**General Purpose AC EMI Filter** 



\*Image shown is for illustrative purpose only



El.italia EC-EA04 [3P4W] serie

#### **Technical specifications**

Operating voltage	250/440 VAC
Current rating	1A - 10A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 2121VDC (applicable
	excluding surge suppressor filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°c

#### **Features and benefits**

- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939- 2:2005 standards.
- I Compact PCB-mountable design.
- I High reliable.
- I Plastic housing with good aesthetic.
- I Single stage.
- I Input and output connection through soldering pins.
- Filters available in medical version without capacitor to earth.
- I With surge suppressor filters also available.
- I Cost effective solution.

#### **Attenuation Type**

Single Stage

Standard

#### Application

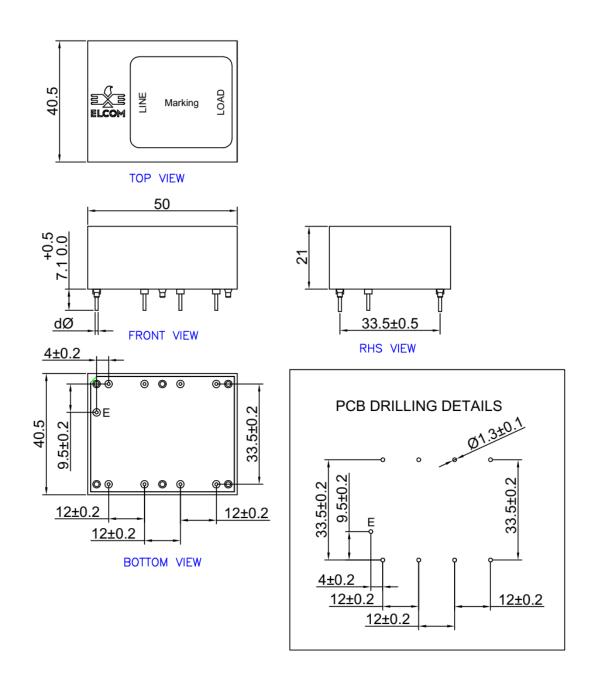
- I Electrical and electronic equipment
- SMPS
- I Test & measurement equipment
- I Small to medium-sized machines and household equipment
- Office automation equipment











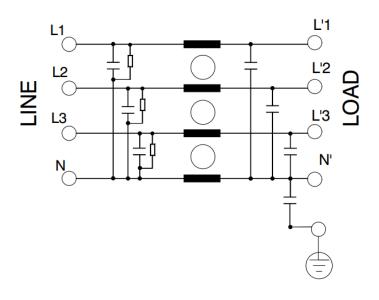
All dimensions in mm. General tolerance=±1mm Note: For medical application filter, earthing terminal is not provided.



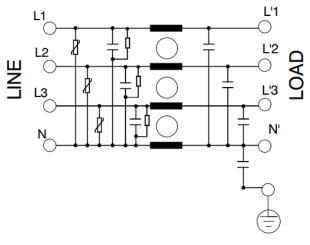


#### **Electrical schematic for filter**

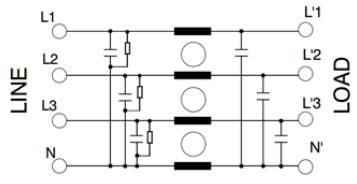
General purpose -



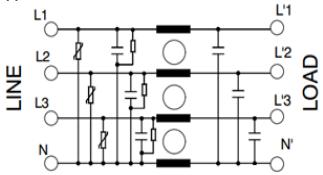
General purpose with Surge Suppressor -



Medical equipment application -



Medical equipment application with Surge Suppressor –





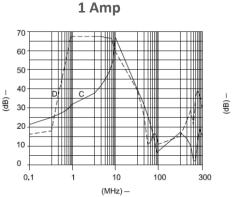


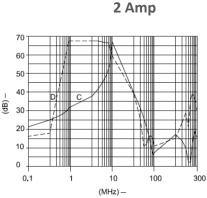
#### Filter attenuation graph

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

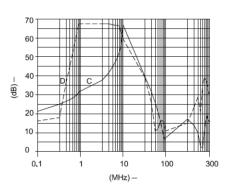
D = Differential mode (symmetrical) ------

#### For general purpose



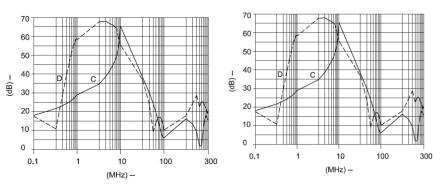


3 Amp





10 Amp



EL.ITALIA SRL



#### Filter Selection Table –

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @250VAC	Pin-type terminal	Max. Peak current (8/20 μ sec 1 time) (KA)	Energy surge rating (10/1000 µ sec) (Joules)	Approx. weight (gm)	Attenuation
1	EF-3P001A01E-A04	1	< 0.5	А			100	Standard
2	EF-3P001A02E-A04	1	< 0.5	А	6.5	175	100	Standard
3	EF-3P001A03E-A04	1	< 0.003	А			100	Standard
4	EF-3P001A04E-A04	1	< 0.003	А	6.5	175	100	Standard
5	EF-3P002A01E-A04	2	< 0.5	А			100	Standard
6	EF-3P002A02E-A04	2	< 0.5	А	6.5	175	100	Standard
7	EF-3P002A03E-A04	2	< 0.003	А			100	Standard
8	EF-3P002A04E-A04	2	< 0.003	А	6.5	175	100	Standard
9	EF-3P003A01E-A04	3	< 0.5	А			100	Standard
10	EF-3P003A02E-A04	3	< 0.5	А	6.5	175	100	Standard
11	EF-3P003A03E-A04	3	< 0.003	А			100	Standard
12	EF-3P003A04E-A04	3	< 0.003	А	6.5	175	100	Standard
13	EF-3P006A01E-A04	6	< 0.5	А			100	Standard
14	EF-3P006A02E-A04	6	< 0.5	А	6.5	175	100	Standard
15	EF-3P006A03E-A04	6	< 0.003	А			100	Standard
16	EF-3P006A04E-A04	6	< 0.003	А	6.5	175	100	Standard
17	EF-3P010A01E-A04	10	< 0.5	А			100	Standard
18	EF-3P010A02E-A04	10	< 0.5	А	6.5	175	100	Standard
19	EF-3P010A03E-A04	10	< 0.003	А			100	Standard
20	EF-3P010A04E-A04	10	< 0.003	А	6.5	175	100	Standard

- Customize products provided on request.

- 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.



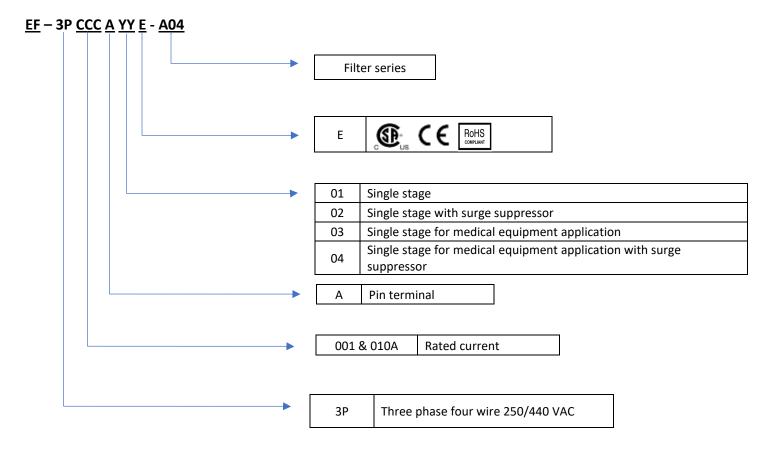




#### **Connection Type**

Current Rating (A)	Pin type terminal	Earthing
1,2,3,6,10 Amp	Solder pins	Solder pins

#### <u>Syntax</u>





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



\*Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage, double stage & triple stage.
- 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





#### **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

#### **Attenuation Type**

Single Stage	Standard
Double Stage	High
Triple Stage	Very High

#### **Applications**

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



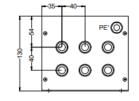
#### Mechanical details For wire lead terminal

For 140A 1250±10 -1150±10  $-1050\pm10$ 6 Ь 3 x Litz wire 50 Sq. mm with cable lug suitable for bolt M10 ≞ Ll L2'L3 LOAD . ٠ 365±1.0 345±1,0 07T=08E E C Marki . LINE ٠ L1 L2 L3 2.0x2.3h μ μ Ĩ Þ P Ĥ M10 earth terminal 3 x Litz wire 50 Sq. mm with cable lng suitable for bolt M10 [35±10 -100±1.0--120±1.0--125±1.0 000 180±1.0-E O

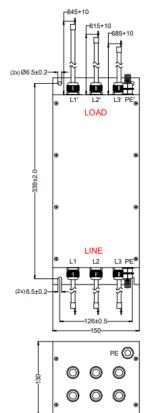


#### For wire lead terminal

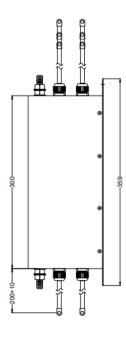
#### For 188A,222A,284A



	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	



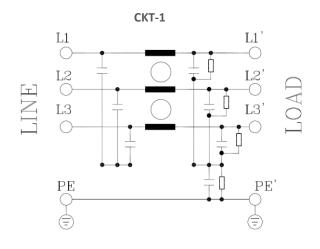
-150



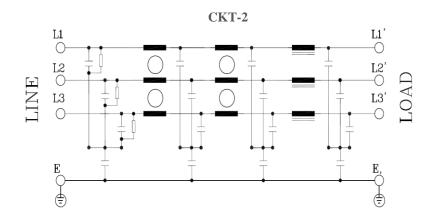




**Electrical schematic for Single Stage Filter** 



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





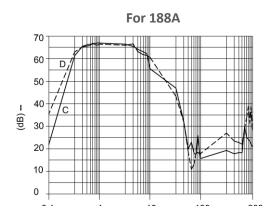


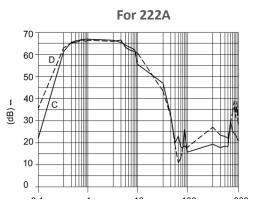


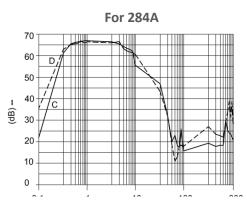
C = Common mode (asymmetrical) -

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

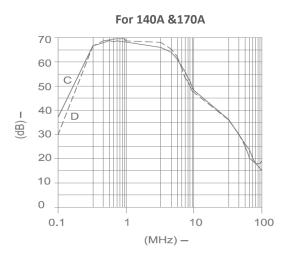
For Single Stage (CKT 1)







For Triple Stage (CKT 2)







#### **Filter Selection Table**

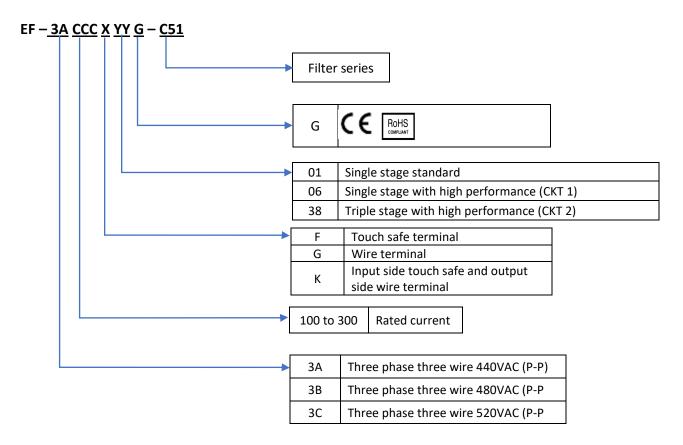
				Term	inals (X)			
Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @440V AC	Wire	Touch - safe	Weight (Kg)	Attenuation	
1	EF-3B140 <u>X</u> 38G-C51	140	< 6	G	F	8	Very High	
2	EF-3B188 <u>X</u> 06G-C51	188	< 15	G	F	9	High	
3	EF-3B222 <u>X</u> 06G-C51	222	< 15	G	F	9	High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

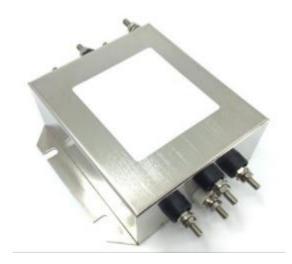
- Customize products provided on request.

#### **Syntax**





#### **General Purpose AC EMI Filter**





### El.italia EC-EC71 [EP-355WN] serie



#### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 3A-40A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC (applicable for excluding surge suppressor filter)  $\geq$  300 MQ @ 500VDC (PN $\rightarrow$ E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Chassis mountable filter in fabricated metal can.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I General purpose filters with low leakage current for safety critical application.
- With surge suppressor filters also available.
- I Various terminal options are available.

#### **Attenuation Type**

Single Stage

Standard

#### Application

- I Defence application
- I Industrial application
- UPS
- Inverters and converters
- Electrical equipment application
- Laser cutting tools
- Test and measurement instruments





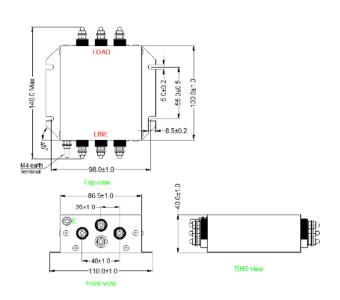
#### **Mechanical details**

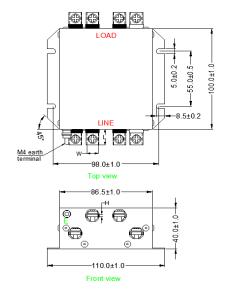
| For screw terminal



### El.italia EC-EC71 [EP-355WN] serie

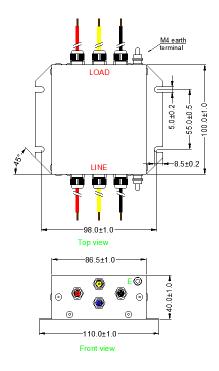
For bus-bar terminal





All dimensions in mm

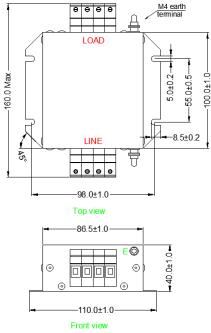
#### | For wire terminal



All dimensions in mm

All dimensions in mm

#### For touch safe terminal



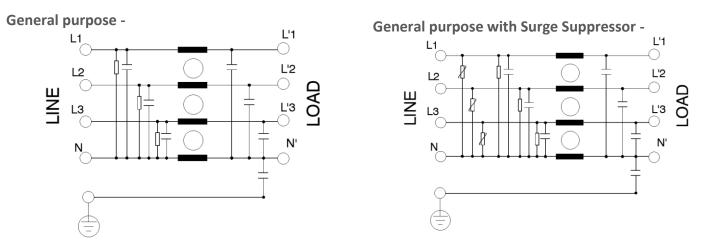
All dimensions in mm -Over 40A current rating touch will be unstackable





### El.italia EC-EC71 [EP-355WN] serie

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



\*Note - For Touch safe/Wire/Busbar terminal, earthing terminal provided on both sides.

#### **Filter attenuation Graph**

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

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

70

60

50

40

30

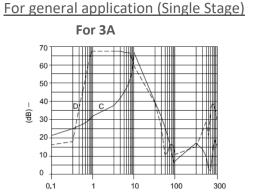
20

10

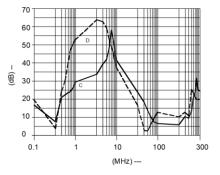
0

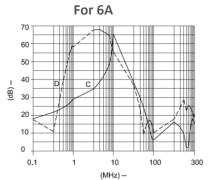
0.1

g

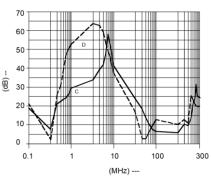














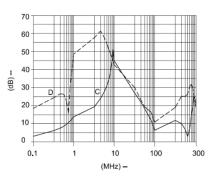
10

(MHz) ----

100

300

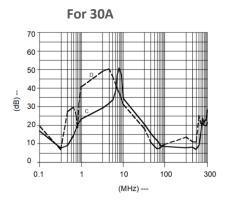
For 10A

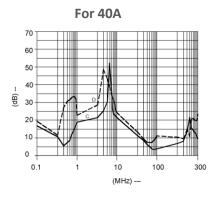






### El.italia EC-EC71 [EP-355WN] serie





#### **Filter Selection Table**

		Rated			Tern	ninals ( <u>X</u> )		Max.	Energy	Weight (gm)	
Sr. No.	Elcom part codes (ordering code)	Current rating (A) @40°c	Leakage current (mA) @250VAC	Screw	Bus bar	Touch -safe	Wire	Peak current (8/20 μ sec 1 time) (KA)	Surge rating (10/1000 µ sec) (Joules)		Attenuation
1	EF-3P003 <u>×</u> 01E-C71	3	< 0.5	D	E	F	G			500	Standard
2	EF-3P003 <u>X</u> 02E-C71	3	< 0.5	D	E	F	G	6.5	175	500	Standard
3	EF-3P006 <u>X</u> 01E-C71	6	< 0.5	D	E	F	G			500	Standard
4	EF-3P006 <u>X</u> 02E-C71	6	< 0.5	D	E	F	G	6.5	175	500	Standard
5	EF-3P010 <u>X</u> 01E-C71	10	< 0.5	D	E	F	G			500	Standard
6	EF-3P010 <u>X</u> 02E-C71	10	< 0.5	D	E	F	G	6.5	175	500	Standard
7	EF-3P015 <u>X</u> 01E-C71	15	< 1.0	D	E	F	G			500	Standard
8	EF-3P015 <u>X</u> 02E-C71	15	< 1.0	D	E	F	G	10	350	500	Standard
9	EF-3P020 <u>X</u> 01E-C71	20	< 1.0	D	E	F	G			500	Standard
10	EF-3P020 <u>X</u> 02E-C71	20	< 1.0	D	E	F	G	10	350	500	Standard
11	EF-3P025 <u>X</u> 01E-C71	25	< 1.0	D	E	F	G			500	Standard
12	EF-3P025 <u>X</u> 02E-C71	25	< 1.0	D	E	F	G	10	350	500	Standard
13	EF-3P030 <u>X</u> 01E-C71	30	< 1.0	D	E	F	G			500	Standard
14	EF-3P030 <u>X</u> 02E-C71	30	< 1.0	D	E	F	G	10	350	500	Standard
15	EF-3P040 <u>X</u> 01E-C71	40	< 1.0	D	E	F	G			500	Standard
16	EF-3P040 <u>X</u> 02E-C71	40	< 1.0	D	E	F	G	10	350	500	Standard



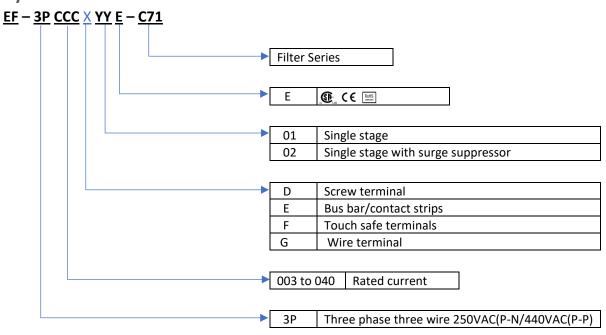


- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P010\_01E-C71)
- Recommended tightening torque for touch safe for 6 sqmm. 10.6-13 lbf.in,. and for screw terminal-M4 tightening torque 12 Kgcm max.
- Maximum leakage under usual AC operating conditions (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**

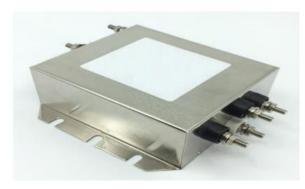
Current Rating (A)	Screw terminal	Bus bar (LxWxH) & connection screw terminal	Touch safe	Wire terminal(AWG)	Earthing
3	M4	12x10x2.5 & M4	6 Sq.mm	18AWG	M4
6	M4	12x10x2.5 & M4	6 Sq.mm	18AWG	M4
10	M4	12x10x2.5 & M4	6 Sq.mm	14AWG	M4
15	M4	12x10x2.5 & M4	6 Sq.mm	14AWG	M4
20	M4	12x10x2.5 & M4	6 Sq.mm	12AWG	M4
25	M4	12x10x2.5 & M4	6 Sq.mm	10AWG	M4
30	M4	12x10x2.5 & M4	6 Sq.mm	10AWG	M4
40	M4	12x10x2.5 & M4	6 Sq.mm	8 AWG	M4







**High attenuation AC EMI Filter** 





### El.italia EC-EC72 serie

 $(\epsilon)$ RoHS COMPLIANT

#### **Technical specifications**

Operating voltage	250VAC(P-N)/440VAC (P-P)
Current rating	1A-40A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC
Insulation resistance	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°c

\*Image shown is for illustrative purpose only

#### **Features and benefits**

- Filters available in double stage Ľ.
- All filters provide high attenuation performance. Т
- Two stage filters designed for noisy application L. requiring excellent filter performance.
- I All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- High reliable 1
- Easy and fast chassis mountable filter with compact size.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- With surge suppressor filters also available. L
- Various terminal options are available Т

#### **Attenuation Type**

**Double Stage** 

High

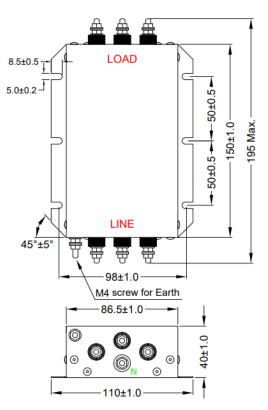
#### **Applications**

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



**Mechanical details** 

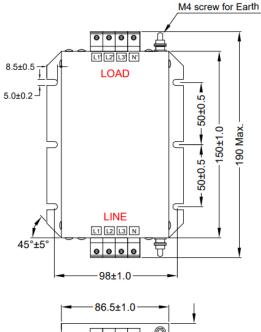
For screw terminal

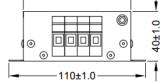




El.italia EC-EC72 serie

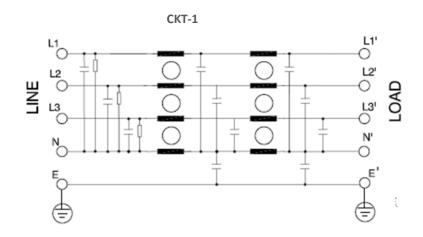
For touch safe terminal





All dimensions in mm General tolerance=±2mm

#### **Electrical schematic for Double Stage Filter**





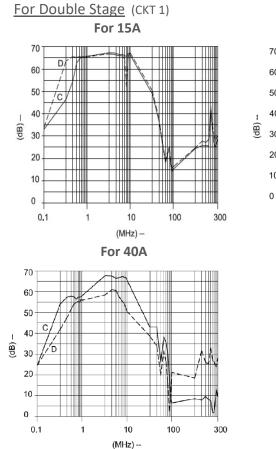


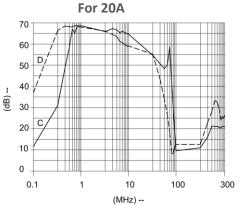
#### Filter attenuation Graph

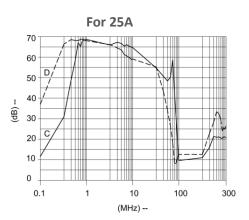
C = Common mode (asymmetrical) -----

### El.italia EC-EC72 serie

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







#### **Filter Selection Table**

				Termina	als ( <u>X</u> )		
Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @440VAC	Screw	Touch safe	Approx. Weight (Kg)	Attenuation
1	EF-3P015 <u>X</u> 20G-C72	15	< 3.5	D	F	1.2	High
2	EF-3P020 <u>X</u> 20G-C72	20	< 3.5	D	F	1.2	High
3	EF-3P025 <u>X</u> 20G-C72	25	< 3.5	D	F	1.2	High
4	EF-3P040 <u>X</u> 20G-C72	40	< 3.5	D	F	1.2	High



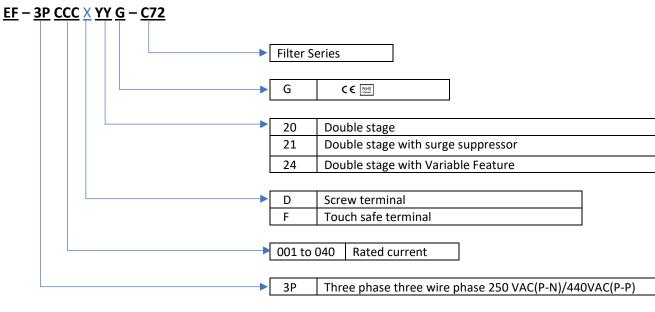


### El.italia EC-EC72 serie

#### **Connection Type**

Current	Screw t	erminal details	Touch safe	Earthing		
Rating (A)	Screw	Recommended tightening torque	Touch safe	Recommended tightening torque	screw terminal	
15	M4	12kgcm max	6 Sq.mm	10.6-13 lbf.in	M4	
20	M4	12kgcm max	6 Sq.mm	10.6-13 lbf.in	M4	
25	M4	12kgcm max	6 Sq.mm	10.6-13 lbf.in	M4	
30	M4	12kgcm max	6 Sq.mm	10.6-13 lbf.in	M4	
40	M4	12kgcm max	6 Sq.mm	10.6-13 lbf.in	M4	

#### Syntax



- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P020D20G-C72)
- 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.



#### **General Purpose AC EMI Filter**



### El.italia EC-EC74 [EP-355WN] serie



# 



#### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 50A-80A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC (applicable for excluding surge suppressor filter)  $\geq$  300 MQ @ 500VDC (PN $\rightarrow$ E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Chassis mountable filter in fabricated metal can.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I General purpose filters with low leakage current for safety critical application.
- With surge suppressor filters also available.
- I Various terminal options are available.

#### **Attenuation Type**

Single Stage

Standard

#### **Application**

- I Defence application
- I Industrial application
- UPS
- I Inverters and converters
- I Electrical equipment application
- Laser cutting tools
- Test and measurement instruments



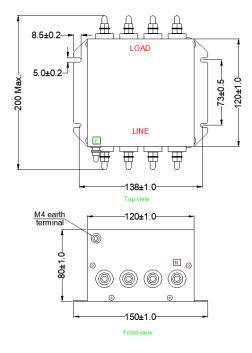


### El.italia EC-EC74 [EP-355WN] serie

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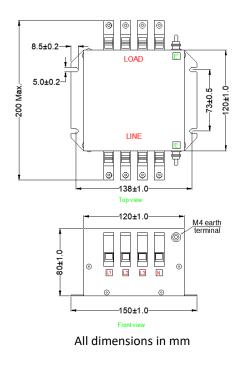
#### **Mechanical details**

| For screw terminal



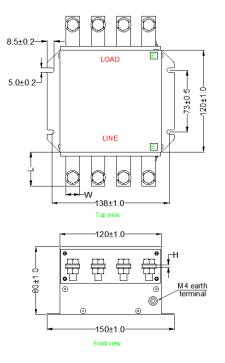
All dimensions in mm

I For touch safe terminal



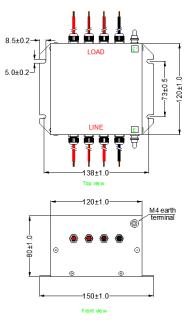


For bus-bar terminal



All dimensions in mm

| For wire lead terminal



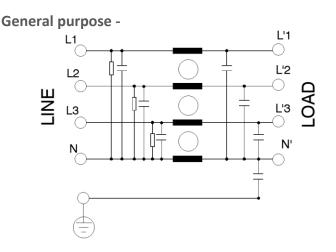
All dimensions in mm

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### El.italia EC-EC74 [EP-355WN] serie

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



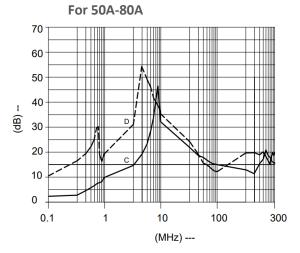
General purpose with external surge suppressor -

#### **Filter attenuation Graph**

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

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

#### For general application (Single Stage)







#### **Filter Selection Table**

### El.italia EC-EC74 [EP-355WN] serie

		Rated			Tern	ninals ( $\underline{X}$ )		Max.	Energy		
Sr. No.	Elcom part codes (ordering code)	Current rating (A) @40°c	Leakage current (mA) @250VAC	Screw	Bus bar	Touch -safe	Wire lead	Peak current (8/20 µ sec 1 time) (KA)	Surge rating (10/1000 µ sec) (Joules)	Weight (Kg)	Attenuation
1	EF-3P050 <u>X</u> 01E-C74	50	< 1.0	D	E	F	G			2.5	Standard
2	EF-3P050 <u>X</u> 12E-C74	50	< 1.0	D	E	F	G	10	350	2.5	Standard
3	EF-3P060 <u>X</u> 01E-C74	60	< 1.0	D	E	F	G			2.5	Standard
4	EF-3P060 <u>×</u> 12E-C74	60	< 1.0	D	E	F	G	10	350	2.5	Standard
5	EF-3P080 <u>×</u> 01E-C74	80	< 1.0	D	E	F	G			2.5	Standard
6	EF-3P080 <u>×</u> 12E-C74	80	< 1.0	D	E	F	G	10	350	2.5	Standard

To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P050\_01E-C74)

- Recommended tightening torque for touch safe – For 16 sqmm- 22-25 lbf.in and for screw terminal tightening torque-for M6 is 20-25Kgcm, for M8 is 25-30 Kgcm

- 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.

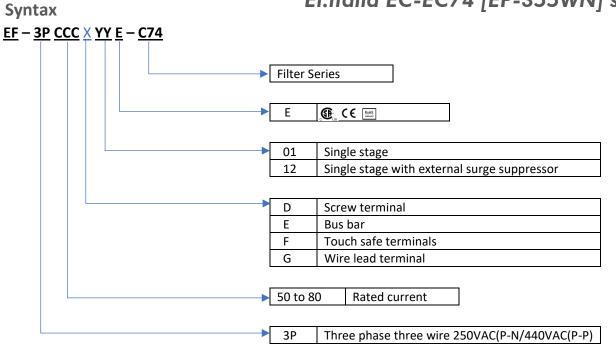
#### **Connection Type**

Current Rating (A)	Screw terminal	Bus bar (LxWxH) & connection screw terminal	Touch safe	Wire terminal (AWG)	Earthing
50	M6	40x16x3 & M8	16 Sq.mm	8AWG	M4
60	M6	40x16x3 & M8	16 Sq.mm	6AWG	M4
80	M8	40x16x3 & M8	16 Sq.mm	6AWG	M4





### El.italia EC-EC74 [EP-355WN] serie





**High attenuation AC EMI Filter** 



\*Image shown is for illustrative purpose only

#### **Features and benefits**

- Filters available in double stage
- I All filters provide high attenuation performance.
- I Two stage filters designed for noisy application requiring excellent filter performance.
- 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



### El.italia EC-EC75 serie

CE ROHS

#### **Technical specifications**

Operating voltage	250VAC(P-N)/440VAC(P-P)
Current rating	50A-60A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC
Insulation resistance	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°c

#### **Attenuation Type**

Double Stage

High

#### **Applications**

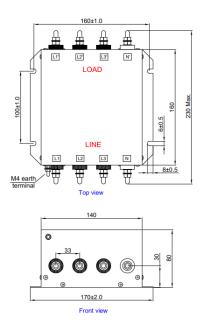
- I Consumer product
- I Defence application
- I Industrial application
- I Automotive application
- I Weighting Machines
- I Printing Machinery
- I Electrical equipment application
- I Office automation equipment





#### **Mechanical details**

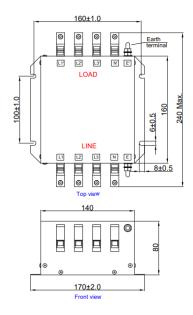
#### Screw terminal





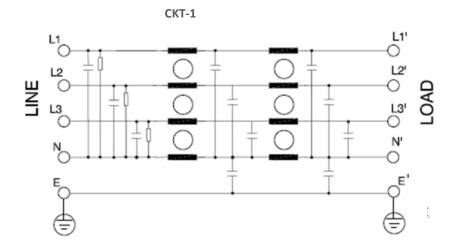
### El.italia EC-EC75 serie

#### Touch safe terminal



All dimensions in mm General tolerance=±2mm

**Electrical schematic for Double Stage Filter** 



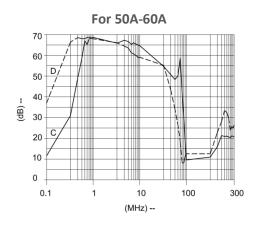




#### Filter attenuation graph

C = Common mode (asymmetrical) —

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



#### **Filter Selection Table**

				Termi	nals ( <u>X</u> )			
Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @440VAC	Fast-on	Wire	Approx. Weight (Kg)	Attenuation	
1	EF-3P050 <u>X</u> 24G-C75	50	< 3.5	D	F	3.5	High	
2	EF-3P060 <u>X</u> 24G-C75	60	< 3.5	D	F	3.5	High	

#### **Connection Type**

Current	Screw t	erminal details	Touch safe	terminal details	Earthing	
Rating (A)	<ul> <li>Recommended</li> </ul>		Touch safe	Recommended tightening torque	screw terminal details	
50	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M4	
60	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M4	



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#### **Technical specifications**



Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 100A-150A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC (applicable for excluding surge suppressor filter)  $\geq$  300 MQ @ 500VDC (PN $\rightarrow$ E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Chassis mountable filter in fabricated metal can.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I General purpose filters with low leakage current for safety critical application.
- I With surge suppressor filters also available.
- I Various terminal options are available.

#### **Attenuation Type**

Single Stage

Standard

#### Application

- I Defence application
- I Industrial application
- UPS
- Inverters and converters
- I Electrical equipment application
- Laser cutting tools
- I Test and measurement instruments

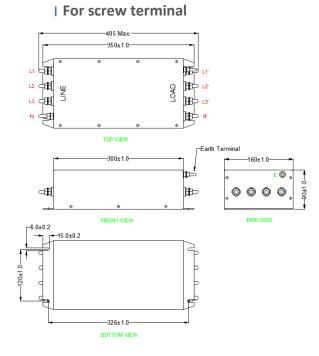




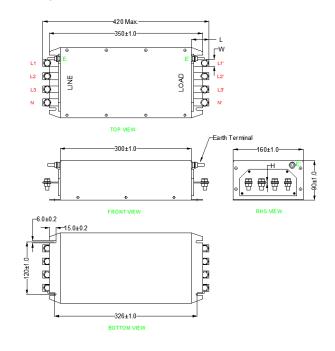
**Mechanical details** 



### El.italia EC-EC76 [EP-355WN] serie



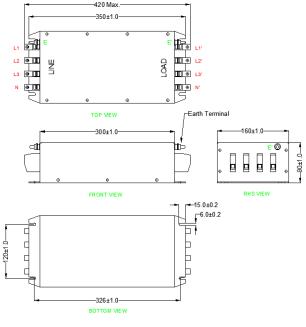
For bus-bar terminal



All dimensions in mm

All dimensions in mm

For touch safe terminal



All dimensions in mm

\*Note-General tolerance =±2%

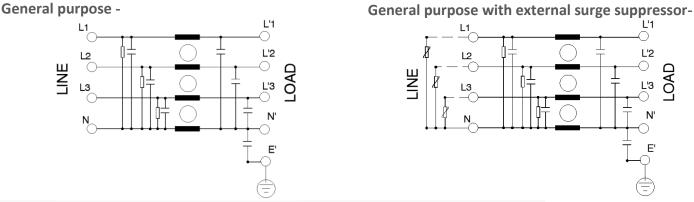


#### **Electrical schematic for Single Stage Filter**





El.italia EC-EC76 [EP-355WN] serie



\*Note - For Touch safe/Wire/Busbar terminal, earthing terminal provided on both sides.

**Filter attenuation Graph** 

C = Common mode (asymmetrical) ----

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

For general application (Single Stage)

For 100A-150A 70 60 50 40 (dB) 30 20 10 0 0.1 10 100 300 1 (MHz) ----





### El.italia EC-EC76 [EP-355WN] serie

#### **Filter Selection Table**

		Rated	_	Т	erminals (	<u>×</u> )	Max.	Energy		Attenuation       Standard       Standard       Standard       Standard
Sr. No.	Elcom part codes (ordering code)	Current rating (A) @40°c	Leakage current (mA) @250VAC	Screw	Bus bar	Touch -safe	Peak current (8/20 µ sec 1 time) (KA)	surge rating (10/1000 µ sec) (Joules)	Weight (Kg)	
1	EF-3P100 <u>X</u> 01E-C76	100	< 1.0	D	E	F			5	Standard
2	EF-3P100 <u>X</u> 12E-C76	100	< 1.0	D	E	F	10	350	5	Standard
3	EF-3P120 <u>X</u> 01E-C76	120	< 1.0	D	E	F			5.5	Standard
4	EF-3P120 <u>X</u> 12E-C76	120	< 1.0	D	E	F	10	350	5.5	Standard
5	EF-3P150 <u>X</u> 01E-C76	150	< 1.0	D	E	F			6	Standard
6	EF-3P150 <u>X</u> 12E-C76	150	< 1.0	D	E	F	10	350	6	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P100\_01E-C76)

- Recommended tightening torque for touch safe – for 50 sqmm.-38-40 lbf.in. and for screw terminal tightening torque-for M10 is 35-40Kgcm, for M12 is 35-40Kgcm

- 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.

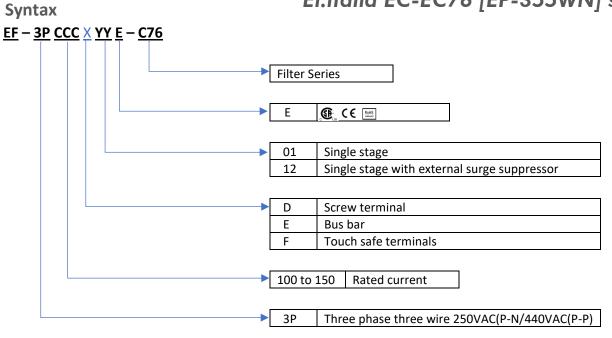
#### **Connection Type**

Current Rating (A)	Screw terminal	Bus bar (LxWxH) & connection screw terminal	Touch safe	Earthing
100	M10	40x16x5 & M8	50 Sqmm	M6
120	M10	40x16x5 & M8	50 Sq.mm	M6
150	M12	40x16x5 & M8	50 Sq.mm	M6





### El.italia EC-EC76 [EP-355WN] serie













#### **Technical specifications**



Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 180-250A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC (applicable for excluding surge suppressor filter)  $\geq$  300 MQ @ 500VDC (PN $\rightarrow$ E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Chassis mountable filter in fabricated metal can.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I General purpose filters with low leakage current for safety critical application.
- I With surge suppressor filters also available.
- I Various terminal options are available.

#### **Attenuation Type**

Single Stage

Standard

#### Application

- I Defence application
- I Industrial application
- UPS
- I Inverters and converters
- I Electrical equipment application
- Laser cutting tools
- Test and measurement instruments





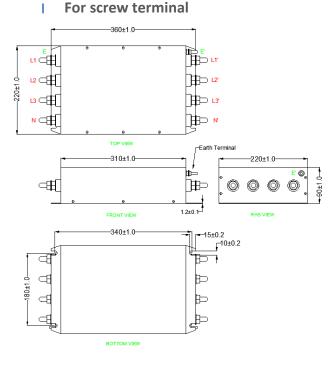


#### **Mechanical details**

### El.italia EC-EC78 [EP-355WN] serie

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For bus-bar terminal



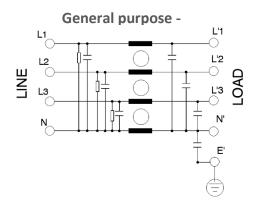
-380±1.0-Lt Ю 220±1.0-L2 Ø L3 Ø N TOP MEN -310±1.0 220±1.0 -0.1±09 . **# ₩** 쁖 ₩ 1.2±0.1 FRONT NEW -340±1.0-45±0.2 <sup>10±0.2</sup> E. Þ 480±1.0-E, ממ ¢ C BOTTOM MEM

All dimensions in mm

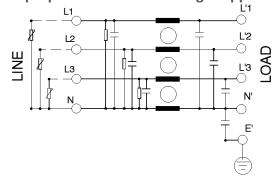
All dimensions in mm

\*Note-General tolerance =±2%

#### Electrical schematic for single stage filter



General purpose with external surge suppressor-



\*Note - For Busbar terminal, earthing terminal provided on both sides.





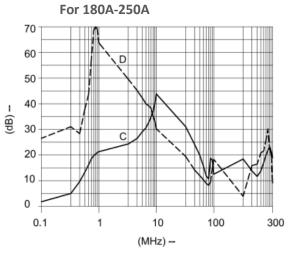


#### **Filter attenuation Graph**

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

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

#### For general application (Single Stage)



#### **Filter Selection Table**

Sr. No.	Elcom part codes (ordering code)	(ordering code) (A) (mA) (A) @250VAC @40°c		inals (X)	Max. Peak current (8/20 µ sec 1 time) (KA)	Energy surge rating (10/1000 μ sec) (Joules)	Weight (Kg)	Attenuation	
		@+0 C		Screw	Bus bar				
				A					
1	EF-3P180 <u>×</u> 01E-C78	180	< 1.0	D	Е			8	Standard
2	EF-3P180 <u>×</u> 12E-C78	180	< 1.0	D	E	10	350	8	Standard
3	EF-3P200 <u>×</u> 01E-C78	200	< 1.0	D	E			9	Standard
4	EF-3P200 <u>X</u> 12E-C78	200	< 1.0	D	E	10	350	9	Standard
5	EF-3P250 <u>X</u> 01E-C78	250	< 1.0	D	E			10	Standard
6	EF-3P250 <u>X</u> 12E-C78	250	< 1.0	D	Е	10	350	10	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P180001E-C78)

- 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.

- With surge suppressor filter available with externally connected surge suppressor unit.

- Customize products provided on request.

### **9** EL.ITALIA SRL

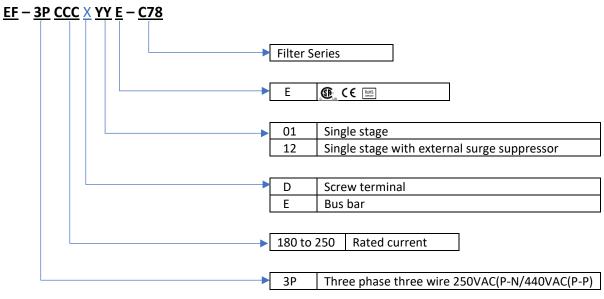


El.italia EC-EC78 [EP-355WN] serie

### **Connection Type**

Current	Screw t	erminal details	Bus bar ter	Earthing	
Rating (A)	Screw	Recommended Bus b crew tightening (LxWx torque		connection screw terminal	screw terminal details
180	M12	35-40Kgcm	40x25x6	M10	M6
200	M12	35-40Kgcm	40x25x6	M10	M6
250	M12	35-40Kgcm	40x25x6	M10	M6







### **General Purpose AC EMI Filter**



# El.italia EC-EC83 [EP-355WN] serie





### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 300-650A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC (applicable for excluding surge suppressor filter)  $\geq$  300 MQ @ 500VDC (PN $\rightarrow$ E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Chassis mountable filter in fabricated metal can.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I General purpose filters with low leakage current for safety critical application.
- I With surge suppressor filters also available.
- I Various terminal options are available.

#### Attenuation Type

Single Stage

Standard

#### **Application**

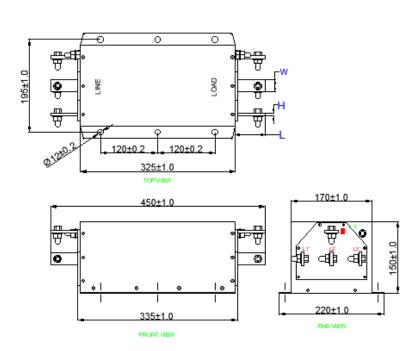
- I Defence application
- I Industrial application
- UPS
- Inverters and converters
- I Electrical equipment application
- Laser cutting tools
- I Test and measurement instruments





### **Mechanical details**

El.italia EC-EC83 [EP-355WN] serie



For bus bar terminal

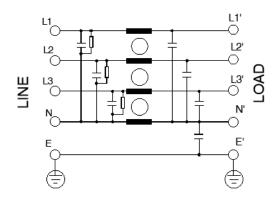
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All dimensions in mm

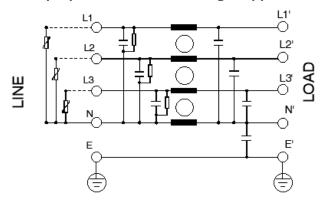
\*Note-General tolerance =±2%

**Electrical schematic for Single Stage Filter** 

General purpose -



General purpose with external surge suppressor-





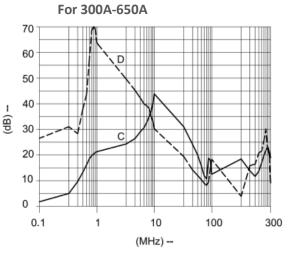


### **Filter attenuation Graph**

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

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

#### For general application (Single Stage)



#### **Filter Selection Table**

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @250VAC	Termi nals (≚) Bus bar	Max. Peak current (8/20 µ sec 1 time) (KA)	Energy surge rating (10/1000 µ sec) (Joules)	Weight (Kg)	Attenuation
1	EF-3P300 <u>×</u> 01E-C83	300	< 1.0	Е			18	Standard
2	EF-3P300 <u>×</u> 12E-C83	300	< 1.0	E	10	350	18	Standard
3	EF-3P350 <u>X</u> 01E-C83	350	< 1.0	E			18	Standard
4	EF-3P350 <u>X</u> 12E-C83	350	< 1.0	E	10	350	18	Standard
5	EF-3P400 <u>×</u> 01E-C83	400	< 1.0	E			18	Standard
6	EF-3P400 <u>×</u> 12E-C83	400	< 1.0	E	10	350	18	Standard
7	EF-3P450 <u>×</u> 01E-C83	450	< 1.0	E			20	Standard
8	EF-3P450 <u>X</u> 12E-C83	450	< 1.0	E	10	350	20	Standard
9	EF-3P500 <u>X</u> 01E-C83	500	< 1.0	E			20	Standard
10	EF-3P500 <u>×</u> 12E-C83	500	< 1.0	E	10	350	20	Standard





11	EF-3P550 <u>X</u> 01E-C83	550	< 1.0	E			20	Standard
12	EF-3P550 <u>X</u> 12E-C83	550	< 1.0	Е	10	350	22	Standard
13	EF-3P600 <u>×</u> 01E-C83	600	< 1.0	E			22	Standard
14	EF-3P600 <u>×</u> 12E-C83	600	< 1.0	Е	10	350	22	Standard
15	EF-3P650 <u>×</u> 01E-C83	650	< 1.0	E			22	Standard
16	EF-3P650 <u>X</u> 12E-C83	650	< 1.0	E	10	350	22	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P400<u>E</u>01E-C83)

- 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.

- With surge suppressor filter available with externally connected surge suppressor unit.

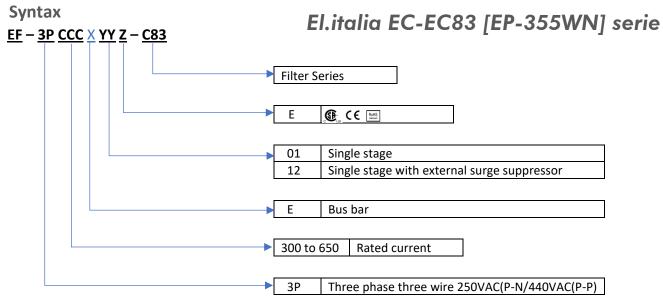
- Customize products provided on request.

## **Connection Type**

Current Rating (A)	Bus bar (LxWxH) & connection screw terminal	Earthing
300	65x25x6 & M10	M10
350	65x25x6 & M10	M10
400	65x25x8 & M10	M10
450	65x25x8 & M10	M10
500	65x30x8 & M10	M10
550	65x30x8 & M10	M10
600	65x30x8 & M10	M10
650	65x30x8 & M10	M10

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### **General Purpose AC EMI Filter**





## El.italia EC-EC84 [EP-355WN] serie



### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 700-1000A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC (applicable for excluding surge suppressor filter)  $\geq$  300 MQ @ 500VDC (PN $\rightarrow$ E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- I All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Chassis mountable filter in fabricated metal can.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- I General purpose filters with low leakage current for safety critical application.
- I With surge suppressor filters also available.
- I Various terminal options are available.

#### Attenuation Type

Single Stage

Standard

#### **Application**

- I Defence application
- I Industrial application
- UPS
- Inverters and converters
- I Electrical equipment application
- Laser cutting tools
- I Test and measurement instruments

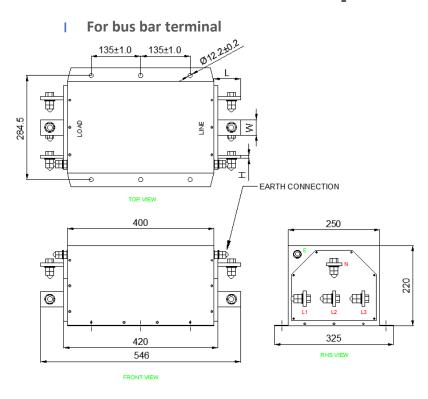






## **Mechanical details**

El.italia EC-EC84 [EP-355WN] serie

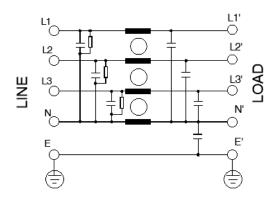


All dimensions in mm

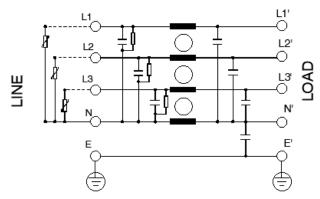
\*Note-General tolerance =±2%

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

General purpose -



General purpose with external surge suppressor-





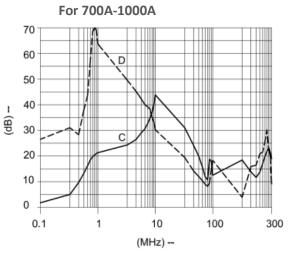


### **Filter attenuation Graph**

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

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

#### For general application (Single Stage)



### **Filter Selection Table**

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @250VAC	Terminals (X) Bus bar	Max. Peak current (8/20 µ sec 1 time) (KA)	Energy surge rating (10/1000 µ sec) (Joules)	Approx. Weight (Kg)	Attenuation
1	EF-3P700E01E-C84	700	< 1.0	_ <b></b> E			30	Standard
2	EF-3P700E12E-C84	700	< 1.0	E	10	350	30	Standard
3	EF-3P800E01E-C84	800	< 1.0	E			35	Standard
4	EF-3P800E12E-C84	800	< 1.0	E	10	350	35	Standard
5	EF-3P1K0E01E-C84	1000	< 1.0	E			40	Standard
6	EF-3P1K0E12E-C84	1000	< 1.0	E	10	350	40	Standard

- 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.

- With surge suppressor filter available with externally connected surge suppressor unit.

- Customize products provided on request.



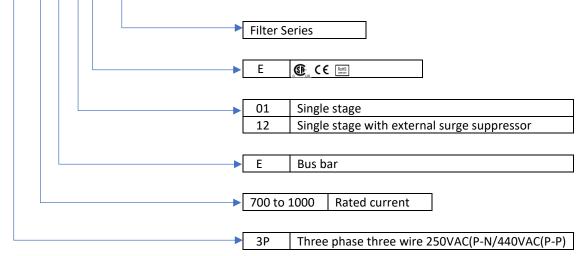


# El.italia EC-EC84 [EP-355WN] serie

#### **Connection Type**

Current Rating (A)	Bus bar (LxWxH) & connection screw terminal	Earthing
700	73x40x10 & M10	M10
800	73x40x10 & M10	M10
1000	73x40x12 & M10	M10







### **General Purpose AC EMI Filter**





## El.italia EC-EC89 serie



### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 1100-1500A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC ≥ 300 MΩ @ 500VDC (PN→E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- Filters available in single & double stage
- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- High reliable
- Chassis mountable filter in fabricated metal can.
- CRCA metal can with nickel plating provides good aesthetic and corrosion protection.

### **Attenuation Type**

Single Stage	Standard
Double Stage	High

#### Application

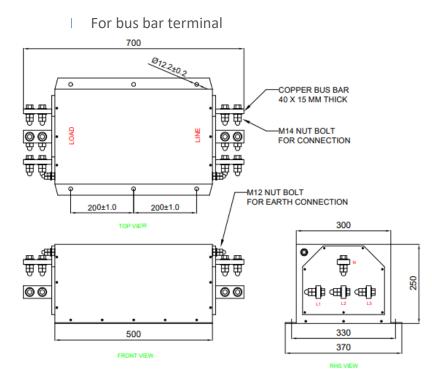
- Defence application
- I Industrial application
- UPS
- Inverters and converters
- Electrical equipment application
- Laser cutting tools
- Test and measurement instruments





El.italia EC-EC89 serie

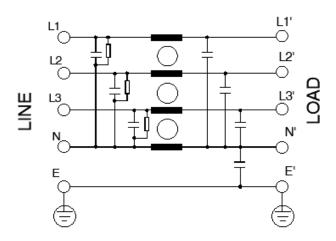
### **Mechanical details**



All dimensions in mm \*Note-General tolerance =±2%

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

General purpose -



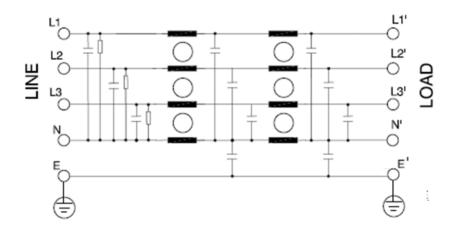




El.italia EC-EC89 serie

**Electrical schematic for Double Stage Filter** 

**General purpose -**

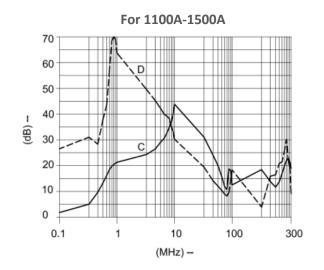


#### **Filter attenuation Graph**

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

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

For general application single stage







# El.italia EC-EC89 serie

### **Filter Selection Table**

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @440VAC	Terminals (X) Bus bar	Approx. Weight (Kg)	Attenuation
1	EF-3P1K1E01G-C89	1100	< 3.5	E	40	Standard
2	EF-3P1K2E01G-C89	1200	< 3.5	E	40	Standard
3	EF-3P1K3E01G-C89	1300	< 3.5	E	45	Standard
4	EF-3P1K4E01G-C89	1400	< 3.5	E	45	Standard
5	EF-3P1K5E01G-C89	1500	< 3.5	E	45	Standard
6	EF-3P1K1E20G-C89	1100	< 3.5	E	40	High
7	EF-3P1K2E20G-C89	1200	< 3.5	E	40	High
8	EF-3P1K3E20G-C89	1300	< 3.5	E	45	High
9	EF-3P1K4E20G-C89	1400	< 3.5	E	45	High
10	EF-3P1K5E20G-C89	1500	< 3.5	E	45	High

- 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.

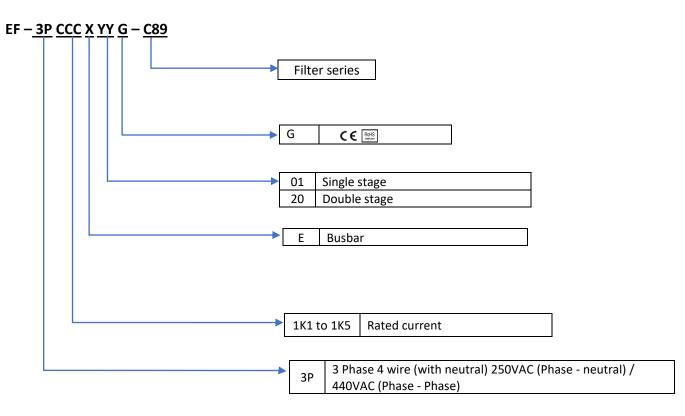
- Customize products provided on request





# El.italia EC-EC89 serie

<u>Syntax</u>





## **General Purpose AC EMI Filter**



# El.italia EC-EC90 serie





### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 1600-2000A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC ≥ 300 MΩ @ 500VDC (PN→E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- Filters available in single stage
- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- High reliable
- Chassis mountable filter in fabricated metal can.
- CRCA metal can with nickel plating provides good aesthetic and corrosion protection.

## **Attenuation Type**

Single Stage

Standard

#### **Application**

- Defense application
- Industrial application
- I UPS
- Inverters and converters
- Electrical equipment application
- Laser cutting tools
- Test and measurement instruments

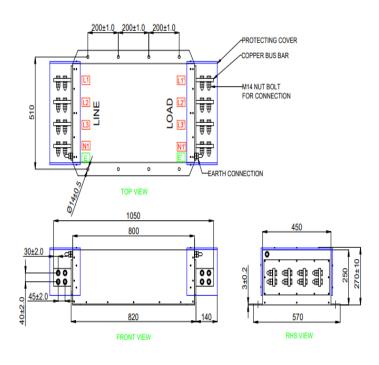




El.italia EC-EC90 serie

### Mechanical details

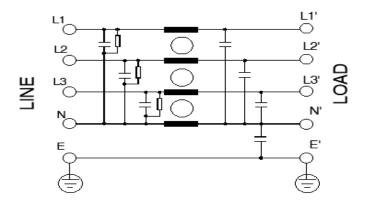
For bus bar terminal



All dimensions in mm \*Note-General tolerance =±2%

**Electrical schematic for Single Stage Filter** 

General purpose -







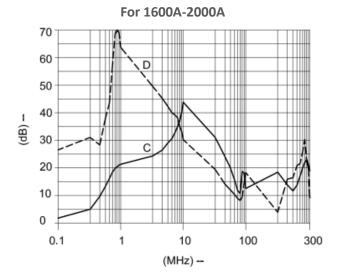
# El.italia EC-EC90 serie

#### **Filter attenuation Graph**

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

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

For general application (Single Stage)



#### **Filter Selection Table**

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @440VAC	Terminals (X) Bus bar	Attenuation
1	EF-3P1K6E01G-C90	1600	< 3.5	E	Standard
2	EF-3P1K7E01G-C90	1700	< 3.5	E	Standard
3	EF-3P1K8E01G-C90	1800	< 3.5	E	Standard
4	EF-3P1K9E01G-C90	1900	< 3.5	E	Standard
5	EF-3P2K0E01G-C90	2000	< 3.5	E	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P1K8<u>E</u>01E-C90)

- 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.

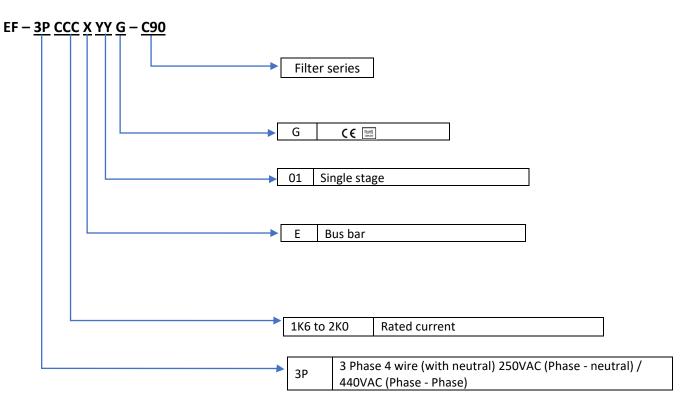
- Customize products provided on request.





El.italia EC-EC90 serie

<u>Syntax</u>





### High performance AC EMI Filter



El.italia EC-EC91 serie

## **Technical specifications**

Operating voltage	250(P-N VAC/440(P-P) VAC
Current rating	1A-40A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC
Insulation resistance	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°c

\*Image shown is for illustrative purpose only

#### **Features and benefits**

- Filters available in 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
- Chassis mountable filter in fabricated metal can.
- Aluminum metal casing provides good aesthetic and corrosion protection.

### **Attenuation Type**

Double Stage

High

#### **Applications**

- Consumer product
- Defence application
- Industrial application
- Automotive application
- Printing Machinery
- Electrical equipment application

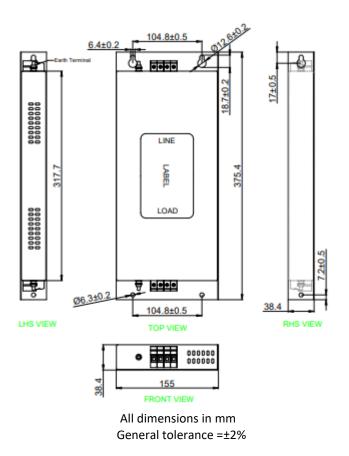




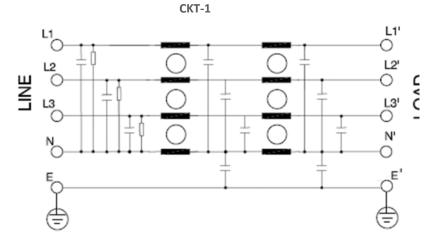




**Mechanical details** 



## **Electrical schematic for Double Stage Filter**





El.italia EC-EC91 serie







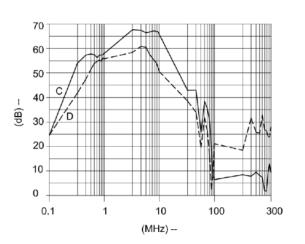
## El.italia EC-EC91 serie

#### **Filter attenuation Graph**

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

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

For general application (Double Stage)



#### For 25A,30A & 40A

#### **Filter Selection Table**

	Elcom part codes	Rated Current	Leakage current	Terminals ( <u>X</u> )		
Sr. No.	(ordering code)	rating (A) @40°c	(mA) @440VAC	Touch safe	Approx. Weight (Kg)	Attenuation
1	EF-3P025F24G-C91	25	< 3.5	F	1.5	High
2	EF-3P030F24G-C91	30	< 3.5	F	1.5	High
3	EF-3P040F24G-C91	40	< 3.5	F	1.5	High



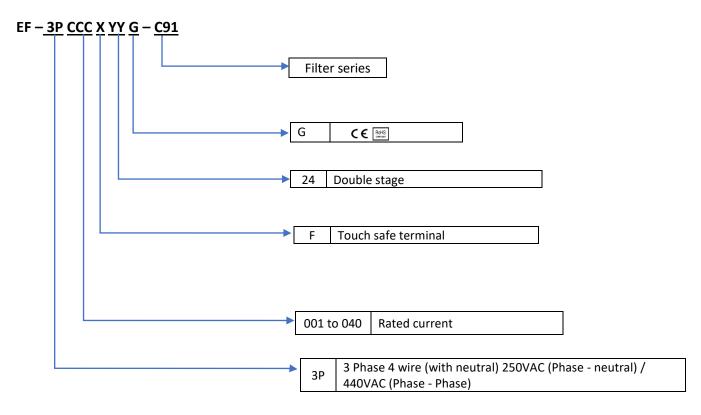


# El.italia EC-EC91 serie

## **Connection Type**

Current Rating (A)	Touch safe	Earthing	
1A-40A	6 sqmm	M4 screw	

### <u>Syntax</u>





## High performance AC EMI Filter







### **Technical specifications**

Operating voltage Current rating Frequency Voltage drop High potential test voltage

Insulation resistance Operating temperature 250VAC(P-N)/440VAC(P-P) 50A-60A 50/60Hz 1 Volt max. P -> E 1500VAC P -> N 2121VDC ≥ 300 MΩ @ 500VDC (PN→E) 40°c /-25°c +85°c

Image shown is for illustrative purpose only

#### **Features and benefits**

- Filters available in single & double stage
- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- High reliable
- Chassis mountable filter in fabricated metal can.
- CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- Various terminal options are available.

## **Attenuation Type**

Single Stage	Standard
Double Stage	High

#### **Application**

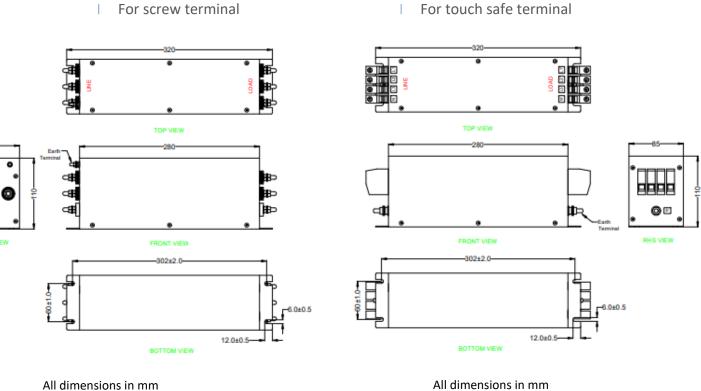
- Defence application
- Industrial application
- UPS
- Inverters and converters
- Electrical equipment application
- Laser cutting tools
- Test and measurement instruments





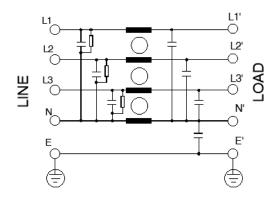
El.italia EC-EC92 serie

### **Mechanical details**



All dimensions in mm Note-General tolerance =±2% All dimensions in mm \*Note-General tolerance =±2%

## Electrical schematic for Single Stage Filter General purpose –



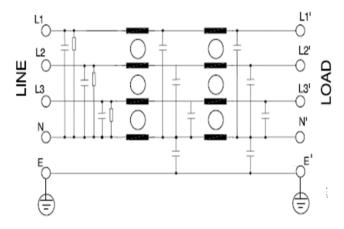




El.italia EC-EC92 serie

### **Electrical schematic for Double Stage Filter**

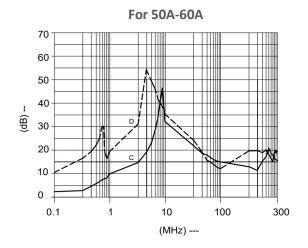
General purpose -



#### **Filter attenuation Graph**

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

For general application (Single Stage)



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

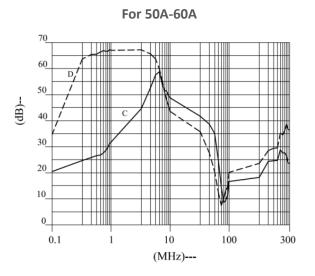






El.italia EC-EC92 serie

For general application (double Stage)



#### **Filter Selection Table**

		Rated	Leakage	Terminals (X)			
Sr. No.	Elcom part codes (ordering code)	Current rating (A) @40°c	current (mA) @440VAC	Screw	Touch -safe	Weight (Kg)	Attenuation
1	EF-3P050 <u>×</u> 01G-C92	50	< 3.5	D	F	2.5	Standard
2	EF-3P060 <u>×</u> 01G-C92	60	< 3.5	D	F	2.5	Standard
3	EF-3P050 <u>×</u> 20G-C92	50	< 3.5	D	F	2.5	High
4	EF-3P060 <u>×</u> 20G-C92	60	< 3.5	D	F	2.5	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3P050D01G-C92)

- Customize products provided on request.



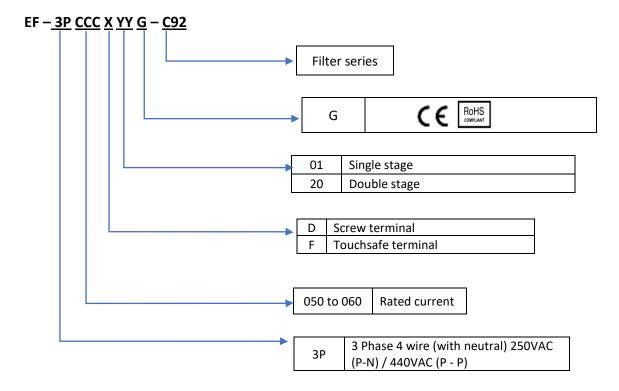


# El.italia EC-EC92 serie

### **Connection Type**

Current Rating (A) Screw		erminal details	Touch safe	Earthing	
		Recommended tightening torque	Touch safe	Recommended tightening torque	screw terminal details
50	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M6
60	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M6

#### <u>Syntax</u>





#### **General Purpose AC EMI Filter**



## El.italia EC-EE07 serie



## **Technical specifications**

Operating voltage	440 VAC
Current rating	1A-40A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC
	P -> P 2121VDC (applicable for
	excluding surge suppressor filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (PN→E)
Operating temperature	40°c /-25°c +85°c

\*Image shown is for illustrative purpose only

#### **Features and benefits**

- I Filters available in single stage
- All filters provide high attenuation performance.
- All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- I High reliable
- I Easy and fast din rail mounting filter with compact size.
- I CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- Filters available in medical version without capacitor to earth.
- I General purpose filters with low leakage current for safety critical application.
- I With surge suppressor filters also available.

#### **Attenuation Type**

Single Stage

Standard

#### **Applications**

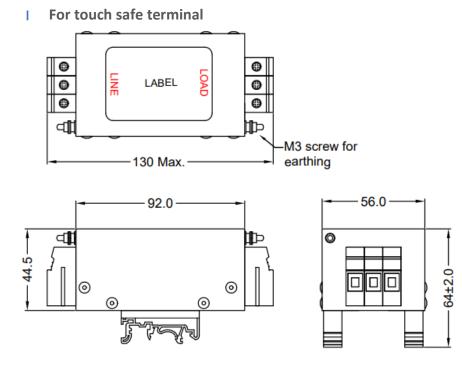
- I Consumer product
- I Defence application
- I Medical equipment
- I Industrial application
- Automotive application
- Weighting Machines
- I Printing Machinery
- I Electrical equipment application
- I Office automation equipment



### **Mechanical details**



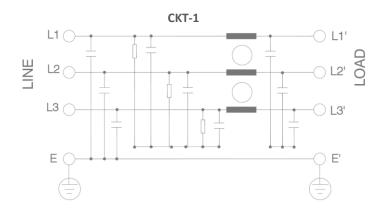
# El.italia EC-EE07 serie



All dimensions in mm General tolerance=±1mm

**Electrical schematic for Single Stage Filter** 

General purpose -



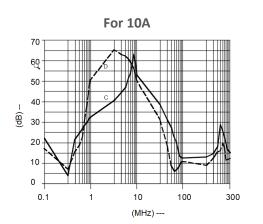


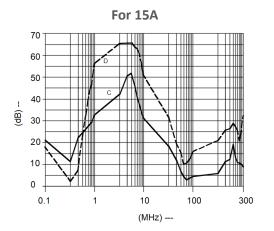


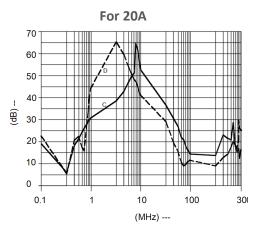
### **Filter attenuation Graph**

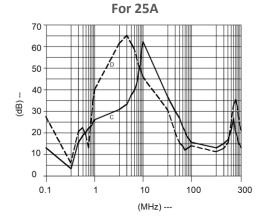
C = Common mode (asymmetrical) -----

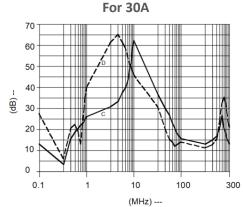
D = Differential mode (symmetrical) ------

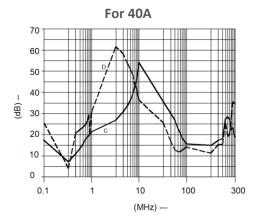












## **Filter Selection Table**

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°c	Leakage current (mA) @440VAC	Terminals (X) Touch safe	Approx. Weight (gm)	Attenuation
1	EF-3A010F01G-E07	10	< 1.8	F	300	Standard
2	EF-3A015F01G-E07	15	< 1.8	F	300	Standard
3	EF-3A020F01G-E07	20	< 1.8	F	300	Standard
4	EF-3A025F01G-E07	25	< 1.8	F	300	Standard
5	EF-3A030F01G-E07	30	< 1.8	F	300	Standard
6	EF-3A040F01G-E07	40	< 1.8	F	300	Standard





# El.italia EC-EE07 serie

### **Connection Type**

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

#### **Syntax** <u>EF – 3A CCC X YY G – E07</u> **Filter Series** G CE RoHS 01 Single stage 02 Single stage with surge suppressor 03 Single stage for medical application 04 Single stage for medical application with surge suppressor F 6 sqmm touch safe 001 to 040 Rated current 3A Three phase three wire

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A010E02G-E07).
- 6 sqmm touch safe terminal tightening torque 10.6-13 lbf.in
- Customize products provided on request.

