

## General Purpose Power Entry Module with Fuses



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



Performance Indicators						
Attenuation performance						
standard	h	igh	very hig	h		
Rated current	[A]					
0 4	8 	12	16	20		
1		10				

## **Technical specifications**

Fuse holder

Operating frequency
Rated currents
High potential test voltage

Protection category
Temperature range (operation and storage)
Design corresponding to
Flammability corresponding to
MTBF @ 40°C/230 V (Mil-HB-217F)

Maximum continuous operating voltage

250 VAC, 50/60 Hz

DC to 400 Hz

1 to 10 A @ 40°C max.

P -> PE 2000 VAC for 2 sec (standard types)

P -> PE 2500 VAC for 2 sec (B types)

 $P \rightarrow N 760 \text{ VAC for 2 sec (standard types)}$ 

P -> N 1700 VDC for 2 sec (B types)

IP 40 according to IEC 60529

-25°C to +85°C (25/85/21)

UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939

UL 94 V-2 or better

2,200,000 hours

1 or 2 fuses (Ø5 x 20 mm) (certified to IEC 60127-6)

## **Approvals**













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 10 A 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
- I Test and measurement equipment

## Typical electrical schematic

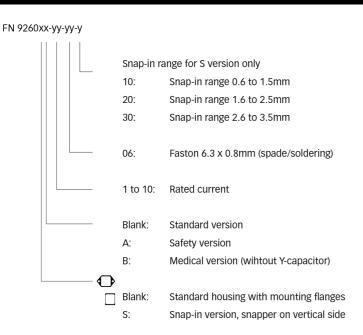
2 EMC/EMI Products | Schaffner Group | Datasheets | 2018

## Filter selection table

Filter	Rated current	Leakage current*	Inductance	Сар	acitance	Resistance	Input/Output	Fuses	Weight
	@ 40°C (25°C)	@ 250 VAC/50 Hz	L	Cx	Су	R	connections		
	2	(@ 120 VAC/60 Hz)			,				
	[A]	[mA]	[mH]	[μF]	[nF]	[kΩ]		[Qty]	[g]
FN 9260 x-1-06-y	1 (1.2)	0.31 (0.18)	5.3	0.1	2.2	1000	-06	2	55
FN 9260 x-2-06-y	2 (2.3)	0.31 (0.18)	2.7	0.1	2.2	1000	-06	2	55
FN 9260 x-4-06-y	4 (4.6)	0.31 (0.18)	1.0	0.1	2.2	1000	-06	2	55
FN 9260 x-6-06-y	6 (6.9)	0.31 (0.18)	0.3	0.1	2.2	1000	-06	2	55
FN 9260 x-10-06-y	10 (11.5)	0.31 (0.18)	0.2	0.1	2.2	1000	-06	2	55
FN 9260 xA1-1-06-y	1 (1.2)	0.03 (0.02)	5.3	0.1	0.22	1000	-06	2	55
FN 9260 xA-2-06-y	2 (2.3)	0.07 (0.04)	2.7	0.1	0.47	1000	-06	2	55
FN 9260 xA-4-06-y	4 (4.6)	0.07 (0.04)	1.0	0.1	0.47	1000	-06	2	55
FN 9260 xA-6-06-y	6 (6.9)	0.07 (0.04)	0.3	0.1	0.47	1000	-06	2	55
FN9260 xA-10-06-y	10 (11.5)	0.07 (0.04)	0.2	0.1	0.47	1000	-06	2	55
FN 9260 xB-1-06-y	1 (1.2)	0.00	5.3	0.1		1000	-06	2	55
FN 9260 xB-2-06-y	2 (2.3)	0.00	2.7	0.1		1000	-06	2	55
FN 9260 xB-4-06-y	4 (4.6)	0.00	1.0	0.1		1000	-06	2	55
FN 9260 xB-6-06-y	6 (6.9)	0.00	0.3	0.1		1000	-06	2	55
FN9260 xB-10-06-y	10 (11.5)	0.00	0.2	0.1		1000	-06	2	55
FN 261 x-1-06-y	1 (1.2)	0.31 (0.18)	5.3	0.1	2.2	1000	-06	1	55
FN 261 x-2-06-y	2 (2.3)	0.31 (0.18)	2.7	0.1	2.2	1000	-06	1	55
FN 261 x-4-06-y	4 (4.6)	0.31 (0.18)	1.0	0.1	2.2	1000	-06	1	55
FN 261 x-6-06-y	6 (6.9)	0.31 (0.18)	0.3	0.1	2.2	1000	-06	1	55
FN 261 x-10-06-y	10 (11.5)	0.31 (0.18)	0.2	0.1	2.2	1000	-06	1	55

<sup>\*</sup> 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.

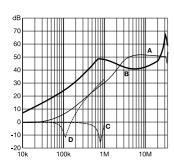
## Product selector



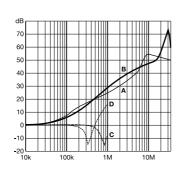
## **Typical filter attenuation**

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

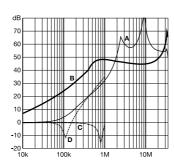
FN 9260: 1 to 4 A types



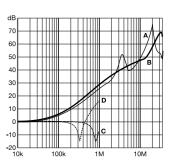
FN 9260: 6 and 10 A types



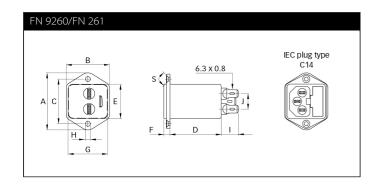
FN 261: 1 to 4 A types

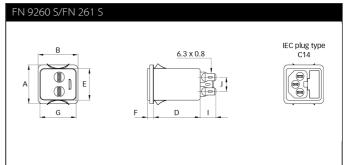


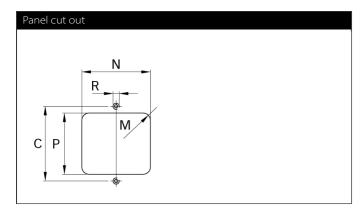
FN 261: 6 and 10 A types

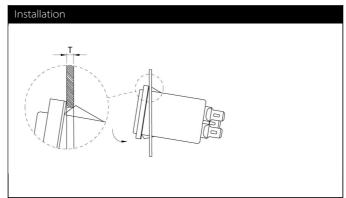


## **Mechanical data**









4 EMC/EMI Products | Schaffner Group | Datasheets | 2018

## **Dimensions**

	FN 261	FN 261 S	
	FN 9260	FN 9260 S	Tolerances
Α	46	34	±0.3
В	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
Н	Ø3.2		±0.1
1	13.8	13.8	
J	12.5	12.5	±0.3
М	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	

 $<sup>\</sup>mbox{\ensuremath{^{\star}}}$  For selecting the panel thickness, please refer to the filter selector table.

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

Please visit <u>www.schaffner.com</u> to find more details on filter connections.

5 | EMC/EMI Products | Schaffner Group | Datasheets | 2018

## **Accessories for IEC Inlet Filters and Power Entry Modules**

The accessories displayed are a selection of available accessories for IEC Inlet filters and IEC Power entry modules. As they are displayed in a general way there might be variants of the filters where the accessories are not available.

For further information please ask your local Schaffner Sales Partner and visit our homepage http://www.schaffner.com/.

## Power Cord with Locking System for Inlet Filters IL 13, IL 13 P, IL 19



Link to Datasheet: <u>Datasheet IEC C13/</u> C19 locking cable

The locking system has a tensile force of typical 200N.

It is recommended to use it with flange mount filters.

Lock Power Cords with IEC Inlets and Filters"

Schaffner power cords with IEC lock guard against accidental disconnection of all electrical appliances with an IEC inlet. No exchange or modification of the IEC inlet or IEC inlet filter system is

needed. Easy retrofit for all electronic equipments and devices

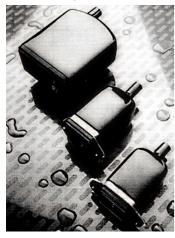
IEC C13 Rewireable Connector for individual Power Cord with Locking System



Link to Datasheet: <u>Datasheet IEC C13</u> rewireable

The locking system has a tensile force of typical 300N. It is recommended to use it with flange mount filters. For details refer to our Application Note "Using IEC Lock Power Cords with IEC Inlets and Filters" Schaffner power connector with IEC lock guard against accidental disconnection of all electrical appliances with an IEC inlet. No exchange or modification of the IEC inlet or IEC inlet filter system is needed. Easy retrofit for all electronic equipments and devices.

## **IB** - Insulating Boots



There is a full range of insulating boots available from Schaffner that provide a physical cover for the exposed terminals on the back of IEC Inlet Filters.

These boots fit the simplest non-fused and unswitched style up to the fully fused and switched IEC filtered inlet. The boots are made from a durable black PVC material that conforms to UL94-V0 flammability requirements. The boots slip easily over the back of the filter and reduce the risk of electrical shock to maintenance personnel whilst protecting the filter from environmental hazard such as the ingress of dust and moisture.



# Headquarters, global innovation and development

#### Switzerland

#### **Schaffner Group**

Nordstrasse 11 4542 Luterbach T+41 32 681 66 26 info@schaffner.com www.schaffner.com

To find your local partner within Schaffner's global network: <a href="https://www.schaffner.com">www.schaffner.com</a>

## © 2018 Schaffner Group

The content of this document has been carefully checked and understood. However, neither Schaffner nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Schaffner does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Swiss law and resulting disputes shall be settled by the courts at the place of business of Schaffner Holding AG. Latest publications and a complete disclaimer can be downloaded from the Schaffner website. All trademarks recognized



## Sales and application centers

#### China

#### Schaffner EMC Ltd. Shanghai

T20-3 C, No 565 Chuangye Road, Pudong district 201201 Shanghai T +86 21 3813 9500 cschina@schaffner.com www.schaffner.com.cn

#### Einland

## Schaffner Oy

Sauvonrinne 19 H 08500 Lohja T +358 50 468 7284 finlandsales@schaffner.com

#### France

#### Schaffner EMC S.A.S.

16-20 Rue Louis Rameau 95875 Bezons T +33 1 34 34 30 60 F +33 1 39 47 02 28 francesales@schaffner.com

#### Germany

#### **Schaffner Deutschland GmbH**

Schoemperlenstrasse 12B 76185 Karlsruhe T+49 721 56910 F+49 721 569110 germanysales@schaffner.com

#### India

## Schaffner India Pvt. Ltd

Unit 59, Level, Mfar Greenheart 7 Manyata Tech Park, Hebbal Outer Ring Road 560045 Bangalore T+91 80 6781 9805 F+91 80 6781 9998 indiasales@schaffner.com

#### Italy

#### Schaffner EMC S.r.l.

Via Ticino, 30 20900 Monza (MB) T +39 039 21 41 070 italysales@schaffner.com

#### Japan

## Schaffner EMC K.K.

1-32-12, Kamiuma, Setagaya-ku 7F Mitsui-seimei Sangenjaya Bldg. 154-0011 Tokyo T +81 3 5712 3650 F +81 3 5712 3651 japansales@schaffner.com www.schaffner.jp

## Singapore

## Schaffner EMC Pte Ltd.

#05-09, Kg Ubi Ind. Estate 408705 Singapore T +65 6377 3283 F +65 6377 3281 singaporesales@schaffner.com

#### Spain

#### Schaffner EMC España

Calle Caléndula 93, Miniparc III, Edificio E El Soto de Moraleja, Alcobendas 28109 Madrid T +34 917 912 900 F +34 917 912 901 spainsales@schaffner.com

#### Sweden

## **Schaffner EMC AB**

Tegeluddsvägen 76, 2tr 115 28 Stockholm T +46 8 5050 2425 swedensales@schaffner.com www.schaffner.com

#### Switzerland

#### Schaffner EMV AG

Nordstrasse 11 4542 Luterbach T+41 32 681 66 26 switzerlandsales@schaffner.com

#### Taiwan R.O.C.

#### Schaffner EMV Ltd.

20 Floor-2, No 97, Section 1, XinTai 5th Road 22175 XiZhi District New Taipei City 22175 T +886 2 2697 5500 F +886 2 2697 5533 taiwansales@schaffner.com www.schaffner.com.tw

#### Thailand

## Schaffner EMC Co. Ltd.

Northern Region Industrial Estate 67 Moo 4 Tambon Ban Klang Amphur Muangg P.O. Box 14 51000 Lamphun T +66 53 58 11 04 F +66 53 58 10 19 thailandsales@schaffner.com

## United Kingdom

#### Schaffner Ltd.

5 Ashville Way, Molly Millars Lane Wokingham RG41 2PL Berkshire T +44 118 9770070 F +44 118 9792969 uksales@schaffner.com

#### USA

# **Schaffner EMC Inc.** 52 Mayfield Avenue

08837 Edison, New Jersey T+1 800 367 5566 T+1 732 225 9533 F+1 732 225 4789 usasales@schaffner.com

## **Schaffner North America**

6722 Thirlane Road 24019 Roanoke, Virginia T +1 276 228 7943 F +1 276 228 7953

## **Schaffner North America**

823 Fairview Road 24382 Wytheville, Virginia T +1 276 228 7943 F +1 276 228 7258