

# 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 2%
- ▶ Protection of motor drive electronics
- ▶ Limitations of inrush Currents
- ▶ Prevention from nuisance tripping caused by power line voltage spikes
- ▶ Low Ripple

## Applications

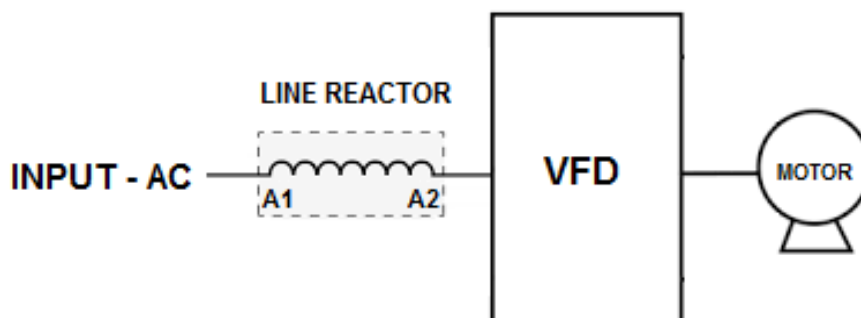
- ▶ Power Quality Applications
- ▶ Motor Drives and Various adjustable speed drive systems.
- ▶ Harmonics Reduction
- ▶ Process Automation Equipment



## Technical Specifications

Maximum Continuous Operating Voltage	: 230VAC
Operating Frequency	: 50/60Hz
Current ratings	: 6A to 500A
Impedance	: 2% 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	: 4.6 V

## Connection Diagram

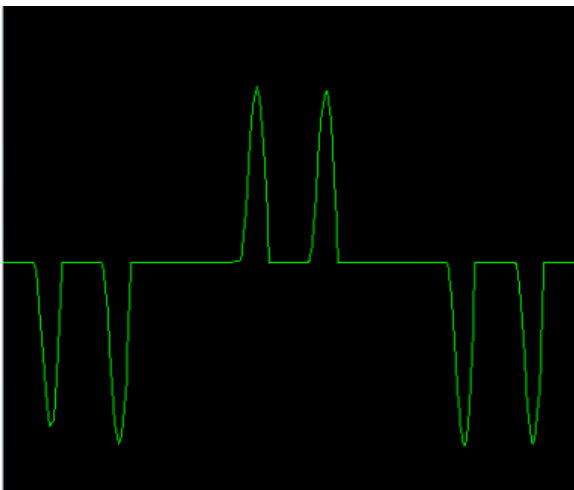


## Technical Data

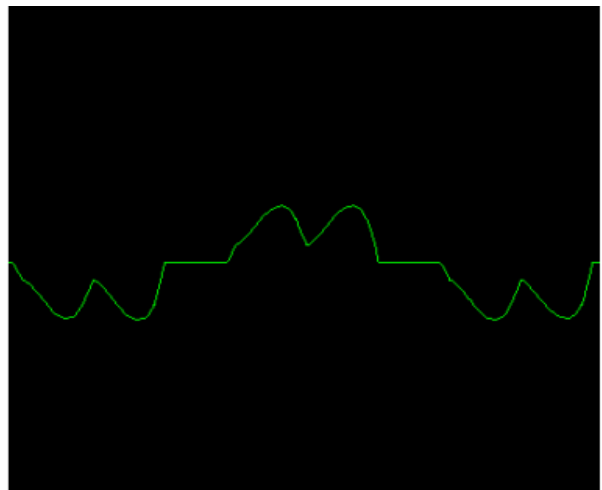
Part Number	Rated Current (Amps)	Rated Power @230V (KW)	Inductance (mH)	Termination	Major Dimensions in mm (L x W x H)
1000622440	6	1.2	2.44	Nut & Bolt / Connectors	76 x 65 x 65
1001021460	10	2	1.46	Nut & Bolt / Connectors	76 x 65 x 65
1001620910	16	3.3	0.915	Nut & Bolt / Connectors	76 x 91 x 66.5
1002020730	20	4.1	0.732	Nut & Bolt / Connectors	76 x 91 x 66.5
1002520580	25	5.1	0.586	Nut & Bolt / Connectors	96 x 78 x 80
1003020480	30	6.2	0.488	Nut & Bolt / Cable Lugs	96 x 78 x 80
1004020360	40	8.2	0.366	Nut & Bolt / Cable Lugs	96 x 91 x 80
1005020290	50	10.3	0.293	Nut & Bolt / Cable Lugs	96 x 91 x 80
1006020240	60	12.4	0.244	Cable Lugs	115 x 98 x 95
1007520190	75	15.5	0.195	Cable Lugs	115 x 110 x 95
1010020140	100	20.7	0.146	Cable Lugs	115 x 124 x 95
1021020069	210	43.47	0.0697	Busbar	152.4 x 117 x 140
1032020045	320	66.24	0.0457	Busbar	180 x 132 x 162.5
1040020036	400	82.8	0.0366	Busbar	180 x 132 x 162.5
1050020029	500	103.5	0.0292	Busbar	180 x 142 x 162.5

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

## Advantages of having Line Reactor

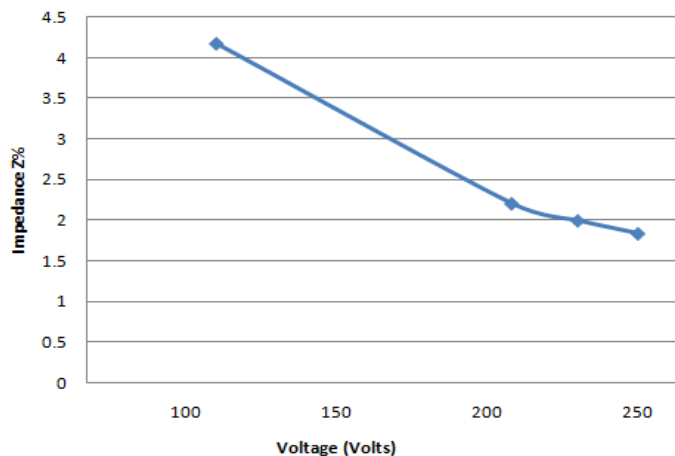


Without Line Reactor

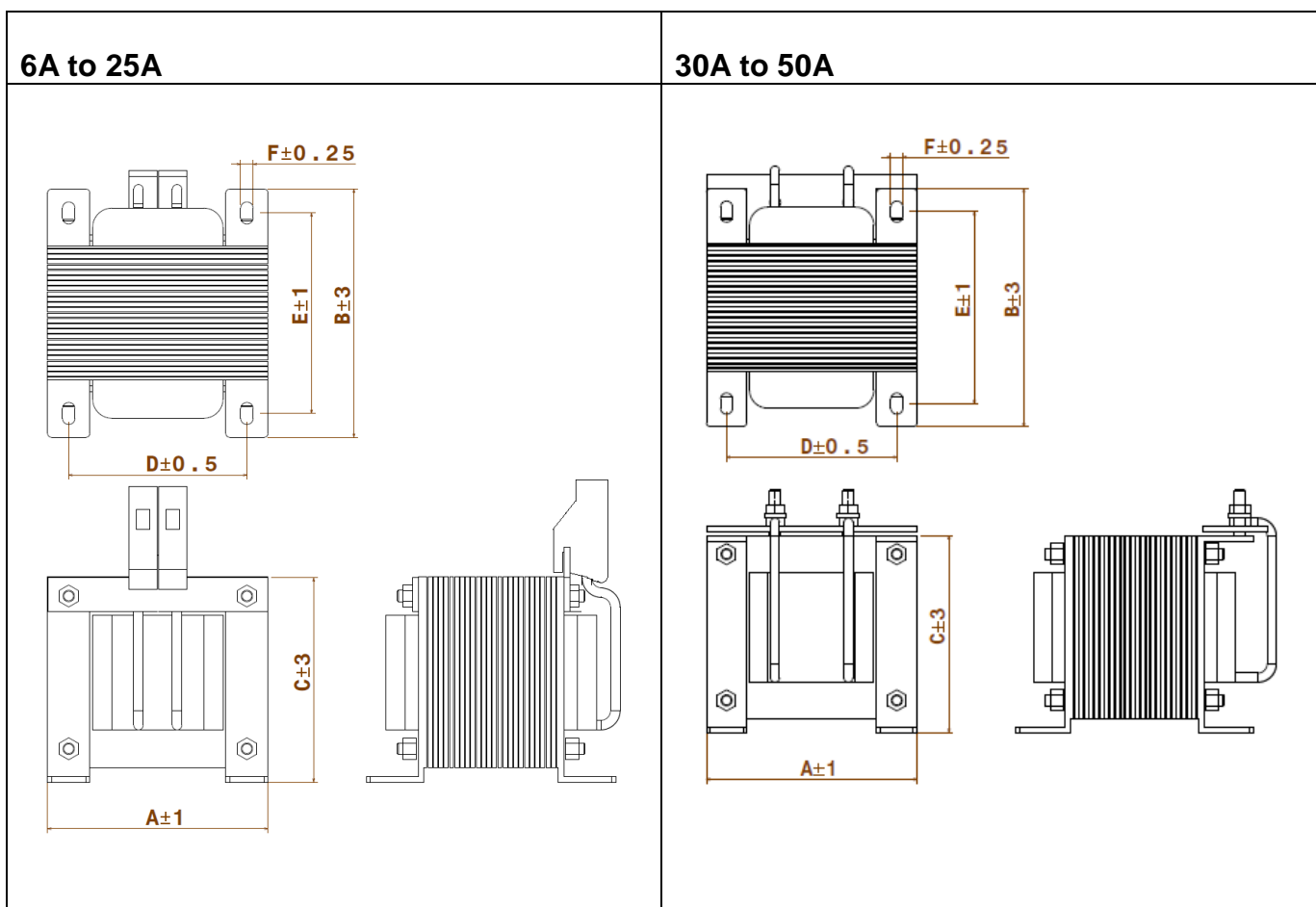


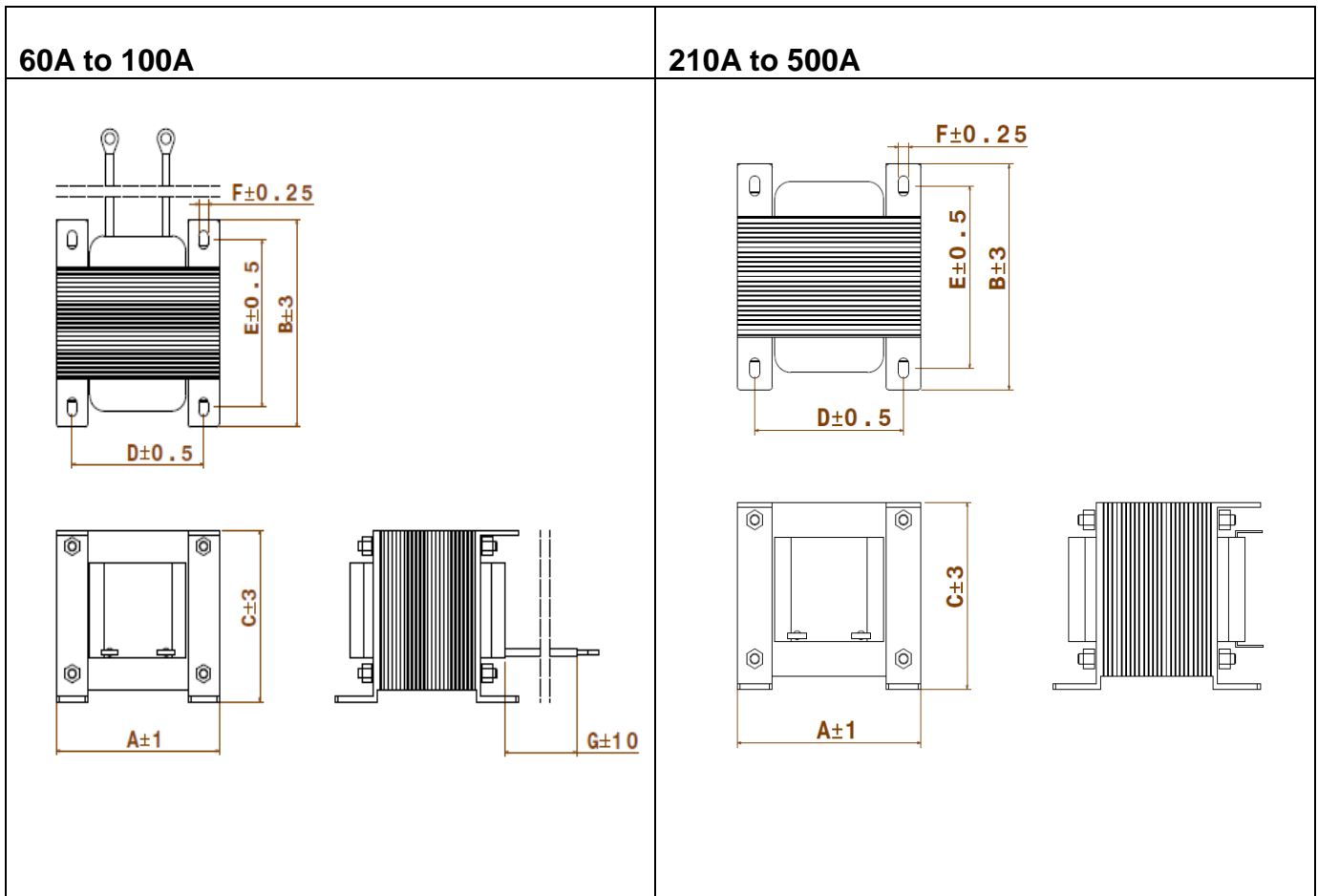
With Line Reactor

## Impedance versus Voltage Plot



## Mechanical Drawing





## Mechanical Dimensions

Part Number	A	B	C	D	E	F
1000622440	76	65	65	64	48	6
1001021460	76	65	65	64	48	6
1001620910	76	91	66.5	64	77	6
1002020730	76	91	66.5	64	77	6
1002520580	96	78	80	80	62	6
1003020480	96	78	80	80	62	6
1004020360	96	91	80	80	76	6
1005020290	96	91	80	80	76	6
1006020240	115	98	95	95	65	8
1007520190	115	110	95	95	78	8
1010020140	115	124	95	95	90	8
1021020069	152.4	117	140	127	85	8
1032020045	180	132	162.5	150	97	10
1040020036	180	132	162.5	150	97	10
1050020029	180	148	162.5	150	113	10

\*All Dimensions are in mm

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