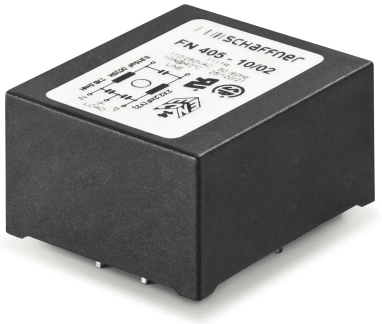
SCHAFFNER
shaping electrical power

PCB-mounting filter

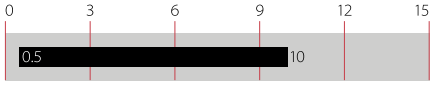


- Rated currents from 0.5 to 10 A
- Compact PCB-mountable design
- Low profile

Performance indicators

Attenuation performance

Rated current [A]



Approvals

Technical specifications

Maximum continuous operating voltage	250 VAC, 50/60 Hz
Operating frequency	DC to 400 Hz
Rated currents	0.5 to 10 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-0
MTBF @ 40°C/230 V (Mil-HB-217F)	1,600,000 hours

The FN 405 PCB filter is a single-phase filter designed for easy and fast PCB-mounting. Choosing the FN 405 product line brings you the rapid availability of a standard 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.

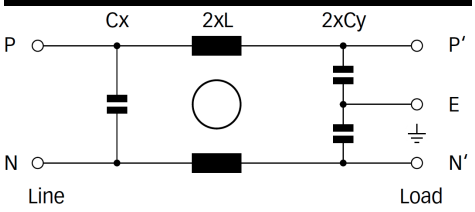
Features and benefits

- Good conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior
- PCB through hole mounting
- Low profile
- 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 @ 40°C (25°C) [A]	Leakage current* @ 230 VAC/50 Hz [µA]	Inductance L [mH]	Capacitance Cx [nF]	Capacitance Cy [nF]	Resistance connections ⊥	Weight [g]
FN 405-0.5-02	0.5 (0.6)	373	24	15	2.2	-02	40
FN 405-1-02	1 (1.2)	373	10	15	2.2	-02	40
FN 405-3-02	3 (3.6)	373	2	15	2.2	-02	40
FN 405-6-02	6 (6.9)	373	0.8	15	2.2	-02	40
FN 405-10-02	10 (11.5)	373	0.5	15	2.2	-02	40

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

Product selector

FN 405-yy-..

02: PCB through hole mounting

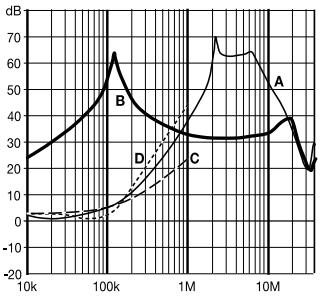
0.5 to 10: Rated current

For example: FN 405-0.5-02, FN 405-10-02

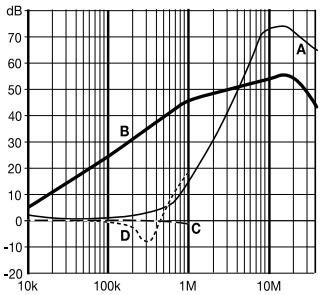
Typical filter attenuation

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

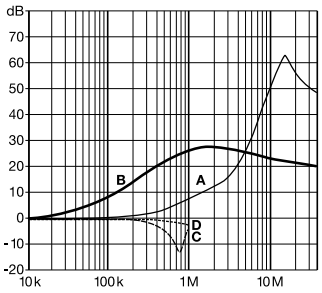
0.5 and 1 A types



3 and 6 A types

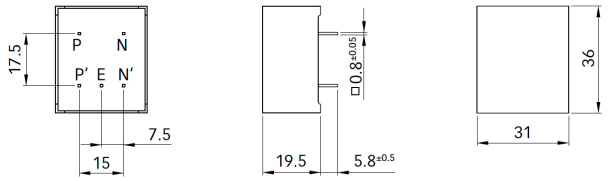


10 A types



Mechanical data

FN 405



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 connectors.

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