

General Purpose AC EMI Filter



*Image shown is for illustrative purpose only

Conformance



Technical Specifications

Operating voltage	120/250 VAC
Current rating	1A - 40A
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

- | 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 drill rail mounting 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.

Application

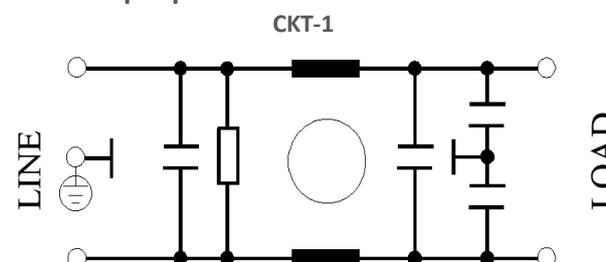
- | Consumer product
- | Defence application
- | Medical equipment
- | Industrial application
- | Automotive application
- | Weighting Machines
- | Printing Machinery
- | Electrical equipment application
- | Office automation equipment

Attenuation type

Single Stage	Standard
Double Stage	High

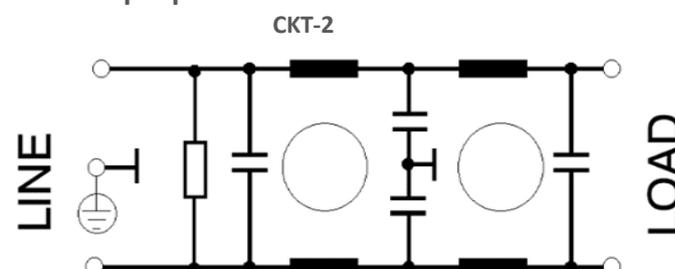
Electrical schematic for Single Stage Filter

General purpose –

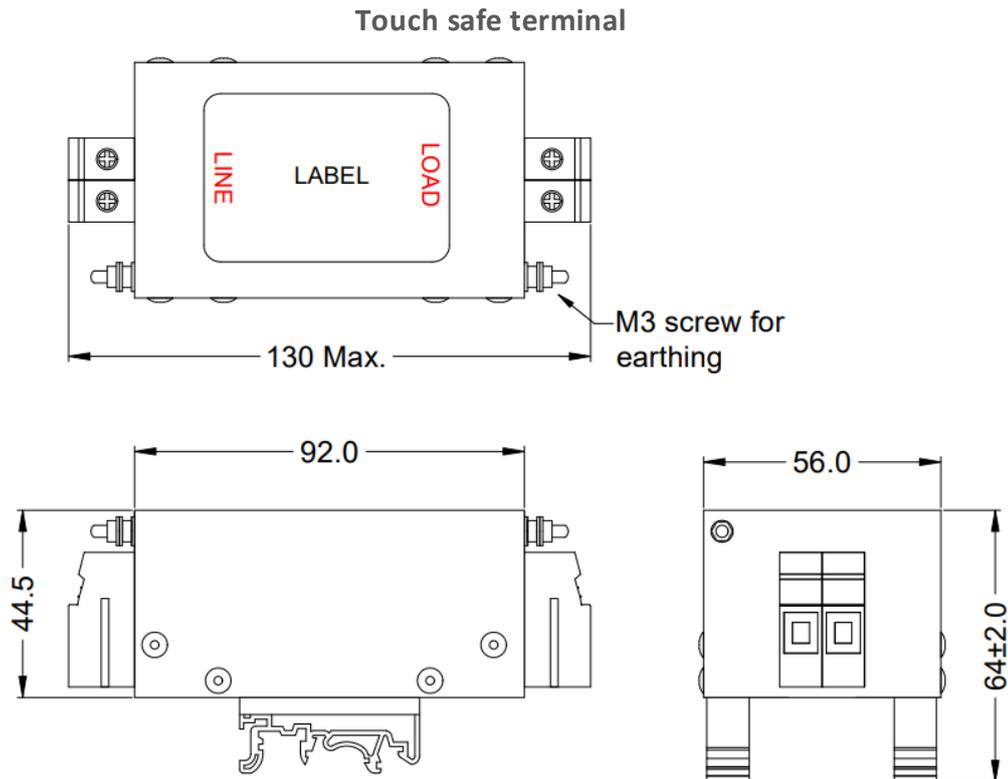


Electrical schematic for Double Stage Filter

General purpose –



Mechanical details



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
				Touch safe 		
1	EF-1B010F01G-E07	10	< 0.5	F	250	Standard
2	EF-1B020F01G-E07	20	< 0.5	F	250	Standard
3	EF-1B030F01G-E07	30	< 0.5	F	250	Standard
4	EF-1B040F01G-E07	40	< 0.5	F	250	Standard
5	EF-1B010F20G-E07	10	< 0.5	F	250	High
6	EF-1B020F20G-E07	20	< 0.5	F	250	High
7	EF-1B030F20G-E07	30	< 0.5	F	250	High
8	EF-1B040F20G-E07	40	< 0.5	F	250	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-1B010F21G-E07).
- 6 sqmm touch safe terminal tightening torque 10.6-13 lbf.in
- 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

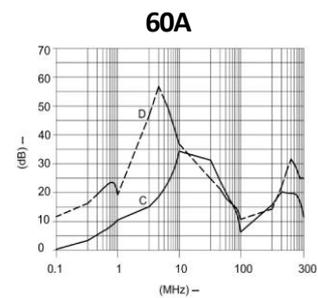
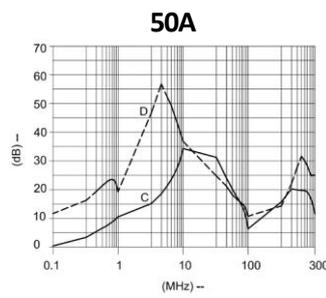
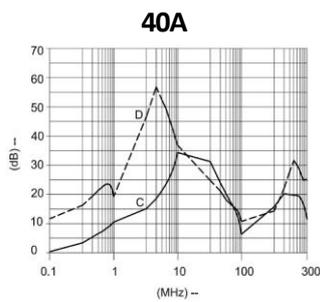
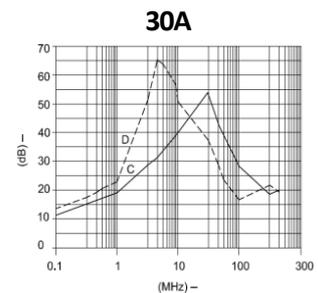
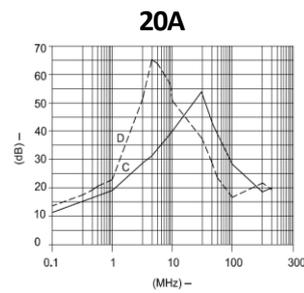
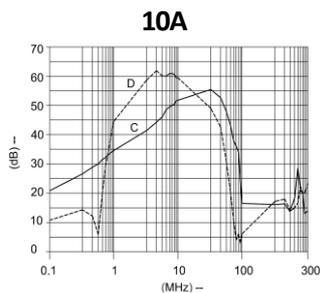
Current Rating (A)	Touch safe terminal	Earthing
1A-40A	6 sqmm	M3 screw terminal

Filter attenuation graph

C = Common mode (asymmetrical) —————

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

For general application (Single Stage) (CKT 1)



For general application (Double Stage) (CKT 2)

