

# Three Phase EMC/RFI FILTER for Inverter & Power Drive System

BLA ETECH



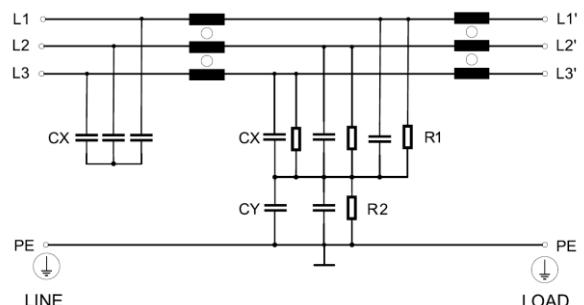
## BL387/388 THREE PHASE ULTRA COMPACT FILTER FOR industrial and Automation

- High performance EMI/EMC solution
- Standard connector terminals
- Attenuation performance is good BL387
- Attenuation performance is very good BL 388

### Approvals:



### CIRCUIT DIAGRAM:



### Technical specifications

Maximum continuous operating voltage: 520VAC, 50/60Hz

Operating frequency: 50 to 60Hz

Rated currents: 10 to 160A @ 50°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: UL60939-3/CSA 22.2.

Flammability according to: UL 94 V-0

### Feature and Benefits

- BL387 series of filters provides state of- the-art EMI attenuation based on an innovative filter topology.
- They help to ensure compliance with Class C2 or even C1 limits.
- The slim book-style shape allows a convenient and space-saving installation next to inverters, converters or motor drives.
- The compact BL 387 filter from 10 to 160A is designed for the most diverse applications worldwide, including machinery and machine tools.
- Low leakage current filter versions help to fulfil tough requirements (e.g. 0.1 mA) in respect of leakage current limitation.

### Typical Application

- Three-phase variable speed drives and power drive systems (PDS)
- Machine tool and machinery equipment
- IT power distribution networks
- General energy conversion devices (inverters, converters)
- Process automation equipment
- Three-phase power supplies
- Low-leakage current requirements



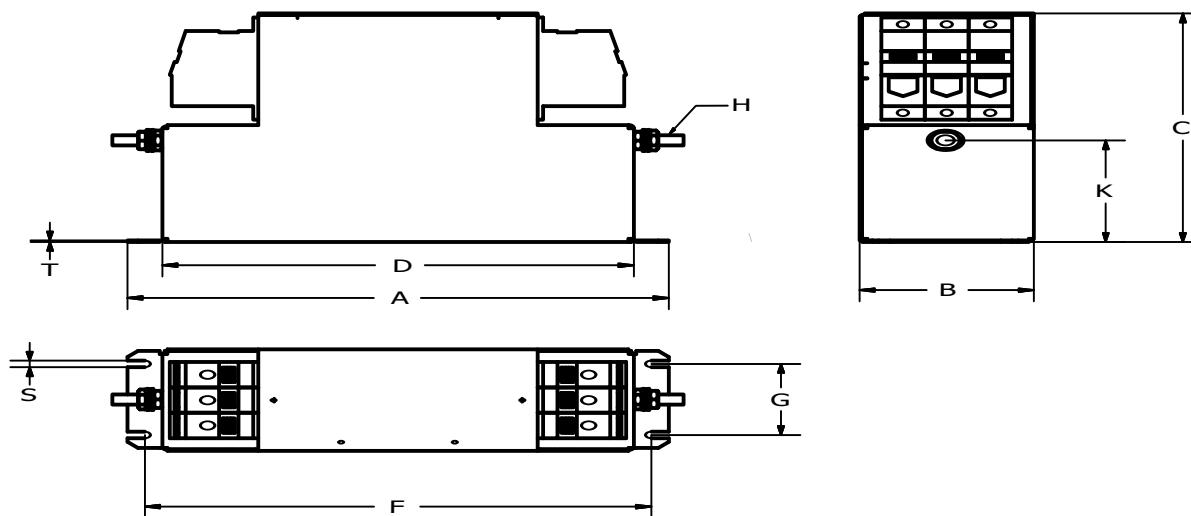
# General EMI Filter with High Attenuation Performance

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Filter selection table.

Part no	current rating @50 °C	power rating (kW)	leakage current @530VAC 50°C	Power loss@25 °C W	I/O connector cross section	Weight (kg)
BL387-10-10	10	5.5	3.7	7.5	10 mm <sup>2</sup> / 8 AWG	0.70
BL387-16-10	16	7.5	4.3	9.5	10 mm <sup>2</sup> / 8 AWG	0.80
BL387-20-10	20	11	4.9	10	10 mm <sup>2</sup> / 8 AWG	0.90
BL387-25-10	25	15	4.9	11.4	10 mm <sup>2</sup> / 8 AWG	1.00
BL387-40-10	40	22	4.9	22.6	10 mm <sup>2</sup> / 8 AWG	1.50
BL387-50-15	50	30	4.9	25.5	25 mm <sup>2</sup> / 4 AWG	2.10
BL387-63-15	63	37	4.9	32.1	25 mm <sup>2</sup> / 4 AWG	2.20
BL387-80-18	80	45	5.6	32.6	50 mm <sup>2</sup> / 1/0 AWG	3.40
BL387-100-18	100	55	5.6	33	50 mm <sup>2</sup> / 1/0 AWG	4.20
BL387-125-18	125	75	5.6	37.5	50 mm <sup>2</sup> / 1/0 AWG	4.60
BL387-160-95	160	90	5.6	38.4	95 mm <sup>2</sup> / 4 - 3/0 AWG	6.00

Mechanical dimension (mm)



Dimensions(mm)

	A	B	C	D	T	F	G	S	K	H
10A	180	40	112	153	0.8	170	20	4.5	68	M5
16A	200	45	120	170	0.8	185	25	5.4	76	M5
20A	205	45	132	173	0.8	190	25	5.4	83	M5
25A	205	45	132	173	0.8	190	25	5.4	83	M5
40A	215	50	147	185	1	200	30	5.4	95	M6
50A	220	65	180	186	1	205	45	5.4	120	M6
63A	220	65	180	186	1	205	45	5.4	120	M6
80A	290	80	205	250	1.2	270	50	6.5	110	M6
100A	300	90	210	260	1.5	280	60	6.5	112	M8
125A	300	90	210	260	1.5	280	60	6.5	112	M8
160A	310	100	225	270	1.5	290	70	6.5	110	M10

Note:- All dimension are in mm

Input/output connection type- Feed through terminal block 10 mm<sup>2</sup> to 95 mm<sup>2</sup>