

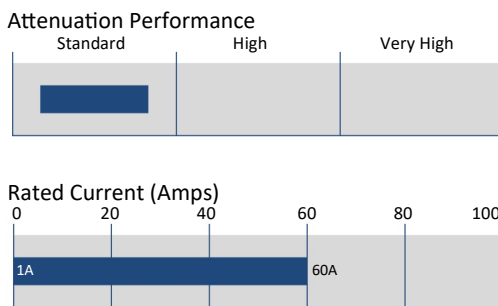


### Standard Performance Single Phase EMI Powerline Filter

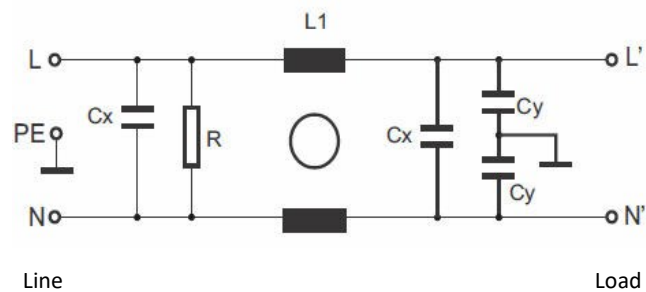
- General purpose filtering performance with good noise suppression, Single-Stage
- Rated currents from 1 to 60 Amps
- Optional medical versions available (Type B)
- Optional safety versions available (Type A)



#### Performance Indicators



#### Electrical Diagram



#### Features and Benefits

- BL2020 filters are designed for easy and fast chassis mounting
- BL2020 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
- BL2020 filters can be used to cover a broad range of usage and they offer a good size/amperage ratio. BL2020 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 60 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

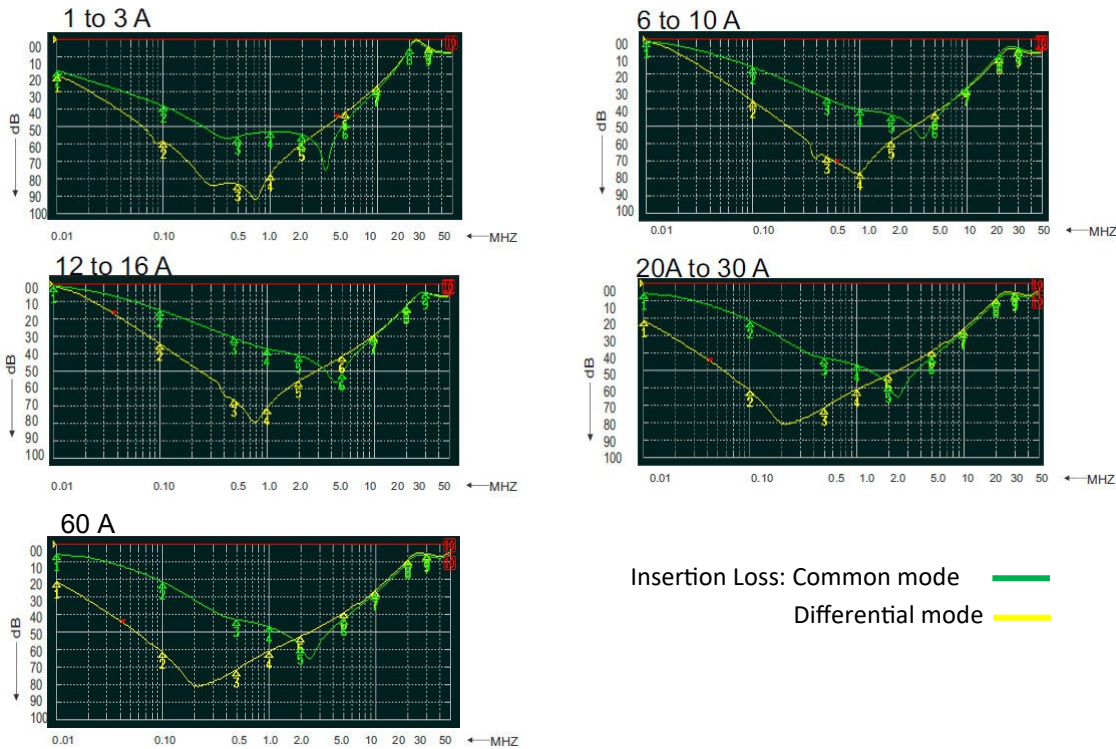
#### Typical Applications

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

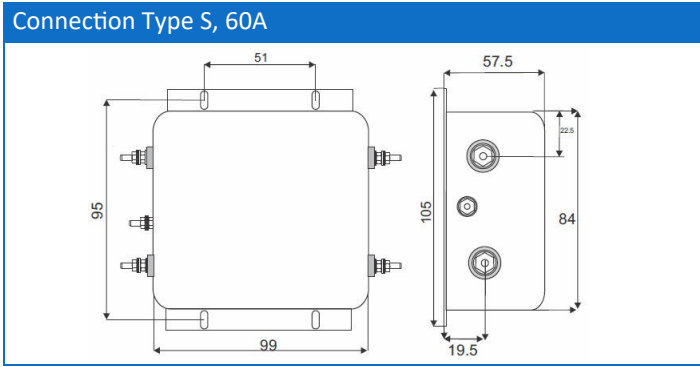
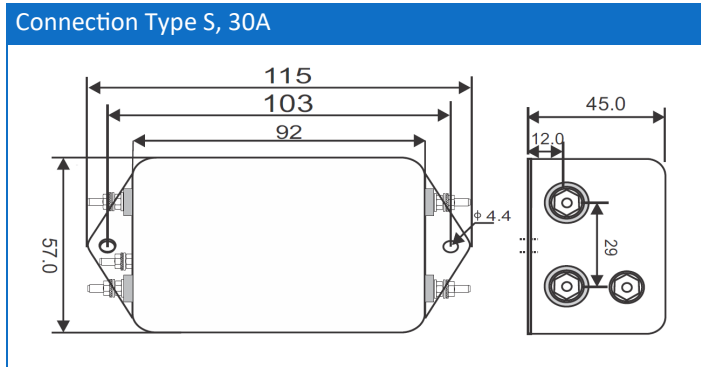
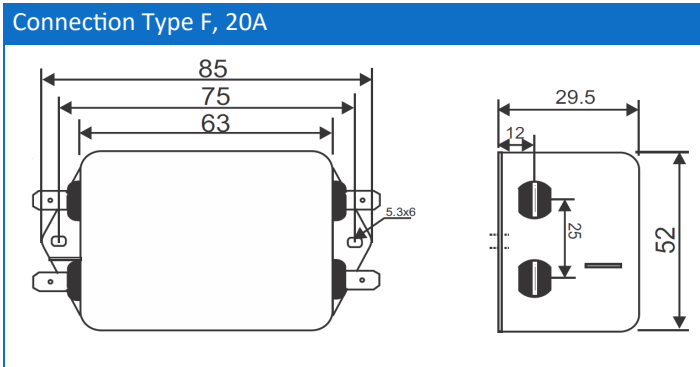
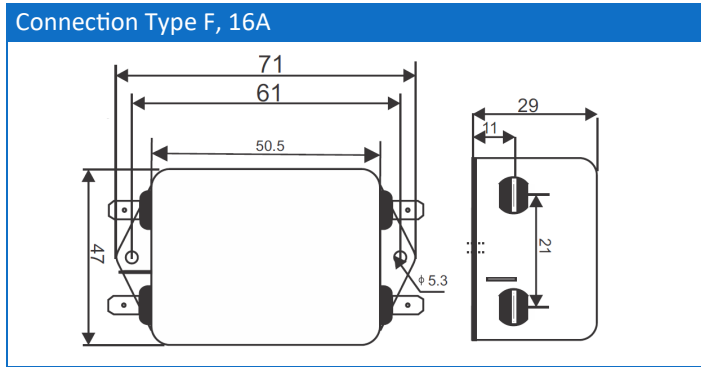
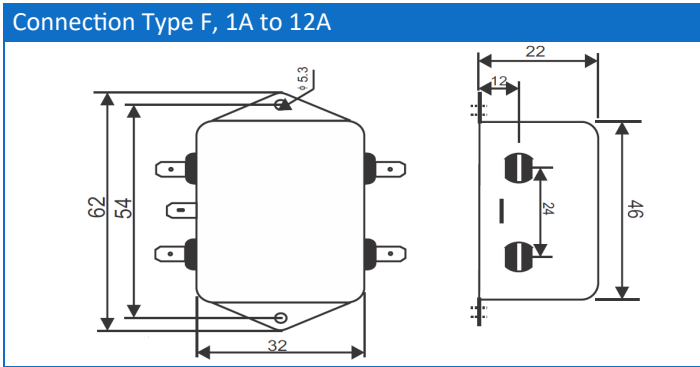
Filter Selection Table

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)				
BL2020-01-X	1	0.74	12	0.3	9.4	1000	F	W	
BL2020-03-X	3	0.74	2.5	0.3	9.4	1000	F	W	
BL2020-06-X	6	0.74	1	0.3	9.4	1000	F	W	
BL2020-10-X	10	0.74	0.8	0.3	9.4	1000	F	W	
BL2020-12-X	12	0.74	0.7	0.3	9.4	1000	F	W	
BL2020-16-X	16	0.74	0.65	0.3	9.4	1000	F	W	
BL2020-20-X	20	0.74	0.6	0.3	9.4	1000	F	W	
BL2020-30-X	30	0.87	0.67	0.94	20	470			S
BL2020-60-X	60	0.87	1	3	20	220			S
<b>Safety Version (A)</b>									
BL2020A-01-X	1	0.074	12	0.3	0.94	1000	F	W	
BL2020A-03-X	3	0.074	2.5	0.3	0.94	1000	F	W	
BL2020A-06-X	6	0.074	1	0.3	0.94	1000	F	W	
BL2020A-10-X	10	0.074	0.8	0.3	0.94	1000	F	W	
BL2020A-12-X	12	0.074	0.7	0.3	0.94	1000	F	W	
BL2020A-16-X	16	0.074	0.65	0.3	0.94	1000	F	W	
BL2020A-20-X	20	0.074	0.6	0.3	0.94	1000	F	W	
BL2020A-30-X	30	0.074	0.67	0.94	0.94	470			S
BL2020A-60-X	60	0.074	1	3	0.94	220			S
<b>Medical Version (B)</b>									
BL2020B-01-X	1	0.002	12	0.3		1000	F	W	
BL2020B-03-X	3	0.002	2.5	0.3		1000	F	W	
BL2020B-06-X	6	0.002	1	0.3		1000	F	W	
BL2020B-10-X	10	0.002	0.8	0.3		1000	F	W	
BL2020B-12-X	12	0.002	0.7	0.3		1000	F	W	
BL2020B-16-X	16	0.002	0.65	0.3		1000	F	W	
BL2020B-20-X	20	0.002	0.6	0.3		1000	F	W	
BL2020B-30-X	30	0.002	0.67	0.94		470			S
BL2020B-60-X	60	0.002	1	3		220			S

Typical Filter Attenuation



Mechanical Dimensions (mm)



**Note:** All dimensions in mm  
 Connection type F = Fast on Terminals (6.3 x 0.8)  
 Connection type S = Screw (M4) 30A  
 Connection type S = Screw (M6 x 35mm) 60A