

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

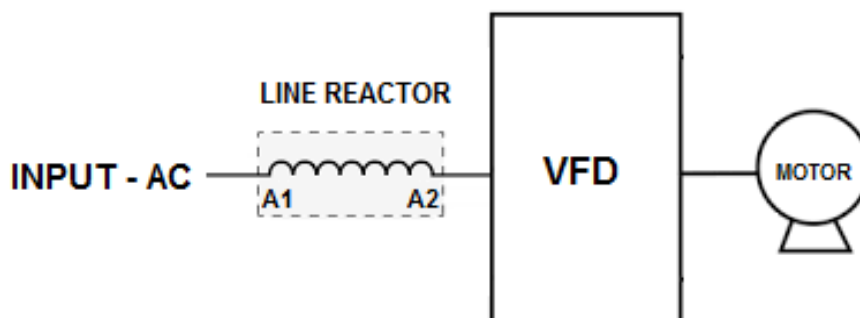
- ▶ Power Quality Applications
- ▶ Motor Drives and Various adjustable speed drive systems.
- ▶ Harmonics Reduction
- ▶ Process Automation Equipment



Technical Specifications

Maximum Continuous Operating Voltage	: 230VAC
Operating Frequency	: 50/60Hz
Current ratings	: 6A to 500A
Impedance	: 4% of rated voltage at rated current
High Potential test voltage	: 2000VAC
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

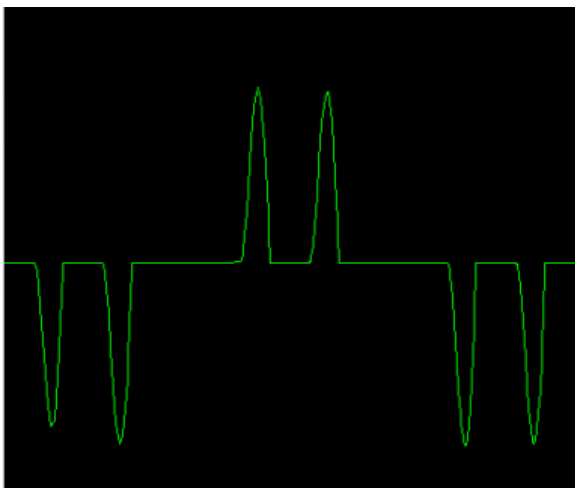


Technical Data

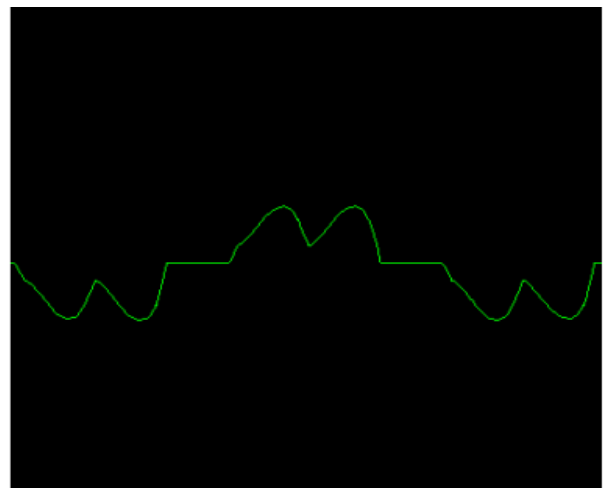
Part Number	Rated Current (Amps)	Rated Power @230V (KW)	Inductance (mH)	Termination	Major Dimensions in mm (L x W x H)
1000644880	6	1.2	4.88	Nut & Bolt / Connectors	76 x 72 x 65
1001042920	10	2	2.92	Nut & Bolt / Connectors	76 x 91 x 65
1001641830	16	3.3	1.83	Nut & Bolt / Connectors	96 x 78 x 80
1002041460	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
1021040140	210	43.47	0.14	Busbar	180 x 132 x 162.5
1032040092	320	66.24	0.092	Busbar	185 x 132 x 192
1040040073	400	82.8	0.073	Busbar	235 x 150 x 215
1050040059	500	103.5	0.059	Busbar	235 x 150 x 215

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

Advantages of having Line Reactor

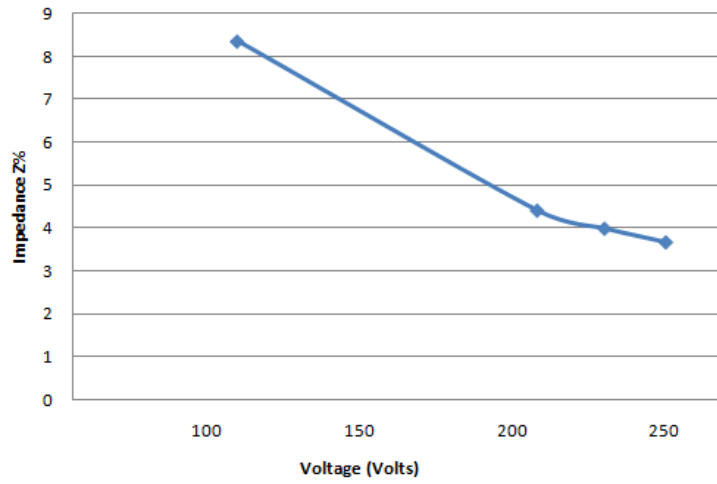


Without Line Reactor

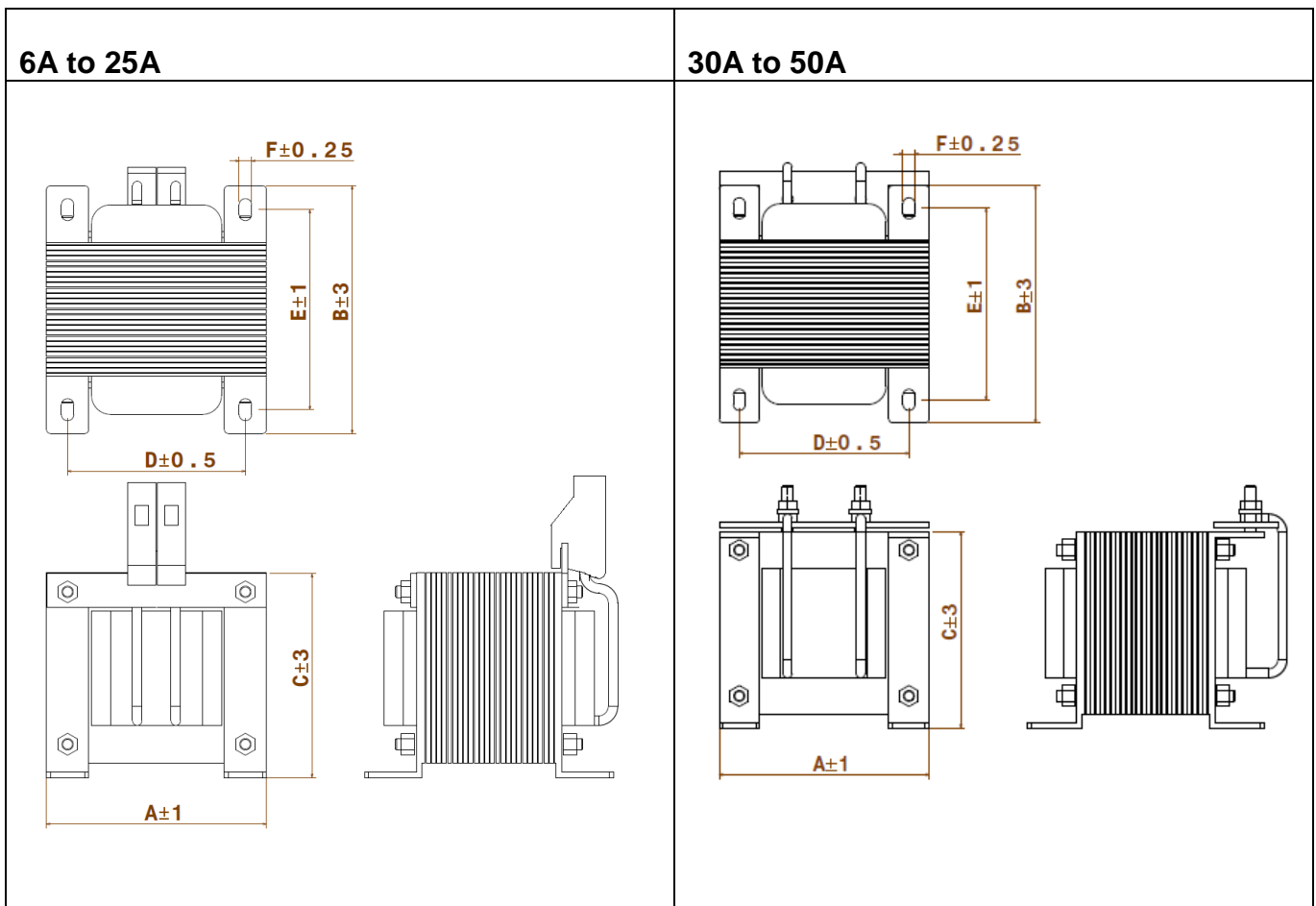


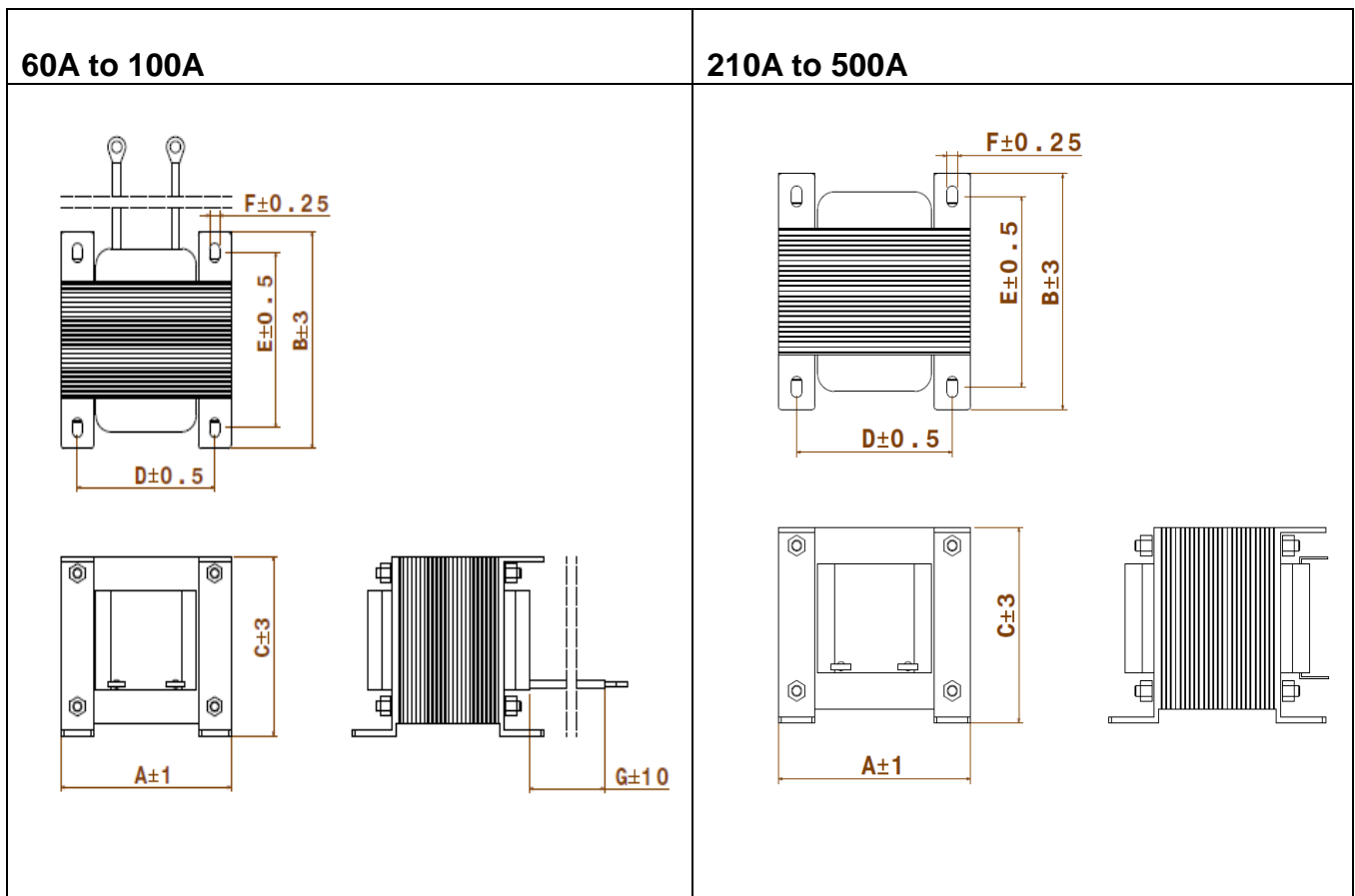
With Line Reactor

Impedance versus Voltage Plot



Mechanical Drawing





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	96	78	80	64	60	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
1021040140	180	132	162.5	150	97	10
1032040092	185	131	192	160	110	8
1040040073	235	150	215	197	113	10
1050040059	235	150	215	197	113	10

*All Dimensions are in mm

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