

## General purpose power entry module with mains switch



- Rated currents up to 10A
- 1-pole rocker switch
- Snap-in versions (S and S1 type)
- Compact to fit 1 U rack size


## Approvals



## RoHS

2002/95/EC

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 for capacitors: | $\mathrm{P} \rightarrow \mathrm{E}$ 2000VAC for 2 sec |
|  | $\mathrm{P} \rightarrow \mathrm{N} 760 \mathrm{VAC}$ for 2 sec |
| 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, UL 94V-0 or better |
| MTBF @ 40${ }^{\circ} \mathrm{C} / 230 \mathrm{~V}$ (Mil-HB-217F): | 6,500,000 hours |
| Rocker switch description: |  |
| Function: | 1-pole, dark not illuminated |
|  | Marking I-0 |
| Electrical specifications: | Inrush current 78A |
|  | 10,000 on-off operations according to UL 1054, TV 5 |
| Switch ratings: |  |
| USA (UL): | 10A, 125VAC; 8A, 250VAC; 1/4HP |
| Canada (CSA): | 10A, 250VAC; 1/4HP |
| Europe (ENEC): | 20A (4A), 250VAC* |
| China (CQC): | 10A, 250VAC |

* Value in () relates to the inductive current charge: $\cos \gamma=0.65$

The FN 9263 power entry module combines an IEC inlet, mains filter with excellent filter attenuation and a mains switch in a small form factor. Choosing the FN 9263 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 and mounting possibilities are designed to offer you the desired solution.

## Features and benefits

- Exceptional conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- Rear/front or snap-in mounting.
- Small compact housing fitting 1U rack applications.
- Versions up to 10A are available with 1 pole rocker switch.
- Custom-specific versions are available on request.

Typical electrical schematic


## Typical applications

- Portable electrical and electronic equipment
- Small to medium-sized machines and household equipment

■ Single-phase power supplies, switch-mode power supplies

- Test and measurement equipment
- Rack mounting equipment

Filter selection table

| Filter | Rated current <br> @ $40^{\circ} \mathrm{C}\left(25^{\circ} \mathrm{C}\right)$ <br> [A] | Leakage current* <br> @ 250VAC/50Hz <br> [ $\mu \mathrm{A}$ ] | Inductance L $[\mathrm{mH}]$ | Capacitance |  | Resistance <br> R <br> [k $\Omega$ ] | Output connections | Weight <br> [g] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FN 9263x-1-06-y | 1 (1.2) | 373 | 5.3 | 0.1 | 2.2 | 1000 | -06 | 55 |
| FN 9263x-2-06-y | 2 (2.3) | 373 | 2.7 | 0.1 | 2.2 | 1000 | -06 | 55 |
| FN 9263x-3-06-y | 3 (3.5) | 373 | 2 | 0.1 | 2.2 | 1000 | -06 | 55 |
| FN 9263x-4-06-y | 4 (4.6) | 373 | 1 | 0.1 | 2.2 | 1000 | -06 | 55 |
| FN 9263x-6-06-y | 6 (6.9) | 373 | 0.3 | 0.1 | 2.2 | 1000 | -06 | 55 |
| FN 9263x-8-06-y | 8 (9.2) | 373 | 0.25 | 0.1 | 2.2 | 1000 | -06 | 55 |
| FN 9263x-10-06-y | 10 (11.5) | 373 | 0.2 | 0.1 | 2.2 | 1000 | -06 | 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 9263x-yy-yy-y


For example: FN 9263-1-06, FN 9263S-10-06-20, FN 9263S1-6-06-30

## 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

1 to 4A types


6 to 10A types


## Mechanical data

FN 9263

FN 9263 S

FN 9263S1


## Panel cut out


Installation



Dimensions

|  | FN 9263 | FN 9263 S | FN 9263S1 | Tolerances |
| :---: | :---: | :---: | :---: | :---: |
| A | 46 | 34 | 34 | $\pm 0.3$ |
| B | 35 | 35 | 35 |  |
| C | 36 |  |  |  |
| D | 41 | 41 | 41 | $\pm 0.3$ |
| E | 27.9 | 27.9 | 27.9 | +0.2/-0 |
| F | 5.5 | 5.5 | 5.5 | $\pm 0.3$ |
| G | 32.2 | 32.2 | 32.2 | +0/-0.2 |
| H | 03.3 |  |  | $\pm 0.1$ |
| I | 13.8 | 13.8 | 13.8 |  |
| J | 12.5 | 12.5 | 12.5 | $\pm 0.3$ |
| M | $\mathrm{R} \leq 3.5$ | $\mathrm{R} \leq 3.5$ | $\mathrm{R} \leq 3.5$ |  |
| N | 33.2 | 32.6 | 33.3 | $\pm 0.1$ |
| P | 29.2 | 29.0 | 28.3 | $\pm 0.1$ |
| R | M3 |  |  |  |
| S | $90^{\circ}$ |  |  |  |
| T* |  | 0.6-1.5 | 0.6-1.5 |  |
| T* |  | 1.6-2.5 | 1.6-2.5 |  |
| T* |  | 2.6-3.5 | 2.6-3.5 |  |

* For selecting the panel thickness, please refer to the filter selector table.

All dimensions in $\mathrm{mm} ; 1$ inch $=25.4 \mathrm{~mm}$
Tolerances according: ISO 2768-m / EN 22768-m

