

## **High Performance Two-stage PCB-mounting EMC Filter**



- Rated currents from 0.5 to 6 A
- High attenuation two-stage design
- PCB-mountable design

Performance indicators



勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw

# Attenuation performance very high standard Rated current [A]

#### **Technical Specifications**

Maximum continuous operating voltage	250 VAC, 50/60 Hz				
Operating frequency	DC to 400 Hz				
Rated currents	0.5 to 6 A @ 40°C max				
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 +100°C (25/100/21)				
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939				
Flammability corresponding to	UL 94 V-2 or better				
MTBF @ 40°C/230 V (Mil-HB-217F)	675,000 hours				

#### Approvals & Compliances









The FN 410 PCB filter is a single-phase, two-stage filter designed for easy and fast PCB-mounting. Choosing the FN 410 product line brings you the rapid availability of a standard high performance filter associated with the necessary safety acceptance. Standard PCB single-phase filters are a practical solution helping you to pass EMI system approval in a short time. A selection on amperage ratings are designed to offer you the desired standard product.

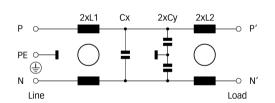
#### **Features and Benefits**

- Very good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- Two-stage single-phase design
- PCB through hole mounting
- Custom specific versions on request

### **Typical Applications**

- Electrical and electronic equipment
- Small to medium-sized machines and household equipment
- Single-phase power supplies, switch-mode power supplies
- Test and measurement equipment

#### Typical electrical schematic

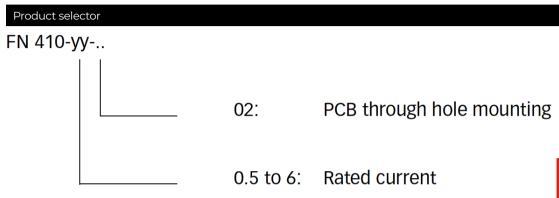


#### **Filter Selection Table**

Filter*	Rated current	Leakage current*	Inductance**		Capacitance**		Resistance**	Input/Output	Weight
	@ 40°C (25°C)	@ 230 VAC/50 Hz	L1	L2	Cx	Су	R	connections	
	[ <b>A</b> ]	[μΑ]	[mH]	[mH]	[nF]	[nF]	[kΩ]	$\perp$	[g]
FN 410-0.5-02	0.5 (0.6)	373	24	24	33	2.2		-02	85
FN 410-1-02	1 (1.2)	373	10	10	33	2.2		-02	85
FN 410-3-02	3 (3.6)	373	2	2	33	2.2		-02	85
FN 410-6-02	6 (6.9)	373	0.8	0.8	33	2.2		-02	85

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

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



For example: FN 410-0.5-02, FN 410-6-02

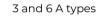
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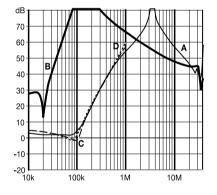
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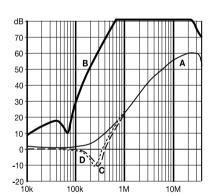
#### **Typical Filter Attenuation**

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

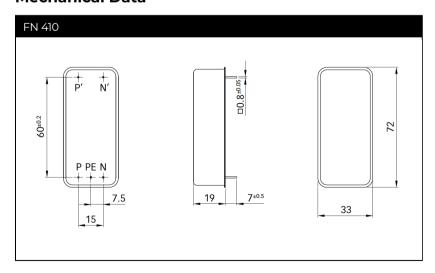
0.5 and 1 A types







### **Mechanical Data**



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 connectors.