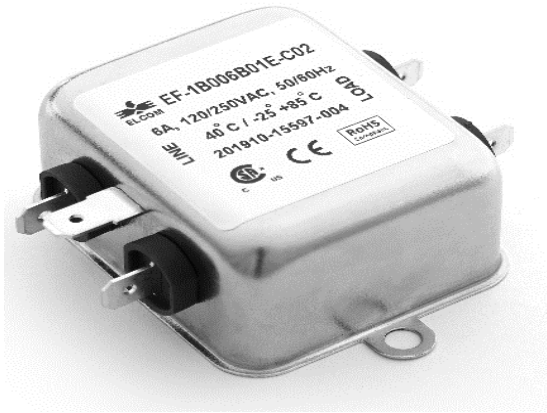


### General Purpose AC EMI Filter

### Approvals /Conformance



\*Image shown is for illustrative purpose only

### 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	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°C / -25°C +85°C

### Features and benefits

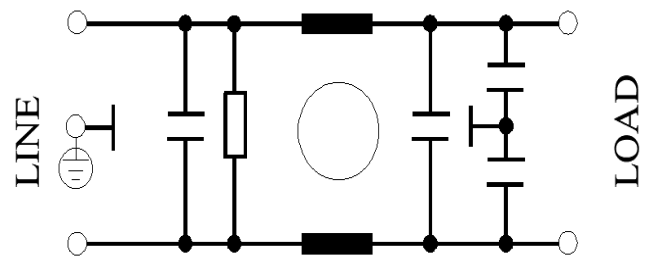
- | Filters available in single stage and double stage
- | All filters provide high attenuation performance.
- | Two stage filters designed for noisy application requiring excellent filter performance.
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- | High reliable
- | Easy 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

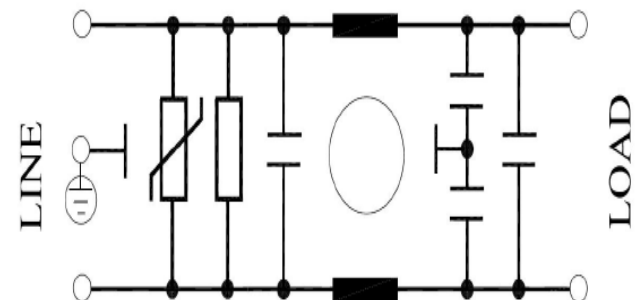
Single Stage	Standard
Double Stage	High

### Electrical schematic for Single Stage filter:

#### General purpose –



#### General purpose with Surge Suppressor –



### Application

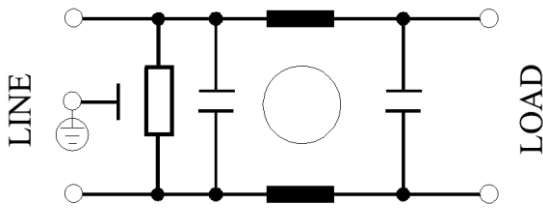
- | Consumer product
- | Defence application
- | Medical equipment
- | Industrial application
- | Automotive application
- | Weighting Machines
- | Printing Machinery
- | Electrical equipment application
- | Office automation equipment

# Datasheet | EC02

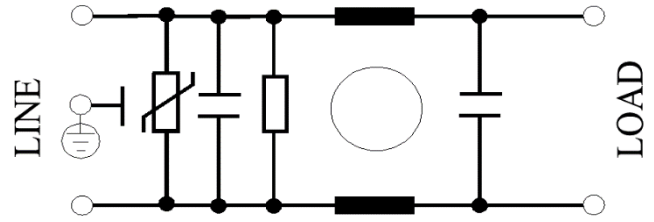


## EP-15AP Series (For single stage) & EP-660 series (For double stage)

Medical equipment application –

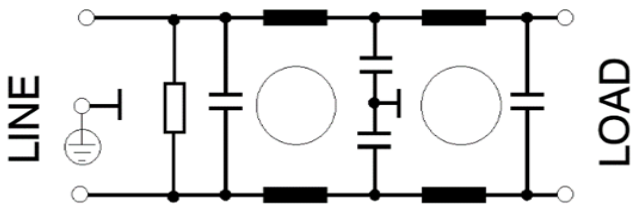


Medical equipment application with Surge Suppressor

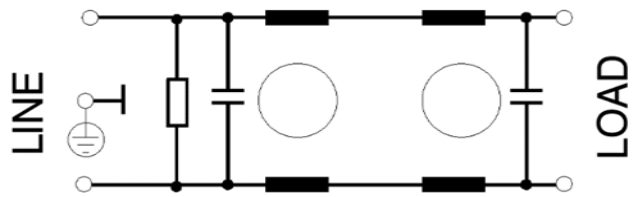


### Electrical schematic for Double Stage Filter

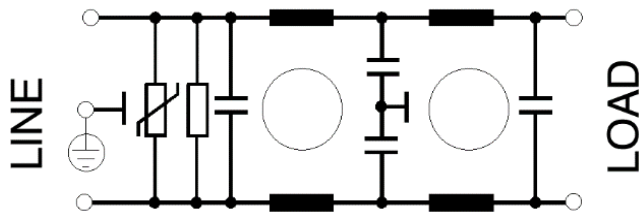
General purpose –



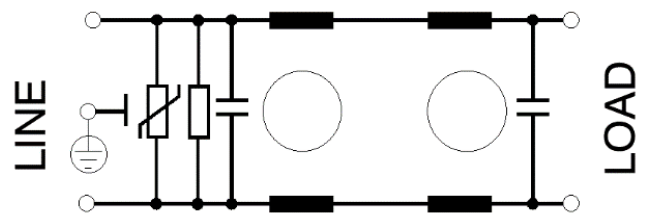
Medical equipment application –



General purpose with Surge Suppressor –



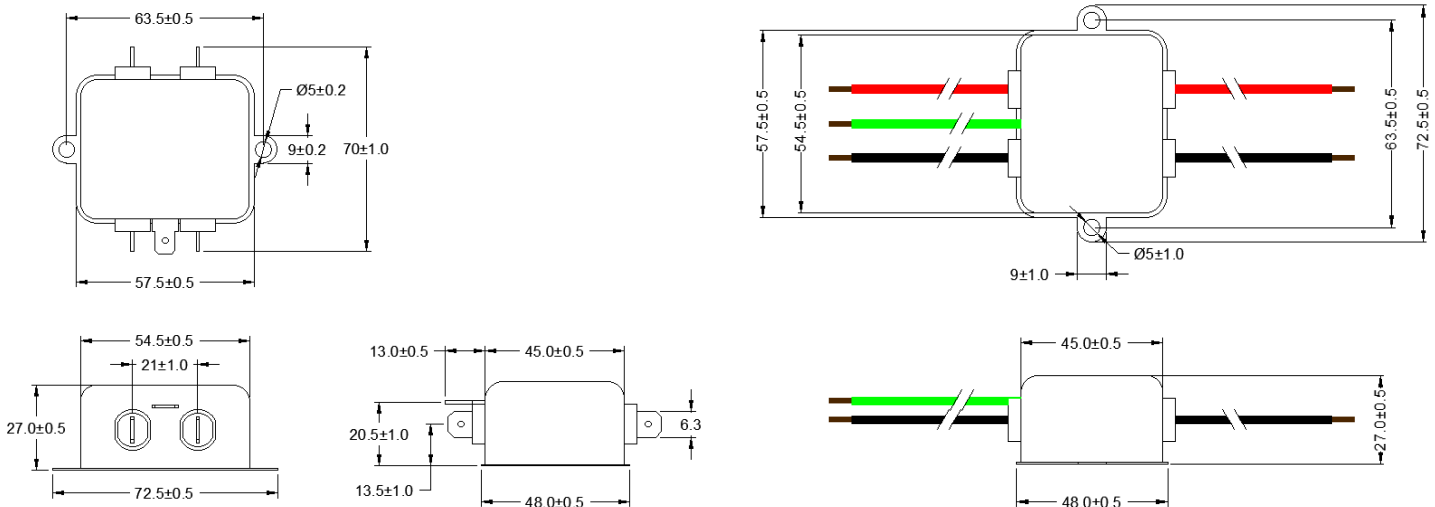
Medical equipment application with Surge Suppressor –



### Mechanical Drawing





fast-on terminal

wire lead terminal





\*All dimensions in mm

### Filter Selection Table:

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-C02	1	< 0.5	B	G	----	----	90	Standard
2	EF-1B001X02E-C02	1	< 0.5	B	G	6.5	175	90	Standard
3	EF-1B001X03E-C02	1	< 0.003	B	G	----	----	90	Standard
4	EF-1B001X04E-C02	1	< 0.003	B	G	6.5	175	90	Standard
5	EF-1B003X01E-C02	3	< 0.5	B	G	----	----	90	Standard
6	EF-1B003X02E-C02	3	< 0.5	B	G	6.5	175	90	Standard
7	EF-1B003X03E-C02	3	< 0.003	B	G	----	----	90	Standard
8	EF-1B003X04E-C02	3	< 0.003	B	G	6.5	175	90	Standard
9	EF-1B006X01E-C02	6	< 0.5	B	G	----	----	90	Standard
10	EF-1B006X02E-C02	6	< 0.5	B	G	6.5	175	90	Standard
11	EF-1B006X03E-C02	6	< 0.003	B	G	----	----	90	Standard
12	EF-1B006X04E-C02	6	< 0.003	B	G	6.5	175	90	Standard
13	EF-1B010X01E-C02	10	< 0.5	B	G	----	----	90	Standard
14	EF-1B010X02E-C02	10	< 0.5	B	G	6.5	175	90	Standard
15	EF-1B010X03E-C02	10	< 0.003	B	G	----	----	90	Standard
16	EF-1B010X04E-C02	10	< 0.003	B	G	6.5	175	90	Standard
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 				
17	EF-1B015X01E-C02	15	< 0.5	B	G	----	----	90	Standard
18	EF-1B015X02E-C02	15	< 0.5	B	G	10	350	90	Standard
19	EF-1B015X03E-C02	15	< 0.003	B	G	----	----	90	Standard
20	EF-1B015X04E-C02	15	< 0.003	B	G	10	350	90	Standard
21	EF-1B020X01E-C02	20	< 0.5	B	G	----	----	90	Standard
22	EF-1B020X02E-C02	20	< 0.5	B	G	10	350	90	Standard

## EP-15AP Series (For single stage) & EP-660 series (For double stage)

23	EF-1B020X03E-C02	20	< 0.003	B	G	----	----	90	Standard
24	EF-1B020X04E-C02	20	< 0.003	B	G	10	350	90	Standard
25	EF-1B001X20E-C02	1	< 0.5	B	G	----	----	100	High
26	EF-1B001X21E-C02	1	< 0.5	B	G	6.5	175	100	High
27	EF-1B001X22E-C02	1	< 0.003	B	G	----	----	100	High
28	EF-1B001X23E-C02	1	< 0.003	B	G	6.5	175	100	High
29	EF-1B003X20E-C02	3	< 0.5	B	G	----	----	100	High
30	EF-1B003X21E-C02	3	< 0.5	B	G	6.5	175	100	High
31	EF-1B003X22E-C02	3	< 0.003	B	G	----	----	100	High
32	EF-1B003X23E-C02	3	< 0.003	B	G	6.5	175	100	High
33	EF-1B006X20E-C02	6	< 0.5	B	G	----	----	100	High
34	EF-1B006X21E-C02	6	< 0.5	B	G	6.5	175	100	High
35	EF-1B006X22E-C02	6	< 0.003	B	G	----	----	100	High
36	EF-1B006X23E-C02	6	< 0.003	B	G	6.5	175	100	High
37	EF-1B010X20E-C02	10	< 0.5	B	G	----	----	100	High
38	EF-1B010X21E-C02	10	< 0.5	B	G	6.5	175	100	High
39	EF-1B010X22E-C02	10	< 0.003	B	G	----	----	100	High
40	EF-1B010X23E-C02	10	< 0.003	B	G	6.5	175	100	High
41	EF-1B015X20E-C02	15	< 0.5	B	G	----	----	100	High
42	EF-1B015X21E-C02	15	< 0.5	B	G	10	350	100	High
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 				
44	EF-1B015X23E-C02	15	< 0.003	B	G	10	350	100	High
45	EF-1B020X20E-C02	20	< 0.5	B	G	----	----	100	High
46	EF-1B020X21E-C02	20	< 0.5	B	G	10	350	100	High
47	EF-1B020X22E-C02	20	< 0.003	B	G	----	----	100	High
48	EF-1B020X23E-C02	20	< 0.003	B	G	10	350	100	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-1B001B20E-C02)
- 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.

### Connection type

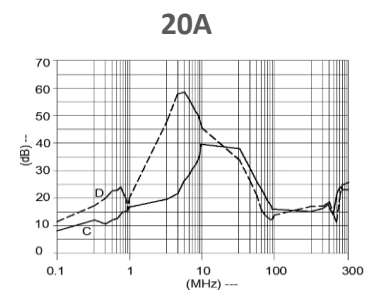
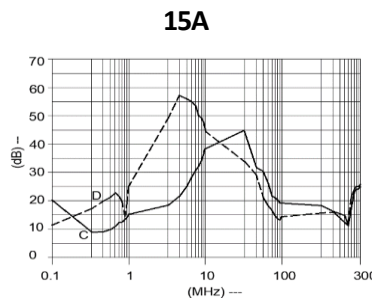
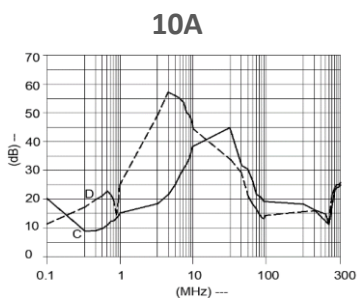
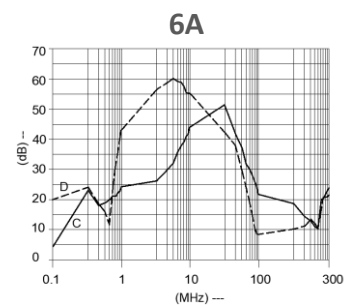
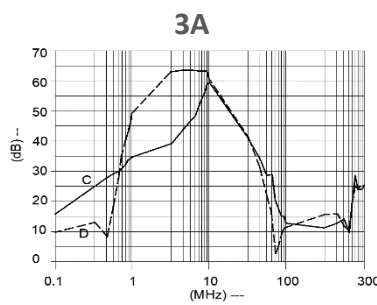
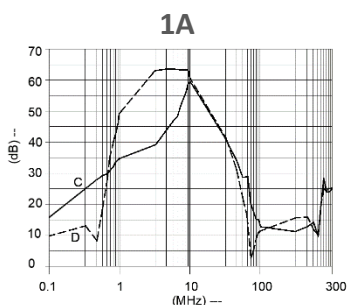
Current Rating (A)	Fast-on	Wire	Earthing
1,3 & 6	6.3 X 0.8mm	18AWG	Fast-on/wire leads
10 & 15		14AWG	
20		12AWG	

### Filter attenuation graph

C = Common mode (asymmetrical) —————

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

#### For general purpose (Single Stage)



#### For general purpose (Double Stage)

