



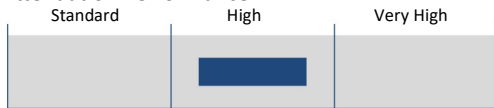
High Performance Single Phase EMI Powerline Filter

- High differential mode attenuation performance and very good noise suppression, Single-Stage
- Rated currents from 1 to 30 Amps
- Optional medical versions available (Type B)
- Optional safety versions available (Type A)
- Optional overvoltage protection (Type Z)

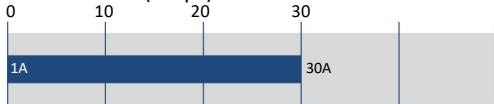


Performance Indicators

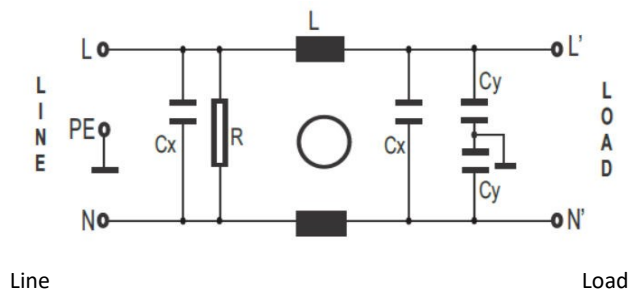
Attenuation Performance



Rated Current (Amps)



Electrical Diagram



Features and Benefits

- BL2030 single stage filters are designed for easy & fast chassis mounting and noisy applications requiring excellent filter performance
- This filter has a rating of 250Vac 50/60Hz
- All filters provide an exceptional conducted attenuation performance, based on chokes with high saturation resistance and excellent thermal behaviour
- Also available as B version with no Y-capacitors for medical applications as well as A versions with low capacitance for safety critical applications with a requirement for low leakage currents
- Various terminal options allow you to select the desired connection style
- All BL2030 filters can be supplied with optional surge pulse protection

Technical Specification

Operating voltage	250 VAC
Operating frequency	50 to 60 Hz
Rated currents	1 to 30 A @ 40 °C max
High potential test voltage	L → PE 3000Vdc for 2 sec (standard types) L → PE 3500Vdc for 2 sec (B types) L → N 1100Vdc for 2 sec
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

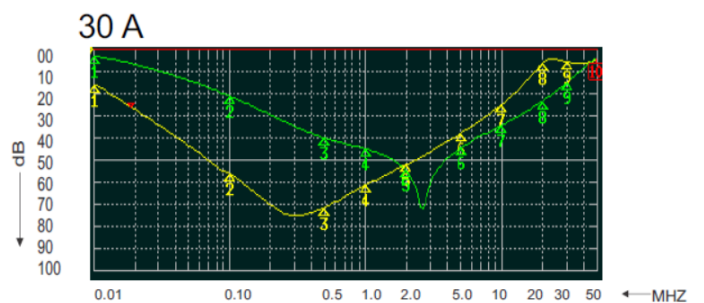
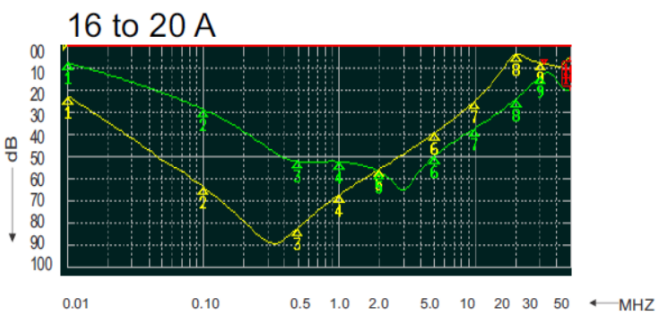
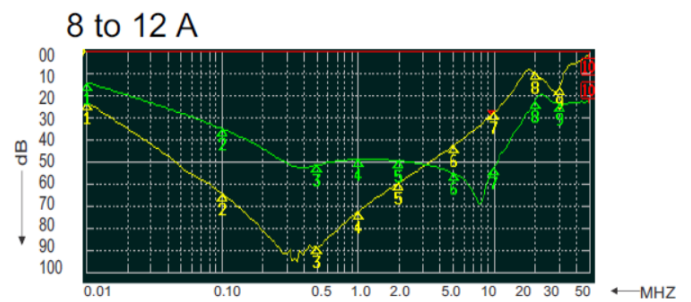
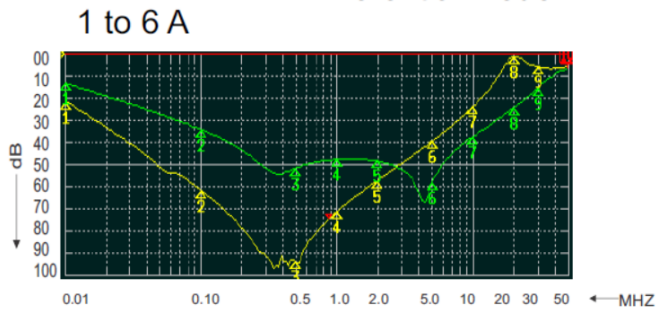
- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Building automation
- Medical equipment
- Power & Energy
- Office & Datacom equipment

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)				
BL2030-01-F	1	0.34	20	0.44	4.4	1000	F	W	
BL2030-03-F	3	0.52	14	0.66	6.6	1000	F	W	
BL2030-04-F	4	0.52	14	0.66	6.6	1000	F	W	
BL2030-06-F	6	0.73	8	0.94	9.4	680	F	W	
BL2030-08-F	8	0.73	8	0.94	9.4	680	F	W	
BL2030-10-F	10	0.73	8	0.94	9.4	680	F	W	
BL2030-12-F	12	0.87	4	2.00	20	330	F	W	
BL2030-16-F	16	0.87	4	2.00	20	330	F	W	
BL2030-20-F	20	0.87	4	2.00	20	330	F		S
BL2030-30-S	30	0.87	2	2.00	20	330			S
BL2030A-01-F	1	0.074	20	0.44	0.94	1000	F	W	
BL2030A-03-F	3	0.074	14	0.66	0.94	1000	F	W	
BL2030A-04-F	4	0.074	14	0.66	0.94	1000	F	W	
BL2030A-06-F	6	0.074	8	0.94	0.94	680	F	W	
BL2030A-08-F	8	0.074	8	0.94	0.94	680	F	W	
BL2030A-10-F	10	0.074	8	0.94	0.94	680	F	W	
BL2030A-12-F	12	0.074	4	2.00	0.94	330	F	W	
BL2030A-16-F	16	0.074	4	2.00	0.94	330	F	W	
BL2030A-20-F	20	0.074	4	2.00	0.94	330	F		S
BL2030A-30-S	30	0.074	2	2.00	0.94	330			S
BL2030B-01-F	1	0.002	20	0.44		1000	F	W	
BL2030B-03-F	3	0.002	14	0.66		1000	F	W	
BL2030B-04-F	4	0.002	14	0.66		1000	F	W	
BL2030B-06-F	6	0.002	8	0.94		680	F	W	
BL2030B-08-F	8	0.002	8	0.94		680	F	W	
BL2030B-10-F	10	0.002	8	0.94		680	F	W	
BL2030B-12-F	12	0.002	4	2.00		330	F	W	
BL2030B-16-F	16	0.002	4	2.00		330	F	W	
BL2030B-20-F	20	0.002	4	2.00		330	F		S
BL2030B-30-S	30	0.002	2	2.00		330			S

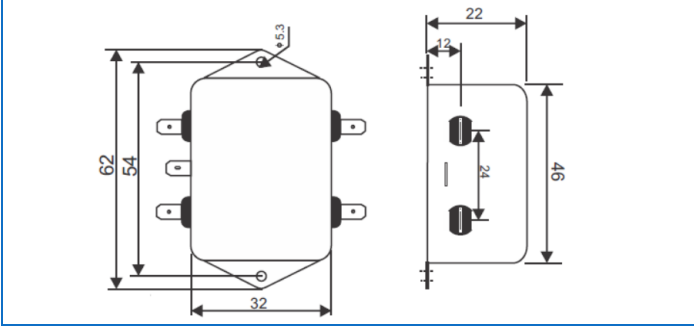
Typical Filter Attenuation

Insertion Loss: Common mode - —
 Differential mode - —

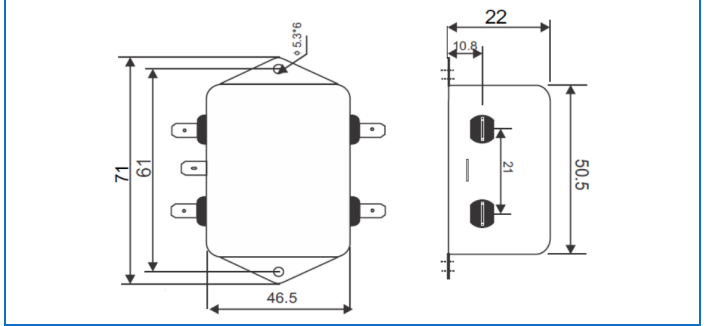


Mechanical Dimensions (mm)

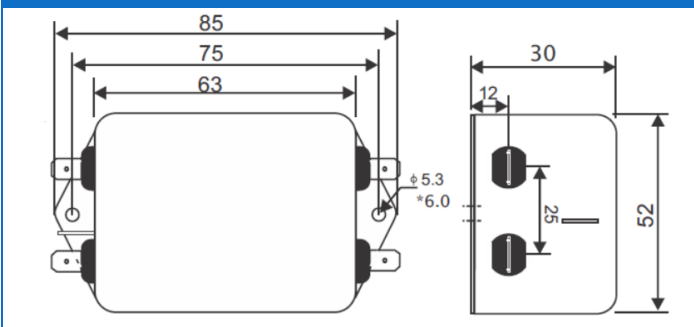
Connection Type F, 1A



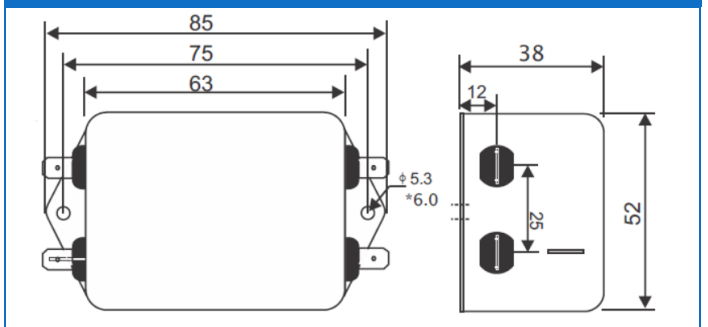
Connection Type F, 3A to 6A



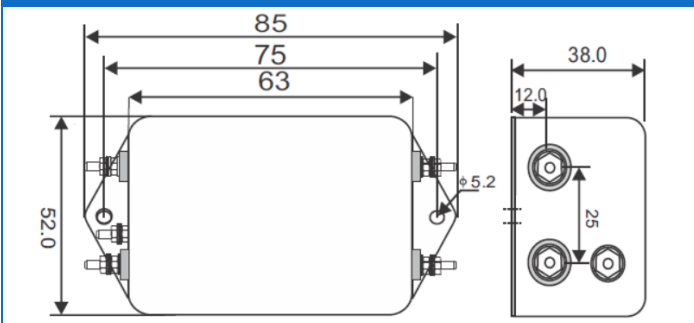
Connection Type F, 8A to 12A



Connection Type F, 16A to 20A



Connection Type S, 20A TO 30A



Note: All dimensions in mm

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

Connection type S = Screw (M4)