Datasheet | EC51



High attenuation AC EMI Filter



*Image shown is for illustrative purpose only

Features and benefits

- Filters available in single stage, double stage & triple stage.
- All filters provide high attenuation performance.
- 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.
- Various terminal options are available

Application

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

Conformance





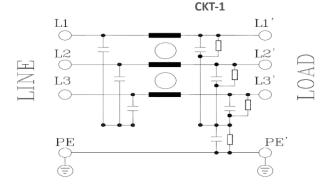
Technical specifications

Operating voltage	440 VAC/480 VAC /520VAC
Current rating	100A - 300A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> P 2121VDC
Insulation resistance	\geq 300 M Ω @ 500VDC (PN \rightarrow E)
Operating temperature	40°c /-25°c +85°C

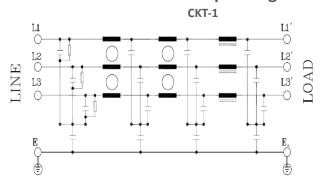
Attenuation type

Single Stage	Standard		
Double Stage	High		
Triple Stage	Very High		

Electrical schematic for Single Stage Filter filter:



Electrical schematic for Triple Stage Filter:



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ELCOM

Mechanical Details

6.5±1.0

LOAD

LINE L1 L2 L3

-100±1.0-

-120±1.0-

000

(G)

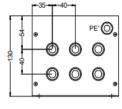
Wire lead terminal

140A

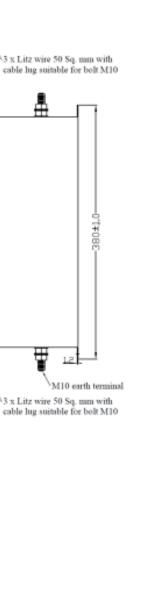
345±1.0

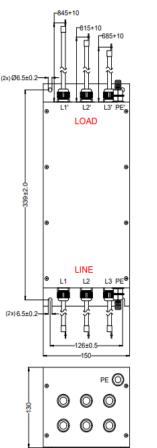


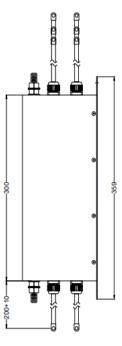
188A & 222A & 284A



Line side cable length with lugs center			Load side cable length with lugs center		
	L1	200+10mm	L1'	845+10mm	
	L2	200+10mm	L2'	815+10mm	
	L3	200+10mm	L3'	685+10mm	







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Filter Selection Table

	•	Current rating (A)	Leakage current (mA) @440V AC	Terminals (X)			
Sr. No.				Wire	Touch -safe	Weight (Kg)	Attenuation
1	EF-3B140 <u>X</u> 38G-C51	140	< 6	G	F	8	Very High
2	EF-3B188 <u>X</u> 06G-C51	188	< 15	G	F	9	High
3	EF-3B222 <u>X</u> 06G-C51	222	< 15	G	F	9	High
3	EF-3B284 <u>X</u> 06G-C51	284	< 15	G	F	10	High

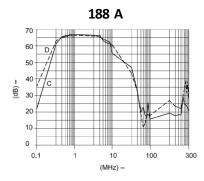
- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3B140G38G-C51).
- Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.
- Customize products provided on request.

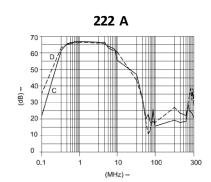
Filter attenuation graph

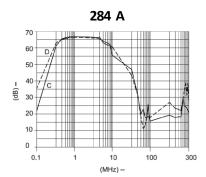
C = Common mode (asymmetrical) ————

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

For Single Stage (CKT 1)







For Triple Stage (CKT 2)

140A & 170A

