

Datasheet | EC01

EP-42 Series



General Purpose AC EMI Filter

El.italia EC-EC01 [EP-42] serie



Technical specifications

Operating voltage	120/250 VAC
Current rating	1A-20A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 1414VDC (applicable for excluding surge suppressor filter)
Insulation resistance	$\geq 300 \text{ M}\Omega @ 500\text{VDC (PN}\rightarrow\text{E)}$
Operating temperature	40°C / -25°C +85°C

*Image shown is for illustrative purpose only

Features and benefit:

- | All filters provide high attenuation performance.
- | High reliable
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards
- | Easy and fast chassis mountable filter in deep drawn metal can with compact size.
- | CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- | Filters available in medical version without capacitor to earth.
- | General purpose filters with low leakage current for safety critical application.
- | With surge suppressor filters also available.
- | Various terminal options are available.

Attenuation Type:

Single Stage

Standard

Application

- | Consumer product
 - | Food processing machines
 - | Medical equipment
 - | Printing machinery
- Electrical automation equipment

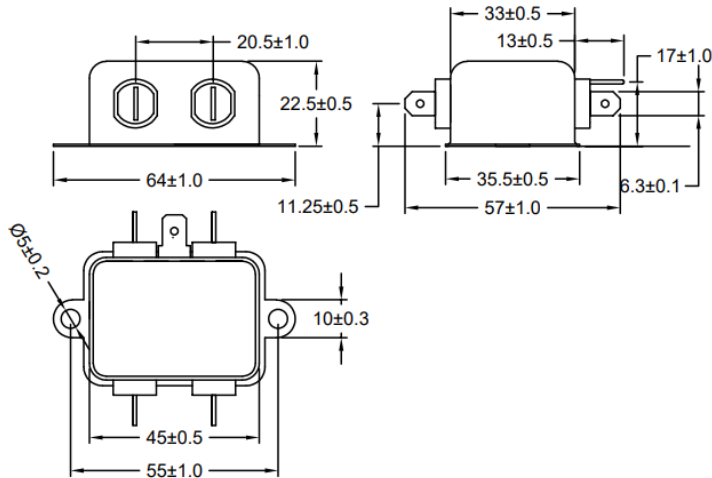
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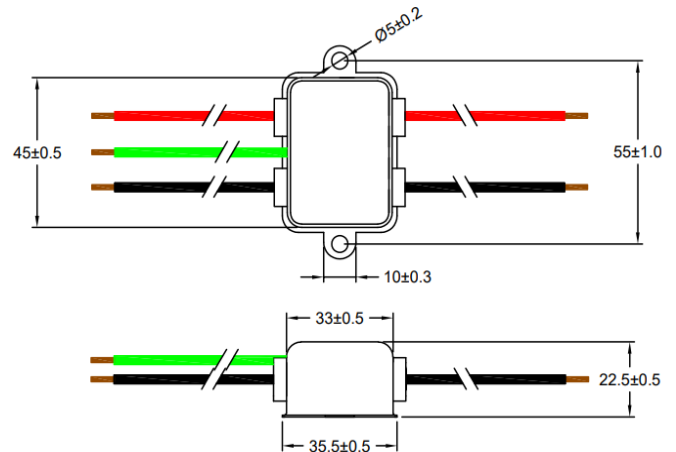
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| For wire lead terminal



All dimensions in mm.

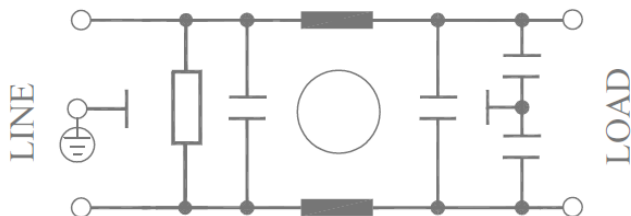
| For touch safe terminal



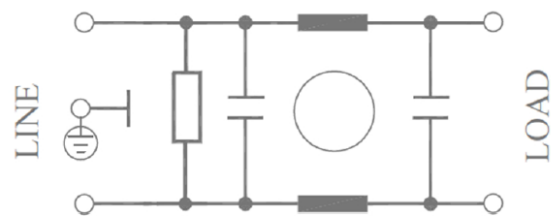
All dimensions in mm.

Electrical schematic for Single Stage Filter

General Purpose -



Medical equipment application -



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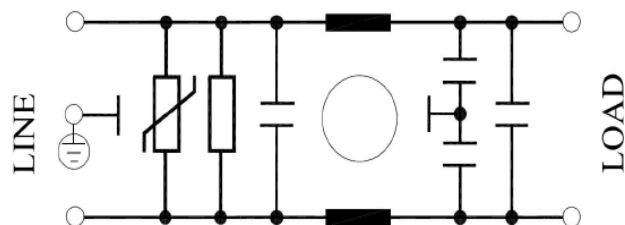
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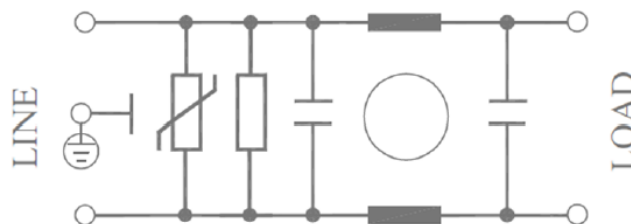
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General Purpose with Surge Suppressor -



Medical equipment application with Surge Suppressor -

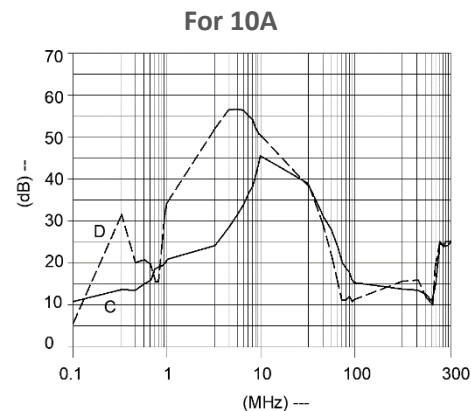
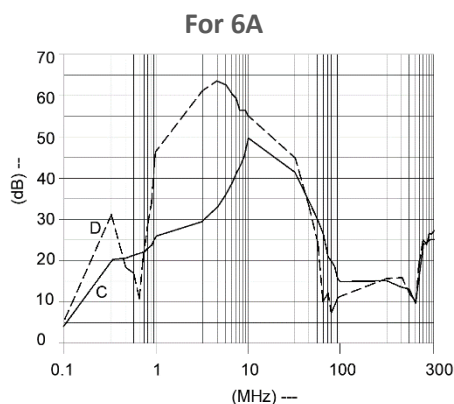
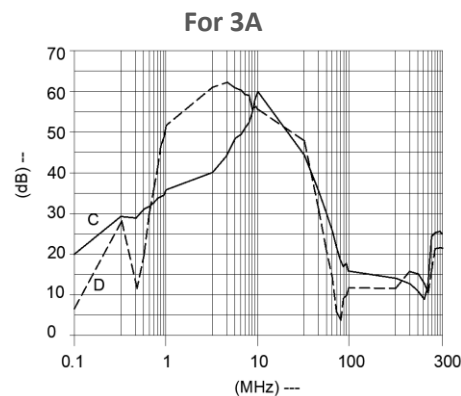
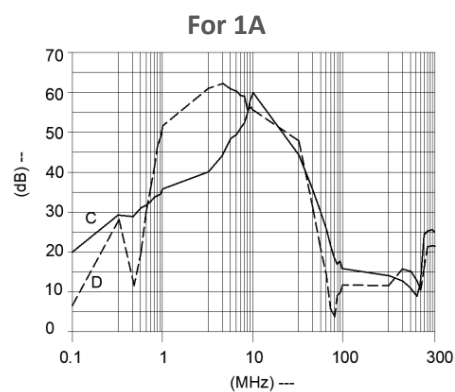


Filter attenuation Graph

C = Common mode (asymmetrical) —

D = Differential mode (symmetrical) -----

For General purpose



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Filter Selection Table

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Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @250VAC	Terminals (X)		Max. Peak current (8/20 μ sec 1 time) (KA)	Energy surge rating (10/1000 μ sec) (Joules)	Approx. Weight (gm)	Attenuation
				Fast-on 	Wire 				
1	EF-1B001X01E-C01	1	< 0.5	B	G	----	----	60	Standard
2	EF-1B001X02E-C01	1	< 0.5	B	G	6.5	175	60	Standard
3	EF-1B001X03E-C01	1	< 0.003	B	G	----	----	60	Standard
4	EF-1B001X04E-C01	1	< 0.003	B	G	6.5	175	60	Standard
5	EF-1B003X01E-C01	3	< 0.5	B	G	----	----	60	Standard
6	EF-1B003X02E-C01	3	< 0.5	B	G	6.5	175	60	Standard
7	EF-1B003X03E-C01	3	< 0.003	B	G	----	----	60	Standard
8	EF-1B003X04E-C01	3	< 0.003	B	G	6.5	175	60	Standard
9	EF-1B006X01E-C01	6	< 0.5	B	G	----	----	60	Standard
10	EF-1B006X02E-C01	6	< 0.5	B	G	6.5	175	60	Standard
11	EF-1B006X03E-C01	6	< 0.003	B	G	----	----	60	Standard
12	EF-1B006X04E-C01	6	< 0.003	B	G	6.5	175	60	Standard
13	EF-1B010X01E-C01	10	< 0.5	B	G	----	----	60	Standard
14	EF-1B010X02E-C01	10	< 0.5	B	G	6.5	175	60	Standard
15	EF-1B010X03E-C01	10	< 0.003	B	G	----	----	60	Standard
16	EF-1B010X04E-C01	10	< 0.003	B	G	6.5	175	60	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-1B001B03E-C01)
- 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.
- Customize products provided on request.

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Connection Type

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Current Rating (A)	Fast -on	Wire	Earthing
1,3 & 6	6.3 X 0.8mm	18AWG	Fast-on terminal/wires
10		14AWG	

Syntax

EF - 1B CCC X YY E - C01

