

## IEC Inlet Filters FN 9260

### General Purpose Power Entry Module with Fuses

**SCHAFNER**  
energy efficiency and reliability



- Rated currents up to 10A
- For one or two fuses
- Optional safety version (A type)
- Optional medical versions (B type) according to IEC/EN 60601-1
- Snap-in versions (S type)

#### Approvals



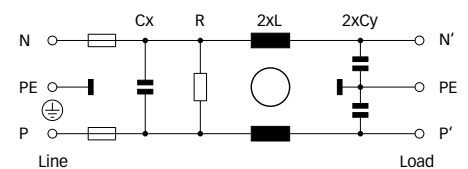
**RoHS**

#### Technical specifications

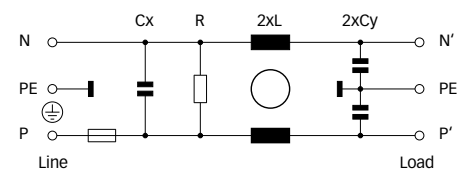
|                                            |                                                                                                                                                                 |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum continuous operating voltage:      | 250VAC, 50/60Hz                                                                                                                                                 |
| Operating frequency:                       | dc to 400Hz                                                                                                                                                     |
| Rated currents:                            | 1 to 10A @ 40°C max.                                                                                                                                            |
| High potential test voltage:               | P → PE 2000VAC for 2 sec (standard types)<br>P → PE 2500VAC for 2 sec (B types)<br>P → N 760VAC for 2 sec (standard types)<br>P → N 1700VDC 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 94V-2 or better                                                                                                                                              |
| MTBF @ 40°C/230V (Mil-HB-217F):            | 2,200,000 hours                                                                                                                                                 |
| Fuse holder:                               | 1 or 2 fuses (Ø5 x 20mm)                                                                                                                                        |

#### Typical electrical schematic

FN 9260 (B types without Y-capacitors)



FN 261



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.

#### Features and benefits

- Exceptional conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
- B types comply with the requirements of IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing.
- Versions up to 10A are available with fuse holder for one or two fuses.
- Custom-specific versions are available on request.

#### 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

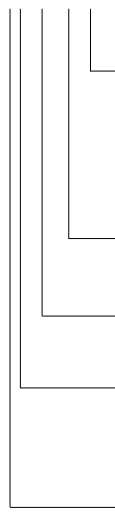
Filter selection table

| Filter            | Rated current<br>@ 40°C (25°C)<br>[A] | Leakage current*<br>@ 230VAC/50Hz<br>[μA] | Inductance<br>L<br>[mH] | Capacitance<br>Cx<br>[μF] | Capacitance<br>Cy<br>[nF] | Resistance<br>R<br>[kΩ] | Input/Output<br>connections<br> | Fuses<br>[Qty] | Weight<br>[g] |
|-------------------|---------------------------------------|-------------------------------------------|-------------------------|---------------------------|---------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------|----------------|---------------|
| 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 9260xA1-1-06-y | 1 (1.2)                               | 37                                        | 5.3                     | 0.1                       | 0.22                      | 1000                    | -06                                                                                                                | 2              | 55            |
| FN 9260xA-2-06-y  | 2 (2.3)                               | 74                                        | 2.7                     | 0.1                       | 0.47                      | 1000                    | -06                                                                                                                | 2              | 55            |
| FN 9260xA-4-06-y  | 4 (4.6)                               | 74                                        | 1.0                     | 0.1                       | 0.47                      | 1000                    | -06                                                                                                                | 2              | 55            |
| FN 9260xA-6-06-y  | 6 (6.9)                               | 74                                        | 0.3                     | 0.1                       | 0.47                      | 1000                    | -06                                                                                                                | 2              | 55            |
| FN 9260xA-10-06-y | 10 (11.5)                             | 74                                        | 0.2                     | 0.1                       | 0.47                      | 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



Snap-in range for S version only

- 10: 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 version

A: Safety version

B: Medical version (without Y-capacitor)



Blank: Standard housing with mounting flanges

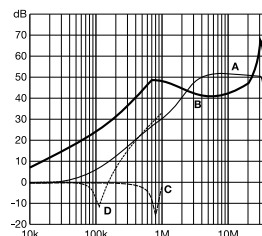
S: Snap-in version, snapper on vertical side

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

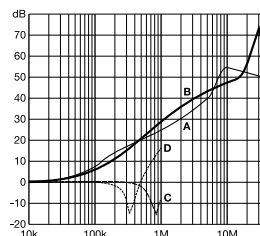
## Typical filter attenuation

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

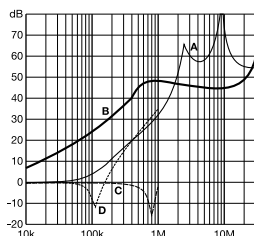
FN 9260: 1 to 4A types



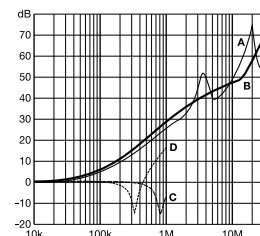
FN 9260: 6 and 10A types



FN 261: 1 to 4A types

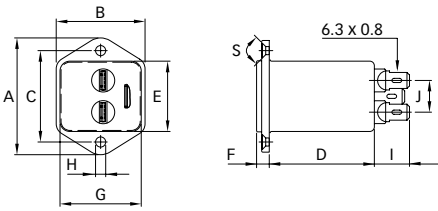


FN 261: 6 and 10A types

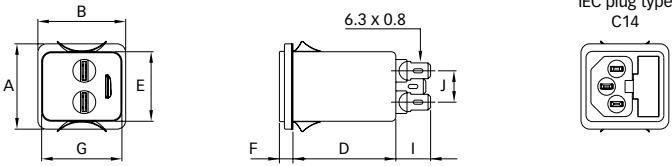


Mechanical data

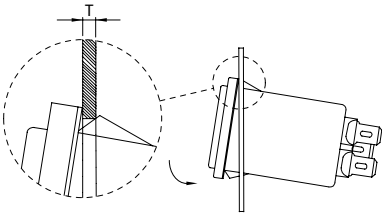
FN 9260 / FN 261



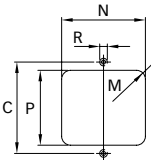
FN 9260S / FN 261S



Installation



Panel cut out



Dimensions

|    | FN 9260<br>FN 261 | FN 9260S<br>FN 261S | Tolerances |
|----|-------------------|---------------------|------------|
| A  | 46                | 34                  | ±0.3       |
| B  | 35                | 35                  | ±0.3       |
| C  | 36                |                     | ±0.3       |
| D  | 41                | 41                  | ±0.3       |
| E  | 27.8              | 27.8                | +0.3/-0    |
| F  | 5.5               | 5.5                 | ±0.3       |
| G  | 32                | 32                  | +0.3/-0    |
| H  | Ø3.2              |                     | ±0.1       |
| I  | 13.8              | 13.8                |            |
| J  | 12.5              | 12.5                | ±0.3       |
| M  | R ≤ 3.5           | R ≤ 3.5             |            |
| N  | 33                | 33                  | +0.3/-0    |
| P  | 29                | 29.5                | ±0.3       |
| R  | M3                |                     |            |
| S  | 90°               |                     |            |
| T* |                   | 0.6 - 1.5           |            |
| T* |                   | 1.6 - 2.5           |            |
| T* |                   | 2.6 - 3.5           |            |

\* For selecting the panel thickness, please refer to the filter selector table.  
All dimensions in mm; 1 inch = 25.4mm  
Tolerances according: ISO 2768-m / EN 22768-m

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