



#### **High attenuation AC EMI Filter**



\*Image shown is for illustrative purpose only

# El.italia EC-EC51 serie



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

#### **Features and benefits**

- I Filters available in single stage, double stage & triple stage.
- I All filters provide high attenuation performance.
- I Filters designed for noisy application requiring excellent filter performance.
- I All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Easy and fast chassis mountable filter with compact size.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I Various terminal options are available

#### **Attenuation Type**

Single Stage	Standard
Double Stage	High
Triple Stage	Very High

## **Applications**

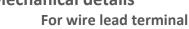
- Consumer product
- I Defence application
- I Industrial application
- Automotive application
- I Weighting Machines
- I Printing Machinery
- I Electrical equipment application
- I Office automation equipment

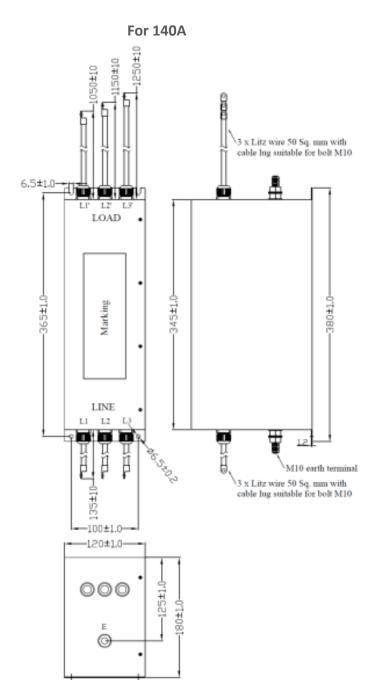






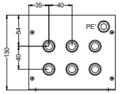
# **Mechanical details**



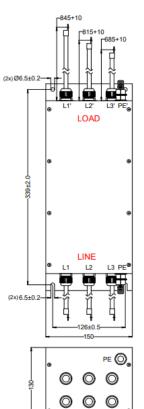


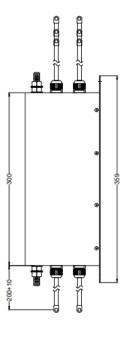
#### For wire lead terminal

#### For 188A,222A,284A



	side cable length 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		

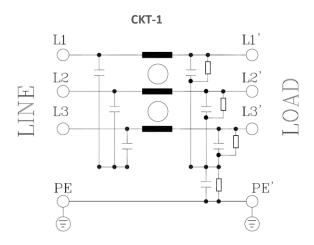




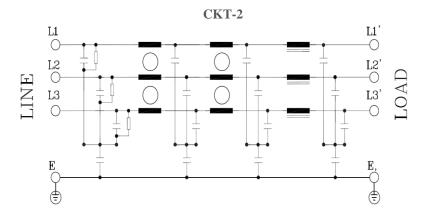




## **Electrical schematic for Single Stage Filter**



## **Electrical schematic for Triple Stage Filter**





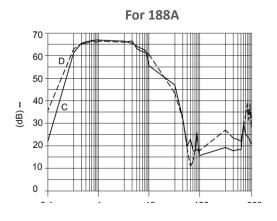


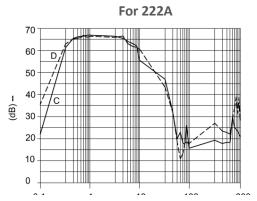
## **Filter attenuation Graph**

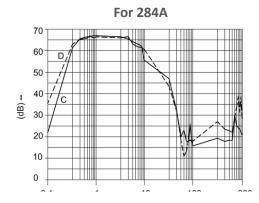
C = Common mode (asymmetrical) -----

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

For Single Stage (CKT 1)







#### For Triple Stage (CKT 2)

## 70 60 50 70 40 70 30 20 10 0.1 1 10 100 (MHz) –

For 140A &170A







#### **Filter Selection Table**

## El.italia EC-EC51 serie

				Terminals (X)			
Sr. No.	Elcom part codes (ordering code)	Current rating (A)	(mA)	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		10	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3B140<u>G</u>38G-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.

#### **Syntax**

