Three Phase Filter



# Compact Three Phase Filter For Low Leakage Application

### Feature and Benefits

- A compact and light weight Filter design with a requiring minimum mounting space with simple and time saving installation with good accessibility for automatic and hand tools
- BL 251 Three Phase Filter provides a Cost-effective
   EMI suppression solution for a wide variety of Application
- Available in Multiple versions, with current ratings from 4 to 50 Ampere, the filters employ a Dual -stage four-wire LC circuit with saturating resistant chokes, and have a very low operational leakage current
- High Performance Filter with Insulated safety input terminals & wire outputs.





### **ELECTRICAL SCHEMATIC**

### Maximum continuous operating voltage 3x440/250 VAC,50/60Hz Operating Frequency DC to 400Hz Rated Currents 4 to 50A @40°C High Potential Test voltage L/N-GND 2800 VDC for 2 sec L-L 1900 VDC for 2 sec L-N 1150 VDC for 2 sec Temperature range (operation and storage) -25°C to +100°C (25/100/21) UL 1283,IEC/EN60939 Design corresponding to UL 94V-2 better Flammability Corresponding to **Protection Category IP 20** Overload Capability 4x Rated Current at switch on

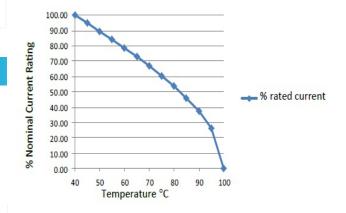
- Ultra-Slim Size Four-wire for compact space Application
- Exceptional low Leakage current

**Technical Specifications** 

Equally Suitable for Star & Delta Power Networkd

# L1 L2 OL1' N E L3 OL3' PE PE

## Temperature Derating Curve for EMC Filters Rated at 40°C Ambient and 100°C Maximum



### **Typical Application**

- Three-phase variable speed motor drives, Servo drives, inverters and converters
- Applications comprising energy conversion devices like machines or process automation equipment
- HVAC equipment, elevators, power supplies, UPS and further three-phase applications
- EV Charger & station ,Renewable energy Application

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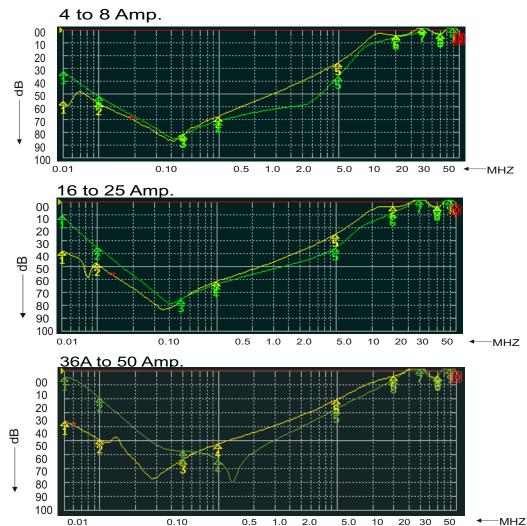
### FILTER SELECTION TABLE

Filters**	Rated current @40°C A	Leakage current @400VAC/50Hz mA	Power Loss @25°C/50Hz W	Connetion type Input/Output
BL251-4T	4	0.50	145X75X40	Wire/164WG
BL251-8T	8	0.50	145X75X40	Wire/164WG
BL251-16-T	16	0.50	180X115X60	Wire/144WG
BL251-20-T	20	0.5	180X115X60	Wire/144WG
B.251-25-T	25	0.50	180X115X60	Wire/144WG
BL251-36-T	36	0.73	180X115X80	Wire/84WG
BL251-50-T	50	0.73	180X115X80	Wire/84WG

<sup>\*\*</sup> Standardized calculated leakage current acc. IEC60939 under normal operating conditions.

# TYPICAL INSERTION LOSS, dB (50/50 Ohm)

Insertion Loss: Common mode - — Differential mode- —



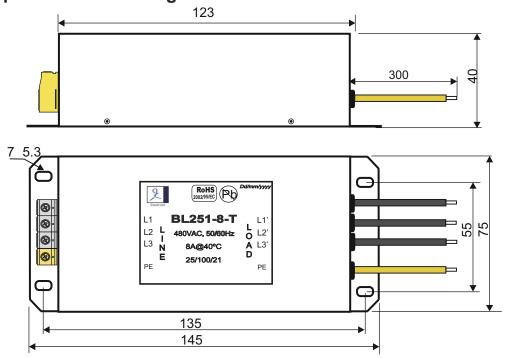
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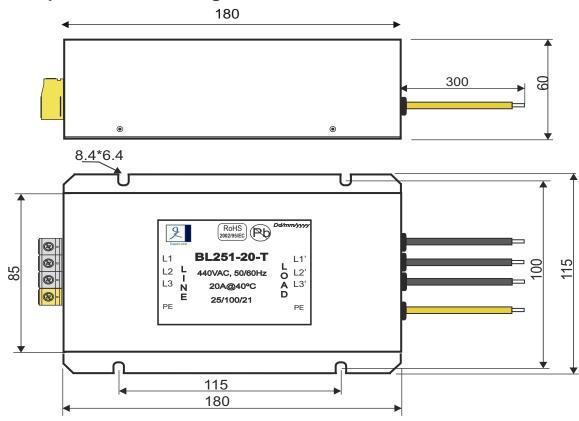


### **MECHNICAL DETAILS**

### \*For 4 to 8 Ampere Current Rating



### \*For 16 to 50 Ampere Current Rating



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Housing matl. Fe+Ni Plated, 1mm Thk Note:

Terminal Block, 6mm2

Cable 14AWG, UL1015 (Optional: Terminal Block)

TOLERENCE: +/-1.0 mm

