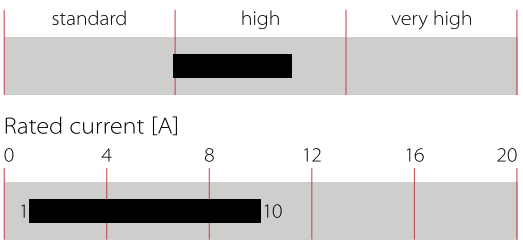
Versatile Filtered Power Entry Module

- 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)

Performance indicators

Attenuation performance



Approvals & Compliances

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

Technical Specifications

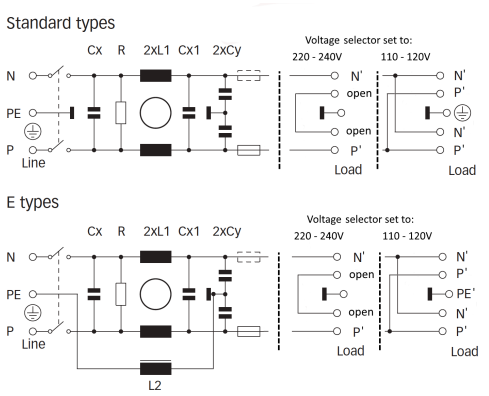
Maximum continuous operating voltage	250 VAC, 50/60 Hz
Nominal operating voltage	230 VAC
Rated currents	1 to 10 A @ 40°C
Operating frequency	10 A (4 A), 250 VAC*
High potential test voltage	P –> PE 2000 VAC for 2 sec P –> N 760 VAC for 2 sec
Temperature range (operation and storage)	-25°C to +85°C (25/85/21)
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

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*	Inductance		Capacitance			Resistance	Output	Fuses**	Weight
	@ 40°C (25°C)	@ 230 VAC/50 Hz	L1	L2	Cx	Cx1	Cy	R	connections		
	[A]	[µA]	[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

* Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.
** Filters are delivered without fuse.
Note: for medical versions please contact your local partner within Schaffner‘s global network.

Product selector

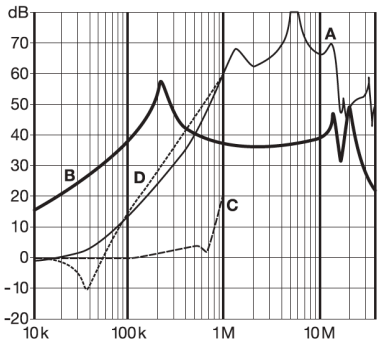
FN (1)39xx-y-zz

05-11:	Faston 6.3 x 0.8mm
1 to 10:	Rated current
Blank:	Standard version
E:	Optional earth line choke
3:	1 fuse (Ø5 x 20mm or Ø6.3 x 32mm)
4:	2 fuses (Ø5 x 20mm or Ø6.3 x 32mm)
Blank:	Standard version
1:	Additional Cx1 capacitor and higher inductivity

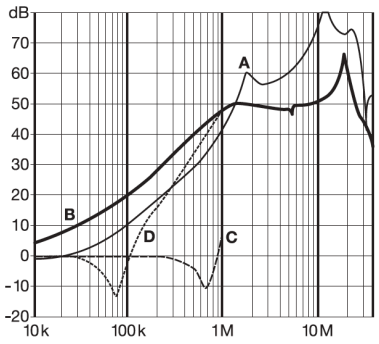
For example: FN 393-1-05-11, FN 394 E-2.5-05-11, FN 1394-10-05-11

Typical Filter Attenuation

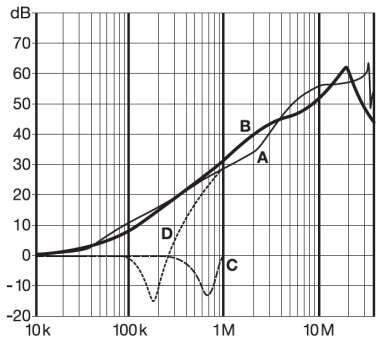
Per CISPR 17; A=50 Ω/50 Ω sym; B=50 Ω/50 Ω asym; C=0.1 Ω/100 Ω sym; D=100 Ω/0.1 Ω sym



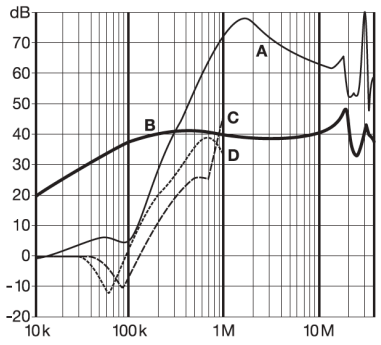
FN 39x: 1 A types



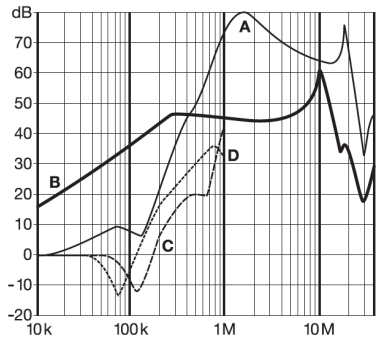
FN 39x: 2.5 A types



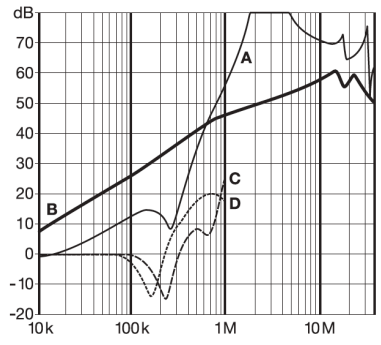
FN 39x: 6 A types



FN 139x: 1 A types



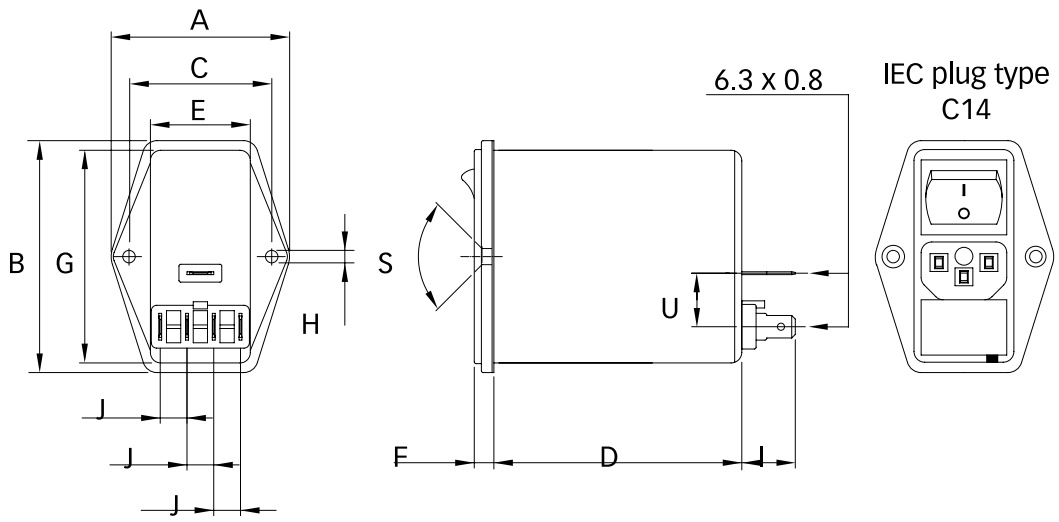
FN 139x: 2.5 A types



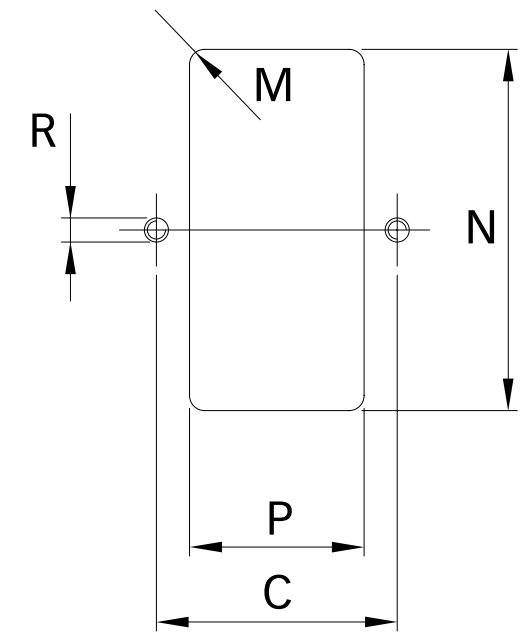
FN 139x: 6 and 10 A types

Mechanical Data

1 to 10 A types



Panel cut out



Dimensions

	1 to 10 A	Tolerances
A	50	±0.3
B	65	±0.3
C	40	±0.1
D	70	±0.5
E	28.5	±0.3
F	5.5	±0.3
G	59.8	±0.2
H	Ø 3.3	
I	13.5	±0.5
J	7.5	
M	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 www.schaffner.com to find more details on filter connections.

We are here to help

Read more insights from TE's experts:

Schaffner is now part of TE Connectivity

Learn more about Corcom products

Connect With Us

We make it easier to connect with our experts and are ready to provide the support you need.
Visit **te.com/support** to chat with a Product Information Specialist.

Contact a TE expert today

te.com

©2025 TE Connectivity plc. All Rights Reserved.

TE Connectivity, TE, TE connectivity (logo), and EVERY CONNECTION COUNTS, ECOsine, Schaffner are trademarks owned or licensed by TE Connectivity plc. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any changes to the information contained herein without prior notice. TE Connectivity assumes only those obligations set forth in the terms and conditions for this product and shall in no event be liable for any incidental, indirect, or consequential damages arising out of the sale, resale, use, or misapplication of the product. TE expressly disclaims any implied warranties with respect to the information contained herein, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose. Dimensions, specifications and/or information contained herein are for reference purposes only and are subject to change without notice. Consult TE for the latest dimensions, specifications and/or information. Users of TE Connectivity products must make their own assessment as to whether the respective product is suitable for the respective desired application.

ED 01/25

schaffner MORE POWER TO YOU is now part of TE connectivity