# 1-phase filters FN 9675

## **Compact performance EMI filter**





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

#### **Approvals**







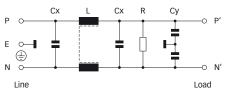


#### **Technical specifications**

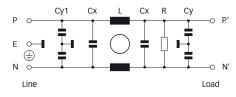
Maximum continuous operating voltage:	250VAC, 50/60Hz
Operating frequency:	dc to 400Hz
Rated currents:	3 to 16A @ 40°C max.
High potential test voltage:	P -> E 2000VAC for 2 sec
	P -> N 760VAC for 2 sec
Temperature range (operation and storage):	-25°C to +100°C (25/100/21)
Flammability corresponding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

#### Typical electrical schematic

## 3 and 6A types



## 16A types



## 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

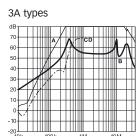
## Filter selection table

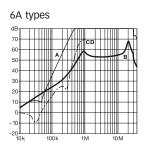
Filter	Rated current	Leakage current*	Inductance		Capacitance Resistar		Resistance	Input	ut/Output   Weight	
	@ 40°C (25°C)	@ 230VAC/50Hz	L	Сх	Су	Cy1	R	conn	ections	
	[A]	[µA]	[mH]	[nF]	[nF]	[nF]	[kΩ]			[g]
FN 9675-3-06	3 (3.5)	410	18	680	4.7		470		-06	270
FN 9675-6-06	6 (6.9)	410	3	680	4.7		470		-06	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

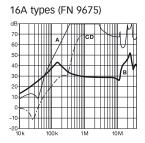
<sup>\*</sup> Maximum leakage under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

## Typical filter attenuation

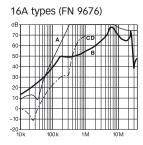
Per CISPR 17; A =  $50\Omega/50\Omega$  sym; B =  $50\Omega/50\Omega$  asym; C =  $0.1\Omega/100\Omega$  sym; D =  $100\Omega/0.1\Omega$  sym





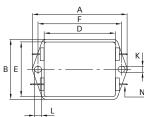


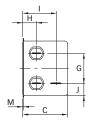
16A types

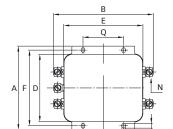


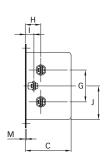
### Mechanical data

3 and 6A types









## Dimensions

A 85 105 ±0.5 B 54 126 ±0.5 C 40.3 57 ±1 D 64 84.5 ±1 E 49.8 99.5 ±0.5 F 75 95 ±0.2 G 27 40 ±0.5 H 29.8 19 ±0.5 H 29.8 19 ±0.5 I 12 11 ±0.5 J 11.4 42.25 ±0.5 K 5.3 4.4 L 6.3 6 M 0.7 1.2 N 6.3 x 0.8		3A	16A	Tolerances	
B       54       126       ±0.5         C       40.3       57       ±1         D       64       84.5       ±1         E       49.8       99.5       ±0.5         F       75       95       ±0.2         G       27       40       ±0.5         H       29.8       19       ±0.5         I       12       11       ±0.5         J       11.4       42.25       ±0.5         K       5.3       4.4       4.4         L       6.3       6         M       0.7       1.2					
B       54       126       ±0.5         C       40.3       57       ±1         D       64       84.5       ±1         E       49.8       99.5       ±0.5         F       75       95       ±0.2         G       27       40       ±0.5         H       29.8       19       ±0.5         I       12       11       ±0.5         J       11.4       42.25       ±0.5         K       5.3       4.4       4.4         L       6.3       6         M       0.7       1.2					
B       54       126       ±0.5         C       40.3       57       ±1         D       64       84.5       ±1         E       49.8       99.5       ±0.5         F       75       95       ±0.2         G       27       40       ±0.5         H       29.8       19       ±0.5         I       12       11       ±0.5         J       11.4       42.25       ±0.5         K       5.3       4.4       4.4         L       6.3       6         M       0.7       1.2					
C     40.3     57     ±1       D     64     84.5     ±1       E     49.8     99.5     ±0.5       F     75     95     ±0.2       G     27     40     ±0.5       H     29.8     19     ±0.5       I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	Α				
D     64     84.5     ±1       E     49.8     99.5     ±0.5       F     75     95     ±0.2       G     27     40     ±0.5       H     29.8     19     ±0.5       I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	В	54	126	±0.5	
E     49.8     99.5     ±0.5       F     75     95     ±0.2       G     27     40     ±0.5       H     29.8     19     ±0.5       I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	С	40.3	57	±1	
F     75     95     ±0.2       G     27     40     ±0.5       H     29.8     19     ±0.5       I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	D	64	84.5	±1	
G     27     40     ±0.5       H     29.8     19     ±0.5       I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	E	49.8	99.5	±0.5	
H     29.8     19     ±0.5       I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	F	75	95	±0.2	
I     12     11     ±0.5       J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	G	27	40	±0.5	
J     11.4     42.25     ±0.5       K     5.3     4.4       L     6.3     6       M     0.7     1.2	Н	29.8	19	±0.5	
K     5.3     4.4       L     6.3     6       M     0.7     1.2	I	12	11	±0.5	
L 6.3 6 M 0.7 1.2	J	11.4	42.25	±0.5	
M 0.7 1.2	K	5.3	4.4		
	L	6.3	6		
N 6.3 x 0.8 UNC 8-32	M	0.7	1.2		
	N	6.3 x 0.8	UNC 8-32		
<b>Q</b> 51 ±0.1	Q		51	±0.1	

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

