm{C}\left(25^{\circ} \mathrm{C}\right)$ | Leakage current* <br> @ 230VAC/50Hz | Inductance L | $\begin{aligned} & \text { Capacitance } \\ & \text { Cx Cy } \end{aligned}$ |  | Resistance <br> R <br> [k $\Omega$ ] | Input/Output connections | Fuses <br> [Qty] | Weight <br> [g] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [A] | [ HA ] | [ mH ] |  |  |  |  |  |  |
| FN 9260x-1-06-y | 1 (1.2) | 373 | 5.3 | 0.1 | 2.2 | 1000 | -06 | 2 | 55 |
| FN 9260x-2-06-y | 2 (2.3) | 373 | 2.7 | 0.1 | 2.2 | 1000 | -06 | 2 | 55 |
| FN 9260x-4-06-y | 4 (4.6) | 373 | 1.0 | 0.1 | 2.2 | 1000 | -06 | 2 | 55 |
| FN 9260x-6-06-y | 6 (6.9) | 373 | 0.3 | 0.1 | 2.2 | 1000 | -06 | 2 | 55 |
| FN 9260x-10-06-y | 10 (11.5) | 373 | 0.2 | 0.1 | 2.2 | 1000 | -06 | 2 | 55 |
|  |  |  |  |  |  |  |  |  |  |
| FN 9260xB-1-06-y | 1 (1.2) | 2 | 5.3 | 0.1 |  | 1000 | -06 | 2 | 55 |
| FN 9260xB-2-06-y | 2 (2.3) | 2 | 2.7 | 0.1 |  | 1000 | -06 | 2 | 55 |
| FN 9260xB-4-06-y | 4 (4.6) | 2 | 1.0 | 0.1 |  | 1000 | -06 | 2 | 55 |
| FN 9260xB-6-06-y | 6 (6.9) | 2 | 0.3 | 0.1 |  | 1000 | -06 | 2 | 55 |
| FN 9260xB-10-06-y | 10 (11.5) | 2 | 0.2 | 0.1 |  | 1000 | -06 | 2 | 55 |
|  |  |  |  |  |  |  |  |  |  |
| FN 261x-1-06-y | 1 (1.2) | 373 | 5.3 | 0.1 | 2.2 | 1000 | -06 | 1 | 55 |
| FN 261x-2-06-y | 2 (2.3) | 373 | 2.7 | 0.1 | 2.2 | 1000 | -06 | 1 | 55 |
| FN 261x-4-06-y | 4 (4.6) | 373 | 1.0 | 0.1 | 2.2 | 1000 | -06 | 1 | 55 |
| FN 261x-6-06-y | 6 (6.9) | 373 | 0.3 | 0.1 | 2.2 | 1000 | -06 | 1 | 55 |
| FN 261x-10-06-y | 10 (11.5) | 373 | 0.2 | 0.1 | 2.2 | 1000 | -06 | 1 | 55 |

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


## Product selector

FN 9260xx-yy-yy-y


For example: FN 9260-1-06-10, FN 9260SB-10-06-20, FN 261S-6-06-30

## Typical filter attenuation

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

FN 9260: 1 to 4A types


FN 9260: 6 and 10A types


FN 261: 1 to 4A types


FN 261: 6 and 10A types


## Mechanical data



## Dimensions

|  | FN 9260 <br> FN 261 | FN 9260S FN 261S | Tolerances |
| :---: | :---: | :---: | :---: |
| A | 46 | 34 | $\pm 0.3$ |
| B | 35 | 35 | $\pm 0.3$ |
| C | 36 |  | $\pm 0.3$ |
| D | 41 | 41 | $\pm 0.3$ |
| E | 27.8 | 27.8 | +0.3/-0 |
| F | 5.5 | 5.5 | $\pm 0.3$ |
| G | 32 | 32 | +0.3/-0 |
| H | 03.2 |  | $\pm 0.1$ |
| I | 13.8 | 13.8 |  |
| J | 12.5 | 12.5 | $\pm 0.3$ |
| M | $\mathrm{R} \leq 3.5$ | $\mathrm{R} \leq 3.5$ |  |
| N | 33 | 33 | +0.3/-0 |
| P | 29 | 29.5 | $\pm 0.3$ |
| R | M3 |  |  |
| S | $90^{\circ}$ |  |  |
| T* |  | 0.6-1.5 |  |
| T* |  | 1.6-2.5 |  |
| T* |  | 2.6-3.5 |  |

All dimensions in mm ; 1 inch $=25.4 \mathrm{~mm}$
For selecting the panel thickness, please refer to the filter selector table.

