

# 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 1U rack size



## Performance indicators

### Attenuation performance



### Rated current [A]



## Approvals



## RoHS

(CQC except HI-types)

The FN9263 power entry module combines an IEC inlet, mains filter with excellent filter attenuation and a mains switch in a small form factor. Choosing the FN9263 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 applications

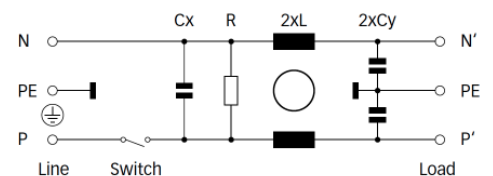
- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Medical equipment
- Electronic data processing equipment
- Office automation and datacom equipment
- Various noisy applications requiring high filter performance

## Technical specifications

|                                                   |                                                                            |
|---------------------------------------------------|----------------------------------------------------------------------------|
| <b>Maximum continuous operating voltage</b>       | 250 VAC, 50/60 Hz                                                          |
| <b>Operating frequency</b>                        | 50 to 400 Hz                                                               |
| <b>Rated currents</b>                             | 1 to 10 A @ 40 °C max.                                                     |
| <b>High potential test voltage for capacitors</b> | P → PE 2000 VAC for 2 sec<br>P → N 760 VAC for 2 sec                       |
| <b>Protection category</b>                        | IP40 according to IEC 60529                                                |
| <b>Temperature range (operation and storage)</b>  | -25 °C to +85 °C (25/85/21)                                                |
| <b>Design corresponding to</b>                    | UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939                                 |
| <b>Flammability corresponding to</b>              | UL 94 V-2 or better                                                        |
| <b>MTBF @ 40°C/230V (Mil-HB-217F)</b>             | 6,500,000 hours                                                            |
| <b>Rocker switch description</b>                  |                                                                            |
| <b>Function</b>                                   | 1-pole, dark not illuminated<br>Marking I - 0                              |
| <b>Electrical specifications</b>                  | Inrush current 78 A<br>10,000 on-off operations according to UL 1054, TV 5 |
| <b>Switch ratings</b>                             |                                                                            |
| <b>Europe (ENEC)</b>                              | 10 A (4 A), 250 VAC*                                                       |
| <b>USA (UL)</b>                                   | 10 A, 125 VAC; 8 A, 250 VAC; 1/4 HP                                        |
| <b>Canada (CSA)</b>                               | 10 A, 250 VAC; 1/4 HP                                                      |

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

## Typical electrical schematic



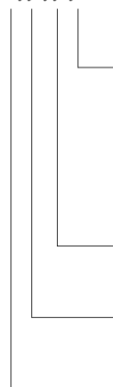
### Filter selection table

| Filter          | Rated current<br>@ 40 °C (25 °C) | Leakage current*<br>@ 230 VAC/50 Hz | Inductance<br>L | Capacitance |      | Resistance<br>R | Output connections                                                                  | Weight |
|-----------------|----------------------------------|-------------------------------------|-----------------|-------------|------|-----------------|-------------------------------------------------------------------------------------|--------|
|                 |                                  |                                     |                 | Cx          | Cy   |                 |                                                                                     |        |
|                 | [A]                              | [µA]                                | [mH]            | [µF]        | [nF] | [kΩ]            |  | [g]    |
| FN9263x-1-06-y  | 1 (1.2)                          | 373                                 | 5.3             | 0.1         | 2.2  | 1000            | -06                                                                                 | 55     |
| FN9263x-2-06-y  | 2 (2.3)                          | 373                                 | 2.7             | 0.1         | 2.2  | 1000            | -06                                                                                 | 55     |
| FN9263x-3-06-y  | 3 (3.5)                          | 373                                 | 2               | 0.1         | 2.2  | 1000            | -06                                                                                 | 55     |
| FN9263x-4-06-y  | 4 (4.6)                          | 373                                 | 1               | 0.1         | 2.2  | 1000            | -06                                                                                 | 55     |
| FN9263x-6-06-y  | 6 (6.9)                          | 373                                 | 0.3             | 0.1         | 2.2  | 1000            | -06                                                                                 | 55     |
| FN9263x-8-06-y  | 8 (9.2)                          | 373                                 | 0.25            | 0.1         | 2.2  | 1000            | -06                                                                                 | 55     |
| FN9263x-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

FN9263x-yy-yy-y



Snap-in range for S version only

Blank: Snap-in range 0.6 to 1.5mm

20: Snap-in range 1.6 to 2.5mm

30: Snap-in range 2.6 to 3.5mm

06: Faston 6.3 x 0.8mm (spade/soldering)

1 to 10: Rated current



Blank: Standard housing with mounting flanges

☐ S:

Snap-in version, snapper on vertical side

☐ S1:

Snap-in version, snapper on horizontal side

☐ S1:

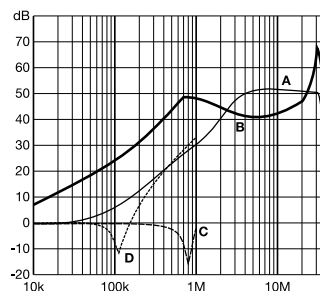
Snap-in version, snapper on horizontal side

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

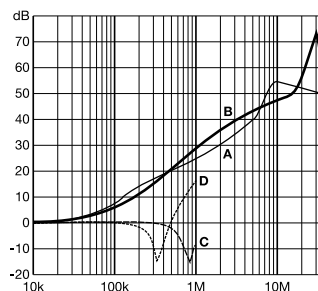
### Typical filter attenuation

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

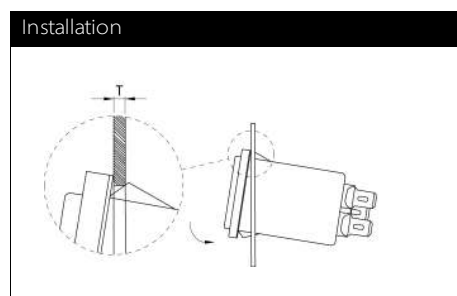
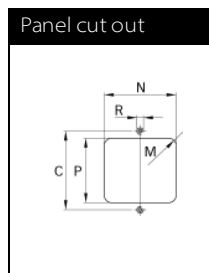
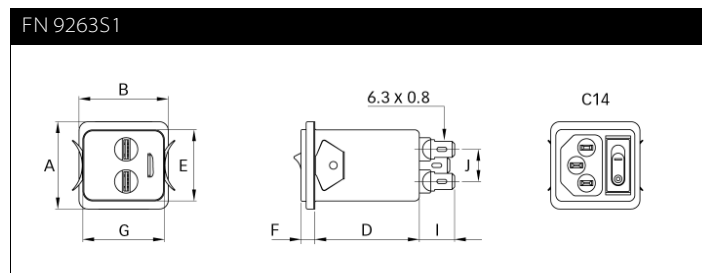
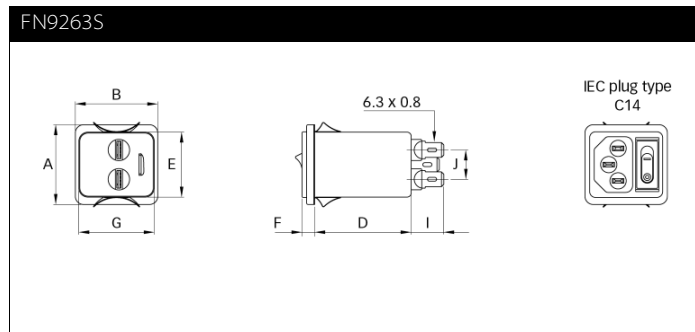
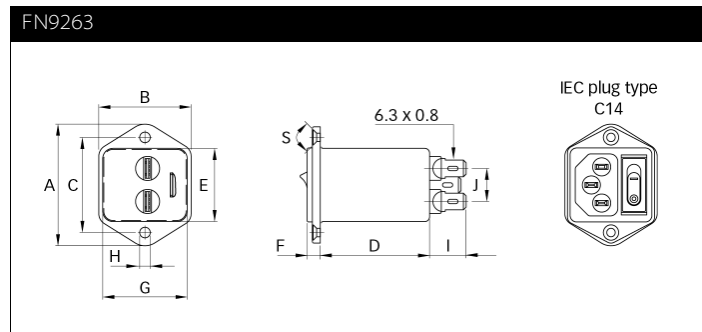
1 to 4 A types



6 to 10 A types



## Mechanical data



## Dimensions

|           | FN 9263 | FN 9263S | FN 9263S1 | Tolerances |
|-----------|---------|----------|-----------|------------|
| <b>A</b>  | 46      | 34       | 34        | ±0.3       |
| <b>B</b>  | 35      | 35       | 35        |            |
| <b>C</b>  | 36      |          |           |            |
| <b>D</b>  | 41      | 41       | 41        | ±0.3       |
| <b>E</b>  | 27.9    | 27.9     | 27.9      | +0.2/-0    |
| <b>F</b>  | 5.5     | 5.5      | 5.5       | ±0.3       |
| <b>G</b>  | 32.2    | 32.2     | 32.2      | +0/-0.2    |
| <b>H</b>  | Ø 3.3   |          |           | ±0.1       |
| <b>I</b>  | 13.8    | 13.8     | 13.8      |            |
| <b>J</b>  | 12.5    | 12.5     | 12.5      | ±0.3       |
| <b>M</b>  | R ≤ 3.5 | R ≤ 3.5  | R ≤ 3.5   |            |
| <b>N</b>  | 33.2    | 32.6     | 33.3      | ±0.1       |
| <b>P</b>  | 29.2    | 29.0     | 28.3      | ±0.1       |
| <b>R</b>  | M3      |          |           |            |
| <b>S</b>  | 90°     |          |           |            |
| <b>T*</b> |         | 0.6-1.5  | 0.6-1.5   |            |
| <b>T*</b> |         | 1.6-2.5  | 1.6-2.5   |            |
| <b>T*</b> |         | 2.6-3.5  | 2.6-3.5   |            |

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

All dimensions in mm; 1 inch = 25.4 mm  
Tolerances according to ISO 2768-m / EN 22768-m

Please visit [www.schaffner.com](http://www.schaffner.com) to find more details on filter connections.



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