

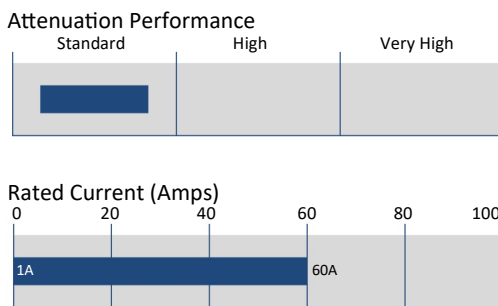


## Standard Performance Single Phase EMI Powerline Filter

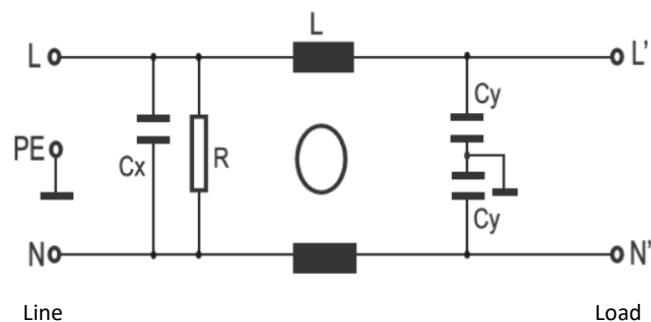
- General purpose filtering performance with good noise suppression, Single-Stage
- Rated currents from 1 to 60 Amps
- Optional medical versions available (Type B)
- Optional safety versions available (Type A)



### Performance Indicators



### Electrical Diagram



### Features and Benefits

- BL2010 filters are designed for easy and fast chassis mounting
- BL2010 filters are also available as B versions without Y-capacitors for medical applications as well as A version with low capacitance for safety critical applications with necessity for low leakage currents
- All filters provide a general purpose conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behaviour
- BL2010 filters can be used to cover a broad range of usage and they offer a good size/amperage ratio. BL2010 filters are also available as two-stage filters (BL2090 series) for more noisy environments.
- Various terminal options allow you to select the desired connection style

### Technical Specification

Operating voltage	250 VAC, 50/60 Hz
Operating frequency	dc to 400 Hz
Rated currents	1 to 30 A @ 40 °C max
High potential test voltage	L → PE 3000 VDC for 2 sec (Standard types) L → N 1100 VDC for 2 sec L → PE 3500 VDC for 2 sec (B types)
Temperature range (operation and storage)	-25 °C to +100 °C (25/100/21)
Design corresponding to	UL 1283, CSA 22.2 No. 8 1986, IEC/EN 60939

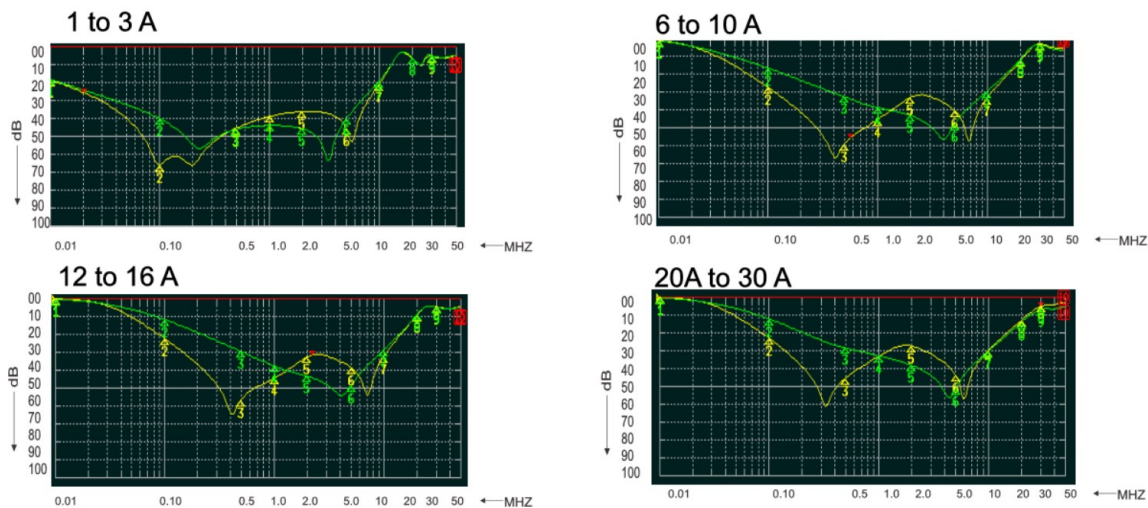
### Typical Applications

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Medical equipment
- Office automation equipment

Filter Selection Table

Filter Model (where X = connection)	Rated Current @40 °C (Amps)	Leakage Current @230Vac/50Hz (mA)	Inductance L (mH)	Capacitance		Resistance R (kΩ)	Input/Output Connections		
				Cx (μF)	Cy (nF)				
BL2010-01-X	1	0.74	12	0.1	9.4	1000	F	W	
BL2010-03-X	3	0.74	2.5	0.1	9.4	1000	F	W	
BL2010-06-X	6	0.74	1	0.1	9.4	1000	F	W	
BL2010-10-X	10	0.74	0.8	0.1	9.4	1000	F	W	
BL2010-12-X	12	0.74	0.7	0.1	9.4	1000	F	W	
BL2010-16-X	16	0.74	0.7	0.1	9.4	1000	F	W	
BL2010-20-X	20	0.74	0.6	0.1	9.4	1000	F	W	
BL2010-30-X	30	0.87	0.7	0.47	20	1000			S
<b>Safety Version (A)</b>									
BL2010A-01-X	1	0.074	12	0.1	0.94	1000	F	W	
BL2010A-03-X	3	0.074	2.5	0.1	0.94	1000	F	W	
BL2010A-06-X	6	0.074	1	0.1	0.94	1000	F	W	
BL2010A-10-X	10	0.074	0.8	0.1	0.94	1000	F	W	
BL2010A-12-X	12	0.074	0.7	0.1	0.94	1000	F	W	
BL2010A-16-X	16	0.074	0.7	0.1	0.94	1000	F	W	
BL2010A-20-X	20	0.074	0.6	0.1	0.94	1000	F	W	
BL2010A-30-X	30	0.074	0.7	0.47	0.94	1000			S
<b>Medical Version (B)</b>									
BL2010B-01-X	1	0.002	12	0.1		1000	F	W	
BL2010B-03-X	3	0.002	2.5	0.1		1000	F	W	
BL2010B-06-X	6	0.002	1	0.1		1000	F	W	
BL2010B-10-X	10	0.002	0.8	0.1		1000	F	W	
BL2010B-12-X	12	0.002	0.7	0.1		1000	F	W	
BL2010B-16-X	16	0.002	0.7	0.1		1000	F	W	
BL2010B-20-X	20	0.002	0.6	0.1		1000	F	W	
BL2010B-30-X	30	0.002	0.7	0.47		1000			S

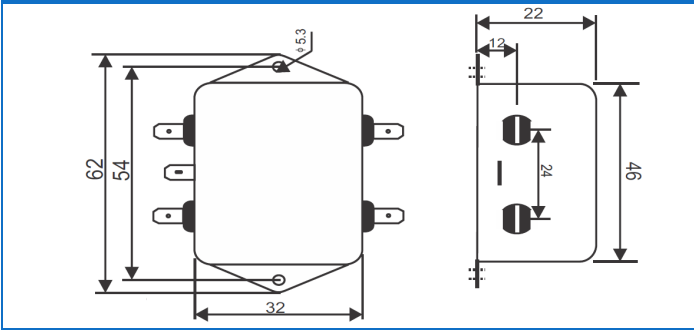
Typical Filter Attenuation



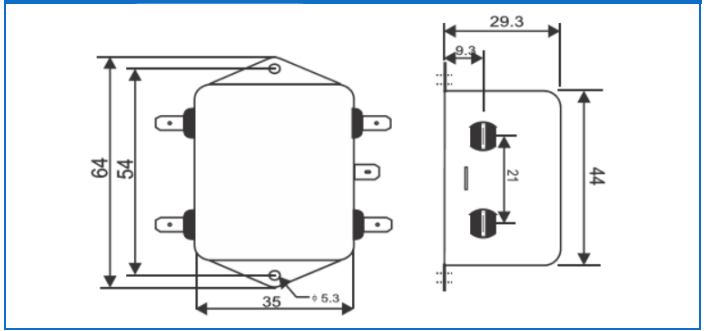
Insertion Loss: Common mode —  
 Differential mode —

Mechanical Dimensions (mm)

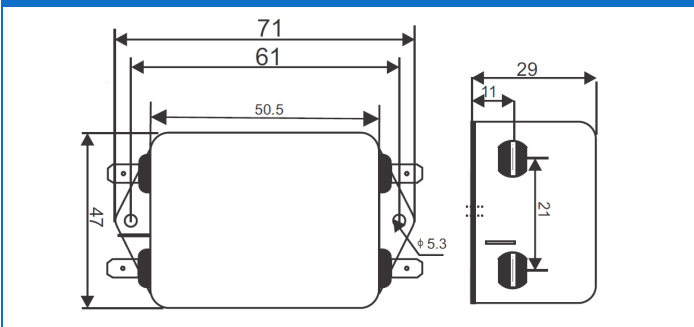
Connection Type F, 1A to 6A



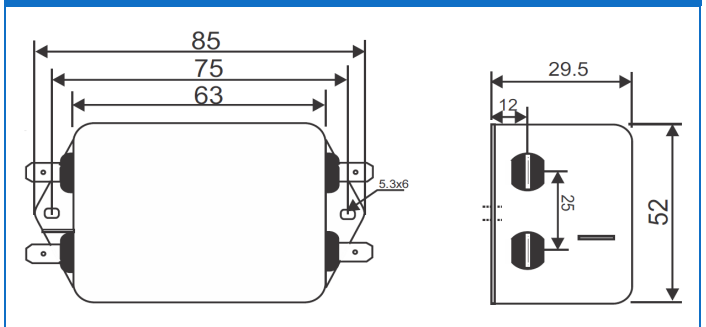
Connection Type F, 10 to 12A



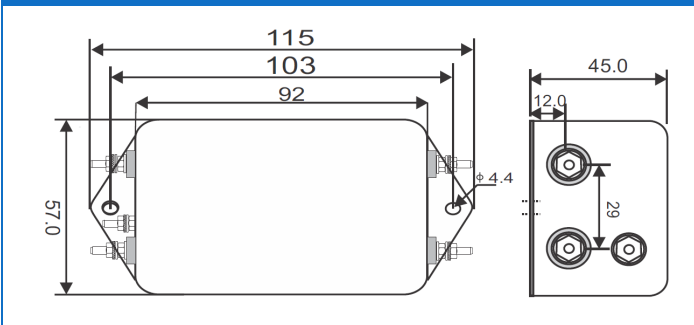
Connection Type F, 16A



Connection Type F, 20A



Connection Type S, 30A



**Note:** All dimensions in mm

Connection type F = Fast on Terminals (6.3 x 0.8)

Connection type S = Screw (M4) 30A