Datasheet | EA04 3P4W

General Purpose AC EMI Filter

*Image shown is for illustrative purpose only

Approvals /Conformance

Technical Specifications

Operating voltage	250/440 VAC
Current rating	1A - 10A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 2121VDC (applicable excluding surge suppressor filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939- 2:2005 standards.
- Compact PCB-mountable design.
- High reliable.
- Plastic housing with good aesthetic.
- Single stage.
- Input and output connection through soldering pins.
- Filters available in medical version without capacitor to earth.
- With surge suppressor filters also available.
- Cost effective solution.

Application

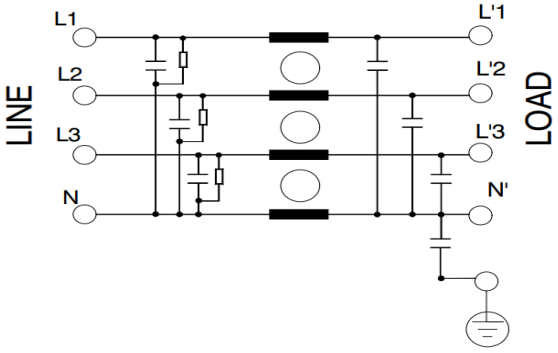
- Electrical and electronic equipment
- SMPS
- Test & measurement equipment
- Small to medium-sized machines and household equipment
- Office automation equipment

Attenuation type

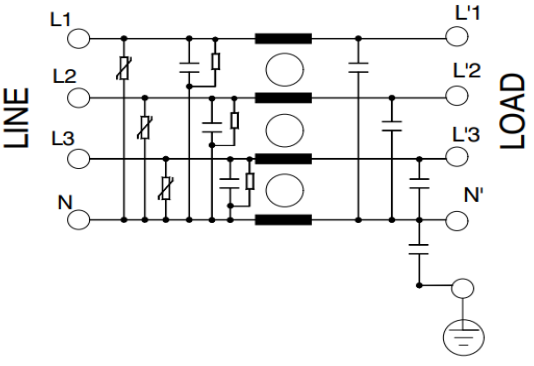
Single Stage **Standard**

Electrical schematic for filter:

General purpose –



General purpose with Surge Suppressor –



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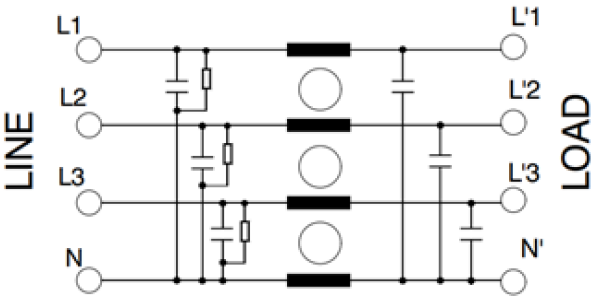
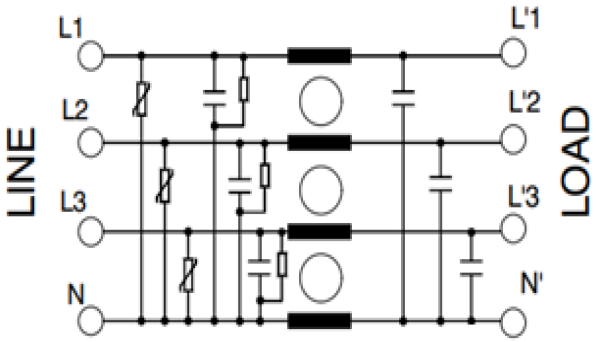
Electrical schematic for filter:

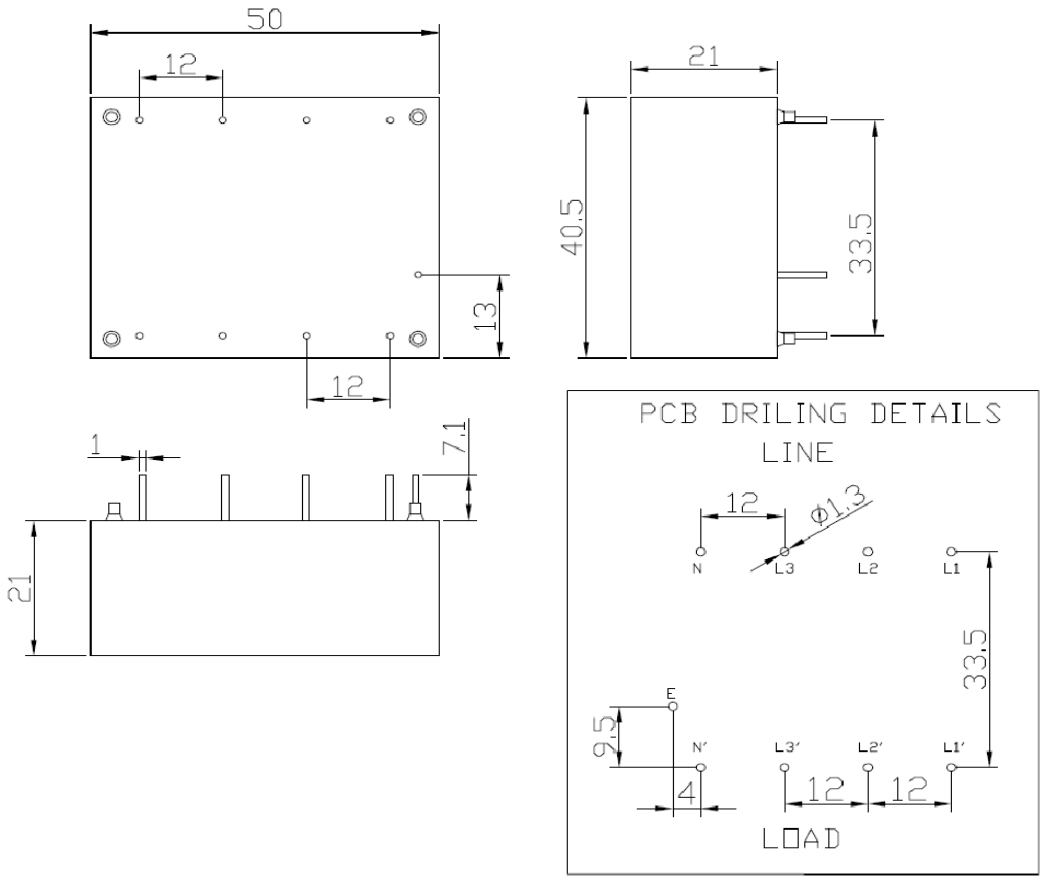
Medical equipment application -



Medical equipment application with Surge Suppressor-



Mechanical Details



All dimensions in mm.
General tolerance=±1mm
Note: For medical application filter, earthing terminal is not provided.

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Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @250VAC	Pin-type terminal 	Max. Peak current (8/20 µ sec 1 time) (KA)	Energy surge rating (10/1000 µ sec) (Joules)	Approx. weight (gm)	Attenuation
1	EF-3P001A01E-A04	1	< 0.5	A	----	----	100	Standard
2	EF-3P001A02E-A04	1	< 0.5	A	6.5	175	100	Standard
3	EF-3P001A03E-A04	1	< 0.003	A	----	----	100	Standard
4	EF-3P001A04E-A04	1	< 0.003	A	6.5	175	100	Standard
5	EF-3P002A01E-A04	2	< 0.5	A	----	----	100	Standard
6	EF-3P002A02E-A04	2	< 0.5	A	6.5	175	100	Standard
7	EF-3P002A03E-A04	2	< 0.003	A	----	----	100	Standard
8	EF-3P002A04E-A04	2	< 0.003	A	6.5	175	100	Standard
9	EF-3P003A01E-A04	3	< 0.5	A	----	----	100	Standard
10	EF-3P003A02E-A04	3	< 0.5	A	6.5	175	100	Standard
11	EF-3P003A03E-A04	3	< 0.003	A	----	----	100	Standard
12	EF-3P003A04E-A04	3	< 0.003	A	6.5	175	100	Standard
13	EF-3P006A01E-A04	6	< 0.5	A	----	----	100	Standard
14	EF-3P006A02E-A04	6	< 0.5	A	6.5	175	100	Standard
15	EF-3P006A03E-A04	6	< 0.003	A	----	----	100	Standard
16	EF-3P006A04E-A04	6	< 0.003	A	6.5	175	100	Standard
17	EF-3P010A01E-A04	10	< 0.5	A	----	----	100	Standard
18	EF-3P010A02E-A04	10	< 0.5	A	6.5	175	100	Standard
19	EF-3P010A03E-A04	10	< 0.003	A	----	----	100	Standard
20	EF-3P010A04E-A04	10	< 0.003	A	6.5	175	100	Standard

- Customize products provided on request.
- Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.

Connection Method

Current Rating (A)	Pin type terminal	Earthing
1,2,3,6,10 Amp	Solder pins	Solder pins

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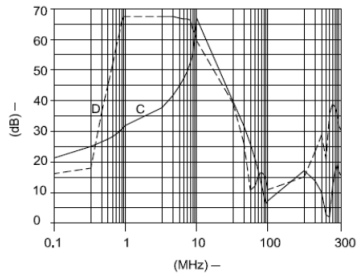
Filter attenuation graph

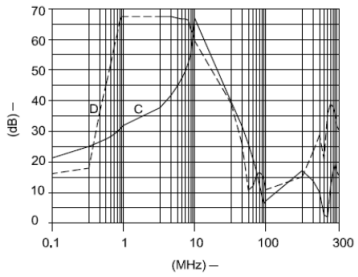
C = Common mode (asymmetrical) ————— D = Differential mode (symmetrical) - - - - - - - - -

For general purpose

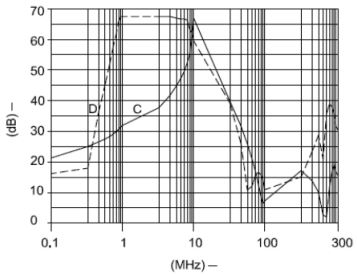
1 Amp



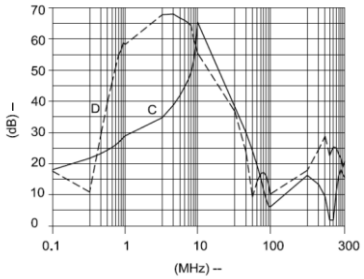
2 Amp



3 Amp



6 Amp



10 Amp