

## Single Phase AC Line Reactor

### Description

These series range of Single Phase AC line reactors serves to filter out spikes of current and reduce injection of harmonic currents and protect Variable Frequency Drives and motors.

### Features

- ▶ Reduction of main harmonics
- ▶ Impedance at 4%
- ▶ Protection of motor drive electronics
- ▶ Limitations of inrush Currents
- ▶ Prevention from nuisance tripping caused by power line voltage spikes
- ▶ Low Ripple

### Applications

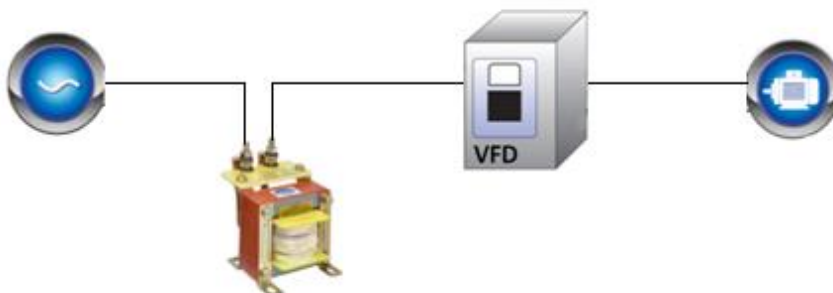
- ▶ Power Quality Applications
- ▶ Motor Drives and Various adjustable speed drive systems.
- ▶ Harmonics Reduction
- ▶ Process Automation Equipment



### Technical Specifications

Maximum Continuous Operating Voltage	: 230VAC
Operating Frequency	: 50/60Hz
Current ratings	: 6A to 100A
Impedance	: 4% of rated voltage at rated current
High Potential test voltage	: 2500VDC
Overload Capability	: 1.6 times of rated current for 1 Min , every hour
Design Corresponding to	: EN 61558-2-20,EN 60076-6,UL61800-5-1
Temperature range	: -45°C to +100°C
Climatic Category	: 45/100/21
Type of Cooling	: Natural Cooling AN
Protection Category	: IP 00
Insulation Class	: Class F
Voltage Drop	: 9.2 V

### Connection Diagram

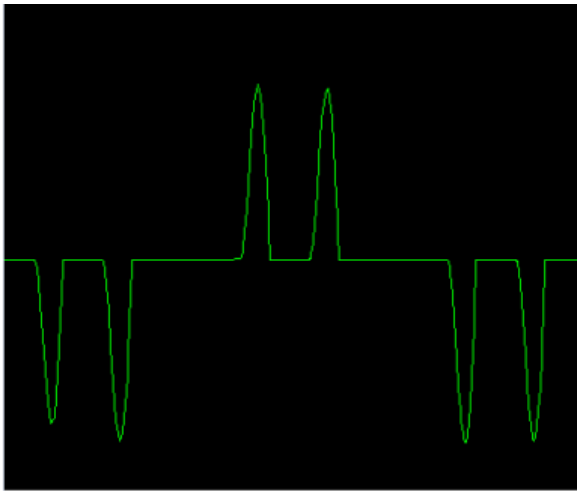


## Technical Data

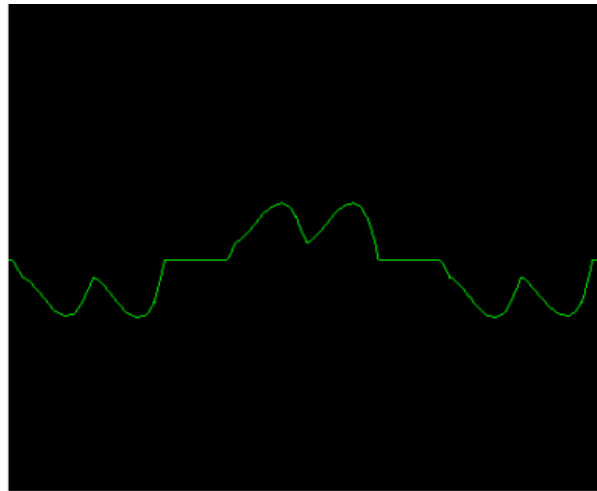
Part Number	Rated Current (Amps)	Rated Power @230V (KW)	Inductance (mH)	Termination	Major Dimensions in mm (L x W x H)
1000644880	6	1.2	4.88	Nut & Bolt / Connectors	76 x 72 x 65
1001042920	10	2	2.92	Nut & Bolt / Connectors	76 x 91 x 65
1001641830	16	3.3	1.83	Nut & Bolt / Connectors	76 x 91 x 65
1002041460	20	4.1	1.46	Nut & Bolt / Connectors	96 x 78 x 80
1002541170	25	5.1	1.17	Nut & Bolt / Connectors	96 x 91 x 80
1003040970	30	6.2	0.97	Nut & Bolt / Cable Lugs	96 x 91 x 80
1004040730	40	8.2	0.73	Nut & Bolt / Cable Lugs	115 x 105 x 95
1005040580	50	10.3	0.58	Nut & Bolt / Cable Lugs	115 x 110 x 95
1006040480	60	12.4	0.48	Cable Lugs	115 x 125 x 95
1007540390	75	15.5	0.39	Cable Lugs	152 x 110 x 127
1010040290	100	20.7	0.29	Cable Lugs	152 x 110 x 127

**\*Note :** Rated Power is calculated for rated current , 230VAC and Cos phi = 0.9

## Advantages of having Line Reactor

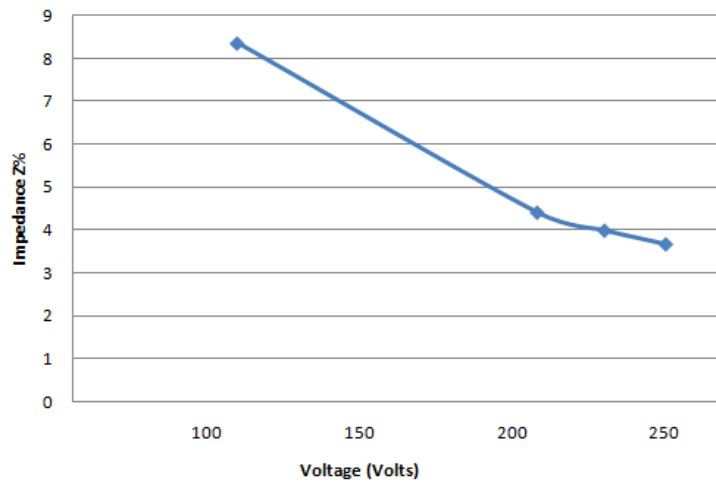


**Without Line Reactor**



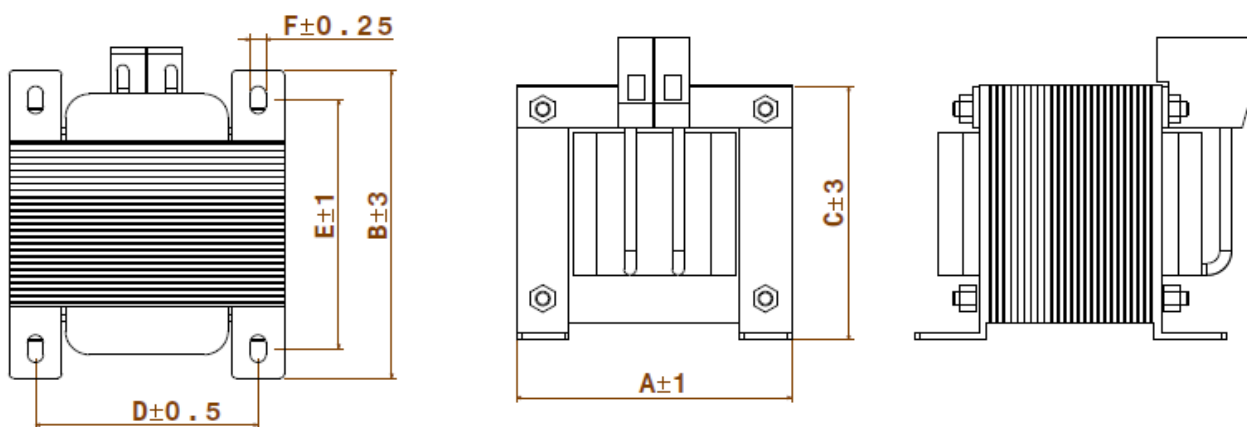
**With Line Reactor**

## Impedance versus Voltage Plot

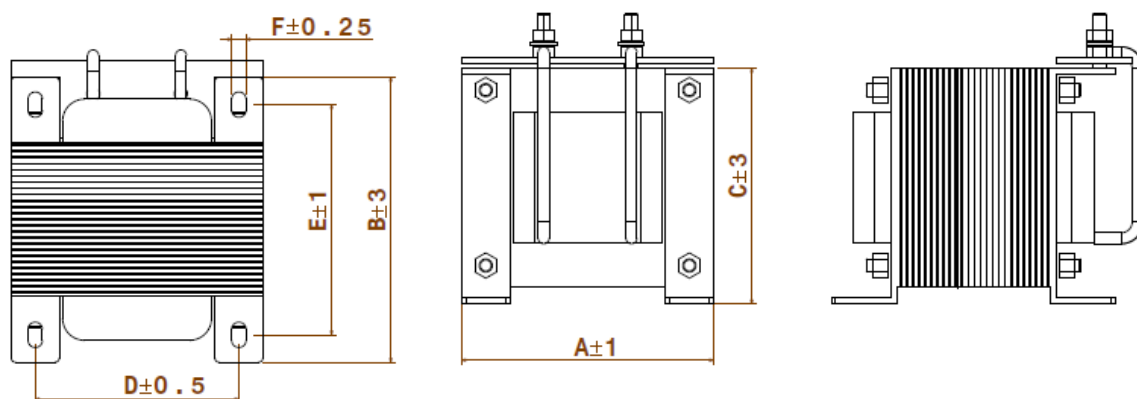


## Mechanical Drawing

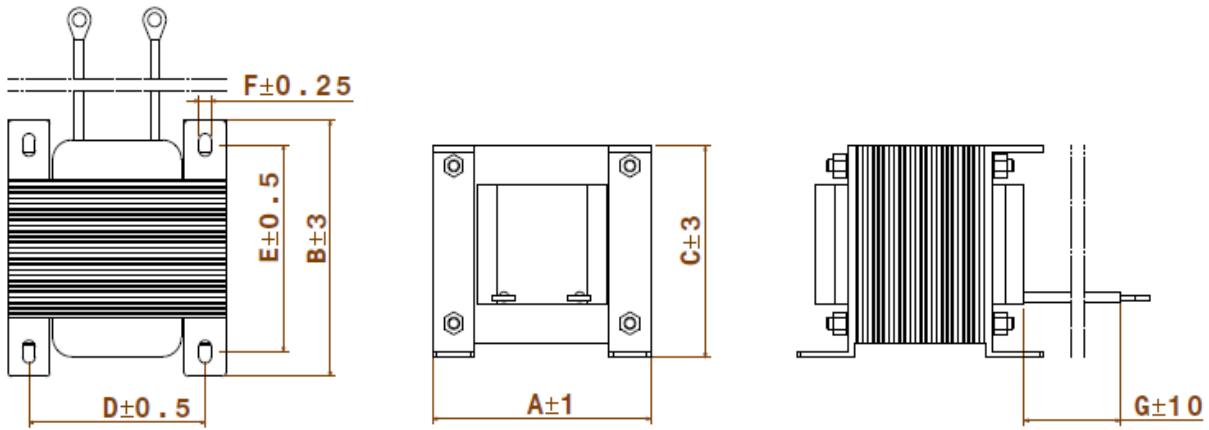
### Up to 25A



### Up to 50A



**For 60A to 100A**



**Mechanical Dimensions**

Part Number	A	B	C	D	E	F
1000644880	76	72	65	64	54	6
1001042920	76	91	65	64	75	6
1001641830	76	91	65	64	75	6
1002041460	96	78	80	64	60	6
1002541170	96	91	80	80	76	6
1003040970	96	91	80	80	76	6
1004040730	115	105	95	95	72	6
1005040580	115	110	95	95	84	8
1006040480	115	125	95	95	96	8
1007540390	152	110	127	140	83	8
1010040290	152	110	127	140	83	8

*\*All Dimensions are in mm*