



General Purpose AC EMI Filter

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

*Image shown is for illustrative purpose only

Features and benefits

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

Attenuation Type

Single Stage

Standard

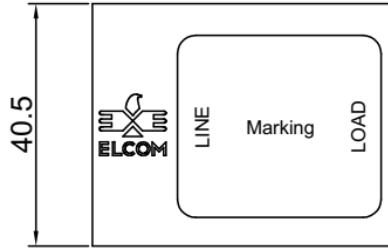
Application

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

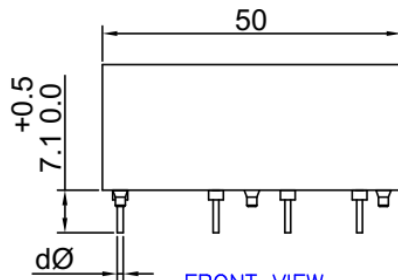


Mechanical details

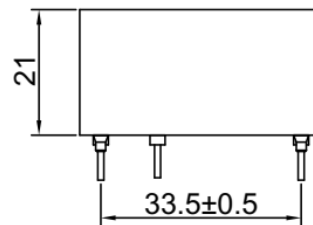
El.italia EC-EA04 [3P4W] serie



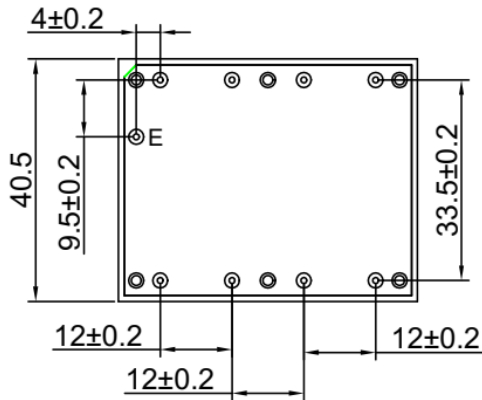
TOP VIEW



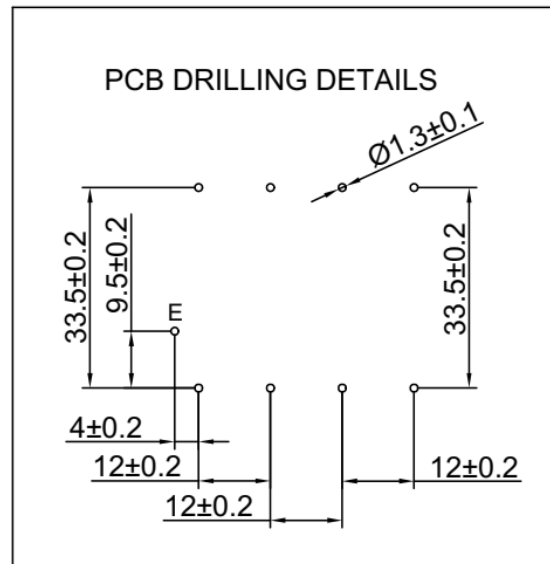
FRONT VIEW



RHS VIEW



BOTTOM VIEW



All dimensions in mm.
General tolerance=±1mm

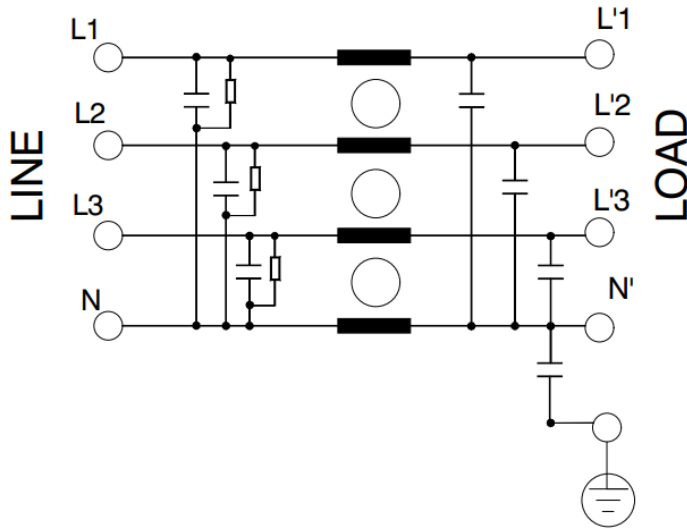
Note: For medical application filter, earthing terminal is not provided.



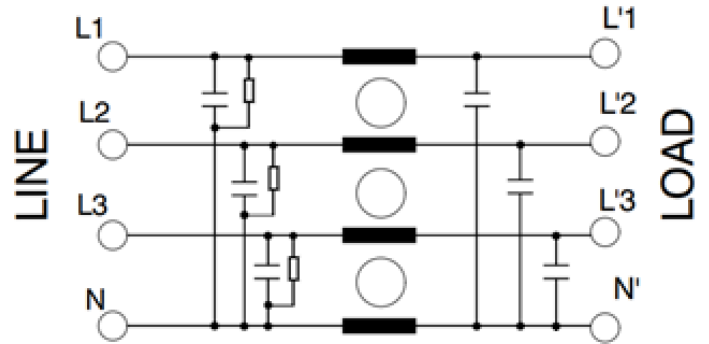
El.italia EC-EA04 [3P4W] serie

Electrical schematic for filter

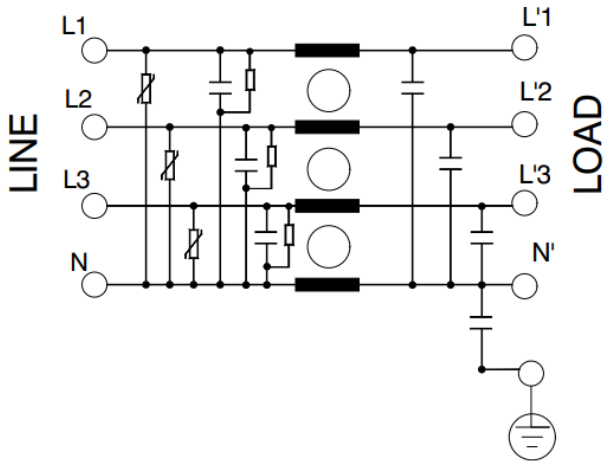
General purpose -



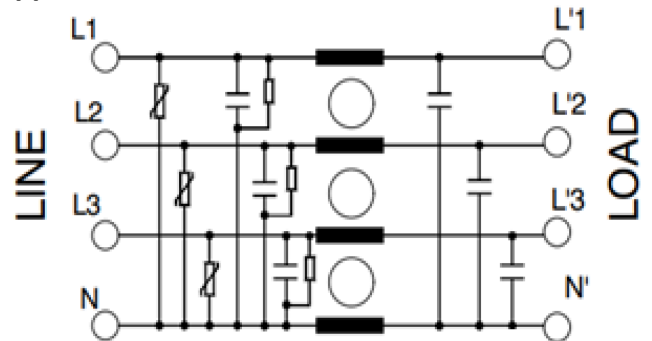
Medical equipment application -



General purpose with Surge Suppressor -



Medical equipment application with Surge Suppressor -





Filter attenuation graph

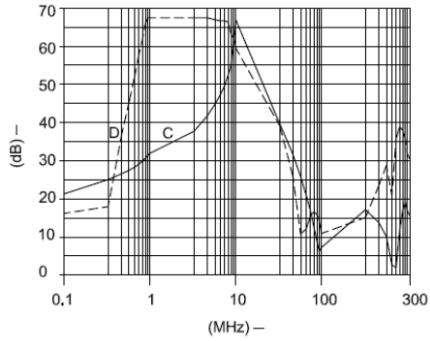
C = Common mode (asymmetrical) ———

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

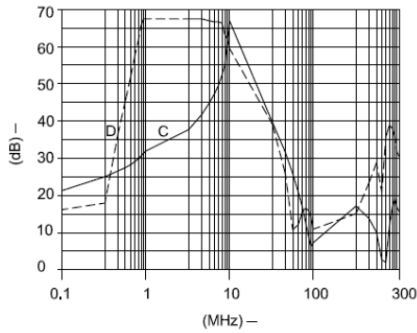
El.italia EC-EA04 [3P4W] serie

For general purpose

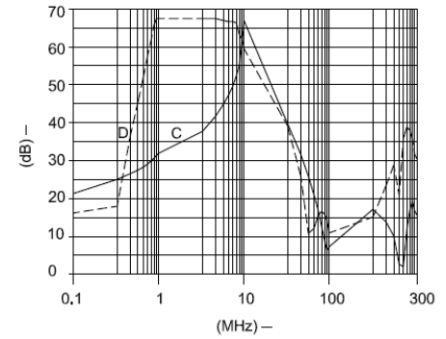
1 Amp



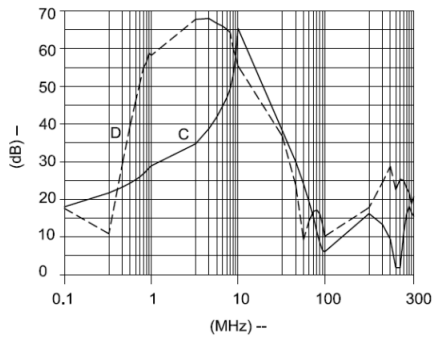
2 Amp



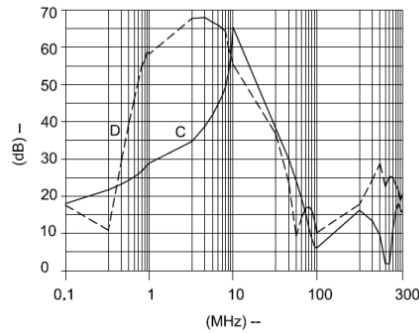
3 Amp



6 Amp



10 Amp





Filter Selection Table –

El.italia EC-EA04 [3P4W] serie

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	A	----	----	100	Standard
2	EF-3P001A02E-A04	1	< 0.5	A	6.5	175	100	Standard
3	EF-3P001A03E-A04	1	< 0.003	A	----	----	100	Standard
4	EF-3P001A04E-A04	1	< 0.003	A	6.5	175	100	Standard
5	EF-3P002A01E-A04	2	< 0.5	A	----	----	100	Standard
6	EF-3P002A02E-A04	2	< 0.5	A	6.5	175	100	Standard
7	EF-3P002A03E-A04	2	< 0.003	A	----	----	100	Standard
8	EF-3P002A04E-A04	2	< 0.003	A	6.5	175	100	Standard
9	EF-3P003A01E-A04	3	< 0.5	A	----	----	100	Standard
10	EF-3P003A02E-A04	3	< 0.5	A	6.5	175	100	Standard
11	EF-3P003A03E-A04	3	< 0.003	A	----	----	100	Standard
12	EF-3P003A04E-A04	3	< 0.003	A	6.5	175	100	Standard
13	EF-3P006A01E-A04	6	< 0.5	A	----	----	100	Standard
14	EF-3P006A02E-A04	6	< 0.5	A	6.5	175	100	Standard
15	EF-3P006A03E-A04	6	< 0.003	A	----	----	100	Standard
16	EF-3P006A04E-A04	6	< 0.003	A	6.5	175	100	Standard
17	EF-3P010A01E-A04	10	< 0.5	A	----	----	100	Standard
18	EF-3P010A02E-A04	10	< 0.5	A	6.5	175	100	Standard
19	EF-3P010A03E-A04	10	< 0.003	A	----	----	100	Standard
20	EF-3P010A04E-A04	10	< 0.003	A	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.



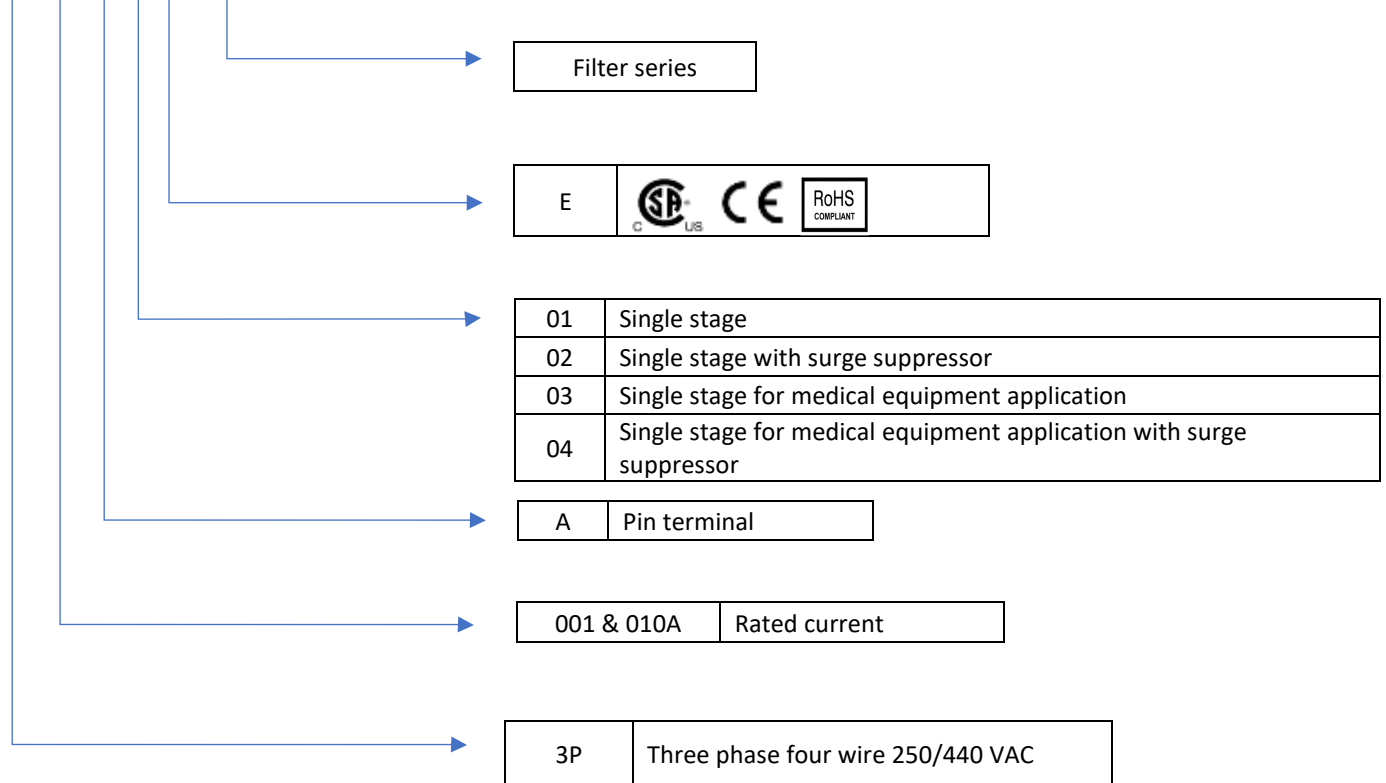
Connection Type

El.italia EC-EA04 [3P4W] serie

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

Syntax

EF - 3P CCC A YY E - A04





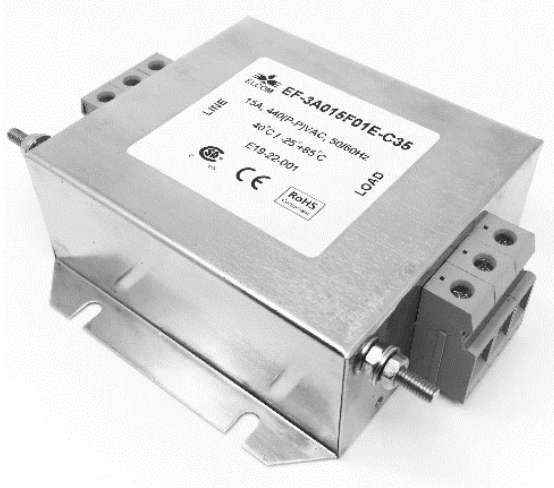
Datasheet | EC35

EP-355WON Series

General Purpose AC EMI Filter



El.italia EC-EC35 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	3A - 40A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> P 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

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

Attenuation type

Single Stage **Standard**

Application

- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine



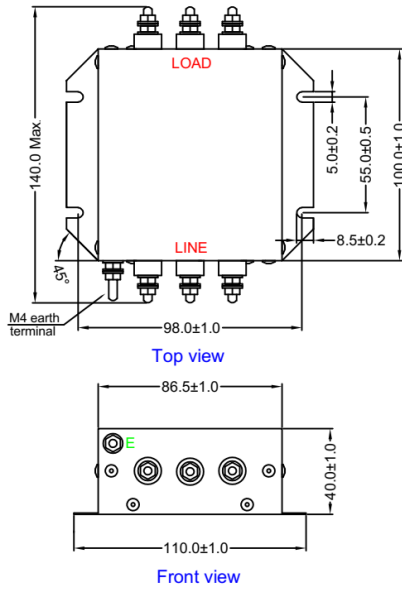
Datasheet | EC35 EP-355WON Series



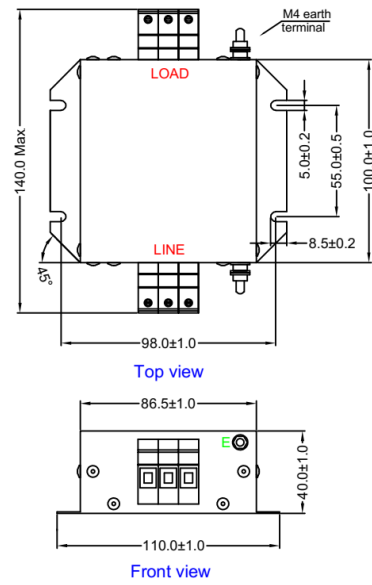
El.italia EC-EC35 [EP-355WON] serie

Mechanical details

Screw terminal

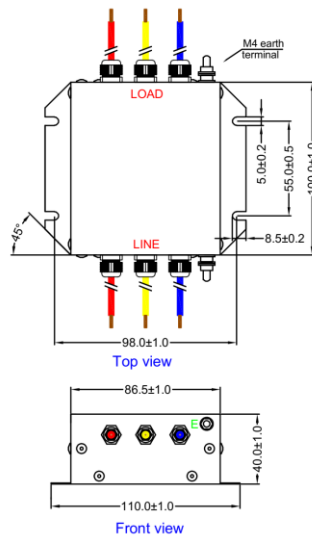


Touch safe terminal

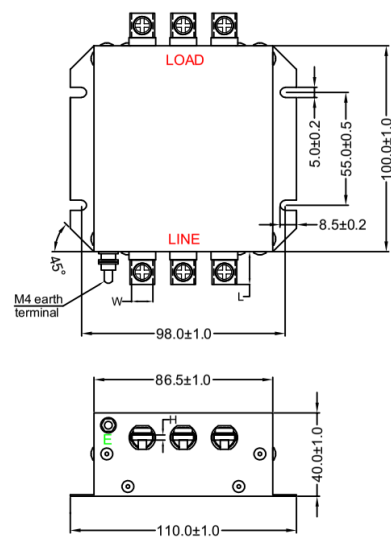


-Over 40A current rating touch will be unstackable

Wire Terminal



Busbar Terminal



*All dimensions are in mm.

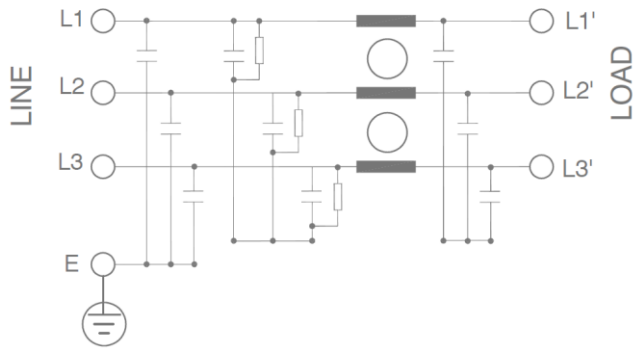
Datasheet | EC35 EP-355WON Series



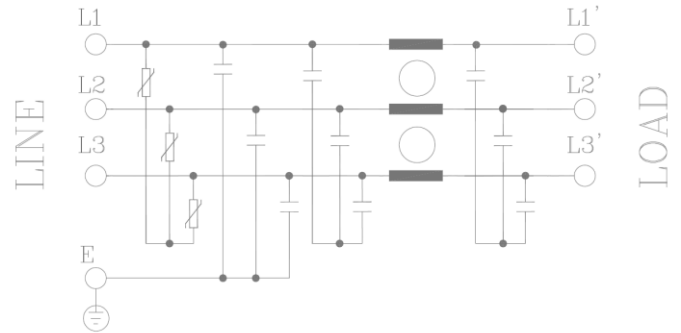
El.italia EC-EC35 [EP-355WON] serie

Electrical schematic for filter

General purpose -



General purpose with surge suppressor -



*Note - For Touchsafe/Wire/Busbar terminal, earthing terminal provided on both sides.

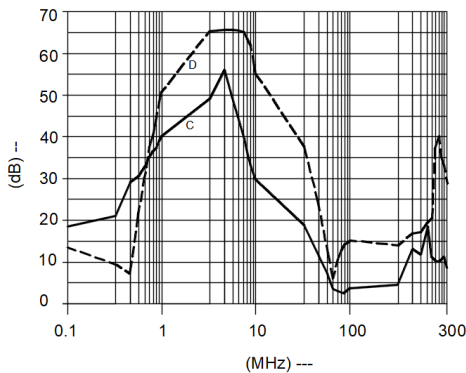
Filter attenuation graph

C = Common mode (asymmetrical) —————

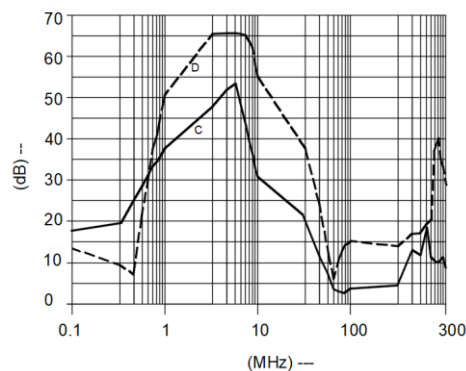
D = Differential mode (symmetrical) - - - - -

For general purpose

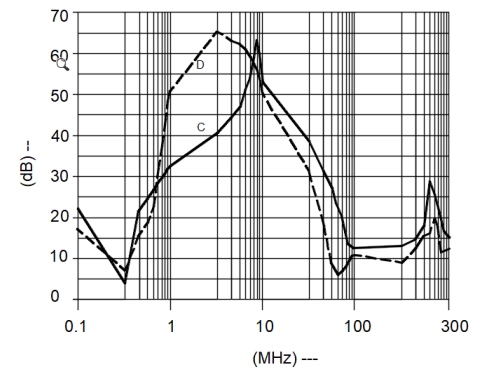
For 3A



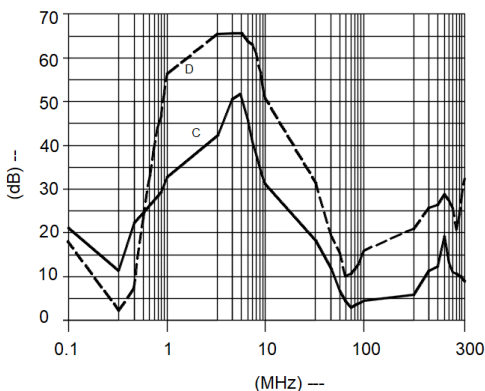
For 6A



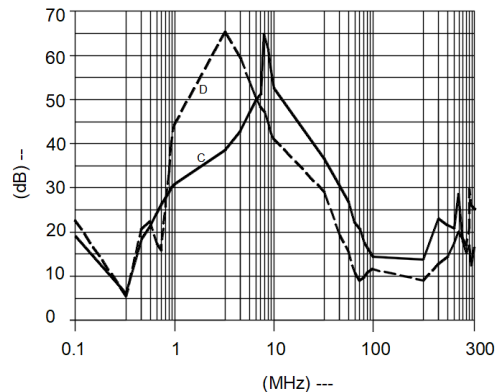
For 10A



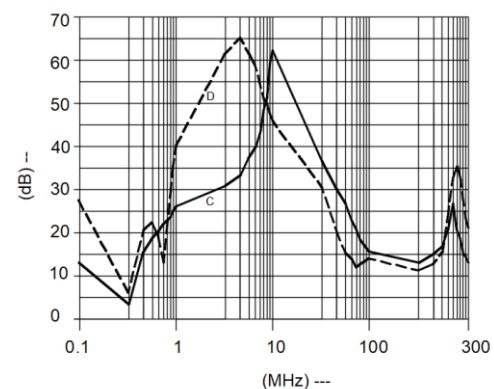
For 15A



For 20A



For 25A

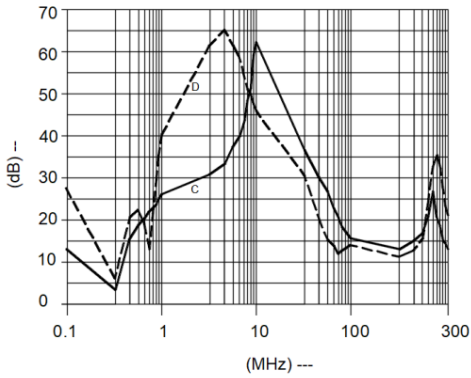


Datasheet | EC35 EP-355WON Series

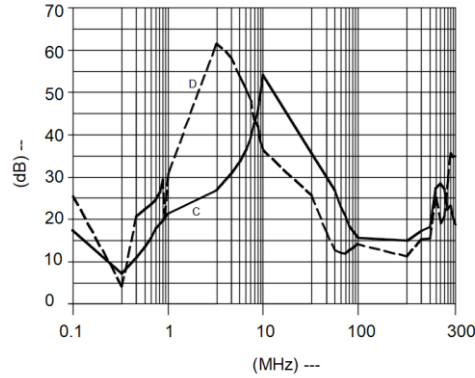


El.italia EC-EC35 [EP-355WON] serie





For 30A



For 40A



Filter Selection Table –

Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @250V AC	Terminals (X)				Max. Peak current (8/20 μ sec 1 time) (KA)	Energy surge rating (10/1000 μ sec) (J)	Weight (gm)	Attenuation
				Screw 	Busbar 	Touch - safe 	Wire 				
1	EF-3A003X01E-C35	3	< 1.8	D	E	F	G	----	----	500	Standard
2	EF-3A003X02E-C35	3	< 1.8	D	E	F	G	6.5	175	500	Standard
3	EF-3A006X01E-C35	6	< 1.8	D	E	F	G	----	----	500	Standard
4	EF-3A006X02E-C35	6	< 1.8	D	E	F	G	6.5	175	500	Standard
5	EF-3A010X01E-C35	10	< 1.8	D	E	F	G	----	----	500	Standard
6	EF-3A010X02E-C35	10	< 1.8	D	E	F	G	6.5	175	500	Standard
7	EF-3A015X01E-C35	15	< 1.8	D	E	F	G	----	----	500	Standard
8	EF-3A015X02E-C35	15	< 1.8	D	E	F	G	10	350	500	Standard
9	EF-3A020X01E-C35	20	< 1.8	D	E	F	G	----	----	500	Standard

Datasheet | EC35

EP-355WON Series



10	EF-3A020X02E-C35	20	< 1.8	D	E	F	G	10	350	500	Standard
11	EF-3A025X01E-C35	25	< 1.8	D	E	F	G	----	----	500	Standard
12	EF-3A025X02E-C35	25	< 1.8	D	E	F	G	10	350	500	Standard
13	EF-3A030X01E-C35	30	< 1.8	D	E	F	G	----	----	500	Standard
14	EF-3A030X02E-C35	30	< 1.8	D	E	F	G	10	350	500	Standard
15	EF-3A040X01E-C35	40	< 1.8	D	E	F	G	----	----	500	Standard
16	EF-3A040X02E-C35	40	< 1.8	D		F	G	10	350	500	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A010D01E-C35)
- 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 Method

Current Rating (A)	Screw terminal details		Bus bar terminal details		Touch safe terminal details		Wire terminal details (AWG)	Earthing screw terminal details
	Screw	Recommended tightening torque	Bus bar (LxWxH)	connection screw terminal	Touch safe	Recommended tightening torque		
3	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	18	M4
6	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	18	M4
10	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	14	M4
15	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	14	M4
20	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	12	M4
25	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	10	M4
30	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	10	M4
40	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	8	M4

Datasheet | EC35

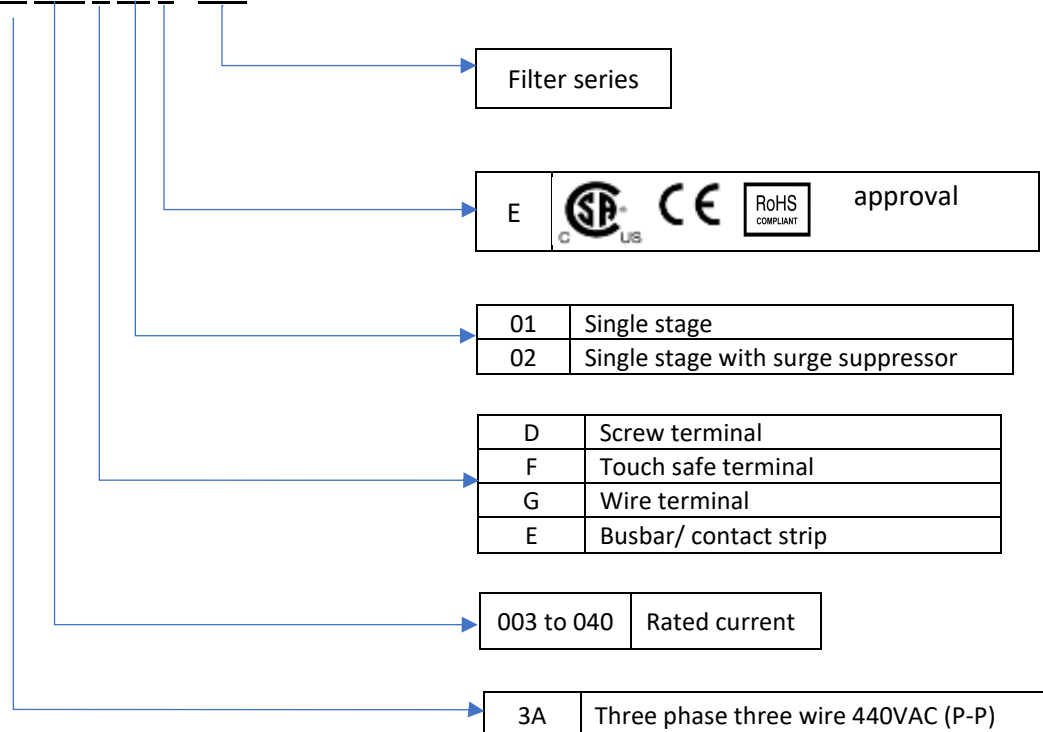
EP-355WON Series



El.italia EC-EC35 [EP-355WON] serie

Syntax

EF - 3A CCC X YY E - C35



Datasheet | EC36 EP-355WON Series



High attenuation AC EMI Filter

El.italia EC-EC36 [EP-355WON] serie



Technical specifications

Operating voltage	440 VAC
Current rating	15A-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
- | Easy and fast chassis mountable filter with compact size.
- | CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- | With surge suppressor filters also available
- | Various terminal options are available

Attenuation Type

Double Stage **High**

Applications

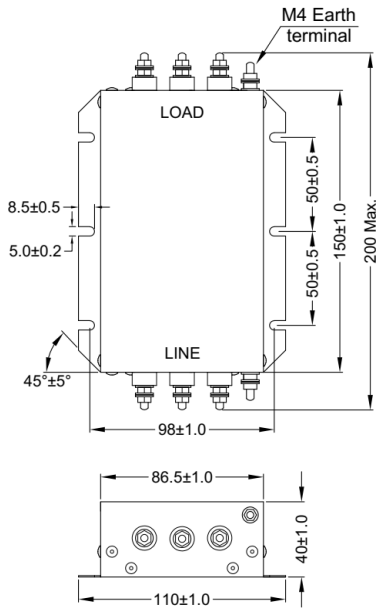
- | Consumer product
- | Defence application
- | Industrial application
- | Automotive application
- | Printing Machinery
- | Electrical equipment application



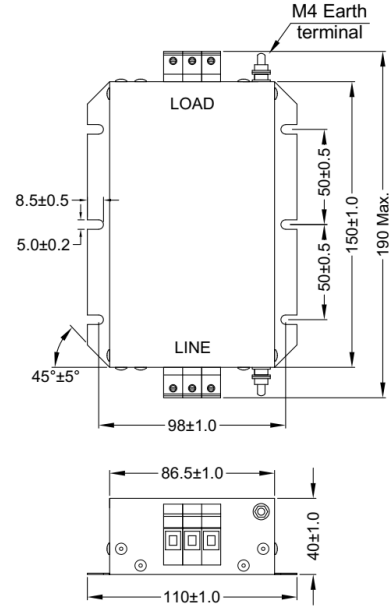
Mechanical details

El.italia EC-EC36 [EP-355WON] serie

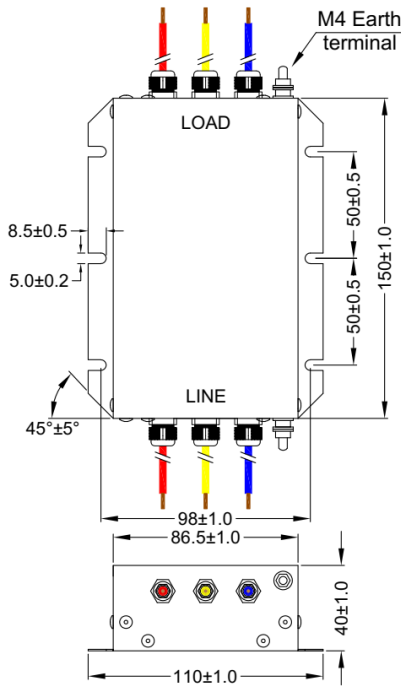
Screw terminal



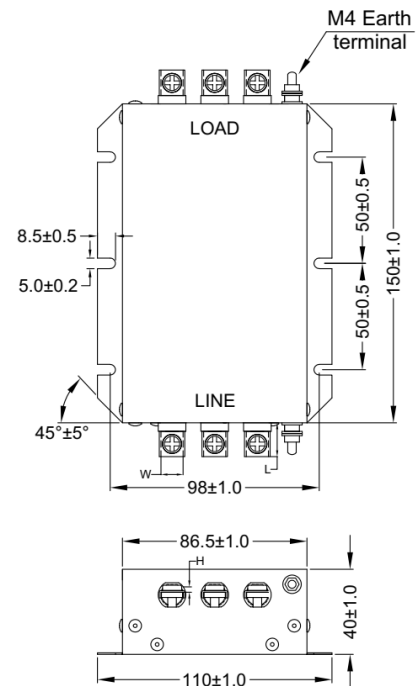
Touch safe terminal



Wire Terminal



Busbar Terminal

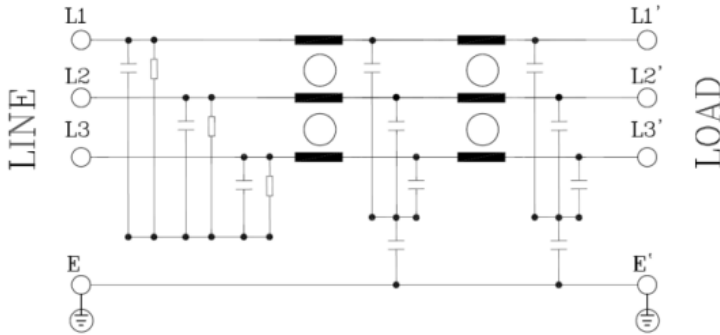


*All dimensions are in mm.



Electrical schematic

El.italia EC-EC36 [EP-355WON] serie

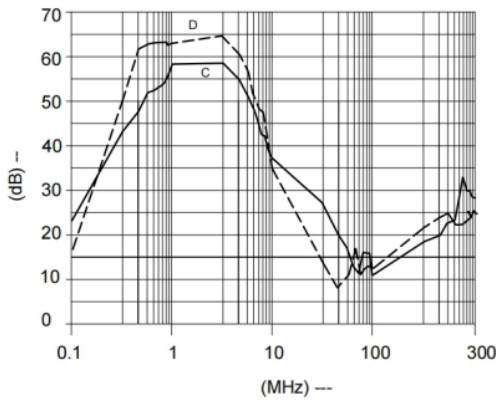


Filter attenuation graph

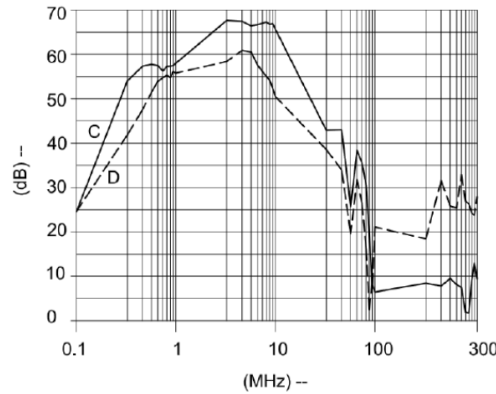
C = Common mode (asymmetrical) —————

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

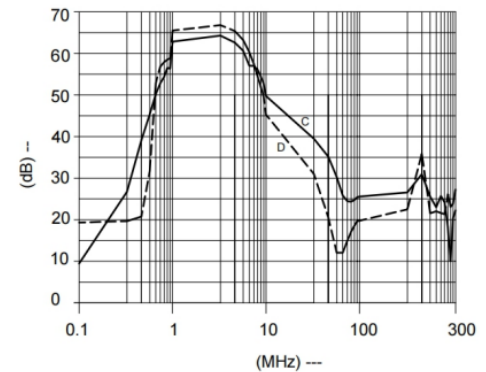
For 15A







For 20A



For 30A & 40A



Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @440V AC	Terminals (X)				Weight (Kg)	Attenuation
				Screw 	Busbar 	Touch -safe 	Wire 		
1	EF-3A015X24G-C36	15	< 3.5	D	E	F	G	1.2	High
2	EF-3A020X24G-C36	20	< 3.5	D	E	F	G	1.2	High
2	EF-3A030X24G-C36	30	< 3.5	D	E	F	G	1.2	High
4	EF-3A040X24G-C36	40	< 3.5	D	E	F	G	1.2	High

Datasheet | EC36

EP-355WON Series



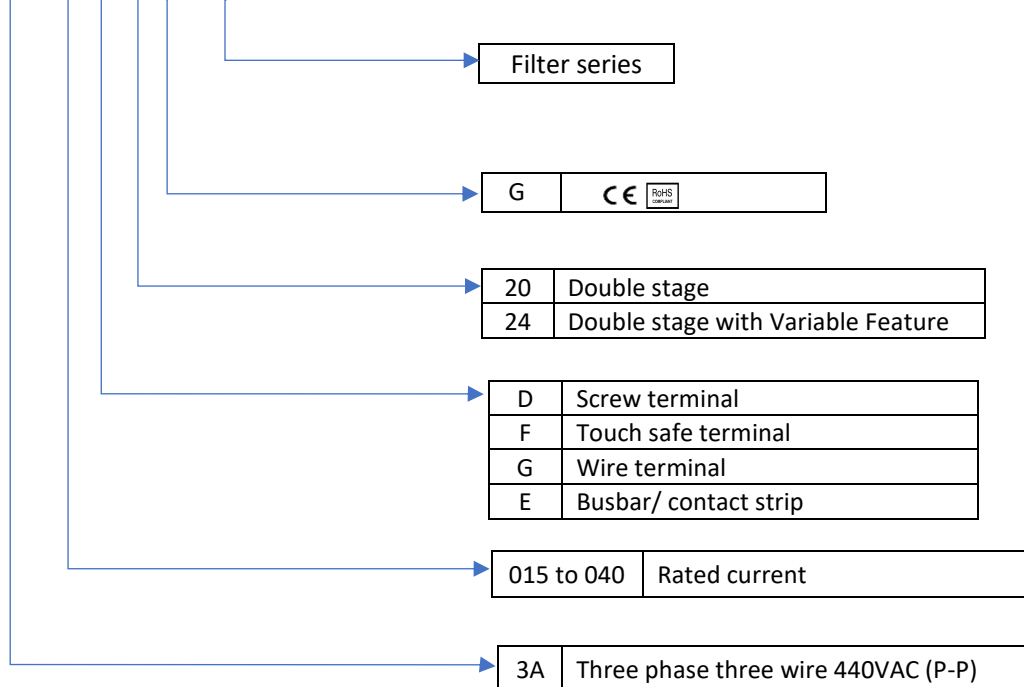
- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A015D24G-C36)
- Maximum leakage under usual AC operating conditions (acc. IEC 60939-3). Note: if the neutral line is interrupted, worst case leakage could reach twice this level.
- Customize products provided on request.

Connection type

Current Rating (A)	Screw terminal details		Bus bar terminal details		Touch safe terminal details		Wire terminal details (AWG)	Earthing screw terminal details
	Screw	Recommended tightening torque	Bus bar (L x W x H)	connection screw terminal	Touch safe	Recommended tightening torque		
15	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	14	M4
20	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	12	M4
30	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	10	M4
40	M4	12kgcm max	12x10x2.5	M4	6 Sq.mm	10.6-13 lbf.in	8	M4

Syntax

EF – 3A CCC X YY G - C36



Datasheet | EC37 (EP-355WON Series)



General Purpose AC EMI Filter

El.italia EC-EC37 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	50A - 80A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> P 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

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

Attenuation type

Single Stage

Standard

Application

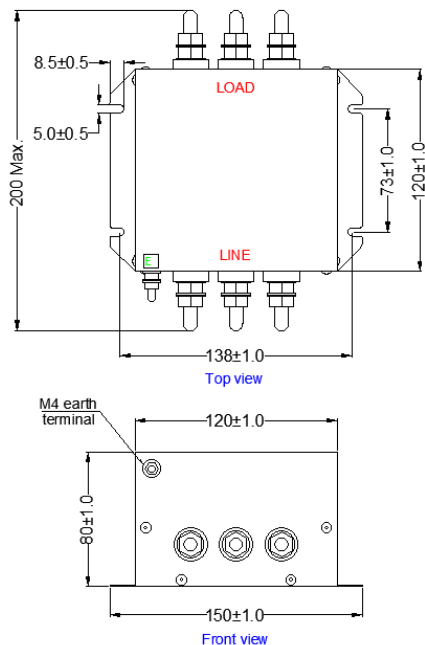
- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine



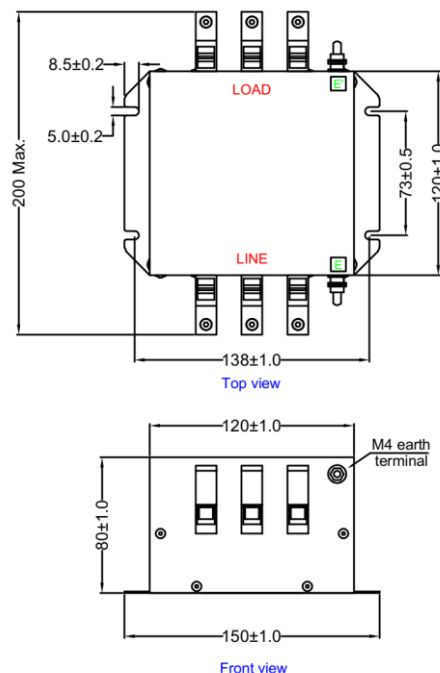
Mechanical details

El.italia EC-EC37 [EP-355WON] serie

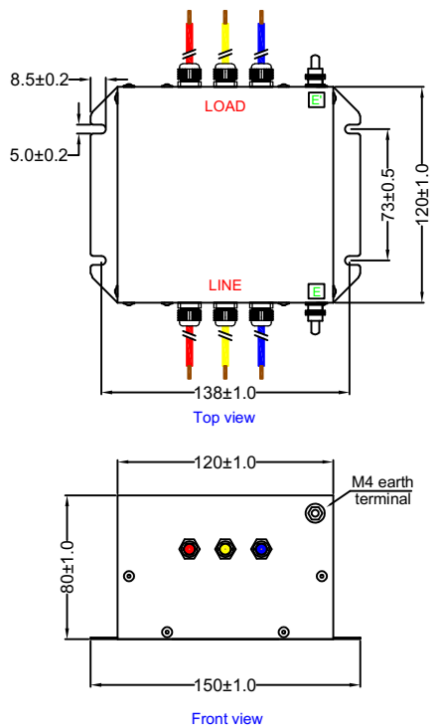
Screw terminal



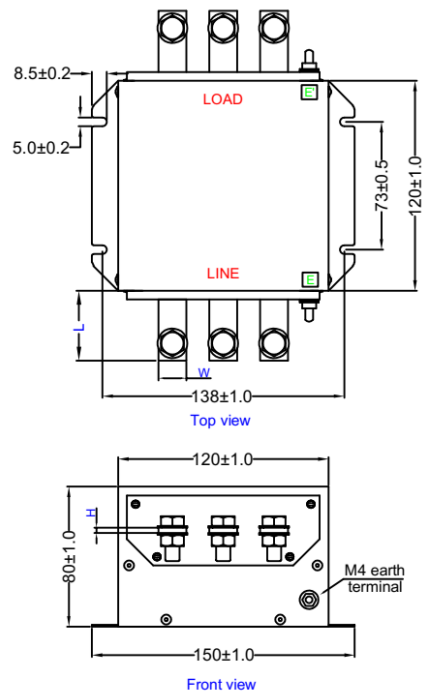
Touch safe terminal



Wire Terminal



Busbar Terminal



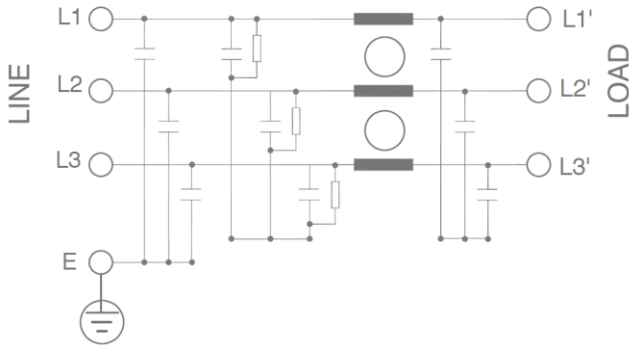
*All dimensions are in mm.



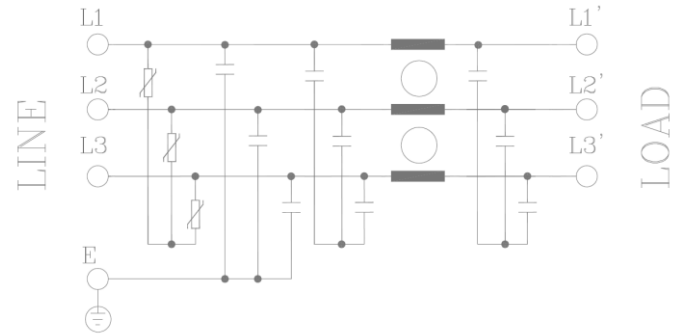
El.italia EC-EC37 [EP-355WON] serie

Electrical schematic for filter

General purpose -



General purpose with surge suppressor -



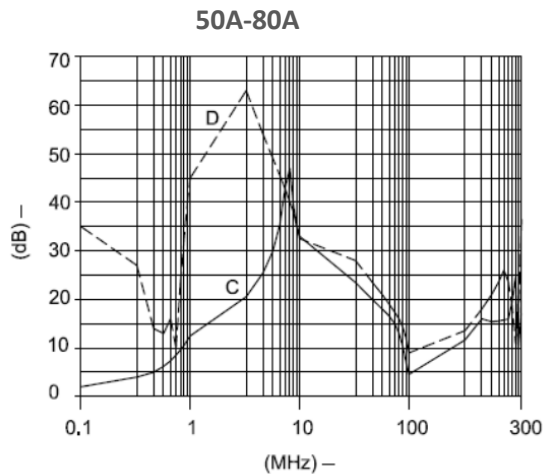
*Note - For Touchsafe/Wire/Busbar terminal, earthing terminal provided on both sides.

Filter attenuation graph

C = Common mode (asymmetrical) —————

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

For general purpose







Datasheet | EC37 (EP-355WON Series)



Filter selection table

El.italia EC-EC37 [EP-355WON] serie

Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @250V AC	Terminals (X)				Max. Peak current (8/20 μ sec 1 time) (KA)	Energy surge rating (10/1000 μ sec) (J)	Weight (Kg)	Attenuation
				Screw 	Busbar 	Touch - safe 	Wire 				
1	EF-3A050X01E-C37	50	< 1.8	D	E	F	G	----	----	2	Standard
2	EF-3A050X02E-C37	50	< 1.8	D	E	F	G	10	350	2	Standard
3	EF-3A050X12E-C37	50	< 1.8	D	E	F	G	10	350	2	Standard
4	EF-3A060X01E-C37	60	< 1.8	D	E	F	G	----	----	2	Standard
5	EF-3A060X02E-C37	60	< 1.8	D	E	F	G	10	350	2	Standard
6	EF-3A060X12E-C37	60	< 1.8	D	E	F	G	10	350	2	Standard
7	EF-3A080X01E-C37	80	< 1.8	D	E	F	G	----	----	2.5	Standard
8	EF-3A080X02E-C37	80	< 1.8	D	E	F	G	10	350	2.5	Standard
9	EF-3A080X12E-C37	80	< 1.8	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-3A050D01E-C37)
- 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 details		Bus bar terminal details		Touch safe terminal details		Wire terminal details (AWG)	Earthing screw terminal details
	Screw	Recommended tightening torque	Bus bar (LxWxH)	connection screw terminal	Touch safe	Recommended tightening torque		
50	M6	20-25Kgcm	40x10x2.5	M8	16 Sq.mm	22-25 lbf.in	8AWG	M4
60	M6	20-25Kgcm	40x10x2.5	M8	16 Sq.mm	22-25 lbf.in	8AWG	M4
80	M8	25-30Kgcm	40x10x2.5	M8	16 Sq.mm	22-25 lbf.in	6AWG	M4

Datasheet | EC37

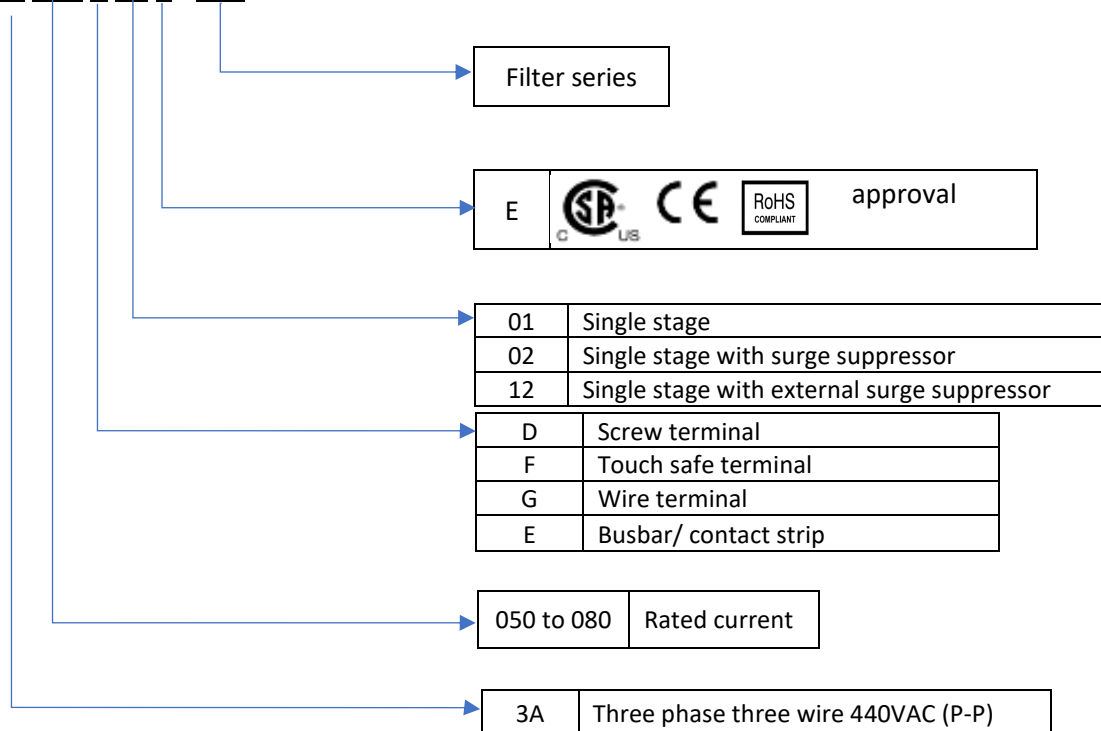
(EP-355WON Series)



El.italia EC-EC37 [EP-355WON] serie

Syntax

EF - 3A CCC X YY E - C37



Datasheet | EC38 (EP-355WON Series)



High attenuation AC EMI Filter

El.italia EC-EC38 [EP-355WON] serie



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	50A - 80A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC
Insulation resistance	≥ 300 MΩ @ 500VDC (P→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
- | 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.

Attenuation type

Double stage **High**

Application

- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine

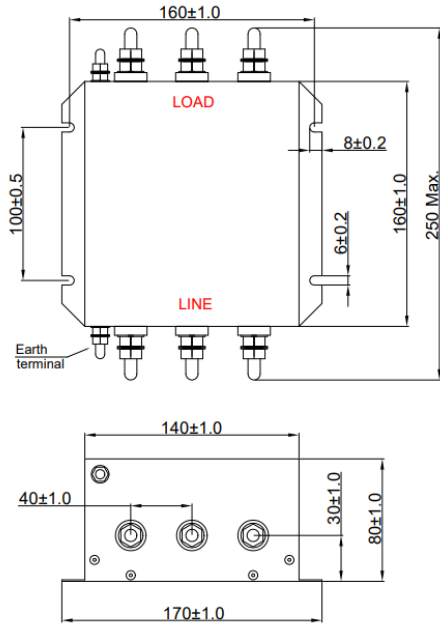
Datasheet | EC38 (EP-355WON Series)



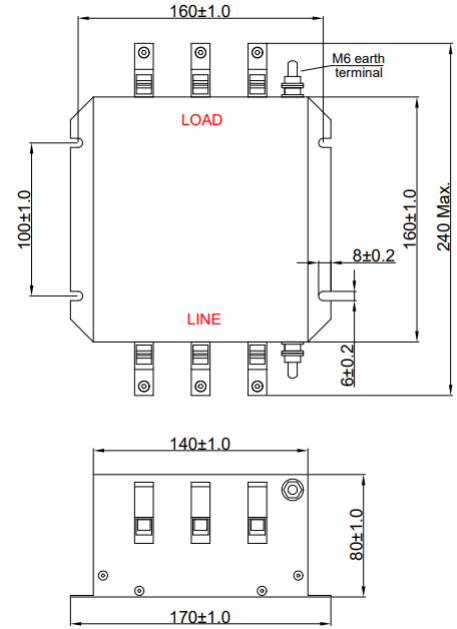
Mechanical details

El.italia EC-EC38 [EP-355WON] serie

Screw terminal

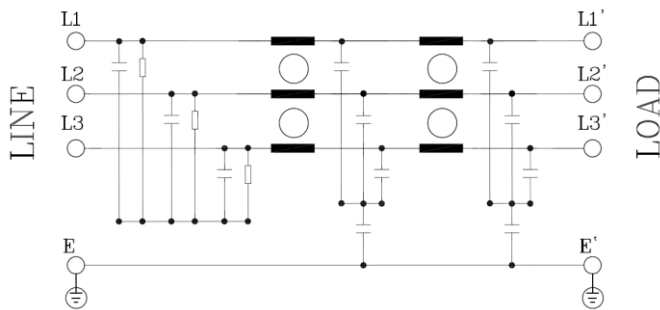


Touch safe terminal



*All dimensions are in mm.
General tolerance=±1mm

Electrical schematic for filter

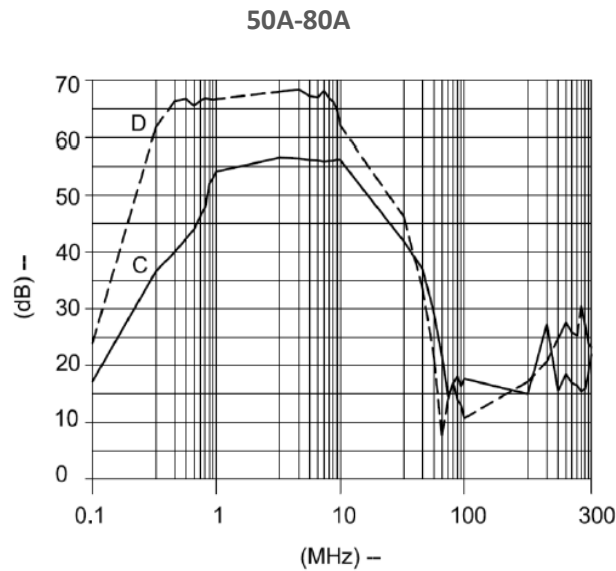






Filter attenuation graph

C = Common mode (asymmetrical) —————

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



Filter selection table

Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @440V AC	Terminals (X)		Weight (Kg)	Attenuation
				Screw 	Touch - safe 		
1	EF-3A050X24G-C38	50	< 3.5	D	F	3.5	Standard
2	EF-3A060X24G-C38	60	< 3.5	D	F	3.5	Standard
3	EF-3A080X24G-C38	80	< 3.5	D	F	3.5	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A050D24G-C38)
- 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.

Datasheet | EC38 (EP-355WON Series)



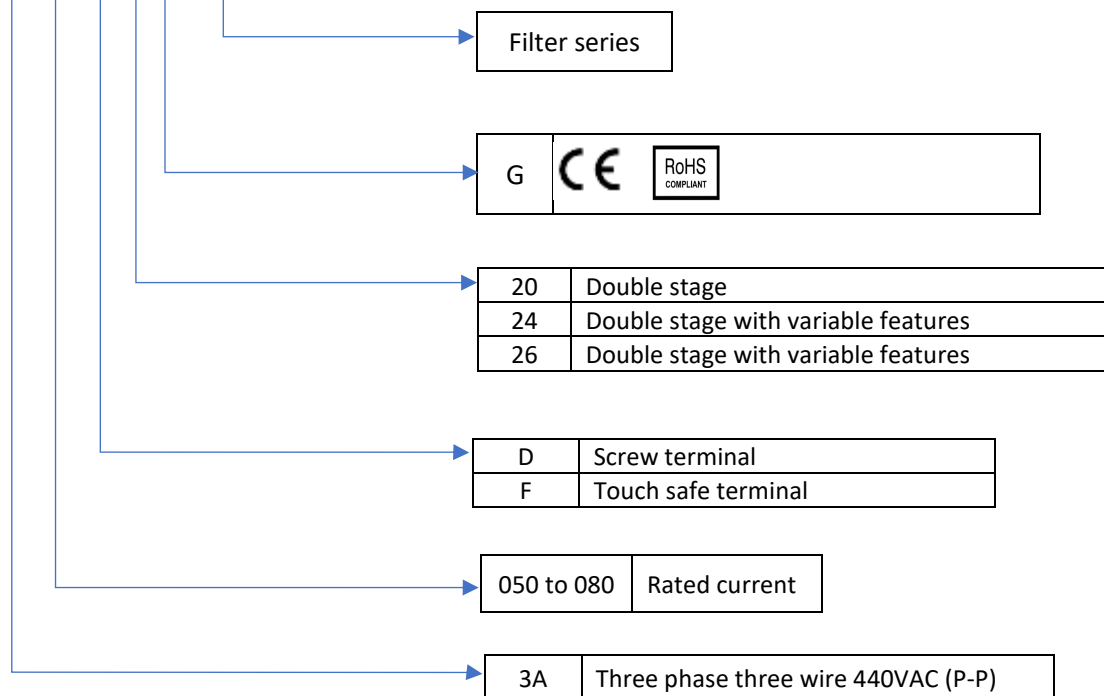
Connection type

El.italia EC-EC38 [EP-355WON] serie

Current Rating (A)	Screw terminal details		Touch safe terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Touch safe	Recommended tightening torque	
50	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M6
60	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M6
80	M8	25-30Kgcm	16 Sq.mm	22-25 lbf.in	M6

Syntax

EF – 3A CCC X YY G - C38



Datasheet | EC39 EP-355WON Series



General Purpose AC EMI Filter

El.italia EC-EC39 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	100A - 150A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> P 2121VDC (applicable for general purpose filter)
Insulation resistance	$\geq 300 \text{ M}\Omega @ 500\text{VDC (P}\rightarrow\text{E)}$
Operating temperature	40°C / -25°C +85°C

Features and benefits

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

Attenuation Type

Single Stage

Standard

Application

- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine

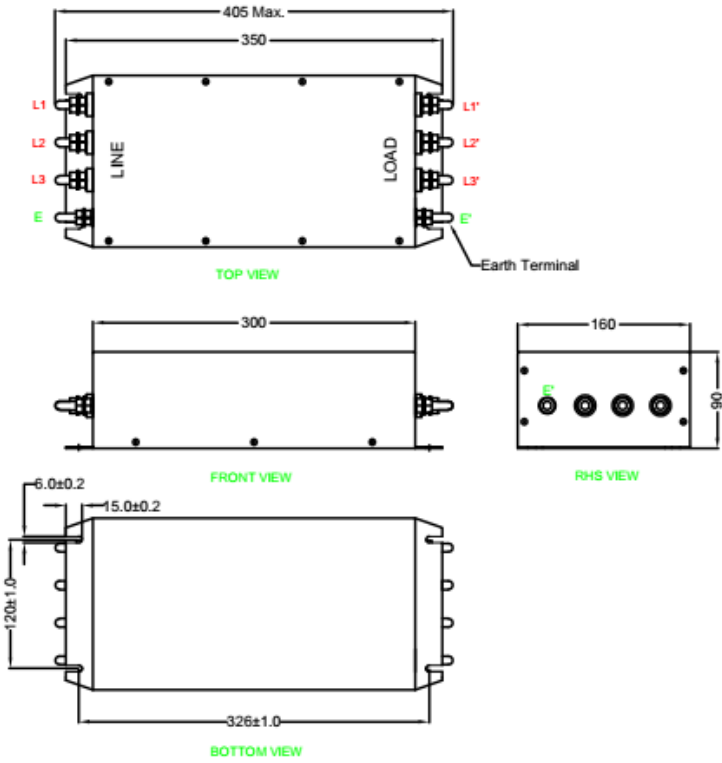
Datasheet | EC39 EP-355WON Series



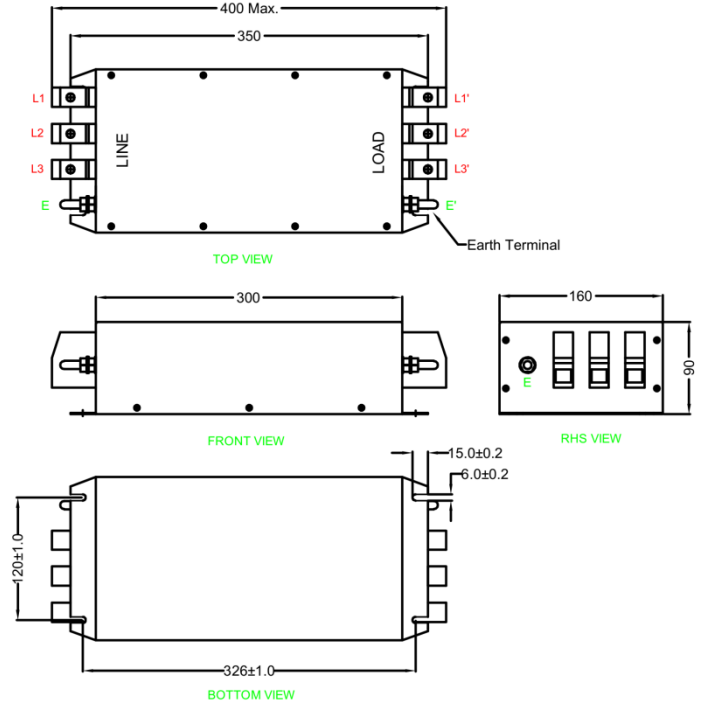
Mechanical details

El.italia EC-EC39 [EP-355WON] serie

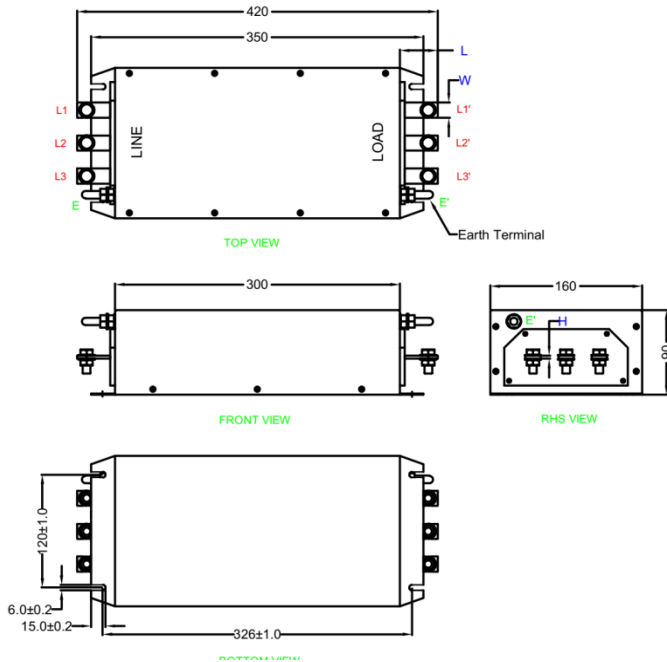
Screw terminal



Touch safe terminal



Busbar Terminal



All dimensions are in mm.
General tolerance ± 2%

Datasheet | EC39 EP-355WON Series

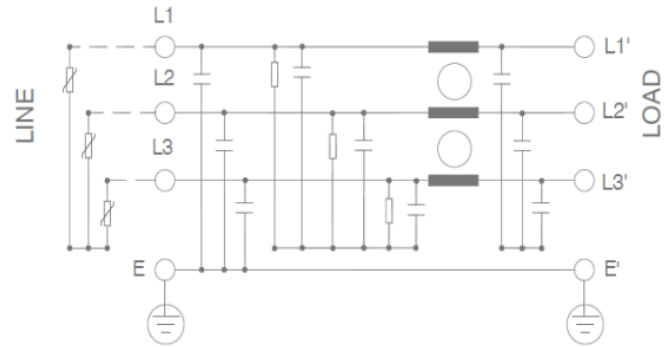
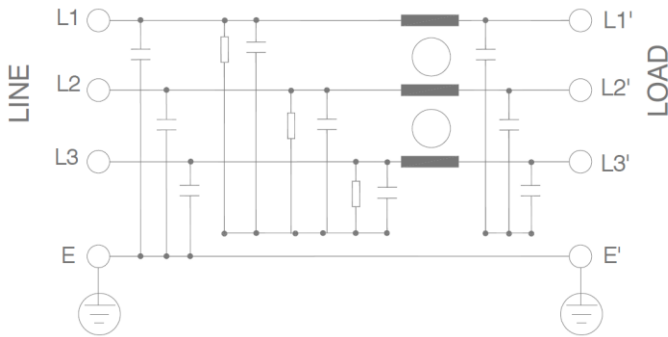


Electrical schematic for filter

El.italia EC-EC39 [EP-355WON] serie

General Purpose -

General Purpose with externally connected Surge Suppressor -

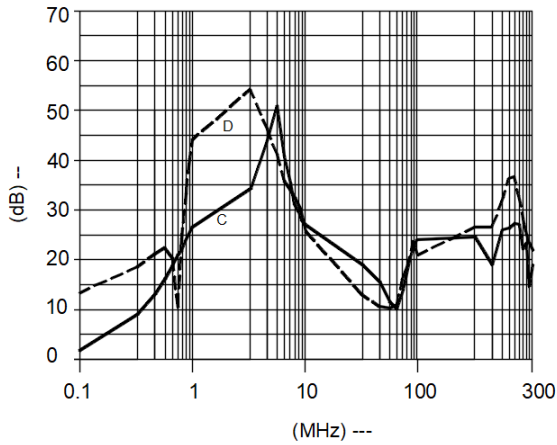


Filter attenuation graph

C = Common mode (asymmetrical) —————

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

100A-150A






Datasheet | EC39

EP-355WON Series



El.italia EC-EC39 [EP-355WON] serie

Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @250VAC	Terminals (X)			Max. Peak current (8/20 μ sec 1 time) (KA)	Energy surge rating (10/1000 μ sec) (Joules)	Approx. Weight (Kg)	Attenuation
				Screw 	Bus bar 	Touch-safe 				
1	EF-3A100X01E-C39	100	< 3.5	D	E	F	----	----	5	Standard
2	EF-3A100X12E-C39	100	< 3.5	D	E	F	10	350	5	Standard
3	EF-3A120X01E-C39	120	< 3.5	D	E	F	----	----	5.5	Standard
4	EF-3A120X12E-C39	120	< 3.5	D	E	F	10	350	5.5	Standard
5	EF-3A150X01E-C39	150	< 3.5	D	E	F	----	----	6	Standard
6	EF-3A150X12E-C39	150	< 3.5	D	E	F	10	350	6	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A100D01E-C39)
- 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 details		Bus bar terminal details		Touch safe terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Bus bar (LxWxH)	Connection screw terminal	Touch safe	Recommended tightening torque	
100	M10	35-40Kgcm	40x16x5	M8	50 Sq.mm	38-40 lbf.in	M10
120	M10	35-40Kgcm	40x16x5	M8	50 Sq.mm	38-40 lbf.in	M10
150	M12	35-40Kgcm	40x16x5	M8	50 Sq.mm	38-40 lbf.in	M12

Datasheet | EC39

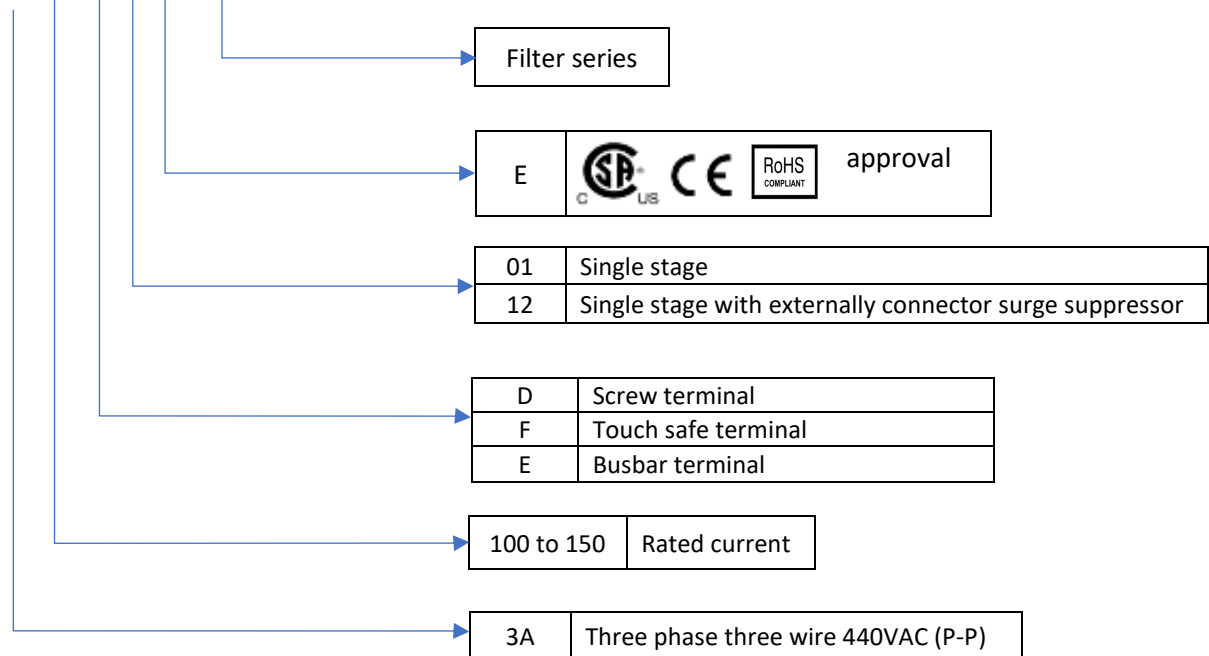
EP-355WON Series



El.italia EC-EC39 [EP-355WON] serie

Syntax

EF - 3A CCC X YY E - C39



Datasheet | EC41 EP-355WON Series



General Purpose AC EMI Filter

El.italia EC-EC41 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	180A - 250A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> P 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

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

Attenuation Type

Single Stage

Standard

Application

- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine

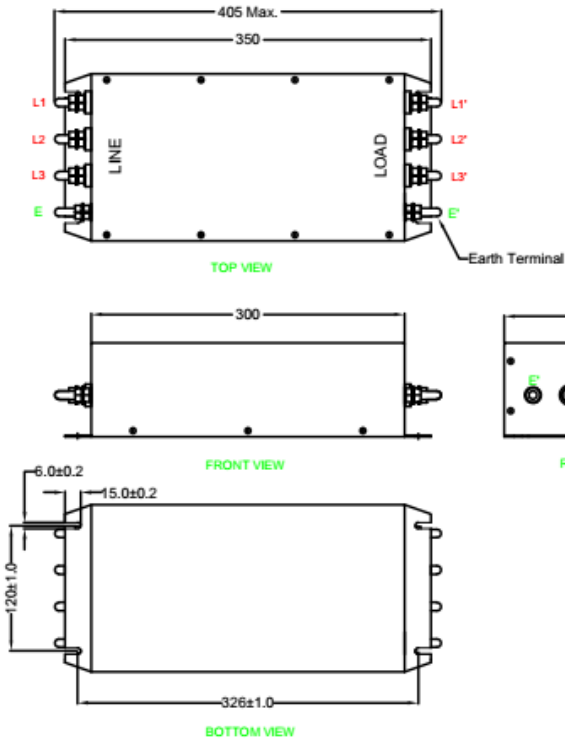
Datasheet | EC41 EP-355WON Series



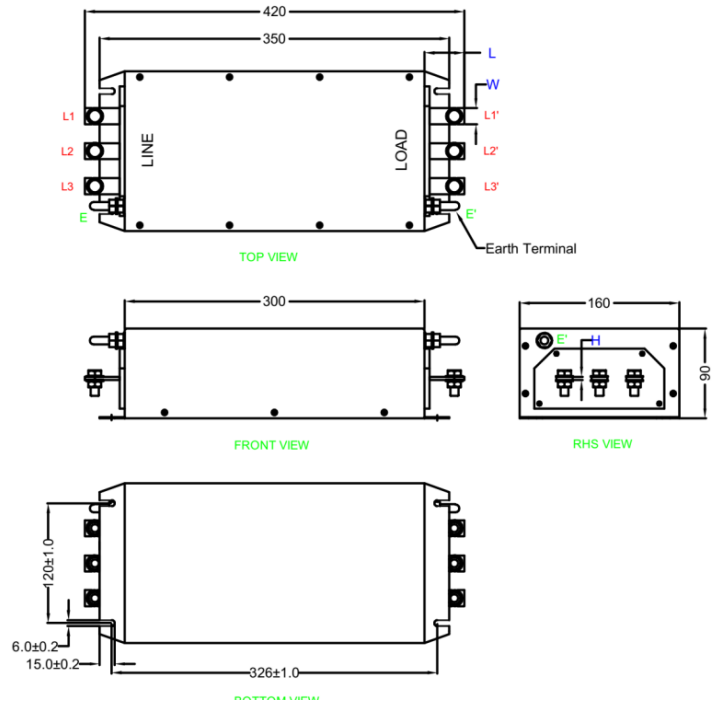
Mechanical details

El.italia EC-EC41 [EP-355WON] serie

Screw terminal



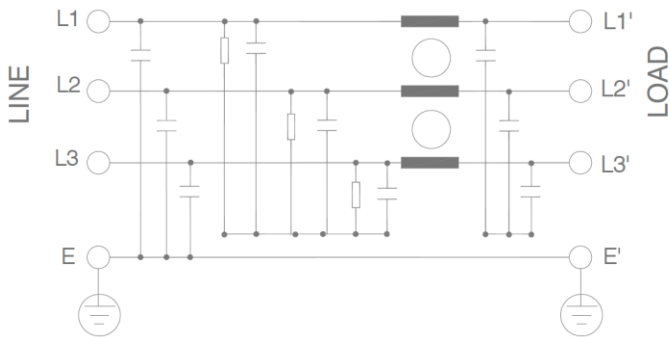
Bus bar terminal



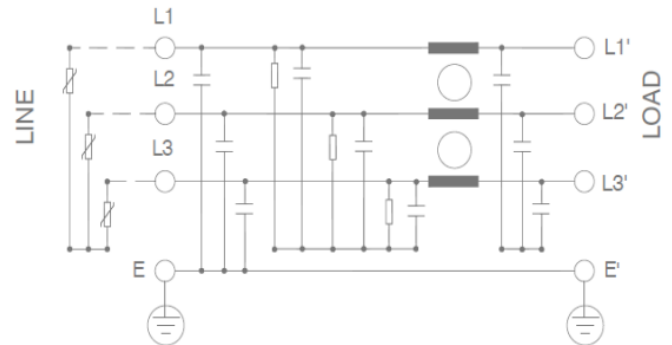
All dimensions are in mm.
General tolerance $\pm 2\%$

Electrical schematic for filter

General Purpose -



General Purpose with externally connected Surge Suppressor -



Datasheet | EC41

EP-355WON Series

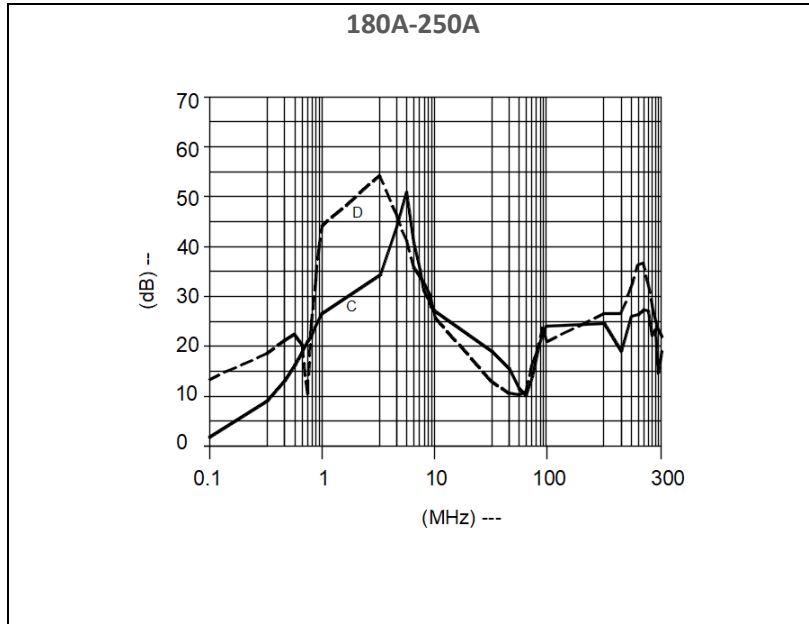


Filter attenuation graph



El.italia EC-EC41 [EP-355WON] serie

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) @250VAC	Terminals (X)		Max. Peak current (8/20 μ sec 1 time) (KA)	Energy surge rating (10/1000 μ sec) (Joules)	Approx. Weight (Kg)	Attenuation
				Screw 	Bus bar 				
1	EF-3A180X01E-C41	180	< 3.5	D	E	----	----	10	Standard
2	EF-3A180X12E-C41	180	< 3.5	D	E	10	350	10	Standard
3	EF-3A200X01E-C41	200	< 3.5	D	E	----	----	10	Standard
4	EF-3A200X12E-C41	200	< 3.5	D	E	10	350	10	Standard
5	EF-3A250X01E-C41	250	< 3.5	D	E	----	----	12	Standard
6	EF-3A250X12E-C41	250	< 3.5	D	E	10	350	12	Standard

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A180D01E-C41)
- 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.

Datasheet | EC41

EP-355WON Series



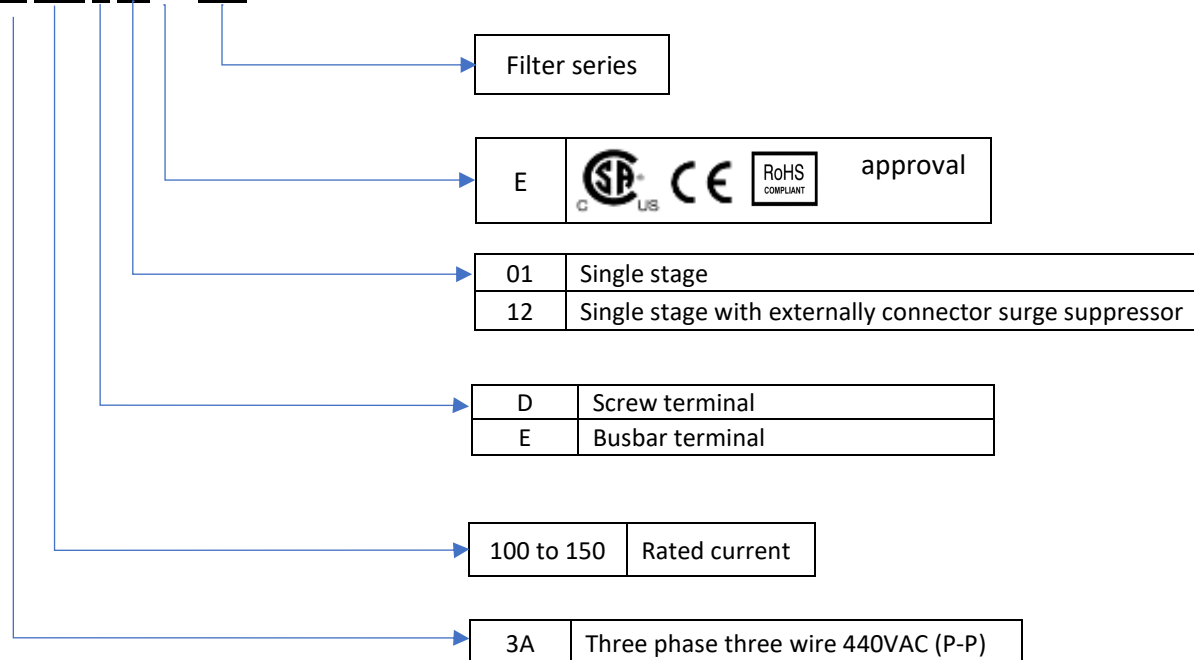
El.italia EC-EC41 [EP-355WON] serie

Connection Type

Current Rating (A)	Screw terminal details		Bus bar terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Bus bar (LxWxH)	connection screw terminal	
180	M12	35-40Kgcm	40x20x5	M8	M10
200	M12	35-40Kgcm	40x20x5	M8	M10
250	M12	35-40Kgcm	40x20x5	M8	M12

Syntax

EF - 3A CCC X YY E - C41



Datasheet | EC43 EP-355WON Series



General Purpose AC EMI Filter

El.italia EC-EC43 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P -P)
Current rating	300A - 450A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

- | All filters provide high attenuation performance.
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- | Single stage.
- | High reliable
- | Chassis mountable filter in fabricated metal can.
- | CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- | General purpose filter with low leakage current for safety critical application.

Attenuation Type

Single Stage

Standard

Application

- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine

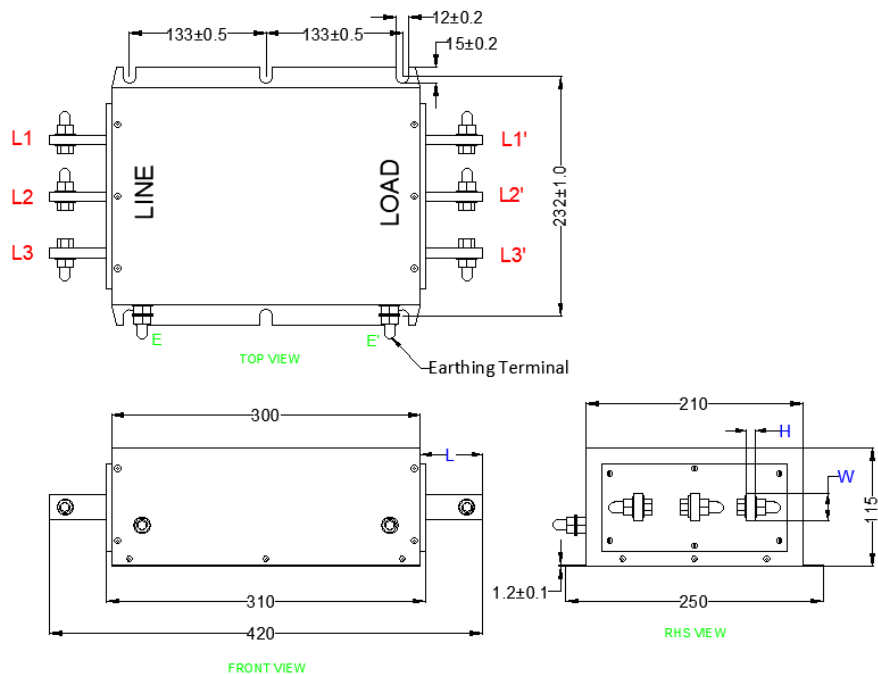
Datasheet | EC43

EP-355WON Series



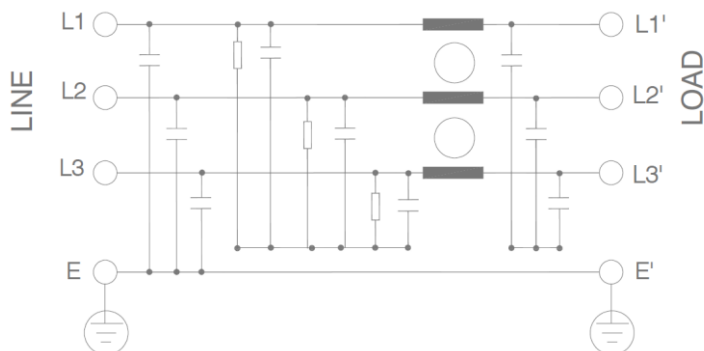
Mechanical details

El.italia EC-EC43 [EP-355WON] serie



All dimensions are in mm.
General tolerance $\pm 2\%$

Electrical schematic



Datasheet | EC43

EP-355WON Series

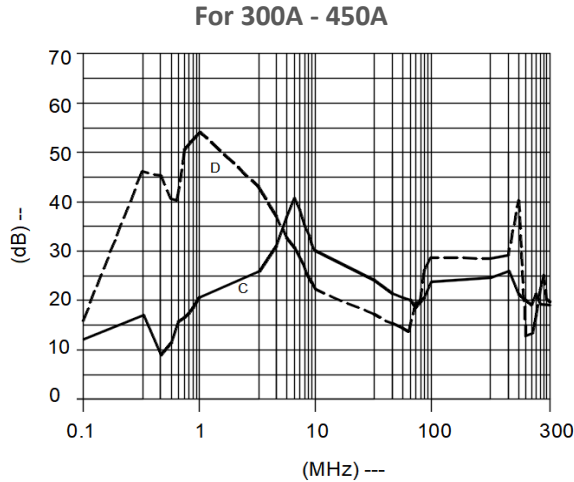


El.italia EC-EC43 [EP-355WON] serie


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) @250VAC	Bus bar 	Approx. Weight (Kg)	Attenuation
1	EF-3A300E01E-C43	300	< 3.5	E	15	Standard
2	EF-3A350E01E-C43	350	< 3.5	E	15	Standard
3	EF-3A400E01E-C43	400	< 3.5	E	16	Standard
4	EF-3A450E01E-C43	450	< 3.5	E	16	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.
- Customize products provided on request.

Connection Type

Current Rating (A)	Busbar details				Earthing
	L (mm)	W (mm)	H (mm)	Screw for connection	
300	55	25	6	M10	M10
350	55	25	6	M10	M10
400	55	25	8	M10	M10
450	55	25	8	M10	M10

Datasheet | EC43

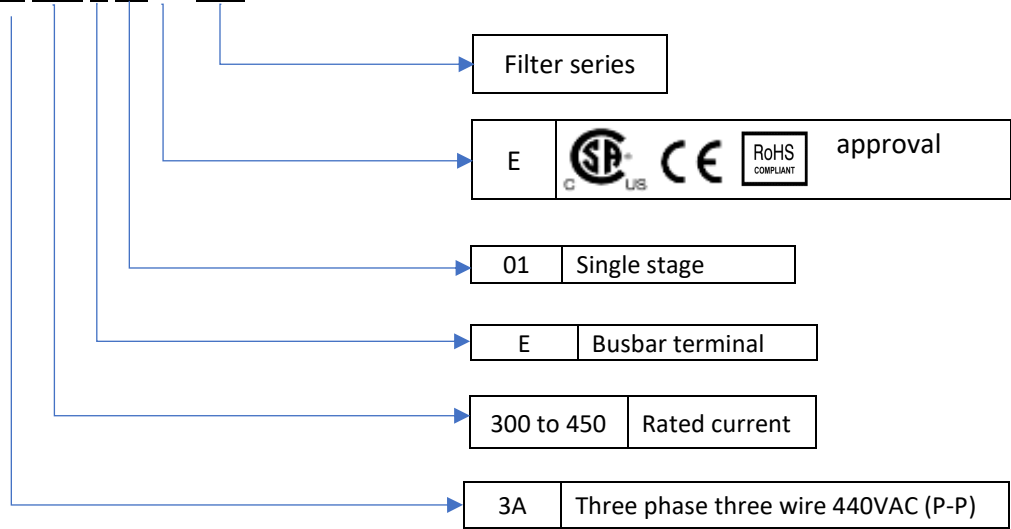
EP-355WON Series



Syntax

El.italia EC-EC43 [EP-355WON] serie

EF - 3A CCC X YY E - C43



Datasheet | EC44 EP-355WON Series



General Purpose AC EMI Filter

El.italia EC-EC44 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P -P)
Current rating	500A - 650A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

- | All filters provide high attenuation performance.
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- | Single stage.
- | High reliable
- | Chassis mountable filter in fabricated metal can.
- | CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- | General purpose filter with low leakage current for safety critical application.

Attenuation Type

Single Stage

Standard

Application

- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine

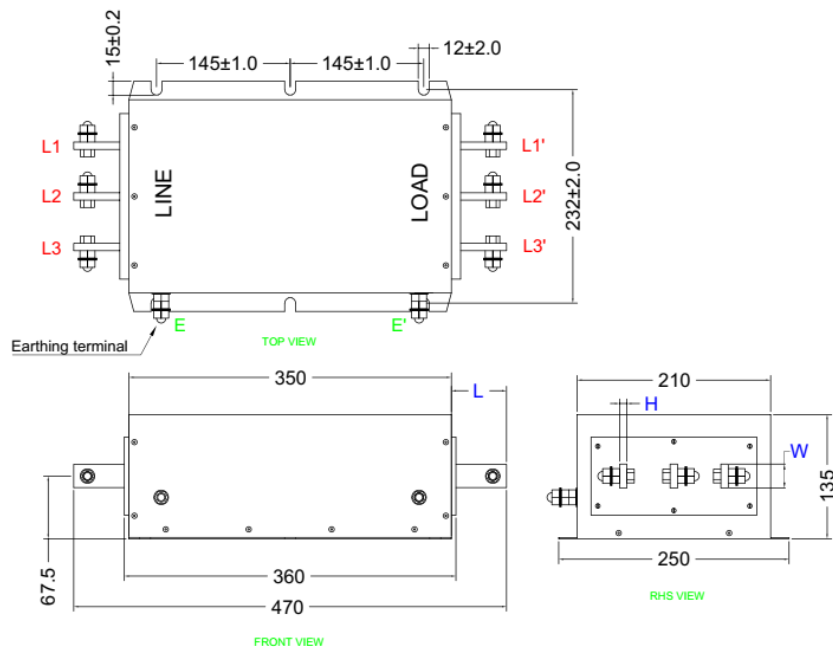
Datasheet | EC44

EP-355WON Series



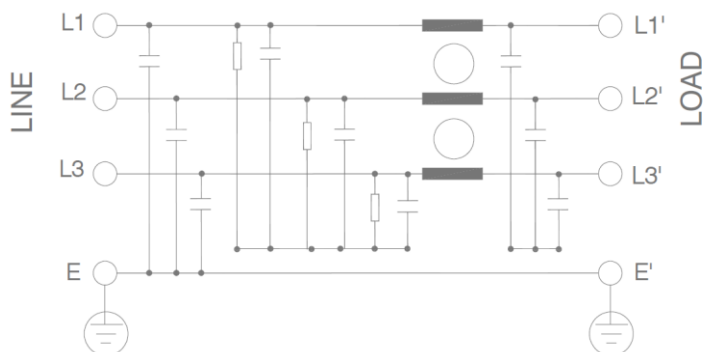
Mechanical details

El.italia EC-EC44 [EP-355WON] serie



All dimensions are in mm.
General tolerance ± 2%

Electrical schematic for filter



Datasheet | EC44

EP-355WON Series

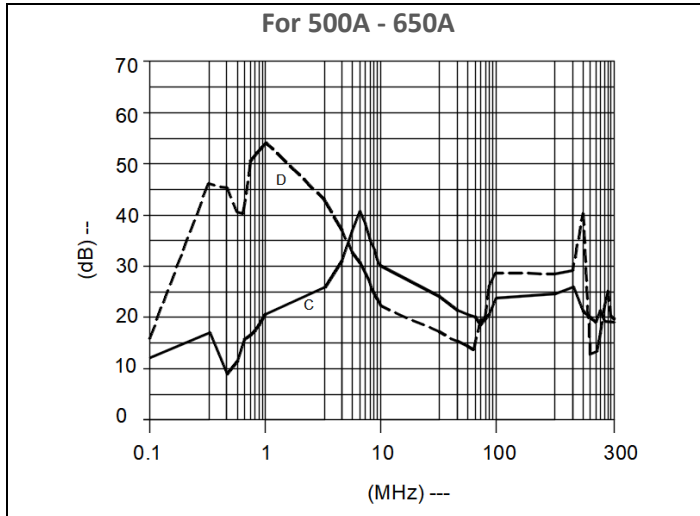


Filter attenuation graph


El.italia EC-EC44 [EP-355WON] serie

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) @250VAC	Bus bar 	Approx. Weight (Kg)	Attenuation
1	EF-3A500E01E-C44	500	< 3.5	E	18	Standard
2	EF-3A550E01E-C44	550	< 3.5	E	18	Standard
3	EF-3A600E01E-C44	600	< 3.5	E	20	Standard
4	EF-3A650E01E-C44	650	< 3.5	E	20	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.
- Customize products provided on request.

Connection Type :

Current Rating (A)	Busbar details				Earthing
	L (mm)	W (mm)	H (mm)	Screw for connection	
500	60	30	8	M10	M10
550	60	30	8	M10	M10
600	60	30	8	M10	M10
650	60	30	8	M10	M10

Datasheet | EC44

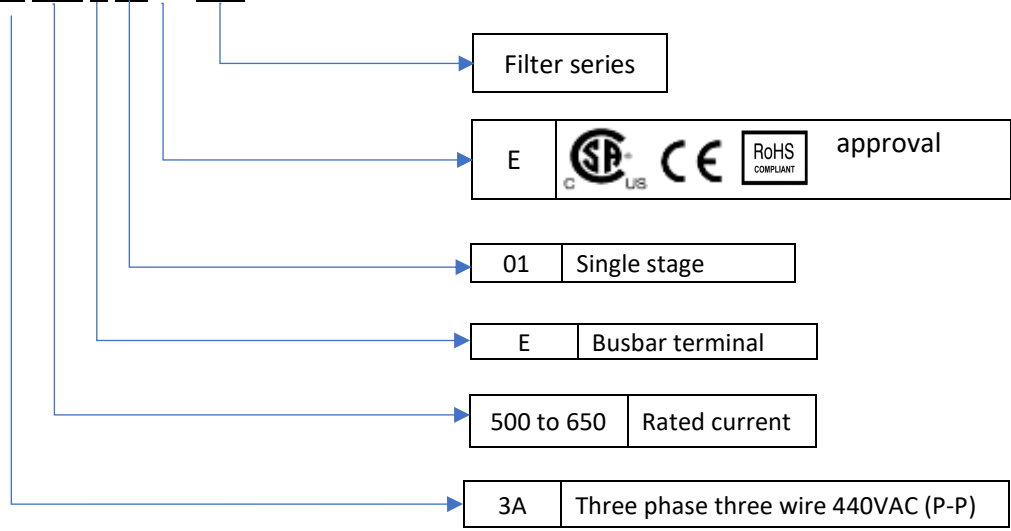
EP-355WON Series



El.italia EC-EC44 [EP-355WON] serie

Syntax

EF - 3A CCC X YY E - C44





General Purpose AC EMI Filter

El.italia EC-EC47 serie



Technical specifications

Operating voltage	440 VAC
Current rating	1100A-1600A
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

*Image shown is for illustrative purpose only

Features and benefits

- | Filters available in single 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.

Attenuation Type

Single Stage

Standard

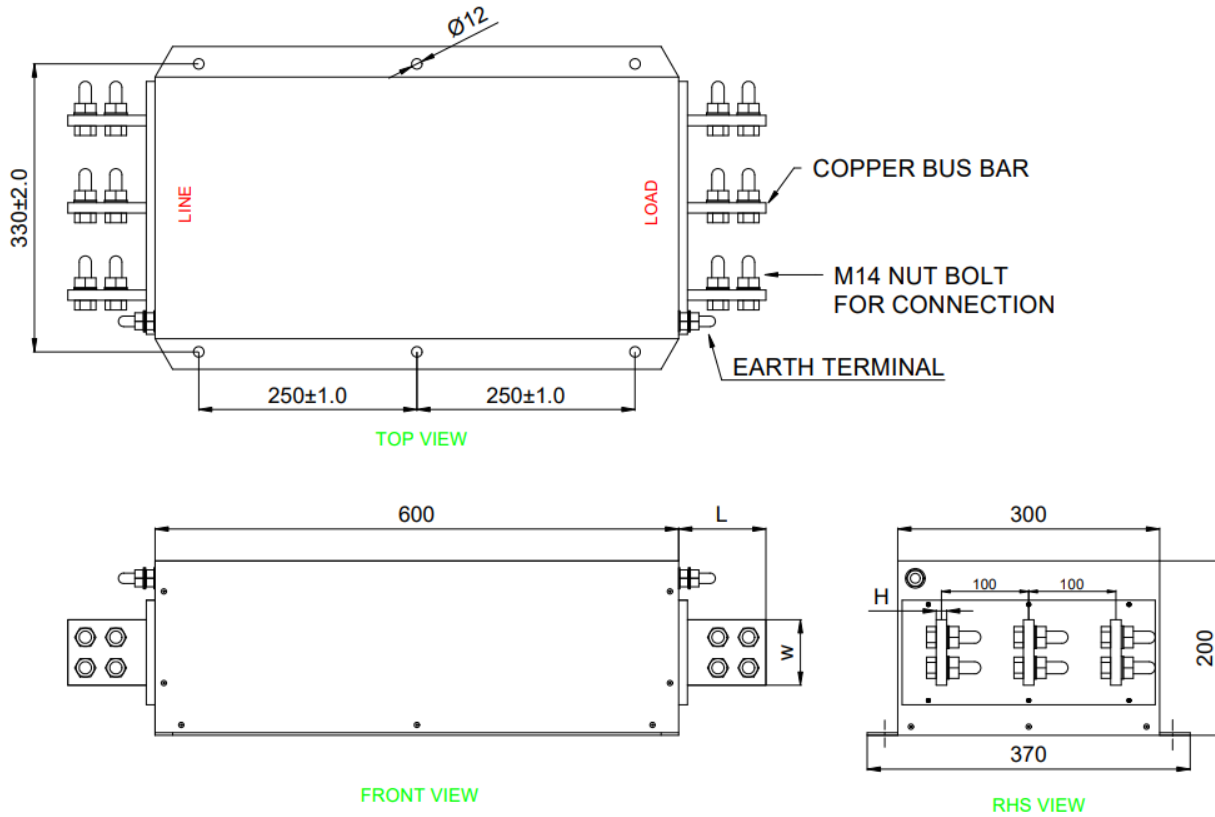
Applications

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



Mechanical details

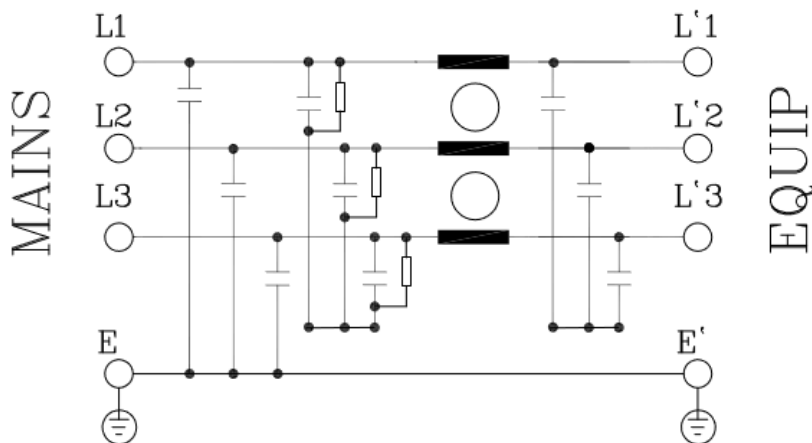
El.italia EC-EC47 serie



All dimensions in mm
General tolerance = $\pm 2\%$

Electrical schematic for Single Stage Filter

General purpose –
CKT-1





El.italia EC-EC47 serie

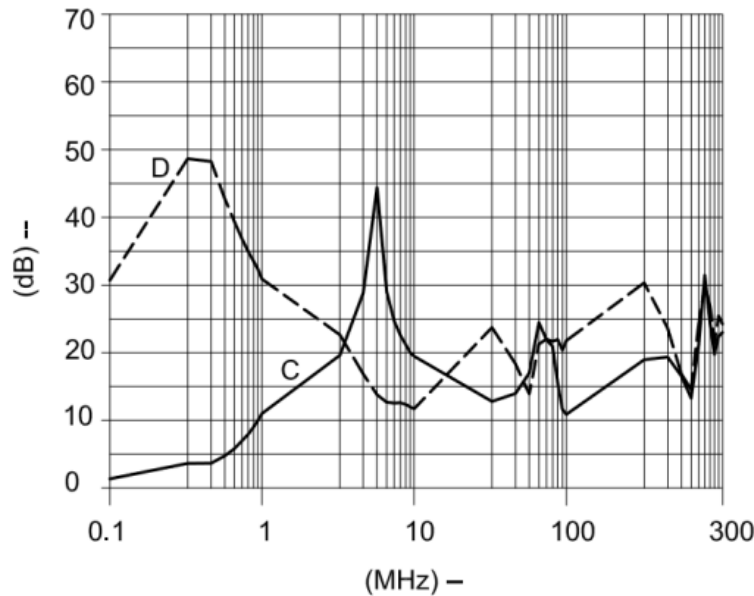
Filter attenuation Graph

C = Common mode (asymmetrical) —————


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

For general application (Single Stage)

For 1100A to 1600A



Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @440VAC	Bus bar 	Approx. Weight (Kg)	Attenuation
1	EF-3A1K3E01E-C57	1300	< 3.5	E	40	Standard
2	EF-3A1K6E01E-C57	1600	< 3.5	E	45	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.
- Protecting cover will provided on request.
- Customize products provided on request.



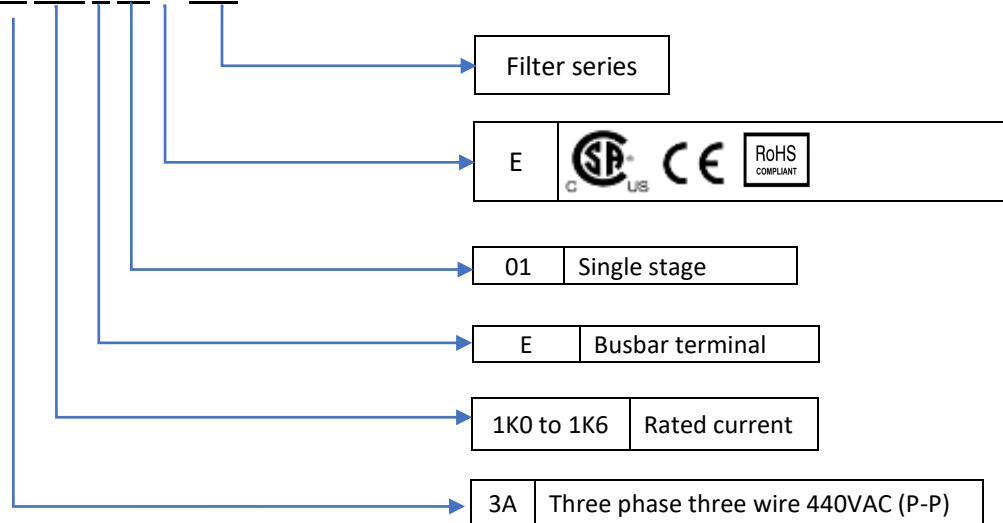
Connection Type :

El.italia EC-EC47 serie

Current Rating (A)	Busbar details				Earthing
	L (mm)	W (mm)	H (mm)	Screw for connection	
1300	100	40	15	M14	M12
1600	100	70	10	M14	M12

Syntax

EF – 3A CCC X YY E–C47





El.italia EC-EC48 serie

General Purpose AC EMI Filter

Conformance



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
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 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
- | Chassis mountable filter in fabricated metal can.
- | Aluminum metal casing provides good aesthetic and corrosion protection.
- | Filters available in medical version without capacitor to earth.
- | With surge suppressor filters also available.

Attenuation Type

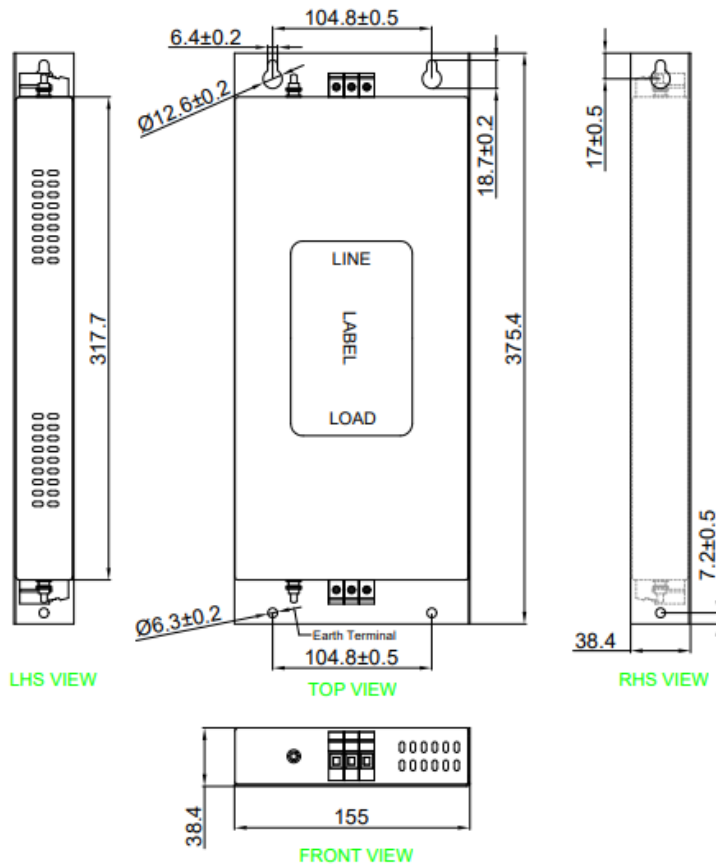
Double Stage	High
--------------	------

Applications

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



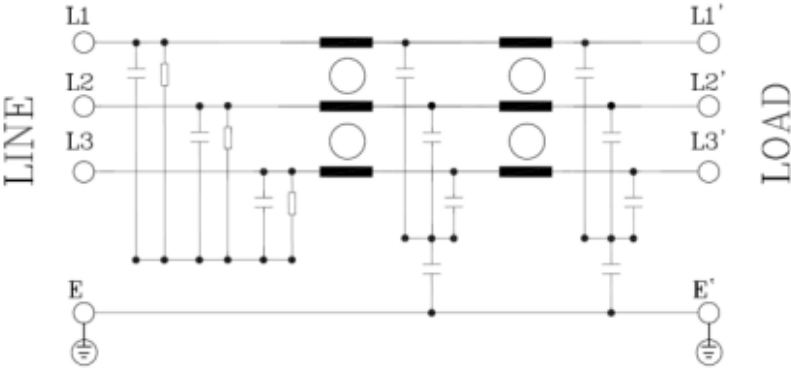
Mechanical details



All dimensions in mm
General tolerance = ±2%

Electrical schematic for Double Stage Filter

CKT-1



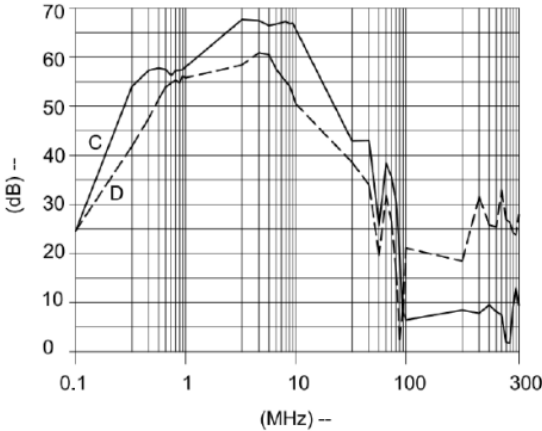
Filter attenuation Graph

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


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

For general application (Double Stage)

For 20A,25A & 30A



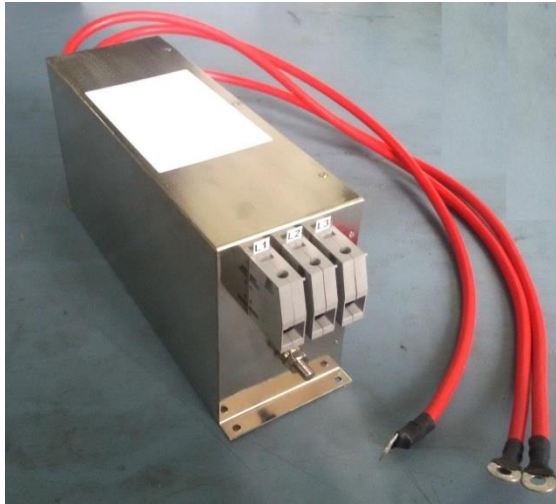
Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @440VAC	Terminals (X)	Approx. Weight (Kg)	Attenuation
				Touch safe 		
1	EF-3A020F24G-C48	20	< 3.5	F	1.5	High
2	EF-3A025F24G-C48	25	< 3.5	F	1.5	High
3	EF-3A030F24G-C48	30	< 3.5	F	1.5	High



High attenuation AC EMI Filter

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

*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

Attenuation Type

Single Stage	Standard
Double Stage	High
Triple Stage	Very High

Applications

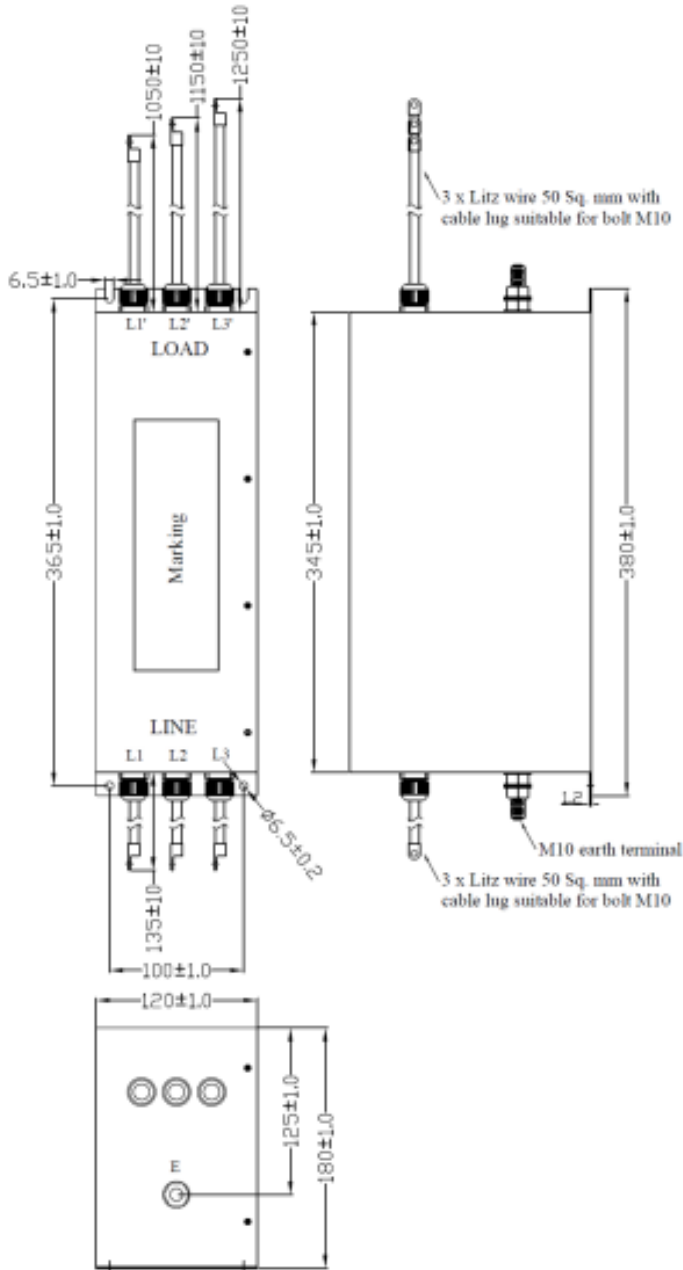
- | Consumer product
- | Defence application
- | Industrial application
- | Automotive application
- | Weighting Machines
- | Printing Machinery
- | Electrical equipment application
- | Office automation equipment



Mechanical details

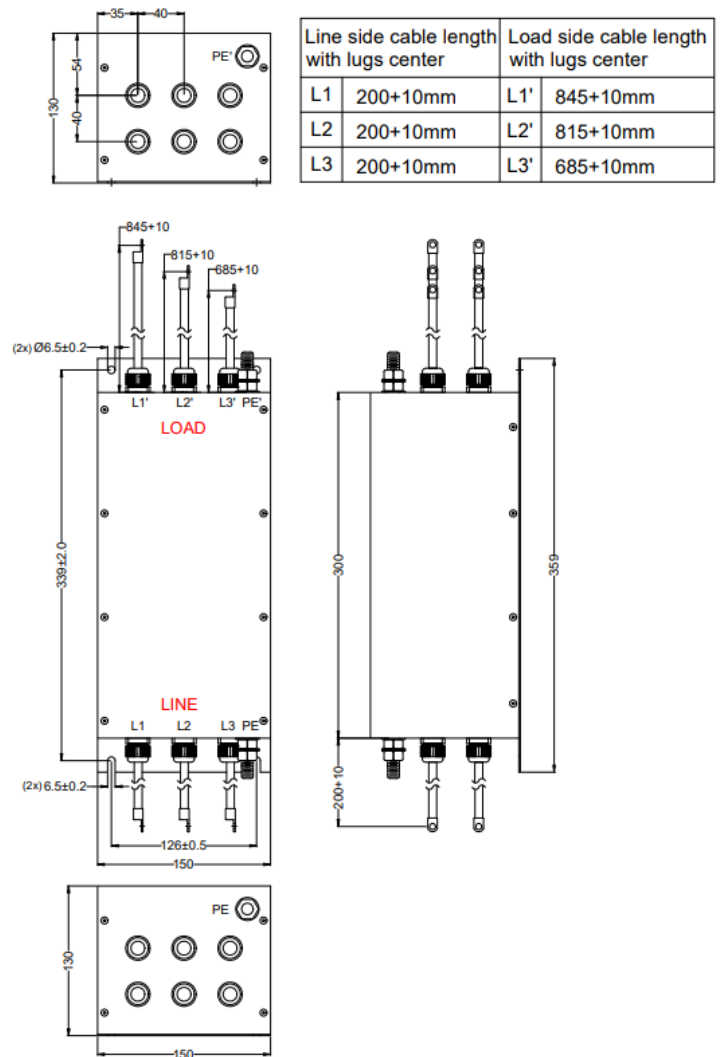
For wire lead terminal

For 140A



For wire lead terminal

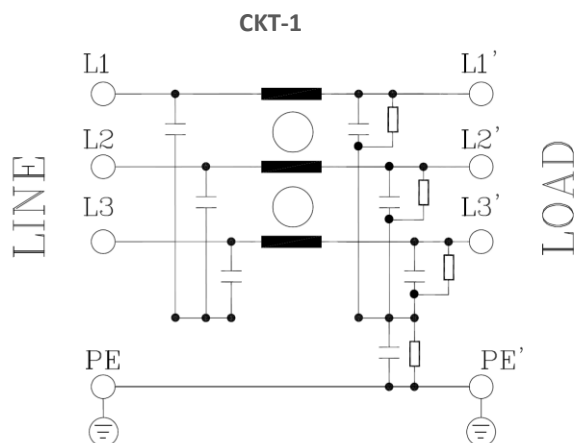
For 188A,222A,284A



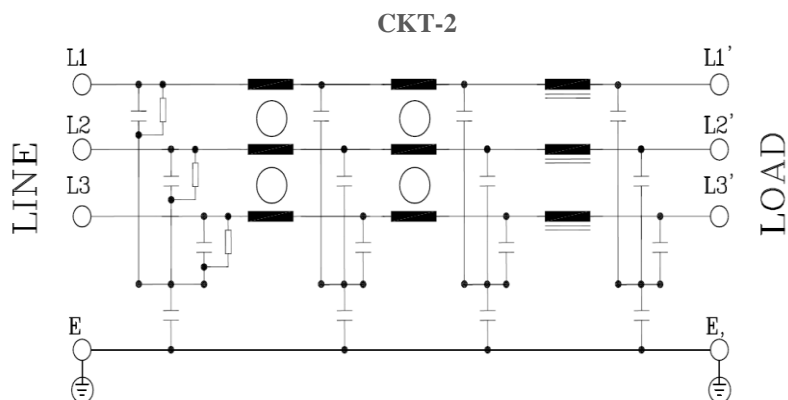


Electrical schematic for Single Stage Filter

El.italia EC-EC51 serie



Electrical schematic for Triple Stage Filter





El.italia EC-EC51 serie

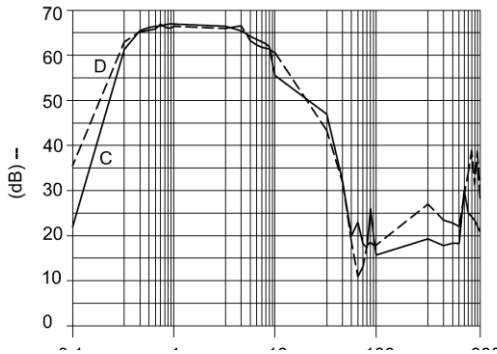
Filter attenuation Graph

C = Common mode (asymmetrical) —————

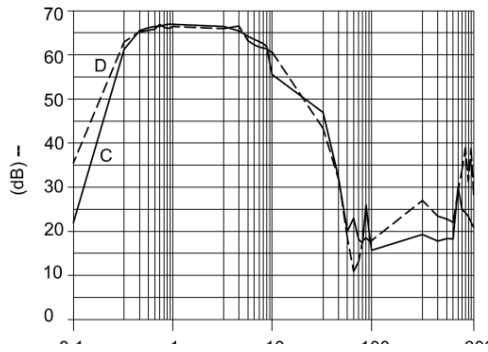
D = Differential mode (symmetrical) - - - - -

For Single Stage (CKT 1)

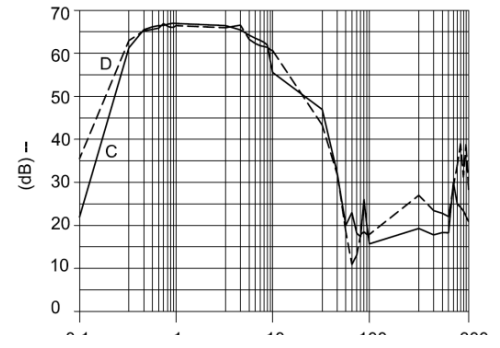
For 188A



For 222A

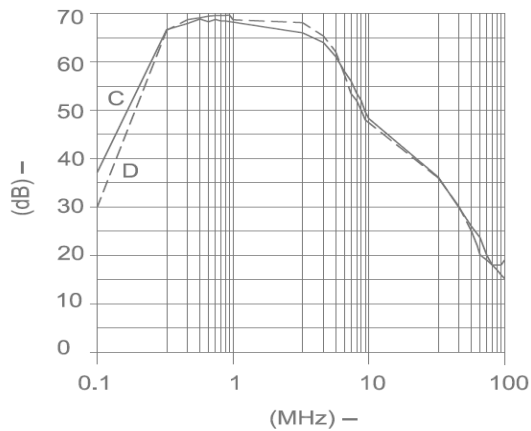


For 284A



For Triple Stage (CKT 2)



For 140A & 170A





Filter Selection Table

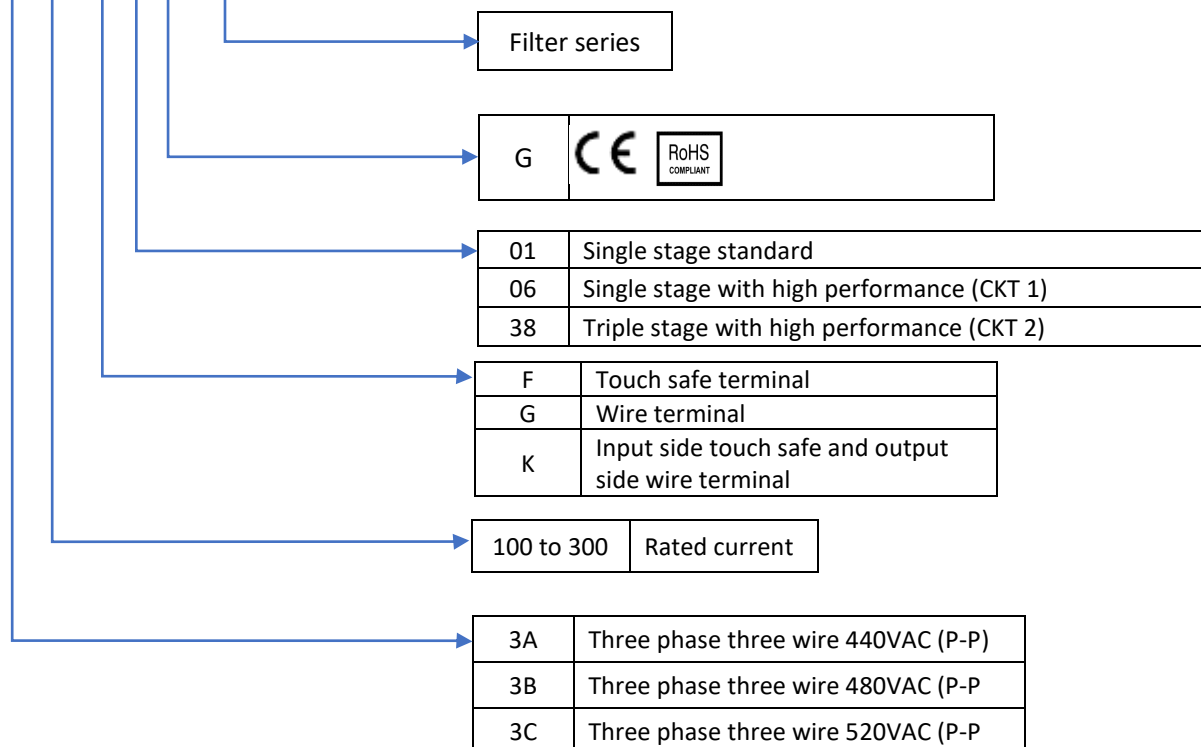
El.italia EC-EC51 serie

Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @440V AC	Terminals (X)		Weight (Kg)	Attenuation
				Wire 	Touch - safe 		
1	EF-3B140X38G-C51	140	< 6	G	F	8	Very High
2	EF-3B188X06G-C51	188	< 15	G	F	9	High
3	EF-3B222X06G-C51	222	< 15	G	F	9	High
3	EF-3B284X06G-C51	284	< 15	G		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.

Syntax

EF - 3A CCC X YY G - C51





High attenuation AC EMI Filter

El.italia EC-EC53 serie



Technical specifications

Operating voltage	440VAC (P-P)
Current rating	50A-80A
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 single& 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.
- | Various terminal options are available

Attenuation Type

Single Stage	Standard
Double Stage	High

Applications

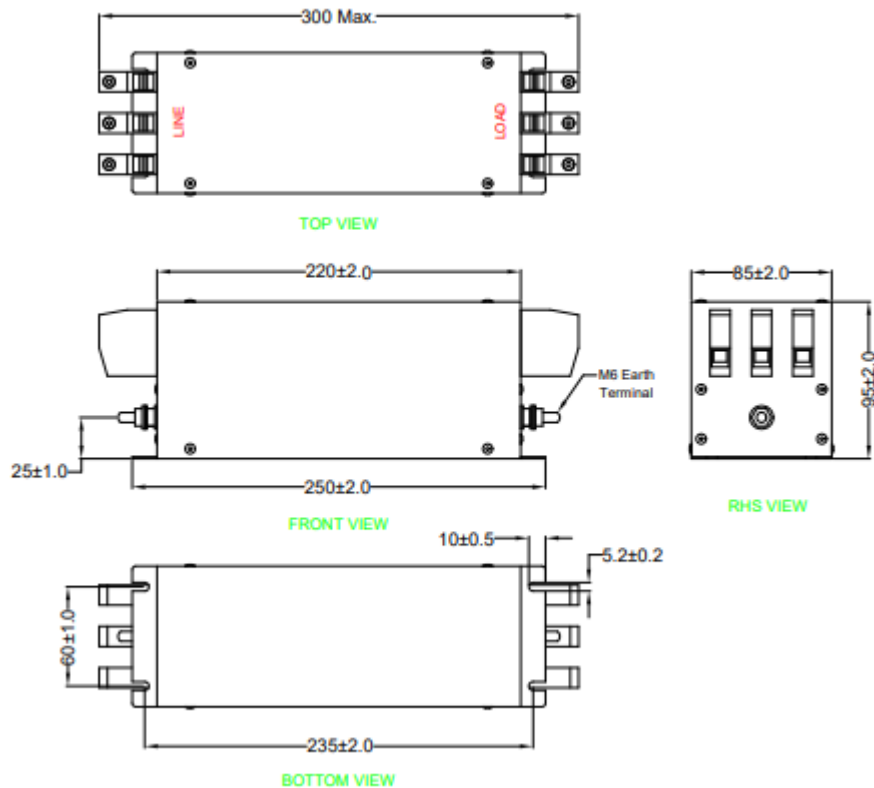
- | Consumer product
- | Defence application
- | Industrial application
- | Automotive application
- | Printing Machinery
- | Electrical equipment application



Mechanical details

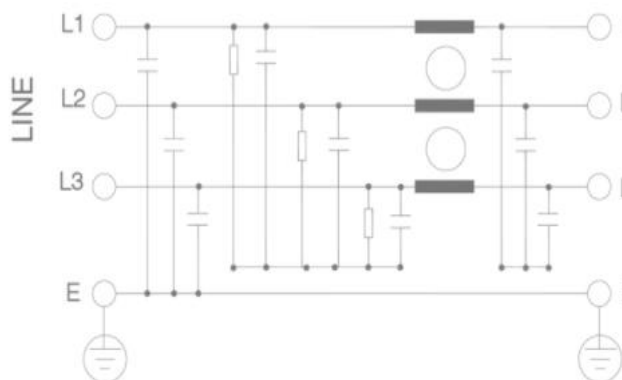
El.italia EC-EC53 serie

Touch safe terminal



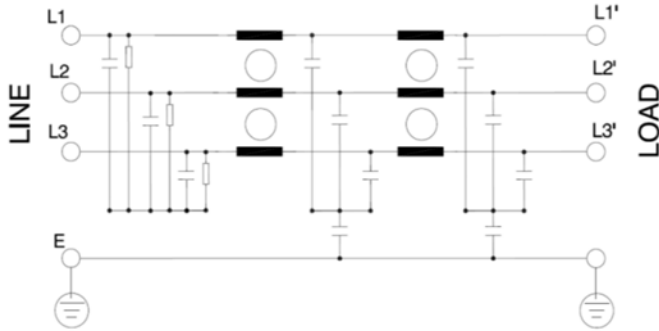
*All dimensions are in mm.
General tolerance=±2%

Electrical schematic for Single stage filter





Electrical schematic for Double stage filter



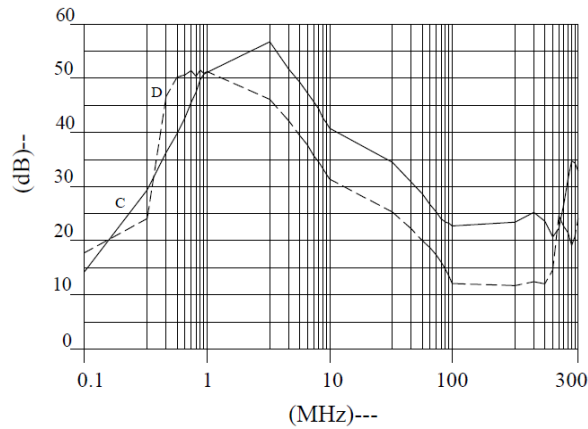
Filter attenuation graph

C = Common mode (asymmetrical)

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

For single stage

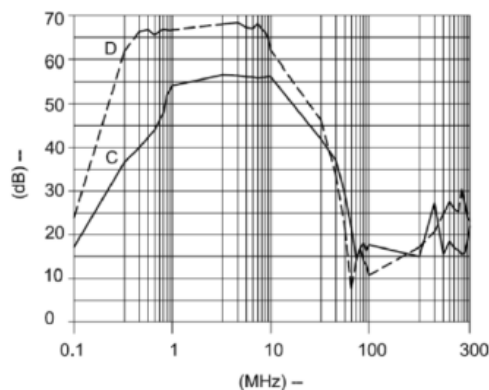
For 50-80A







For double stage

For 50-60A



Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Current rating (A)	Leakage current (mA) @440V AC	Terminals (X)		Weight (Kg)	Attenuation
				Screw 	Touch -safe 		
1	EF-3A050X01G-C53	50	< 3.5	D	F	1.8	Standard
2	EF-3A060X01G-C53	60	< 3.5	D	F	1.8	Standard
2	EF-3A080X01G-C53	80	< 3.5	D	F	1.8	Standard
4	EF-3A050X20G-C53	50	< 3.5	D	F	2	High
5	EF-3A060X20G-C53	60	< 3.5	D	F	2	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A050D20G-C53)
- Customize products provided on request.



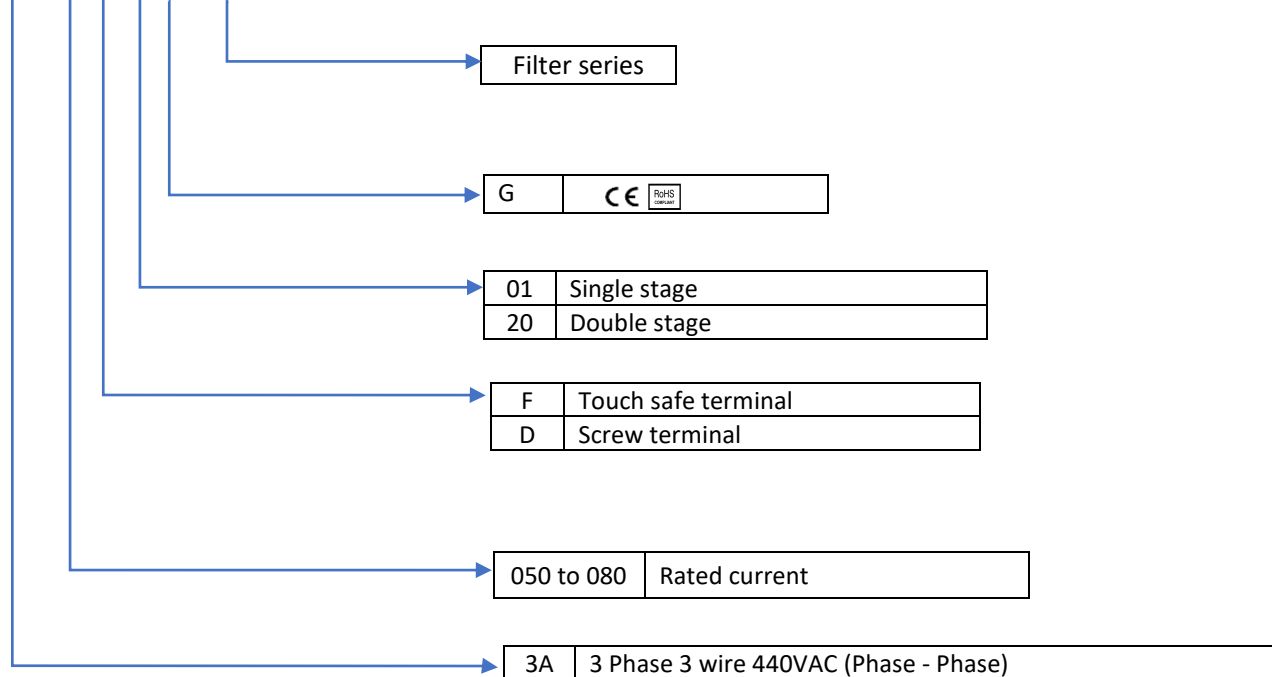
Connection type

El.italia EC-EC53 serie

Current Rating (A)	Screw terminal details		Touch safe terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Touch safe	Recommended tightening torque	
50	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M6
60	M6	20-25Kgcm	16 Sq.mm	22-25 lbf.in	M6
80	M8	25-30Kgcm	16 Sq.mm	22-25 lbf.in	M6

Syntax

EF - 3A CCC X YY G - C53





General Purpose AC EMI Filter

El.italia EC-EC55 serie



*Image shown is for illustrative purpose only

Technical specifications

Operating voltage	440VAC (P-P)
Current rating	80A - 150A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P ->P 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°C / -25°C +85°C

Features and benefits

- | Filters available in Single stage & double stage.
- | All filters provide high attenuation performance.
- | Two stage filters designed for noisy application requiring excellent filter performance.
- | High reliable
- | Easy and fast chassis mountable filter with compact size.
- | CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- | General purpose filters with low leakage current for safety critical application.
- | Various terminal options are available

Attenuation Type

Single Stage	Standard
Double Stage	High

Applications

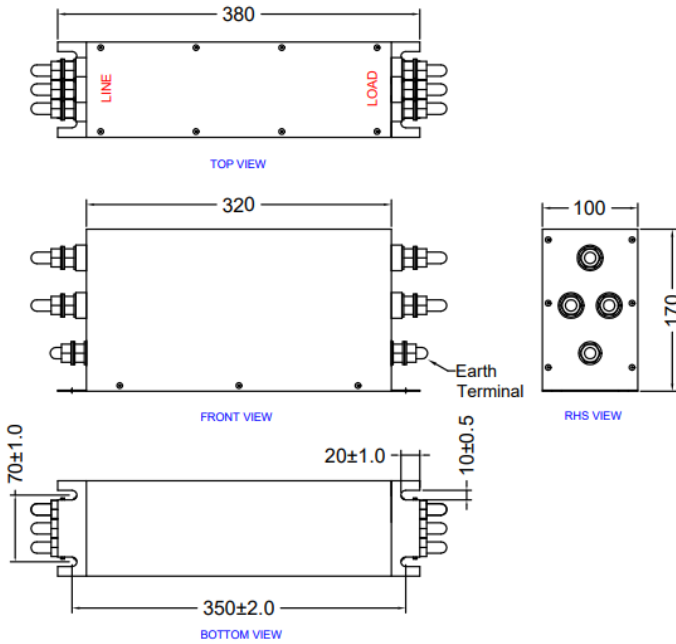
- | Defence application
- | Industrial application
- | Automotive application
- | Weighting Machines
- | Printing Machinery
- | Electrical equipment application
- | Office automation equipment



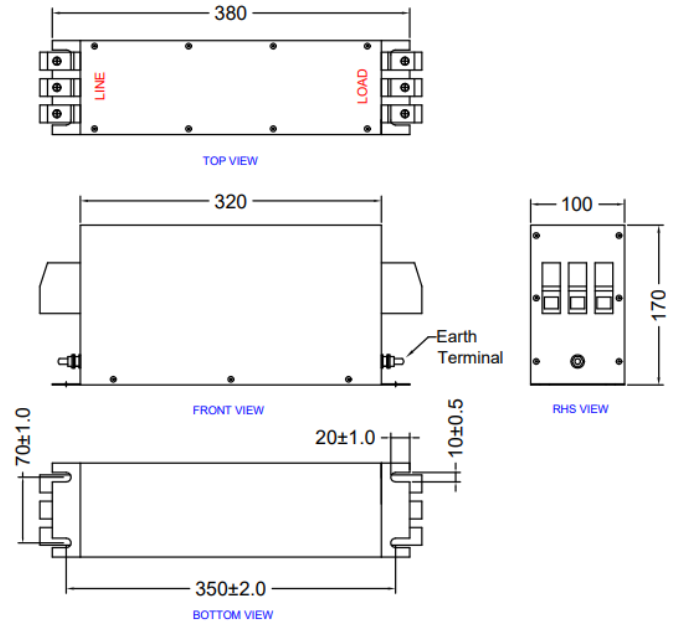
Mechanical details

El.italia EC-EC55 serie

For screw terminal



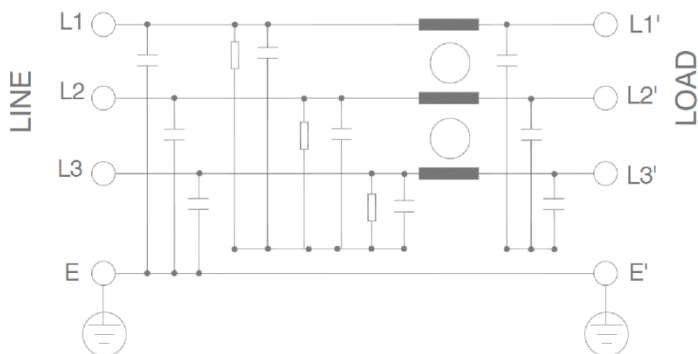
For touch safe terminal



All dimensions in mm
General tolerance = $\pm 2\%$

Electrical schematic for Single Stage Filter

General purpose –

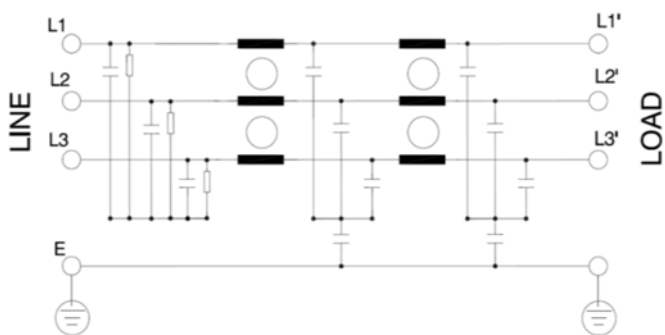




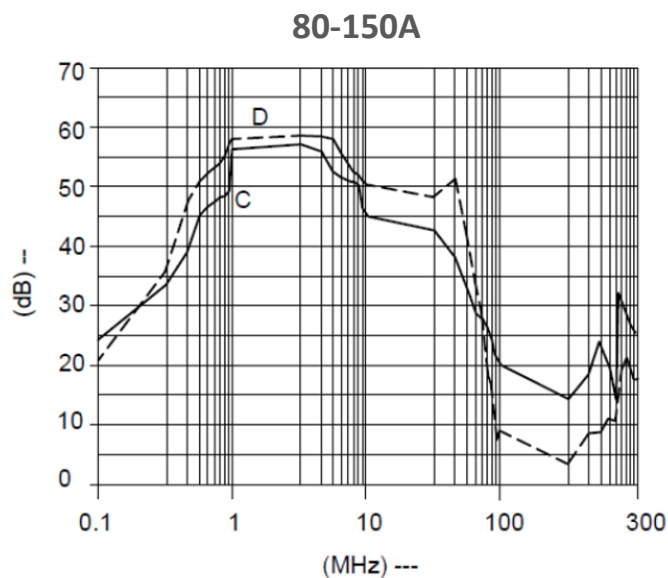
El.italia EC-EC55 serie

Electrical schematic for double stage filter

General Purpose -



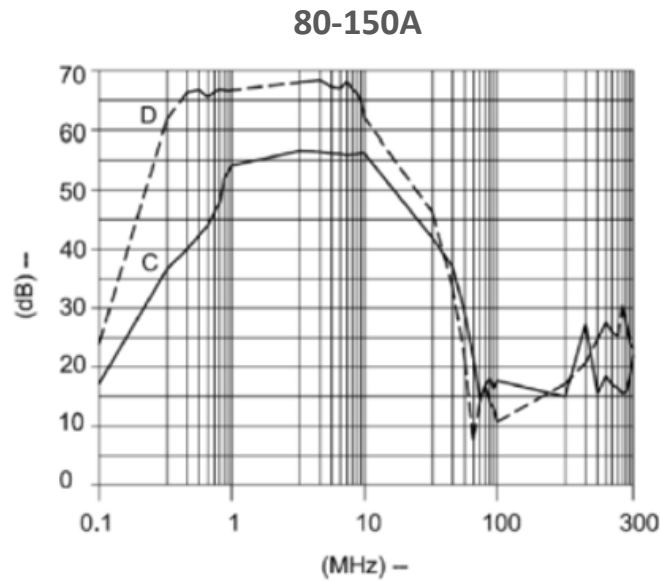
Graph for filter for Single Stage







Graph for filter for Double Stage

El.italia EC-EC55 serie



Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @250VAC	Terminals (X)		Approx. Weight (Kg)	Attenuation
				Screw 	Touch safe 		
1	EF-3A080X01G-C55	80	< 3.5	D	F	5	Standard
1	EF-3A100X01G-C55	100	< 3.5	D	F	5	Standard
2	EF-3A120X01G-C55	120	< 3.5	D	F	6	Standard
3	EF-3A150X01G-C55	150	< 3.5	D	F	6	Standard
4	EF-3A080X20G-C55	80	< 3.5	D	F	6	High
5	EF-3A100X20G-C55	100	< 3.5	D	F	6	High
6	EF-3A120X20G-C55	120	< 3.5	D	F	7	High
7	EF-3A150X20G-C55	150	< 3.5	D	F	7	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A080D01G-C55)
- 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.



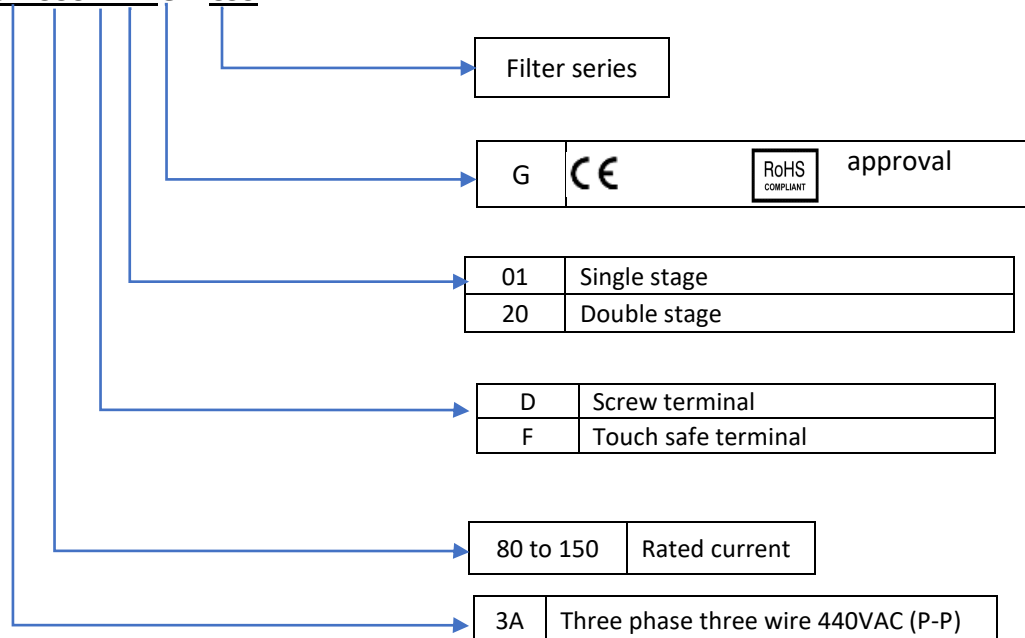
Connection Type

El.italia EC-EC55 serie

Current Rating (A)	Screw terminal details		Touch safe terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Touch safe	Recommended tightening torque	
80	M8	25-30Kgcm	16 sq.mm.	22-25 lbf.in	M8
100	M10	35-40Kgcm	50 sq.mm.	38-40 lbf.in	M10
120	M10	35-40Kgcm	50 sq.mm.	38-40 lbf.in	M12
150	M12	35-40Kgcm	50 sq.mm.	38-40 lbf.in	M12

Syntax

EF - 3A CCC X YY G - C55



Datasheet | EC57 EP-355WON Series



General Purpose AC EMI Filter

El.italia EC-EC57 [EP-355WON] serie



*Image shown is for illustrative purpose only



Technical specifications

Operating voltage	440VAC (P -P)
Current rating	700A - 1000A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P -> N 2121VDC (applicable for general purpose filter)
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°C / -25°C +85°C

Features and benefits

- | All filters provide high attenuation performance.
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- | Single stage.
- | High reliable
- | Chassis mountable filter in fabricated metal can.
- | CRCA metal can with nickel plating provides good aesthetic and corrosion protection.
- | General purpose filter with low leakage current for safety critical application.

Attenuation Type

Single Stage

Standard

Application

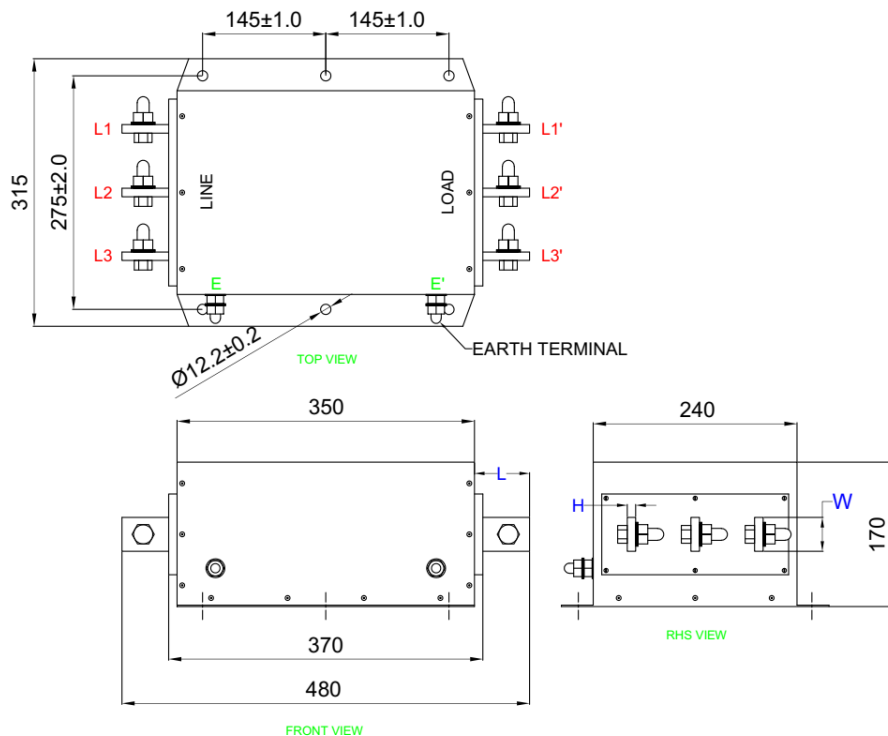
- | Electrical and electronic equipment
- | Test & measurement equipment
- | 3 Phase motor drive
- | Inverters and converters
- | Industrial automation application UPS, SMPS
- | Laser cutting tools
- | Packaging and drilling machine
- | Printing machine

Datasheet | EC57 EP-355WON Series



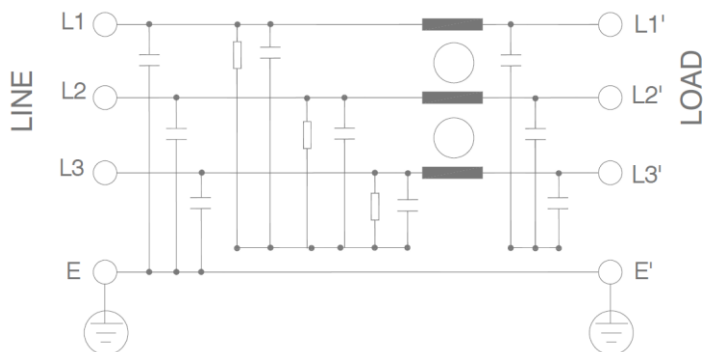
Mechanical details

El.italia EC-EC57 [EP-355WON] serie



All dimensions are in mm.
General tolerance $\pm 2\%$

Electrical schematic for filter



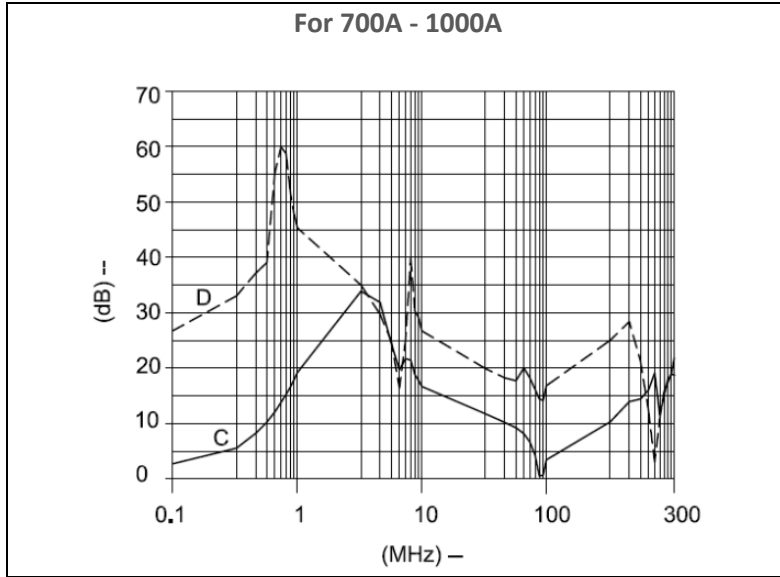


El.italia EC-EC57 [EP-355WON] serie


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) @250VAC	Bus bar 	Approx. Weight (Kg)	Attenuation
1	EF-3A700E01E-C57	700	< 3.5	E	28	Standard
2	EF-3A800E01E-C57	800	< 3.5	E	28	Standard
3	EF-3A1K0E01E-C57	1000	< 3.5	E	30	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.
- Customize products provided on request.

Connection Type :

Current Rating (A)	Busbar details				Earthing
	L (mm)	W (mm)	H (mm)	Screw for connection	
700	65	40	10	M12	M12
800	65	40	10	M12	M12
1000	65	40	12	M12	M12

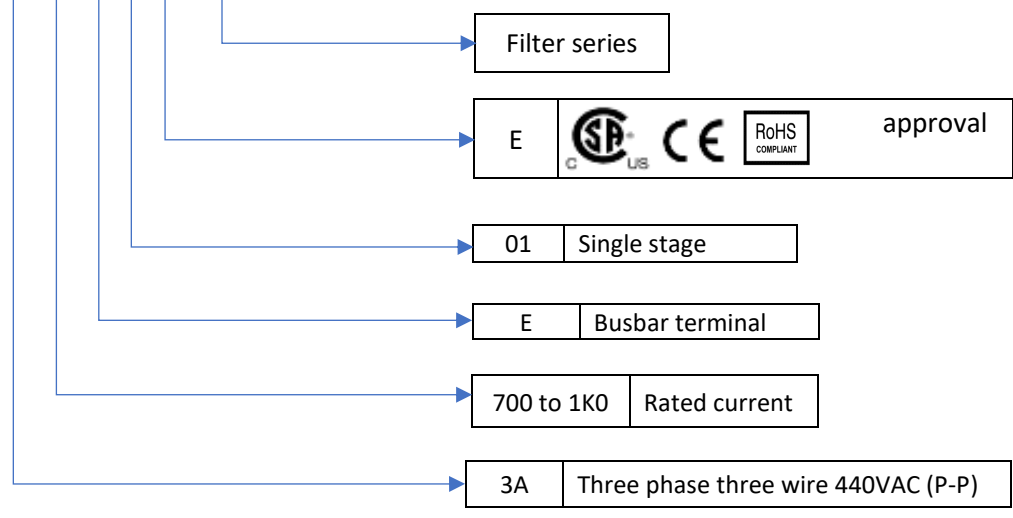
Datasheet | EC57 EP-355WON Series



Syntax

El.italia EC-EC57 [EP-355WON] serie

EF - 3A CCC X YY E - C57





High attenuation AC EMI Filter

El.italia EC-EC64 serie



Technical specifications



Operating voltage	440VAC (P-P)
Current rating	1700A-2000A
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 single& 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.

Attenuation Type

Single Stage	Standard
Double Stage	High

Applications

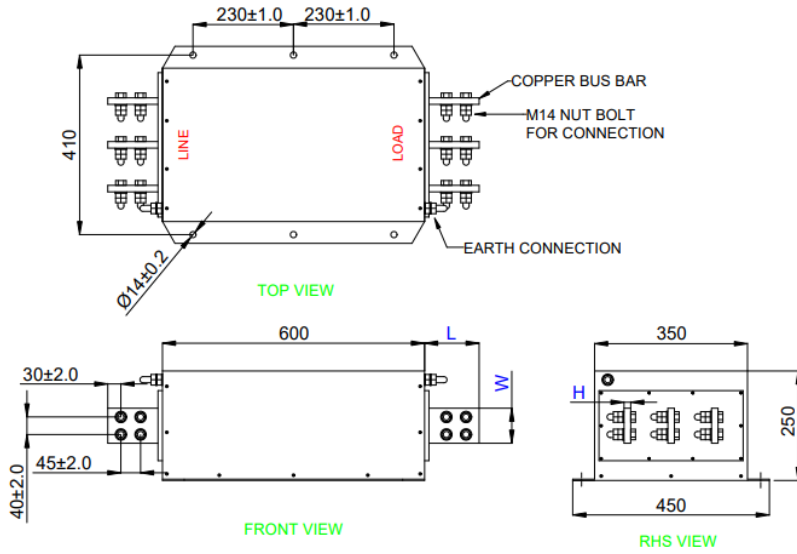
- | Consumer product
- | Defence application
- | Industrial application
- | Automotive application
- | Printing Machinery
- | Electrical equipment application



Mechanical details

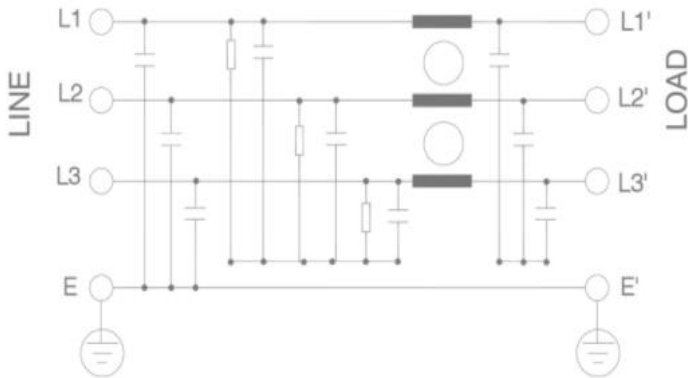
El.italia EC-EC64 serie

Busbar terminal



*All dimensions are in mm.
General tolerance=±2%

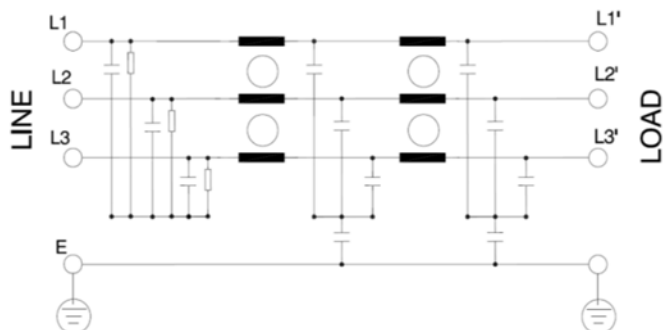
Electrical schematic for Single stage filter





El.italia EC-EC64 serie

Electrical schematic for Double stage filter



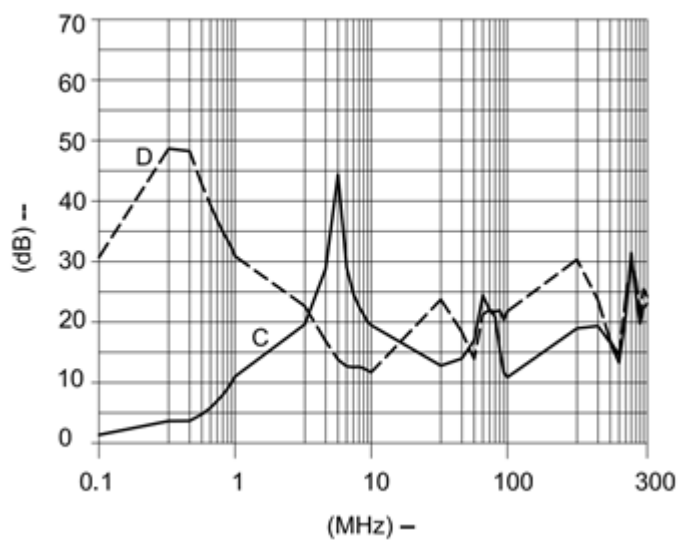
Filter attenuation graph

C = Common mode (asymmetrical)

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

For single stage


For 1700-2000A





Filter Selection Table –

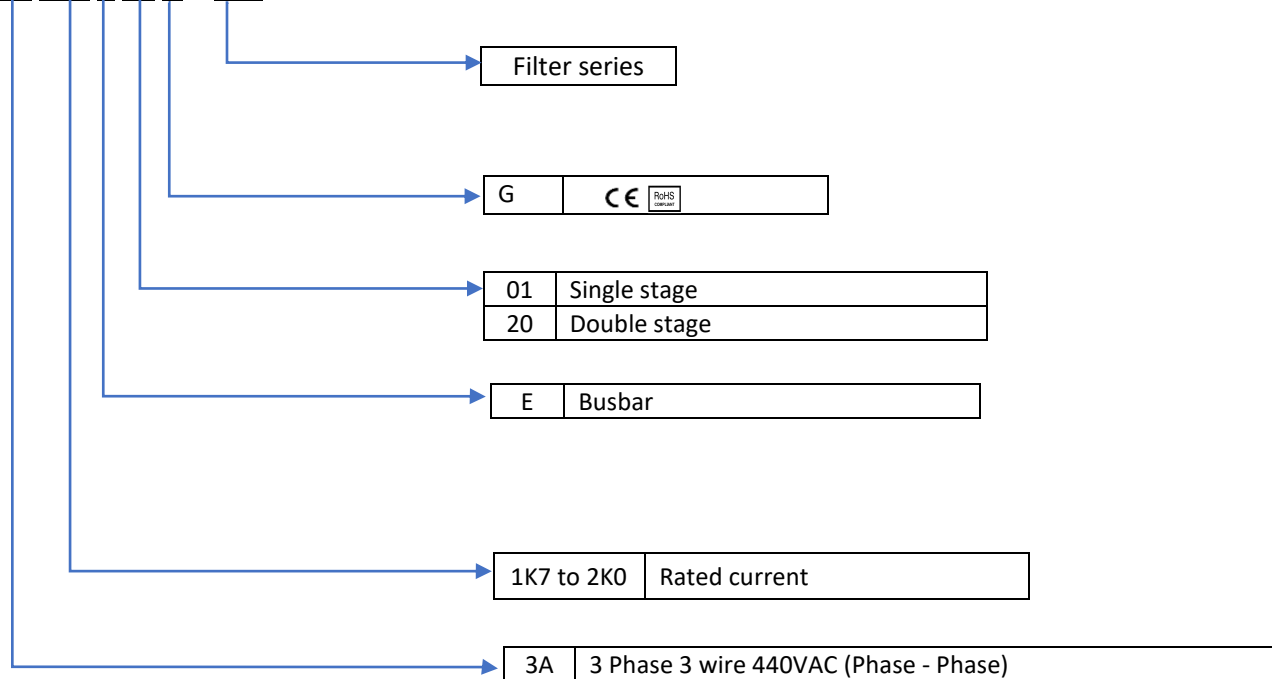
El.italia EC-EC64 serie

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @440VAC	Bus bar 	Attenuation
1	EF-3A1K7E01G-C64	1700	< 3.5	E	Standard
2	EF-3A1K8E01G-C64	1800	< 3.5	E	Standard
3	EF-3A1K9E01G-C64	1900	< 3.5	E	Standard
4	EF-3A2K0E01G-C64	2000	< 3.5	E	Standard
5	EF-3A1K7E20G-C64	1700	< 3.5	E	High
6	EF-3A1K8E20G-C64	1800	< 3.5	E	High
7	EF-3A1K9E20G-C64	1900	< 3.5	E	High
8	EF-3A2K0E20G-C64	2000	< 3.5	E	High

- Customize products provided on request.

Syntax

EF – 3A CCC X YY G – C64





General Purpose AC EMI Filter

El.italia EC-EC65 serie



*Image shown is for illustrative purpose only

Technical specifications

Operating voltage	440VAC (P-P)
Current rating	180A - 250A
Frequency	50/60Hz
Voltage drop	1 Volt max.
High potential test voltage	P -> E 1500VAC P ->P 2121VDC
Insulation resistance	≥ 300 MΩ @ 500VDC (P→E)
Operating temperature	40°c /-25°c +85°c

Features and benefits

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

Attenuation Type

Single Stage	Standard
Double Stage	High

Applications

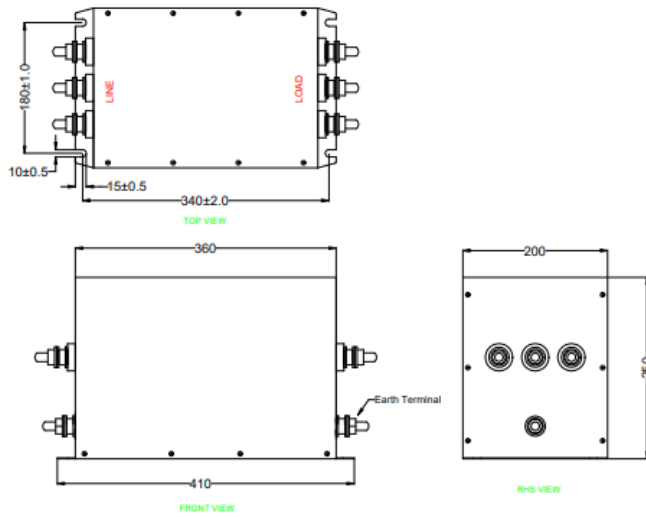
- | Consumer product
- | Defence application
- | Medical equipment
- | Industrial application
- | Automotive application
- | Weighting Machines
- | Printing Machinery
- | Electrical equipment application
- | Office automation equipment



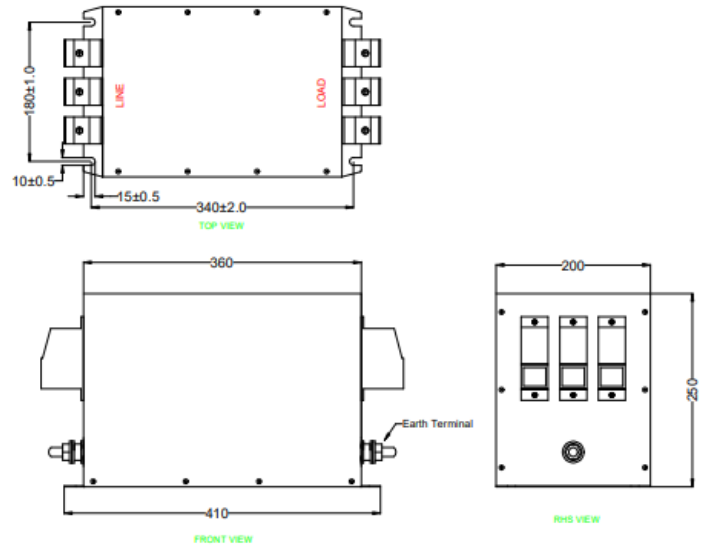
Mechanical details

El.italia EC-EC65 serie

For screw terminal



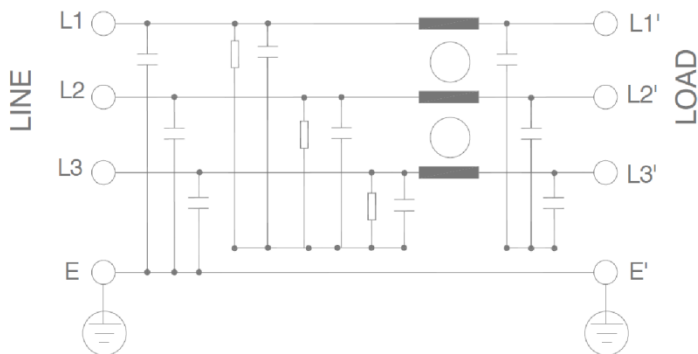
For touch safe terminal



All dimensions in mm
General tolerance = ±2%

Electrical schematic for Single Stage Filter

General purpose –

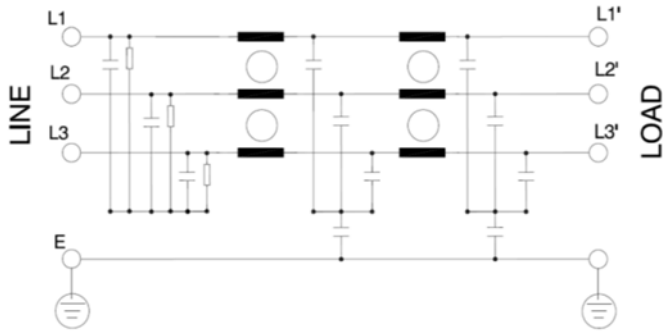




Electrical schematic for double stage filter

El.italia EC-EC65 serie

General Purpose -

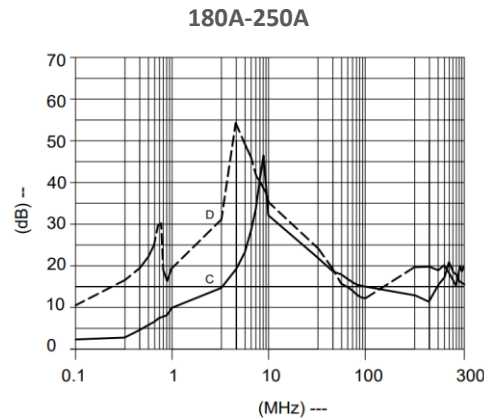


Filter attenuation graph

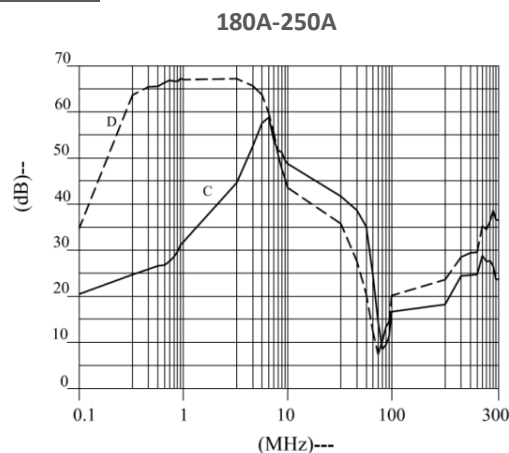
C = Common mode (asymmetrical) —————

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

For general application (Single Stage)



For general application (double Stage)





El.italia EC-EC65 serie

Filter Selection Table

Sr. No.	Elcom part codes (ordering code)	Rated Current rating (A) @40°C	Leakage current (mA) @250VAC	Terminals (X)		Approx. Weight (Kg)	Attenuation
				Screw	Touchsafe		
1	EF-3A180X01G-C65	180	< 3.5	D	F	10	Standard
2	EF-3A200X01G-C65	200	< 3.5	D	F	10	Standard
3	EF-3A250X01G-C65	250	< 3.5	D	F	10	Standard
4	EF-3A180X20G-C65	180	< 3.5	D	F	10	High
5	EF-3A200X20G-C65	200	< 3.5	D	F	10	High
6	EF-3A250X20G-C65	250	< 3.5	D	F	10	High

- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A180D01G-C65)
- Customize products provided on request.

Connection Type

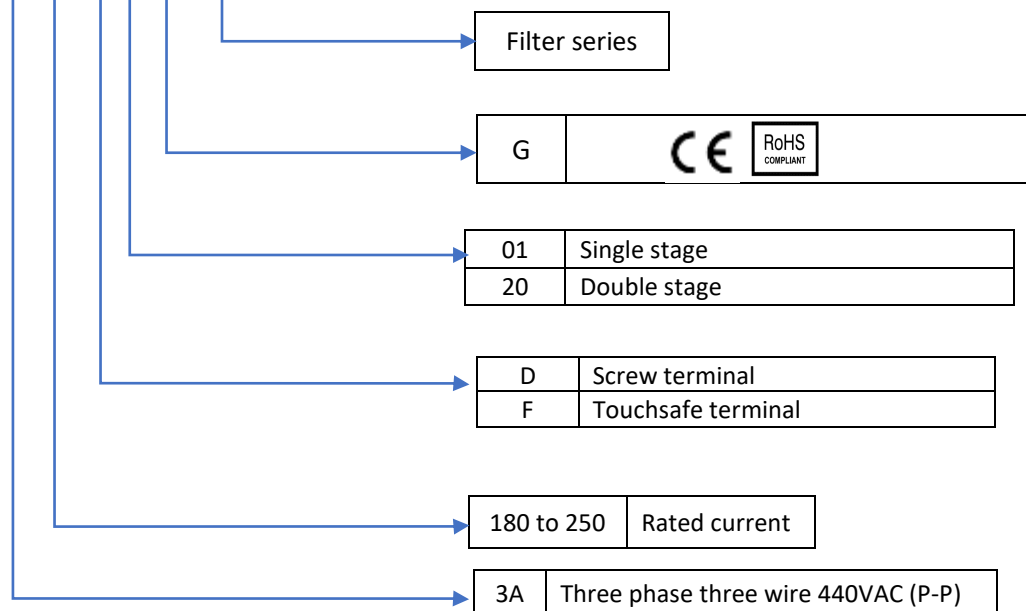
Current Rating (A)	Screw terminal details		Touch safe terminal details		Earthing screw terminal details
	Screw	Recommended tightening torque	Touch safe	Recommended tightening torque	
180	M12	35-40Kgcm	95 sqmm	132-177 lbf.in	M10
200	M12	35-40Kgcm	95 sqmm	132-177 lbf.in	M10
250	M12	35-40Kgcm	150 sqmm	50-60 lbf.in	M12



Syntax

El.italia EC-EC65 serie

EF - 3A CCC X YY G - C65



Datasheet | EE07

Three phase three wire



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

- | Filters available in single stage
- | All filters provide high attenuation performance.
- | All filters compliance to EN60939-3:2015 & EN60939-2:2005 standards.
- | High reliable
- | Easy and fast din 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.

Attenuation Type

Single Stage

Standard

Applications

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

Datasheet | EE07

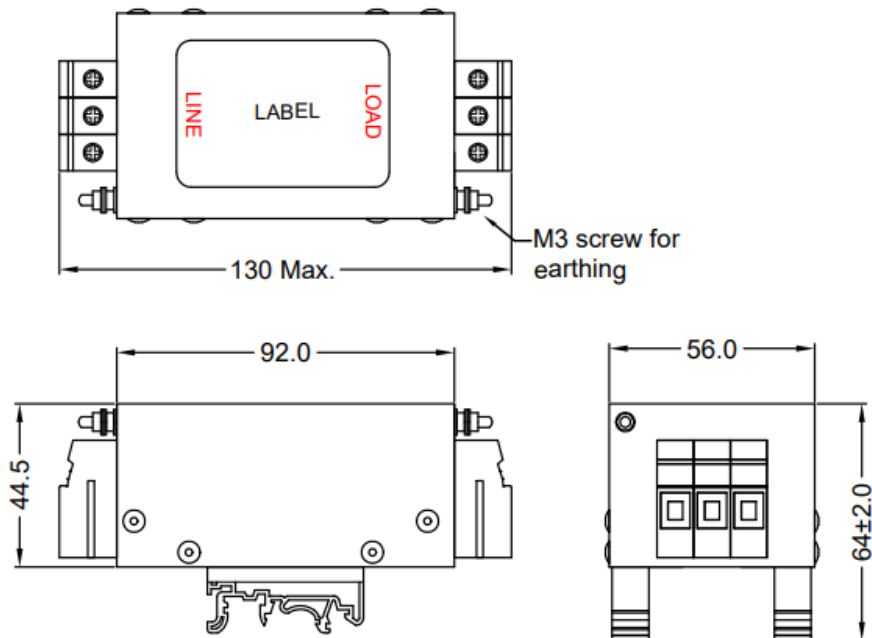
Three phase three wire



Mechanical details

El.italia EC-EE07 serie

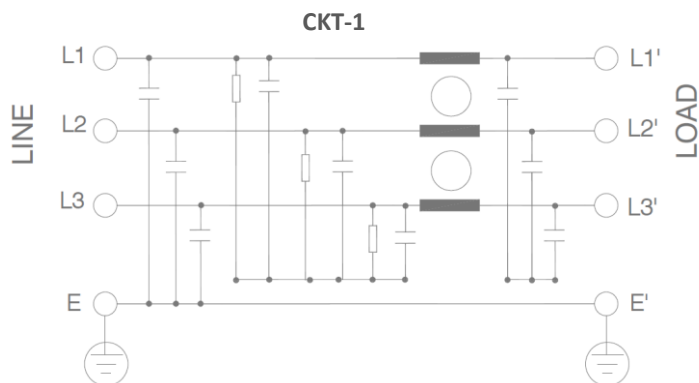
I For touch safe terminal



All dimensions in mm
General tolerance=±1mm

Electrical schematic for Single Stage Filter

General purpose –



Datasheet | EE07

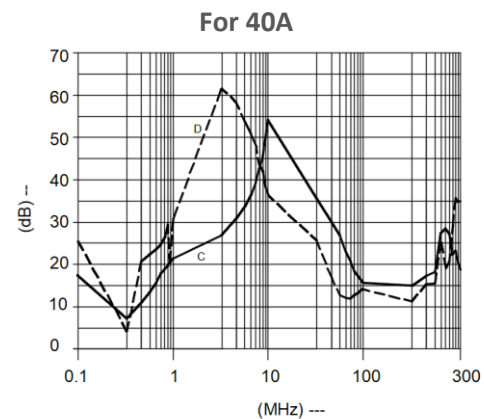
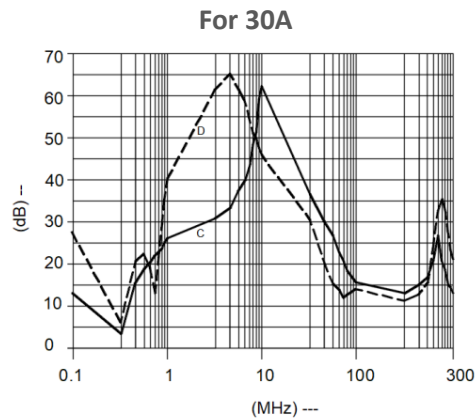
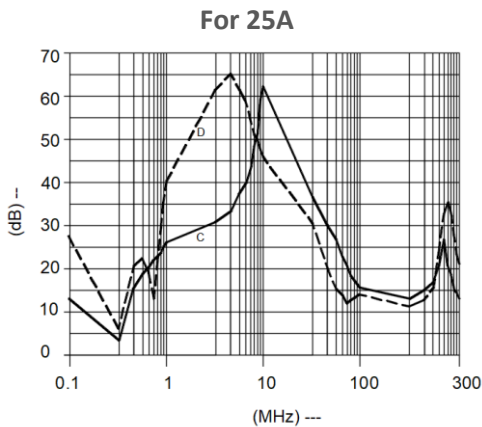
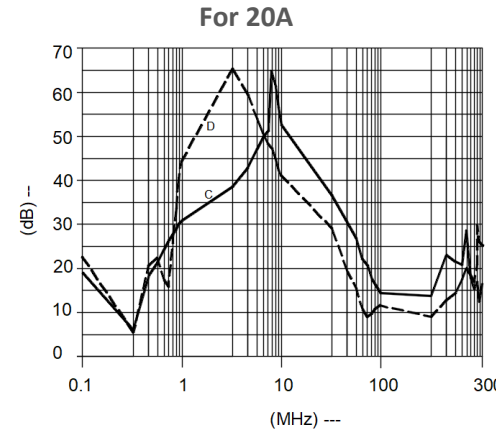
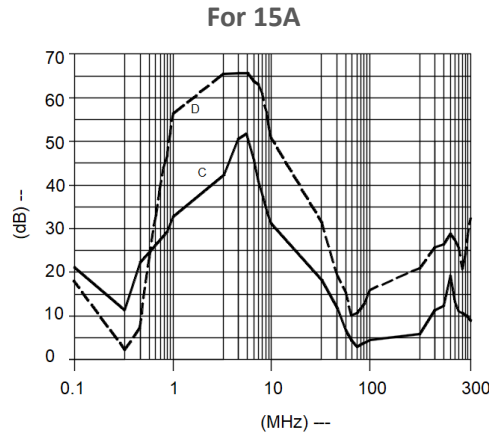
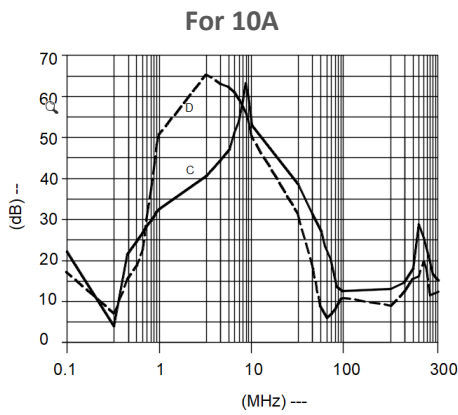
Three phase three wire




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)	Approx. Weight (gm)	Attenuation
				Touch safe 		
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

Datasheet | EE07

Three phase three wire



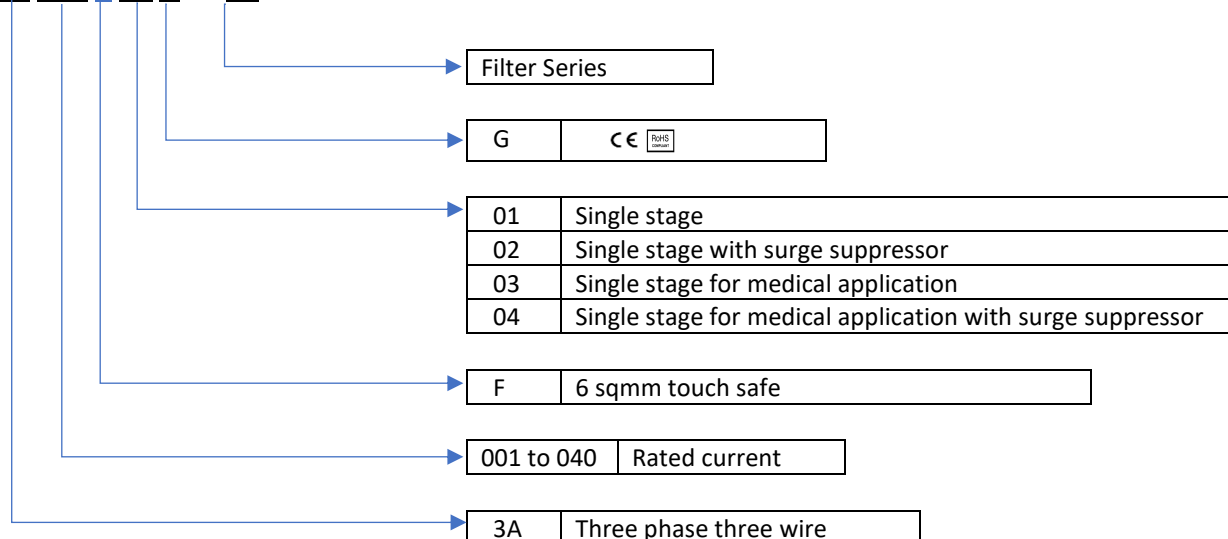
El.italia EC-EE07 serie

Connection Type

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

Syntax

EF - 3A CCC X YY G - E07



- To compile complete part number, replace the 'X' with required I/O connection terminal. (e.g. EF-3A010F02G-E07).
- 6 sqmm touch safe terminal tightening torque 10.6-13 lbf.in
- Customize products provided on request.