

# High Performance Power Entry Module with Switch

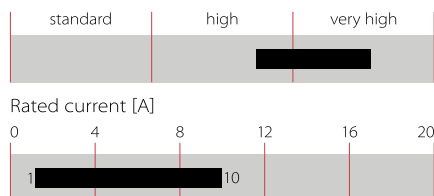


- Rated currents up to 10 A
- High quality 2-pole rocker switch
- Optional reduced leakage current versions (A/B type)
- Complies with IEC/EN 60601-1
- Snap-in versions (S type)
- High attenuation performance



### Performance indicators

Attenuation performance



### Approvals



The FN 9266 power entry module combines an IEC inlet, mains filter with very high filter attenuation based on nano crystalline material selection and a switch in a small form factor. Choosing FN 9266 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, mounting possibilities and filters for medical applications (acc. to IEC 60601-1 with low leakage current and high performance) are designed to offer you the desired solution.

### Features and benefits

- Excellent conducted attenuation performance, based on chokes with high saturation resistance and good thermal behavior
- High quality 2-pole rocker switch for all-pole disconnection
- Faston terminals for easy assembly
- FN 9266 B versions comply with the requirements of 1MOP acc. to IEC/EN 60601-1 for creepage and clearance, leakage current and high potential testing
- As flange mount and snap-in types available

### Typical applications

- Medical electrical devices (MD) and In-Vitro Diagnostic (IVD) medical devices
- Portable electrical and electronic equipment
- EDP and office equipment
- Single-phase power supplies
- Switch-mode power supplies
- Test and measurement equipment

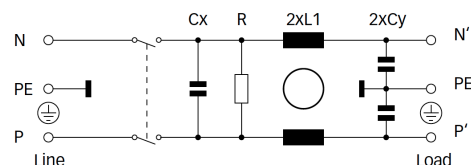
### Technical specifications

|  |  |
|--|--|
| <b>Operating voltage</b>                             | 250 VAC, 50/60 Hz  |
| <b>Operating frequency</b>                           | DC to 400 Hz   |
| <b>Rated currents</b>                                | 1 to 10 A @ 40°C max.  |
| <b>High potential test voltage</b>                   | P → PE 2000 VAC for 2 sec (Standard)<br>P → PE 2500 VAC for 2 sec (B-types)<br>P → N 760 VAC for 2 sec |
| <b>Protection category</b>                           | IP 40 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 60939-3, CSA Std C22.2 No. 8, IEC/EN 60939-3, GB/T 15287, GB/T 15288                                |
| <b>Flammability corresponding to</b>                 | Inlet plastic: UL 94 V-0<br>Switch plastic: UL 94 V-0  |
| <b>MTBF @ Rated amb. Temp./Voltage (Mil-HB-217F)</b> | 2,100,000 hours  |
| <b>Rocker switch description</b>                     |  |
| <b>Function</b>                                      | 2-pole, dark not illuminated<br>Marking I – 0  |
| <b>Electrical specifications</b>                     | Inrush current 100 A<br>50,000 on-off operations for 10 A according to EN 610581-1                     |
| <b>Switch ratings</b>                                |  |
| <b>Europe (ENEC)</b>                                 | 10 A (4 A), 250 VAC* 5E4<br>16 A (4 A), 250 VAC* 1E4   |
| <b>USA (UL)</b>                                      | 20 A, 125 VAC 1 HP; 250 VAC 2 HP;  |


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

### Typical electrical schematic

FN 9266 (B types without Y-capacitors)



## Filter selection table

|                       | Rated current<br>@ 40°C | Leakage current*<br>@ 250 VAC/50 Hz<br>(@ 120 VAC/60 Hz) | Inductance**<br>L | Capacitance** |      | Resistor**<br>R | Output<br>connections   | Weight |
|-----------------------|-------------------------|--|-------------------|---------------|------|-----------------|---|--------|
|                       |                         |  |                   | Cx            | Cy   |                 |   |        |
|                       | [A]                     | [mA]   | [mH]              | [μF]          | [nF] | [kΩ]            |  | [g]    |
| <b>FN 9266-1-06</b>   | 1                       | 0.31 (0.18)  | 40                | 0.15          | 2.2  | 1000            | -06   | 55     |
| <b>FN 9266-2-06</b>   | 2                       | 0.31 (0.18)  | 20                | 0.15          | 2.2  | 1000            | -06   | 55     |
| <b>FN 9266-4-06</b>   | 4                       | 0.31 (0.18)  | 7                 | 0.15          | 2.2  | 1000            | -06   | 55     |
| <b>FN 9266-6-06</b>   | 6                       | 0.31 (0.18)  | 3                 | 0.15          | 2.2  | 1000            | -06   | 55     |
| <b>FN 9266-10-06</b>  | 10                      | 0.31 (0.18)  | 1.15              | 0.15          | 2.2  | 1000            | -06   | 55     |
| <b>FN 9266A-1-06</b>  | 1                       | 0.07 (0.04)  | 40                | 0.15          | 0.47 | 1000            | -06   | 55     |
| <b>FN 9266A-2-06</b>  | 2                       | 0.07 (0.04)  | 20                | 0.15          | 0.47 | 1000            | -06   | 55     |
| <b>FN 9266A-4-06</b>  | 4                       | 0.07 (0.04)  | 7                 | 0.15          | 0.47 | 1000            | -06   | 55     |
| <b>FN 9266A-6-06</b>  | 6                       | 0.07 (0.04)  | 3                 | 0.15          | 0.47 | 1000            | -06   | 55     |
| <b>FN 9266A-10-06</b> | 10                      | 0.07 (0.04)  | 1.15              | 0.15          | 0.47 | 1000            | -06   | 55     |
| <b>FN 9266B-1-06</b>  | 1                       | 0.00   | 40                | 0.15          |      | 1000            | -06   | 55     |
| <b>FN 9266B-2-06</b>  | 2                       | 0.00   | 20                | 0.15          |      | 1000            | -06   | 55     |
| <b>FN 9266B-4-06</b>  | 4                       | 0.00   | 7                 | 0.15          |      | 1000            | -06   | 55     |
| <b>FN 9266B-6-06</b>  | 6                       | 0.00   | 3                 | 0.15          |      | 1000            | -06   | 55     |
| <b>FN9266B-10-06</b>  | 10                      | 0.00   | 1.15              | 0.15          |      | 1000            | -06   | 55     |

\* Leakage current under normal operating conditions (acc. to IEC60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

\*\* Tolerances apply: Inductance: -30/+50%, Capacitance: ±20%, Resistance: ±10%

Product selector

FN 9266xx-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 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 9266-1-06, FN 9266 SB-10-06

### Typical filter attenuation

Per CISPR 17; DM (differential mode)=50 Ω/50 Ω sym; CM (common mode)=50 Ω/50 Ω asym

FN 9266 Standard Type 1 A



FN 9266 A Type 1 A



FN 9266 B Type 1 A



FN 9266 Standard Type 2 A



FN 9266 A Type 2 A



FN 9266 B Type 2 A



FN 9266 Standard Type 4 A



FN 9266 A Type 4 A



FN 9266 B Type 4 A



FN 9266 Standard Type 6 A



FN 9266 A Type 6 A



FN 9266 B Type 6 A



FN 9266 Standard Type 10 A



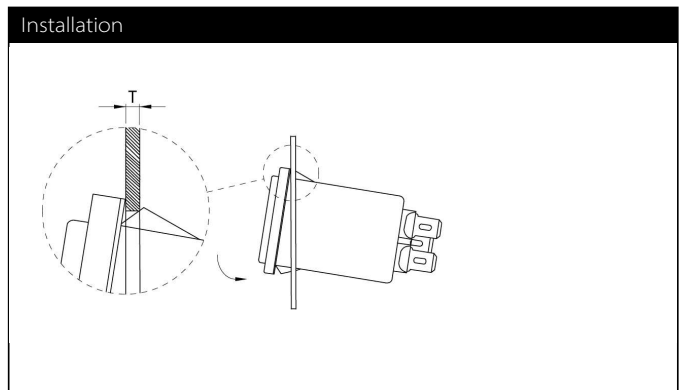
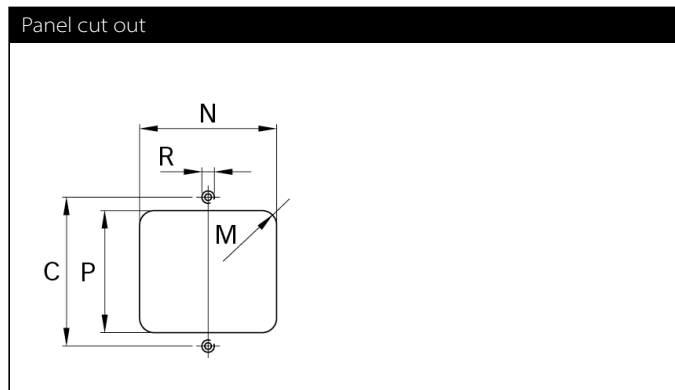
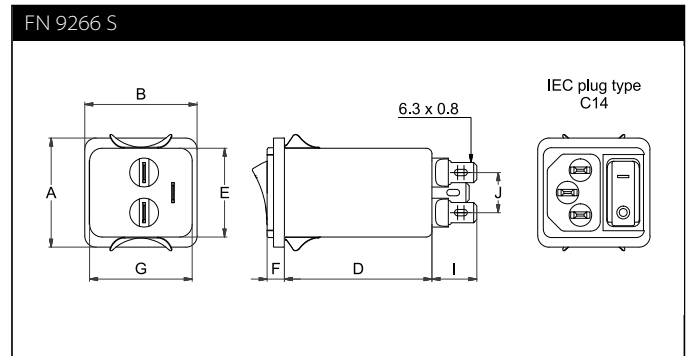
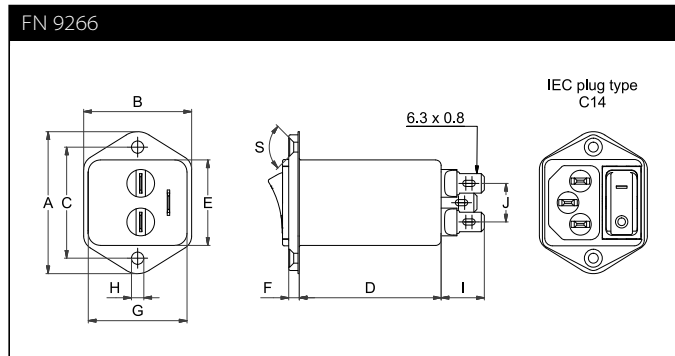
FN 9266 A Type 10 A



FN 9266 B Type 10 A



## Mechanical data



## Dimensions

|     | FN 9266    | FN 9266 S  | Tolerances |
|-----|------------|------------|------------|
| A   | 46         | 34         | ±0.3       |
| B   | 35         | 35         | ±0.3       |
| C   | 36         |            | ±0.3       |
| D   | 46         | 46         | ±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   | 14         | 14         | ±0.5       |
| J   | 12.5       | 12.5       | ±0.3       |
| M   | R ≤3.5     | R ≤3.5     |            |
| N   | 33 +0.3/-0 | 33 +0.2/-0 |            |
| P   | 29 ±0.3    | 29.5 ±0.2  |            |
| R*  | M3         |            |            |
| S   | 90°        |            |            |
| T** |            | 0.6-1.5    |            |
| T** |            | 1.6-2.5    |            |
| T** |            | 2.6-3.5    |            |

\* Recommended torque for M3 (90° countersunk flat head) is 0.5 Nm

\*\* 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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