

General EMI Filter with High Attenuation Performance

Approvals:



- Rated current from 1 to 30 A
- Two stage filter
- Very high differential and common mode attenuation
- Optional medical version (Type B)
- Optional safety version (Type A)
- Optional overvoltage protection (Type Z)

Technical specifications

Maximum continuous operating voltage: 250VAC, 50/60Hz

Operating frequency: dc to 400Hz

Rated currents: 1 to 30A @ 40°C max.

High potential test voltage: L → PE 3000VDC for 2 sec (standard types)

L → PE 3500VDC for 2 sec (B types)

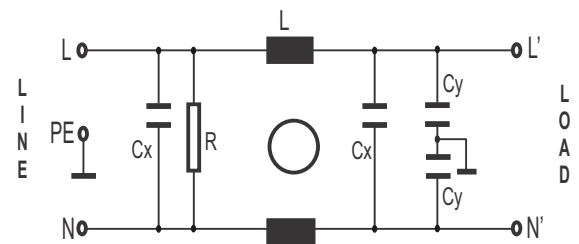
L → N 1100VDC for 2 sec

Temperature range (operation and storage): -25°C to +100°C (25/100/21)

Design corresponding to: UL 1283,

Surge pulse protection (optional): 2kV.

CIRCUIT DIAGRAM:



Feature and Benefits



- BL2030 Single-stage filters are designed for easy and fast chassis mounting.
- The BL2030 filters are also available as B versions 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.
- All filters provide an exceptional conducted attenuation performance, based on chokes with high permeable core material and excellent thermal behavior.
- BL2030 Single-stage filters are designed for noisy applications requiring excellent filter performance
- The higher inductivity versus amperage offers increased attenuation performance with the same form factor compared to BL 2010 and BL 2020 filter series.
- All BL 2030 filters can be delivered with optional surge pulse protection.
- BL 2030 filters are also available as dual stage filters (BL2090 series).
- Various terminal options allow you to select the desired connection style

Typical Application

- Electrical and electronic equipment
- Consumer goods
- Household equipment
- Building automation
- Industrial applications
- Machinery
- Medical equipment
- Electronic data processing equipment
- Office automation and datacom equipment
- Various noisy applications requiring high filter performance

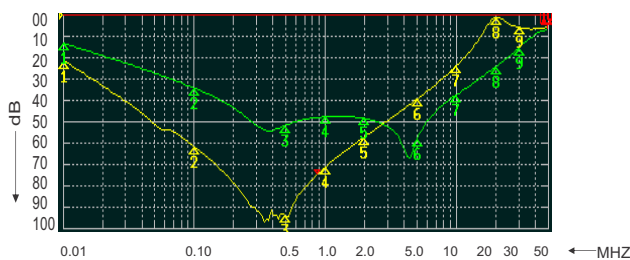
2 EMI FILTER>BL2030

FILTER SELECTION TABLE

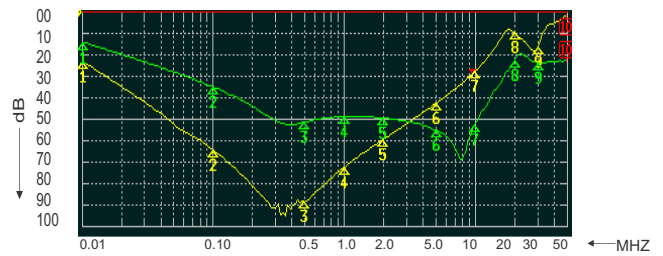
	Rated current @40°C	Leakage current @230V/50Hz	Inductance ΣL	Capacitance ΣCx	Capacitance ΣCy	Resistance ΣR	Connetion type	
	A	mA	mH	μF	nF	K_{Ω}		
BL2030-01-F	1	0.34	20	0.44	4.4	1000	F	W
BL2030-03-F	3	0.52	14	0.66	6.6	1000	F	W
BL2030-04-F	4	0.52	14	0.66	6.6	1000	F	W
BL2030-06-F	6	0.73	8	0.94	9.4	680	F	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

Insertion Loss: Common mode - —
 Differential mode- —

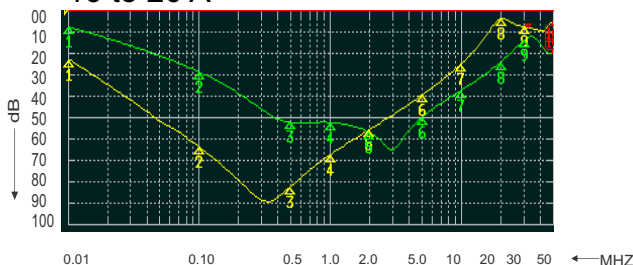
1 to 6 A



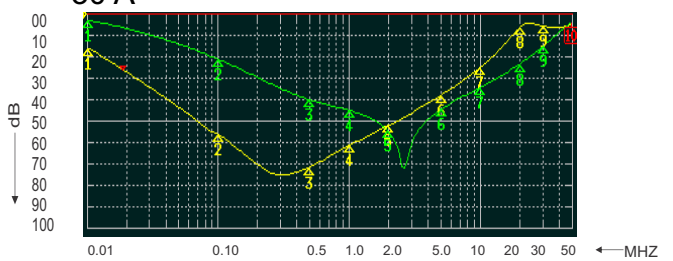
8 to 12 A



16 to 20 A

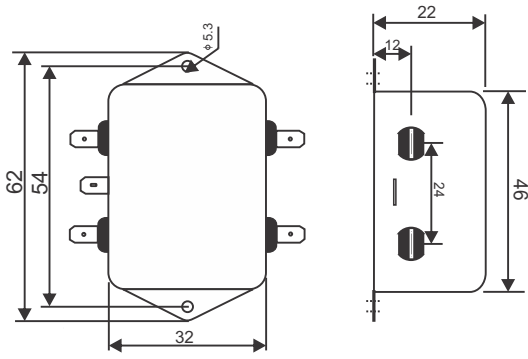


30 A

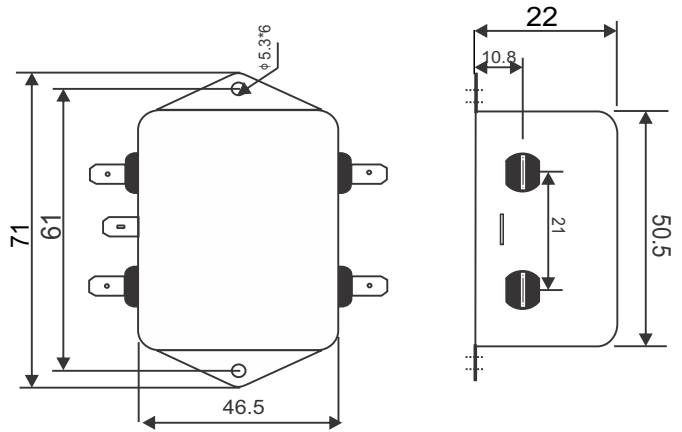


MECHANICAL DIMENSION (mm):

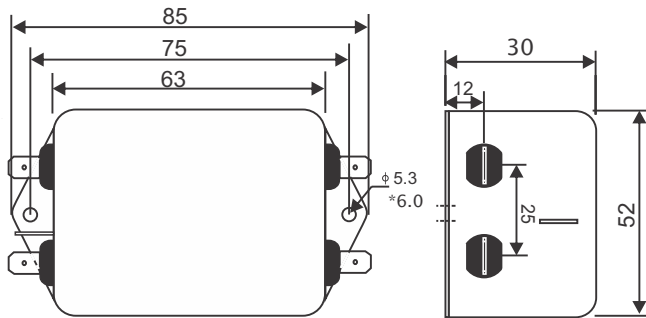
**CONNECTION TYPE -F
1A**



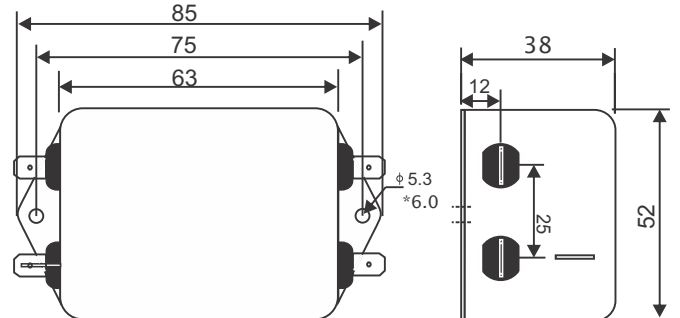
**CONNECTION TYPE -F
3A TO 6A**



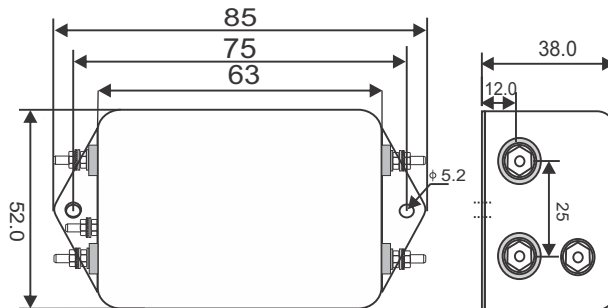
**CONNECTION TYPE -F
8A TO 12A**



**CONNECTION TYPE -F
16A & 20A**



**CONNECTION TYPE -S
20A & 30A**



NOTE:

All Dimension in mm
 Connection type F-Fast On Terminal(6.3x0.8)
 S-Screw (M4)