



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 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

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 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

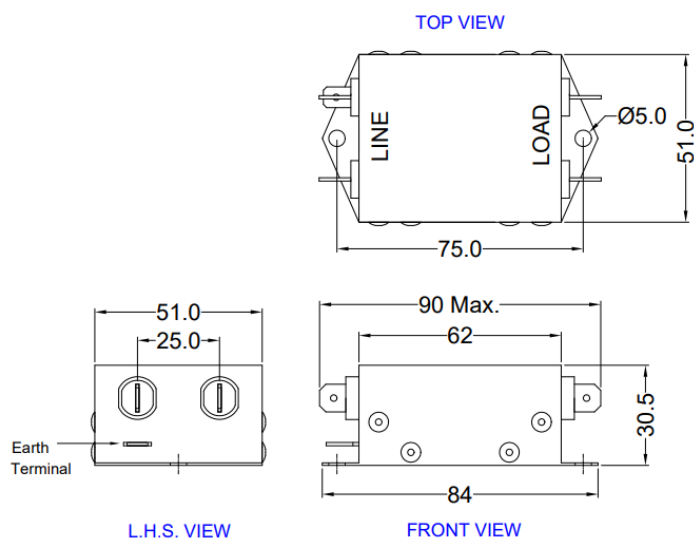
Single Stage	Standard
Double Stage	High

Applications

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

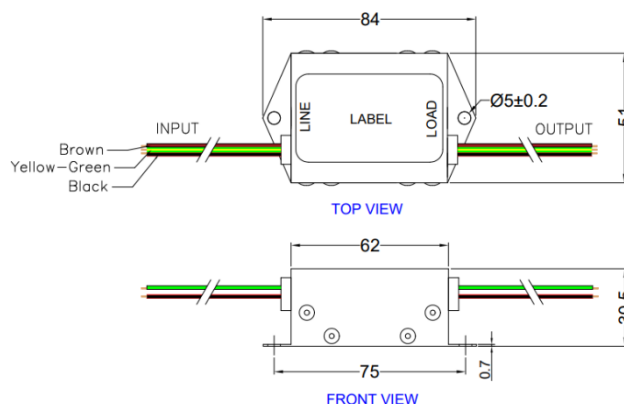
Mechanical details

| For fast-on terminal



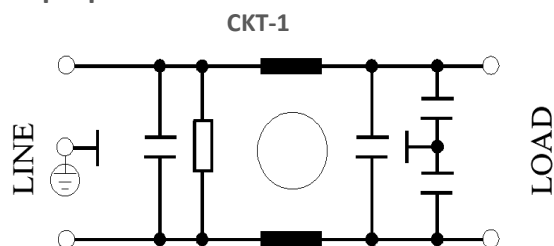
All dimensions in mm
General tolerance=±2mm

| For wire lead terminal



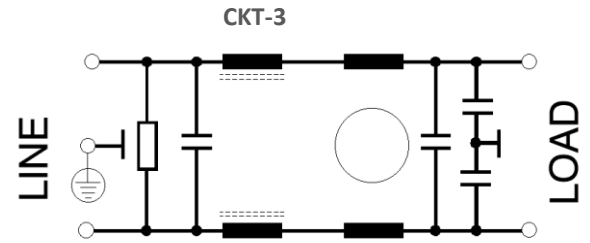
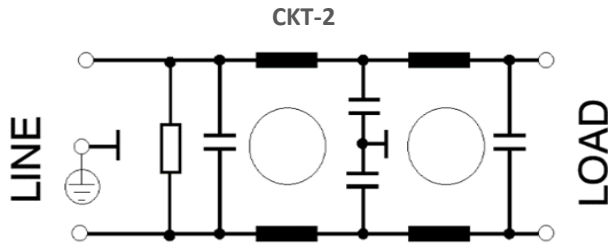
Electrical schematic for Single Stage Filter

General purpose –



Electrical schematic for Double Stage Filter

General purpose –

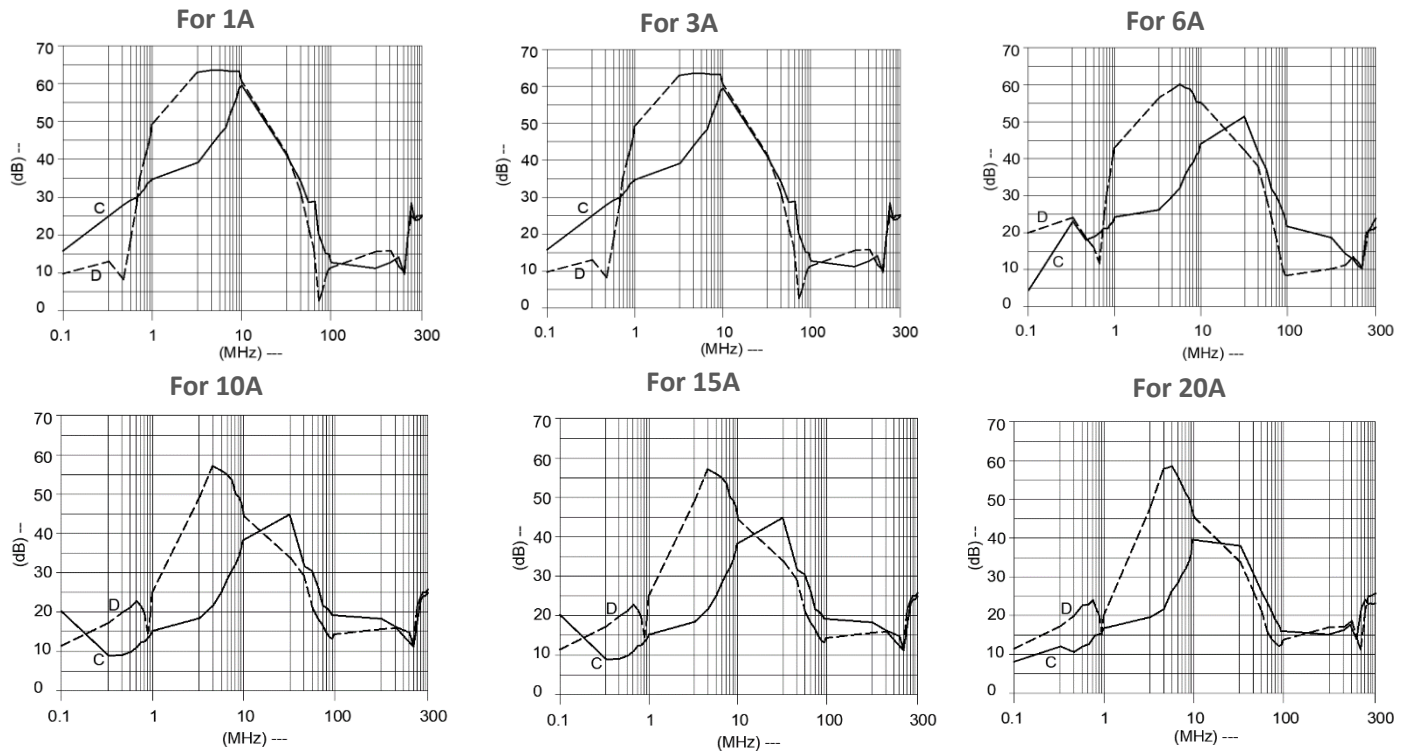


Filter attenuation Graph

C = Common mode (asymmetrical) —————

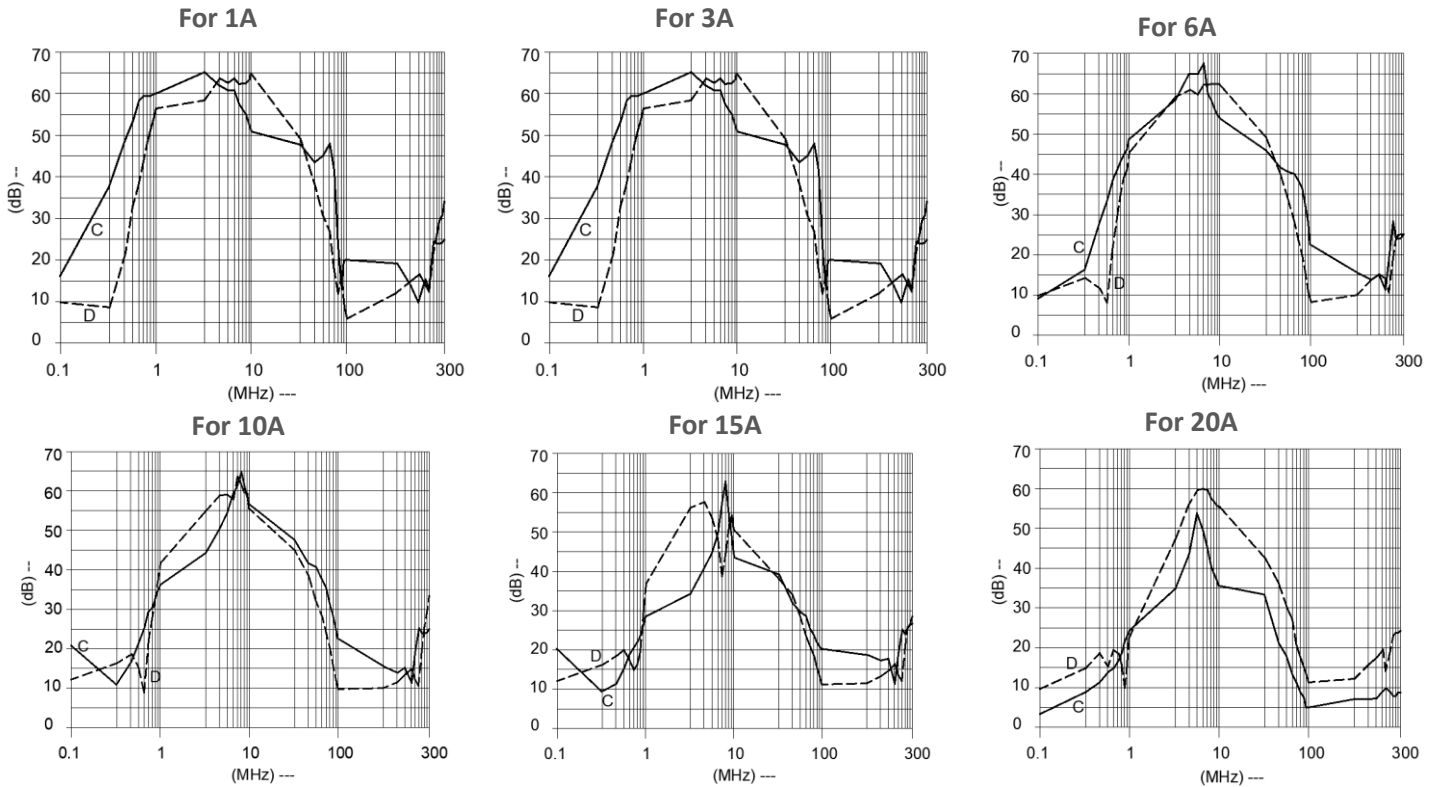
D = Differential mode (symmetrical) - - - - -

For general application (Single Stage)

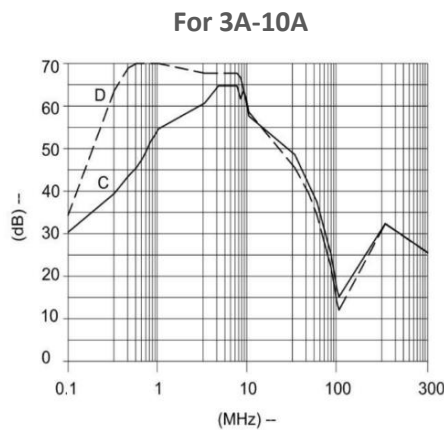


For general application (Double Stage) (CKT 2)

El.italia EC-EC06 serie



For general application (Double Stage) (CKT 3)



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-1B001B20G-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 Type

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		



Syntax

EF - 1B CCC X YY G - C06

