

# Compact Performance EMI Filter



- | Rated currents from 3 to 16 A
- | Economic high performance filter



## Performance indicators

Attenuation performance



Rated current [A]



## Technical specifications

<b>Maximum continuous operating voltage</b>	250 VAC, 50/60 Hz
<b>Operating frequency</b>	dc to 400 Hz
<b>Rated currents</b>	3 to 16 A @ 40 °C max.
<b>High potential test voltage</b>	P → PE 2000 VAC for 2 sec P → N 760 VAC for 2 sec
<b>Temperature range (operation and storage)</b>	-25 °C to +100 °C (25/100/21)
<b>Flammability corresponding to</b>	UL 94 V-2 or better
<b>Design corresponding to</b>	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939
<b>MTBF @ 40°C/230V (Mil-HB-217F)</b>	400,000 hours (FN 9675) 280,000 hours (FN 9676)

## Approvals



## Features and benefits

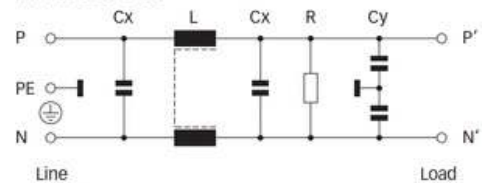
- | FN 9675 filters are designed for easy and fast chassis mounting.
- | FN 9675 offers a economic combination of performance/size ratio.
- | All filters provide a high symmetrical and asymmetrical attenuation performance, based on chokes with high saturation resistance and excellent thermal behavior.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

## Typical applications

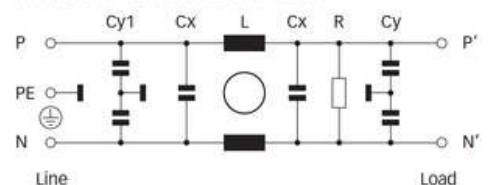
- | Electrical and electronic equipment
- | Consumer goods
- | Household equipment
- | Power supplies
- | Office automation equipment
- | Datacom equipment

## Typical electrical schematic





FN 9675-3/-6-06



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



## Filter selection table

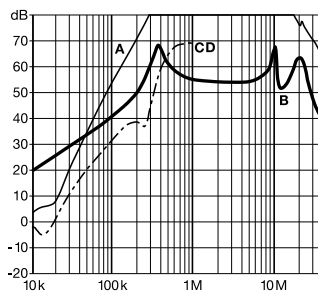
Filter	Rated current @ 40 °C (25 °C)	Leakage current* @ 230 VAC/50 Hz	Inductance L	Capacitance			Resistance R	Input/Output connections	Weight [g]
	[A]	[ $\mu$ A]	[mH]	Cx [nF]	Cy [nF]	Cy1 [nF]	[k $\Omega$ ]	 	
<b>FN9675-3-06</b>	3 (3.5)	410	18	680	4.7		470	 -06	270
<b>FN9675-6-06</b>	6 (6.9)	410	3	680	4.7		470	 -06	270
<b>FN9675-16-03</b>	16 (18.4)	410	10.2	1000	4.7		470	-03	850
<b>FN9676-16-03</b>	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.

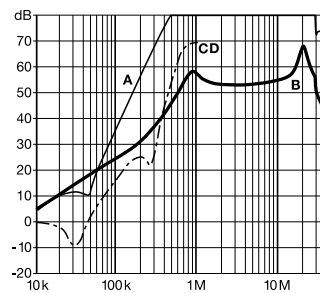
## Typical filter attenuation

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

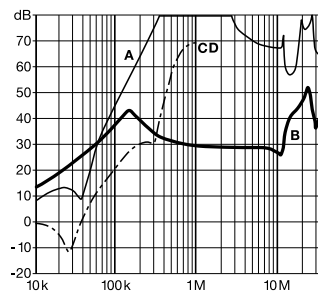
3 A types



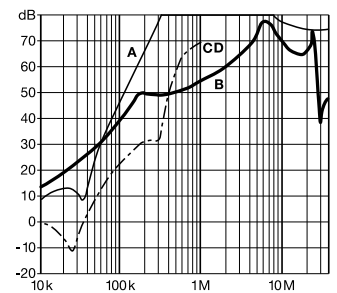
6 A types



16 A types (FN 9675)

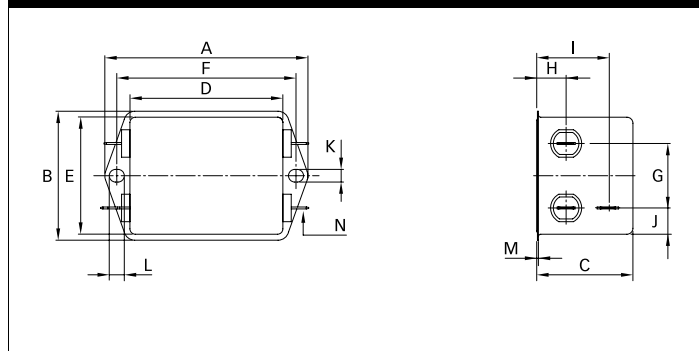


16 A types (FN 9676)

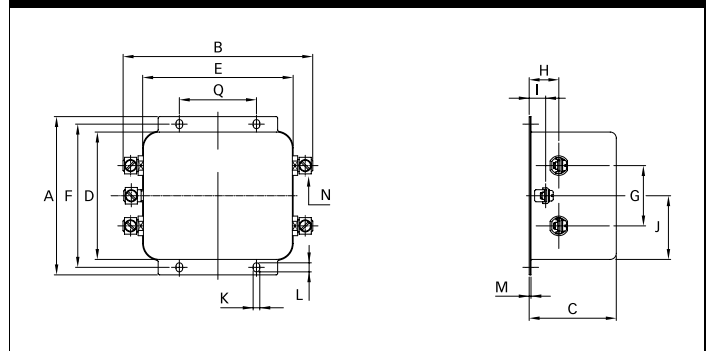


## Mechanical data

3 and 6 A types



16 A types



## Dimensions

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

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



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