## Compact Performance EMI Filter



Rated currents from 3 to 16 A
I Economic high performance filter


## Performance indicators

Attenuation performance


## Technical specifications

Maximum continuous operating voltage
Operating frequency
Rated currents
High potential test voltage

Temperature range (operation and storage)
Flammability corresponding to
Design corresponding to
MTBF @ 40º$/ \mathbf{2 3 0 V}$ (Mil-HB-217F)

250 VAC, $50 / 60 \mathrm{~Hz}$
dc to 400 Hz
3 to 16 A @ $40^{\circ} \mathrm{C}$ max.
P $\rightarrow$ PE 2000 VAC for 2 sec
P $\rightarrow$ N 760 VAC for 2 sec
$-25^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}(25 / 100 / 21)$
UL 94 V -2 or better
UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
400,000 hours (FN 9675)
280,000 hours (FN 9676)

## Approvals



## Features and benefits

I FN 9675 filters are designed for easy and fast chassis mounting.
I FN 9675 offers a economic combination of performance/size ratio.
I All filters provide a high symmetrical and asymmetrical atttenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.
I Economic high performance filter attenuation suitable to be used in a broad range of applications.
I Faston connection with additional spade solder possibility or screw connection.
I Custom-specific versions on request.

## Typical applications

I Electrical and electronic equipment
I Consumer goods
I Household equipment
I Power supplies
I Office automation equipment
| Datacom equipment

Typical electrical schematic


FN 9675-16-03 and FN 9676-16-03


Filter selection table

| Filter | Rated current @ $40^{\circ} \mathrm{C}\left(25^{\circ} \mathrm{C}\right)$ <br> [A] | Leakage current* @ 230 VAC/50 Hz <br> [ $\mu \mathrm{A}$ ] | Inductance L [mH] | Capacitance |  |  | Resistance R | Input/Output connections |  | Weight <br> [g] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Cx | Cy | Cy1 |  |  |  |  |
|  |  |  |  | [ nF$]$ | [ nF ] | [ nF ] | [k $\Omega$ ] | Q | $8$ |  |
| FN 9675-3-06 | 3 (3.5) | 410 | 18 | 680 | 4.7 |  | 470 |  | -06 | 270 |
| FN 9675-6-06 | 6 (6.9) | 410 | 3 | 680 | 4.7 |  | 470 |  | -06 | 270 |
| FN 9675-16-03 | 16 (18.4) | 410 | 10.2 | 1000 | 4.7 |  | 470 | -03 |  | 850 |
|  |  |  |  |  |  |  |  |  |  |  |
| FN 9676-16-03 | 16 (18.4) | 1900 | 10.2 | 1000 | 15 | 6.8 | 470 | -03 |  | 1050 |

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


## Typical filter attenuation

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

3 A types



16 A types (FN 9675)


16 A types (FN 9676)


Mechanical data

## 3 and 6 A types



16 A types


## Dimensions

|  | 3 A | 6 A | 16 A | Tolerances |
| :---: | :---: | :---: | :---: | :---: |
| A | 85 | 85 | 105 | $\pm 0.5$ |
| B | 54 | 54 | 126 | $\pm 0.5$ |
| C | 40.3 | 54 | 126 | $\pm 1$ |
| D | 40.3 | 40.3 | 57 | $\pm 1$ |
| E | 64.4 | 64.4 | 84.5 | $\pm 0.5$ |
| F | 49.8 | 49.8 | 99.5 | $\pm 0.2$ |
| G | 27 | 27 | 40 | $\pm 0.5$ |
| H | 12.3 | 12.3 | 19 | $\pm 0.5$ |
| I | 29.8 | 29.8 | 11 | $\pm 0.5$ |
| J | 11.4 | 11.4 | 42.25 | $\pm 0.5$ |
| K | 5.3 | 5.3 | 4.4 |  |
| L | 6.3 | 6.3 | 6 |  |
| M | 0.7 | 0.7 | 1.2 |  |
| N | $6.3 \times 0.8$ | $6.3 \times 0.8$ | UNC 8-32 |  |
| Q |  |  | 51 | $\pm 0.1$ |

[^0]
[^0]:    All dimensions in $\mathrm{mm} ; 1$ inch $=25.4 \mathrm{~mm}$
    Tolerances according: ISO 2768-m / EN 22768-m

