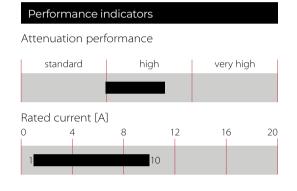


# **Versatile Filtered Power Entry Module**



Rated currents up to 10 A
For one or two fuses
Fuses ø6.3 x 32 mm or ø5 x 20 mm
2-pole rocker switch
Voltage selector

Optional earth line choke (E type)



### **Technical Specifications**

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Nominal operating voltage	230 VAC
Rated currents	1 to 10 A @ 40°C
Operating frequency	10 A (4 A), 250 VAC*
High potential test voltage	P -> PE 2000 VAC for 2 sec P -> N 760 VAC for 2 sec
Temperature range (operation and storage)	-25°C to +85°C (25/85/21)
Protection category	IP 40 according to IEC 60529
Flammability corresponding to	UL 94V-0
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
MTBF (Mil-HB-217F)	>2,200,000 h @ 40°C/230 V
Fuse holder	1 or 2 fuses (Ø5 x 20 mm) (certified to IEC 60127-6), power acceptance 1.6W @ Ta 23°C per pole for 2 fuses. 2.5W, if only 1 pole is used.
Rocker switch description	
Switch ratings	
Function	Series/parallel Marking I - 0
Electrical specifications	Inrush current 51 A 6,000 on-off operations according to UL 1054, TV 5 10,000 on-off operations according to ENEC
USA (UL) and Canada (C-UL)	10 A, 125 VAC 10 A, 250 VAC 1/3 HP
Voltage selector description	
Voltage marking	
Series	110-120 V
Parallel	220-240 V

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

# Approvals & Compliances



C € Ľ

The FN 390 power entry module combines an IEC inlet, mains filter with single or dual-fuse holder, voltage selector and 2-pole rocker switch. Choosing FN 390 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. Multiple options designed to offer you the desired solution.

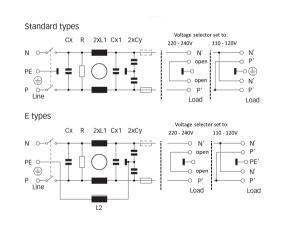
### **Features and Benefits**

- High conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Rear or front mounting
- Single or dual-fuse holder
- USA ø6.3 x 32 mm or EU ø5 x 20 mm fuses
- 2-pole rocker switch
- Voltage selector 110-120 V/220-240 V
- Custom-specific versions are available on request

### **Typical Applications**

- Portable electrical and electronic equipment
- Consumer goods
- EDP and office equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment

### Typical electrical schematic

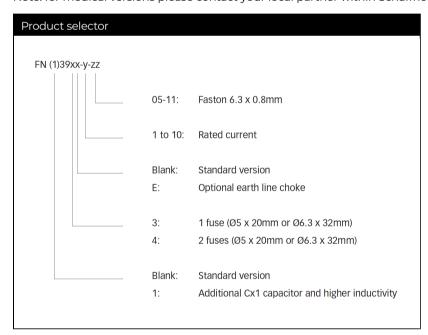


# **Filter Selection Table**

Filter	Rated current	Leakage current*	Ind	uctance		Capaci	itance	Resistance	Output	Fuses**	Weight
	@ 40°C (25°C)	@ 230 VAC/50 Hz	L1	L2	Cx	Cx1	Су	R	connections		
	[A]	[μ <b>A</b> ]	[mH]	[mH]	[nF]	[nF]	[nF]	[kΩ]		[Qty]	[g]
FN 393-1-05-11	1 (1.2)	560	7.5		220		3.3	1000	05-11	1	200
FN 393-2.5-05-11	2.5 (3)	560	2		220		3.3	1000	05-11	1	200
FN 393-6-05-11	6 (7.2)	560	0.45		220		3.3	1000	05-11	1	200
FN 394-1-05-11	1 (1.2)	560	7.5		220		3.3	1000	05-11	2	200
FN 394-2.5-05-11	2.5 (3)	560	2		220		3.3	1000	05-11	2	200
FN 394-6-05-11	6 (7.2)	560	0.45		220		3.3	1000	05-11	2	200
FN 393 E-1-05-11	1 (1.2)	560	7.5	0.4	220		3.3	1000	05-11	1	205
FN 393 E-2.5-05-11	2.5 (3)	560	2	0.4	220		3.3	1000	05-11	1	205
FN 393 E-6-05-11	6 (7.2)	560	0.45	0.4	220		3.3	1000	05-11	1	205
FN 394 E-1-05-11	1 (1.2)	560	7.5	0.4	220		3.3	1000	05-11	2	205
FN 394 E-2.5-05-11	2.5 (3)	560	2	0.4	220		3.3	1000	05-11	2	205
FN 394 E-6-05-11	6 (7.2)	560	0.45	0.4	220		3.3	1000	05-11	2	205
FN 1393-1-05-11	1 (1.2)	797	16		220	100	4.7	470	05-11	1	210
FN 1393-2.5-05-11	2.5 (3)	797	8		220	100	4.7	470	05-11	1	210
FN 1393-6-05-11	6 (7.2)	797	2.5		220	100	4.7	470	05-11	1	210
FN 1393-10-05-11	10 (12)	797	0.6		220	100	4.7	470	05-11	1	210
FN 1394-1-05-11	1 (1.2)	797	16		220	100	4.7	470	05-11	2	210
FN 1394-2.5-05-11	2.5 (3)	797	8		220	100	4.7	470	05-11	2	210
FN 1394-6-05-11	6 (7.2)	797	2.5		220	100	4.7	470	05-11	2	210
FN 1394-10-05-11	10 (12)	797	0.6		220	100	4.7	470	05-11	2	210

<sup>\*</sup> Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

Note: for medical versions please contact your local partner within Schaffner's global network.

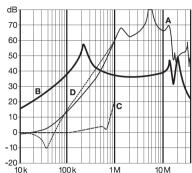


For example: FN 393-1-05-11, FN 394 E-2.5-05-11, FN 1394-10-05-11

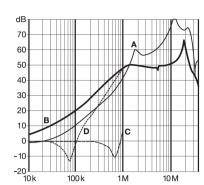
<sup>\*\*</sup> Filters are delivered without fuse.

**Typical Filter Attenuation** 

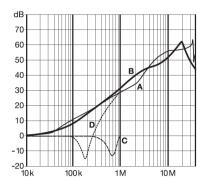
Per CISPR 17; A=50  $\Omega$ /50  $\Omega$  sym; B=50  $\Omega$ /50  $\Omega$  asym; C=0.1  $\Omega$ /100  $\Omega$  sym; D=100  $\Omega$ /0.1  $\Omega$  sym



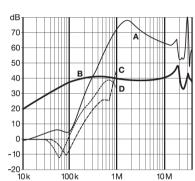




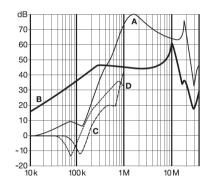
FN 39x: 2.5 A types



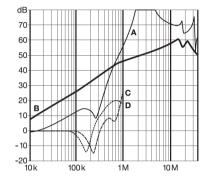
FN 39x: 6 A types



FN 139x: 1 A types



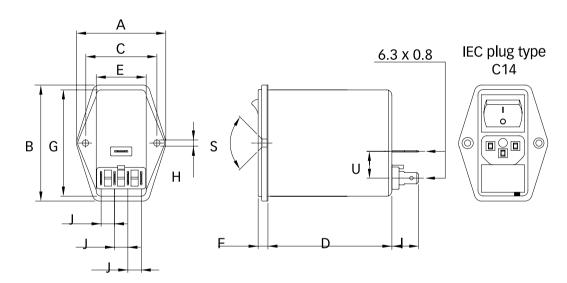
FN 139x: 2.5 A types



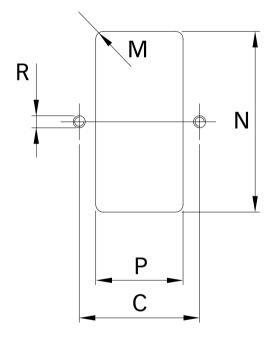
FN 139x: 6 and 10 A types

# **Mechanical Data**

1 to 10 A types



Panel cut out



4 Power Entry Module with EMC- Filter 29. Jan 2025

## **Dimensions**

	1 to 10 A	Tolerances
Α	50	±0.3
В	65	±0.3
С	40	±0.1
D	70	±0.5
E	28.5	±0.3
F	5.5	±0.3
G	59.8	±0.2
Н	Ø 3.3	
1	13.5	±0.5
J	7.5	
М	R ≤ 2.5	
N	60	+0.5/-0
P	29	+0.5/-0
R	M3	
S	90°	
U	15	±0.3

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

Please visit  $\underline{www.schaffner.com}$  to find more details on filter connections.

# Headquarters, Global Innovation and Development

### **Switzerland**

### **Schaffner Group**

Industrie Nord Nordstrasse 5 4542 Luterbach

+41 32 681 66 26

info@schaffner.com

To find your local partner within Schaffner's global network schaffner.com

# © 2025 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 specifica-tionsw 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 downloa-ded from the Schaffner website. All trademarks recognized.

# Sales and Application **Centers**

### **Finland**

### **Schaffner Oy**

Lohjanharjuntie 1109

08500

Lohja

+ 358 50 468 72 84

finlandsales@schaffner.com

### France

### Schaffner EMC S.A.S.

16-20 Rue Louis Rameau

95875

Bezons

+33 1 34 34 30 60

francesales@schaffner.com

### Germany

### **Schaffner Deutschland GmbH**

Ohiostr. 8 76149 Karlsruhe +49 721 56910

germanysales@schaffner.com

### Schaffner EMC S.r.l.

Via Ticino, 30 20900 Monza (MB) +39 335 120 44 32

italysales@schaffner.com

### Schaffner EMC K.K.

ISM Sangenjaya 7F 1-32-12 Kamiuma Setagaya-ku 154-0011

Tokyo

+81 3 5712 3650

japansales@schaffner.com

### **Singapore**

### Schaffner EMC Pte Ltd.

Blk 3015A Ubi Road 1 #05-09 Kampong Ubi Industrial Estate 408705

Singapore

+65 63773283

singaporesales@schaffner.com

### Sweden

### Schaffner EMC AB

Östermalmstrorg 1 114 42

Stockholm

+46 8 5050 2425

swedensales@schaffner.com

### **Switzerland**

### **Schaffner EMV AG**

Industrie Nord Nordstrasse 5 4542 Luterbach

+41 32 681 66 26

switzerlandsales@schaffner.com

### India

### Schaffner India Pvt. Ltd

Regus World Trade Centre WTC 22nd Floor Unit No 2238 Brigade Gateway Campus 26/1 Dr. Rajkumar Road Malleshwaram (W)

560055

Bangalore +91 8067935355

indiasales@schaffner.com

### **United Kingdom**

### Schaffner Ltd.

Suite 1 Oakmede Place Terrace Road

RG42 4JF

Binfield

+44 118 9770070 schaffner.uksales@te.com

# **United States**

### Schaffner EMC Inc.

52 Mayfield Avenue Edison, New Jersey +1 732 225 9533

usasales@schaffner.com

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Schaffner:

FN394-6-05-11 FN1394-6-05-11 FN1393-6-05-11 FN1393-10-05-11 FN1394-10-05-11 FN393-2.5-05-11 FN393-1-05-11 FN393-6-05-11 FN393E-6-05-11 FN393E-2.5-05-11 FN393-1-05-14 FN393-2.5-05-11 FN394-10-05-11- QN-0 FN393E-1-05-11 FN394-1-05-11 FN394-2.5-05-11 FN394E-1-05-11 FN394-1-05-11 FN394-1-05-11 FN394-1-05-11 FN394-2.5-05-11