

General Purpose AC EMI Filter



*Image shown is for illustrative purpose only

Conformance



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 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.
- | High reliable
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards
- | Chassis mountable filter in oval shape aluminium metal can with mounting clamp.
- | 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.

Application

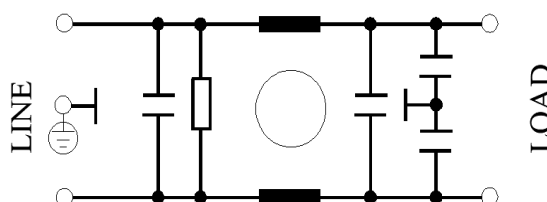
- | Consumer product
- | Defence application
- | Medical equipment
- | Industrial application
- | Automotive application
- | Weighting Machines
- | Printing Machinery
- | Electrical equipment application
- | Office automation equipment

Attenuation type

Single Stage	Standard
Double Stage	High

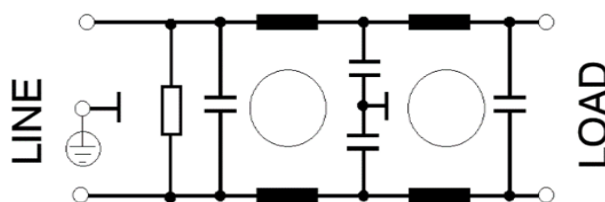
Electrical schematic for single stage filter:

General purpose – CKT1



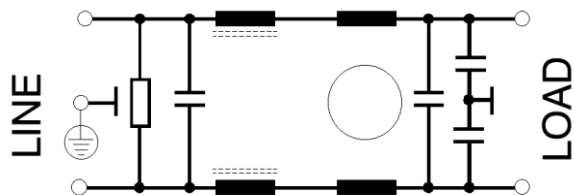
Electrical schematic for single stage filter:

General purpose CKT2-



General Purpose

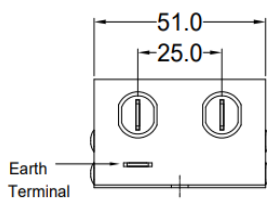
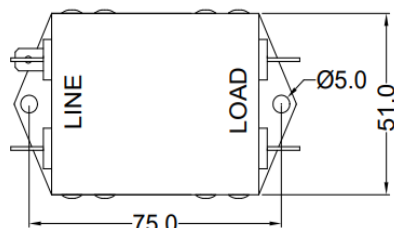
CKT3



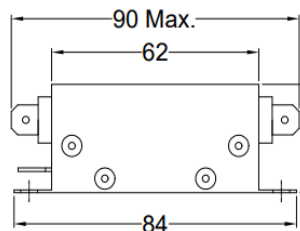
Mechanical Details

fast-on terminal

TOP VIEW

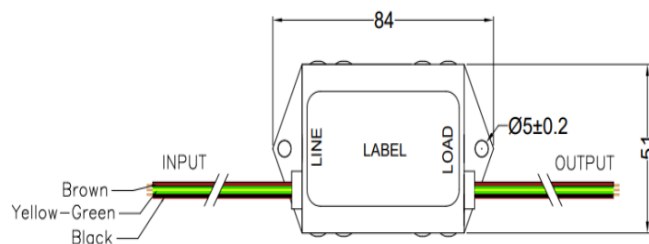


L.H.S. VIEW

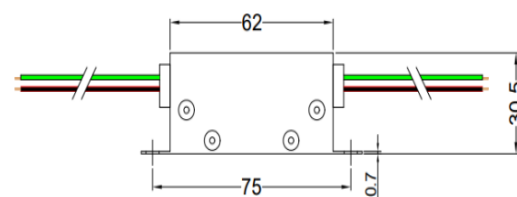


FRONT VIEW

Wire lead terminal



TOP VIEW



FRONT VIEW

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)		Approx. Weight (gm)	Attenuation
				Fast-on	Wire		
1	EF-1B001X01G-C06	1	< 0.5	B	G	150	Standard
2	EF-1B003X01G-C06	3	< 0.5	B	G	150	Standard
3	EF-1B006X01G-C06	6	< 0.5	B	G	150	Standard
4	EF-1B010X01G-C06	10	< 0.5	B	G	150	Standard
5	EF-1B015X01G-C06	15	< 0.5	B	G	150	Standard
6	EF-1B020X01G-C06	20	< 0.5	B	G	150	Standard
7	EF-1B001X20G-C06	1	< 0.5	B	G	150	High
8	EF-1B003X20G-C06	3	< 0.5	B	G	150	High

9	EF-1B006X20G-C06	6	< 0.5	B	G	150	High
10	EF-1B010X20G-C06	10	< 0.5	B	G	150	High
11	EF-1B015X20G-C06	15	< 0.5	B	G	150	High
12	EF-1B020X20G-C06	20	< 0.5	B	G	150	High
13	EF-1B003X24G-C06	3	<1.0	B	G	150	High
14	EF-1B006X24G-C06	6	<1.0	B	G	150	High
15	EF-1B010X24G-C06	10	<1.0	B	G	150	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-1B001E20G-C06).
- 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 Method

Current Rating (A)	Wire terminal	Fast -on terminal	Earthing
1 & 3	0.5 sqmm	6.3 X 0.8mm	Wire lead/Fast-on
6	0.75 sqmm		
10	1 sqmm		
15	1.5 sqmm		
20	2.5 sqmm		

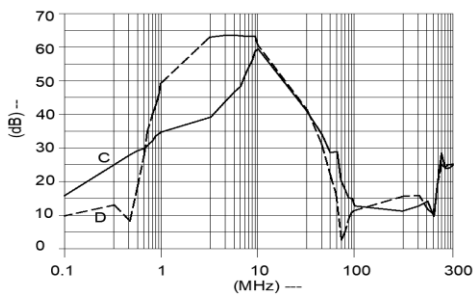
Filter attenuation graph

C = Common mode (asymmetrical) —————

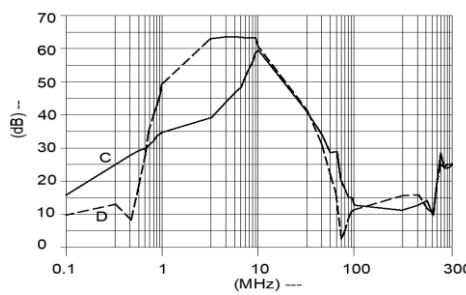
D = Differential mode (symmetrical) - - - - -

For general purpose

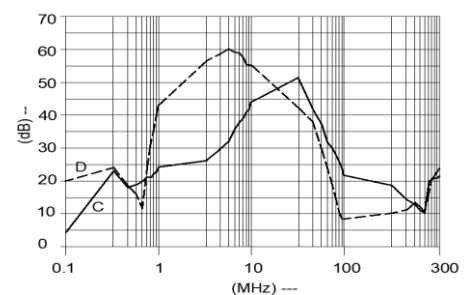
1A



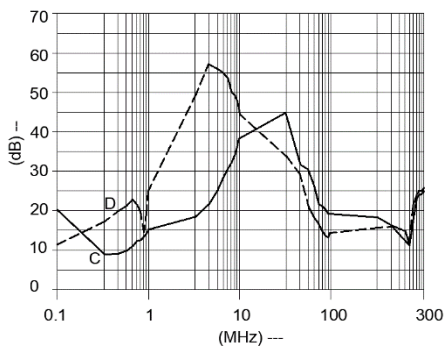
3A



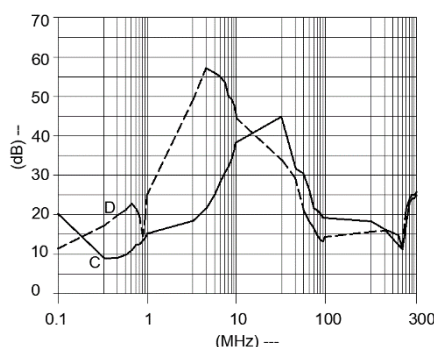
6A



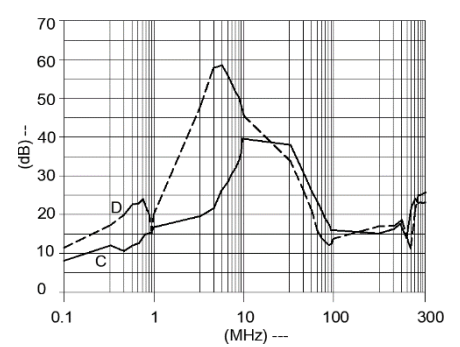
10A



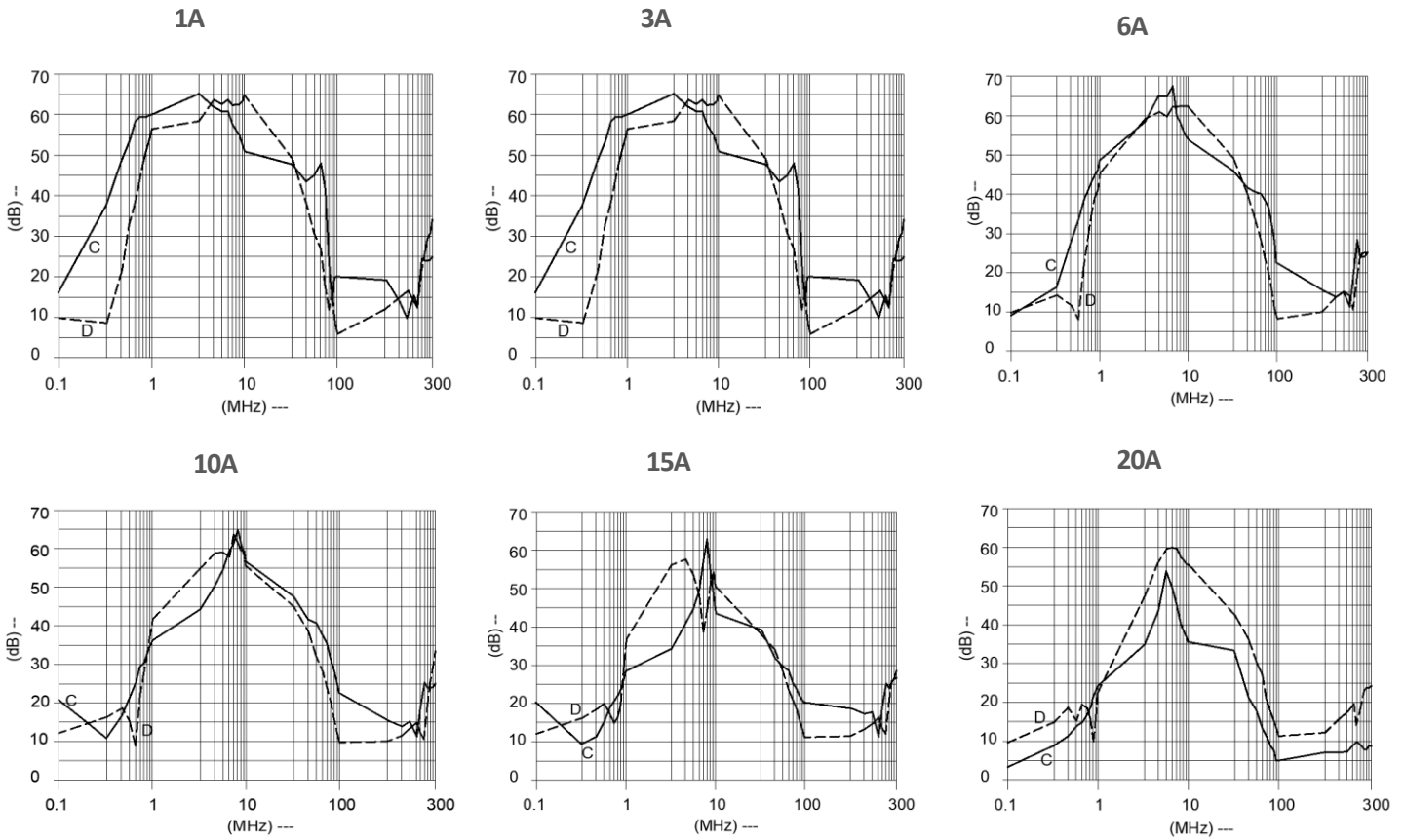
15A



20A



For general application (Double Stage) (CKT 2)



For general application (Double Stage) (CKT 3)

