

Single Phase AC Line Reactor – PQR Series



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

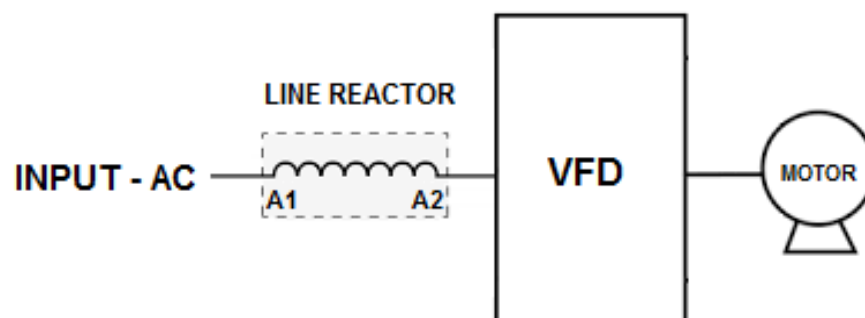
- ▶ Power Quality Applications
- ▶ Motor Drives and Various adjustable speed drive systems.
- ▶ Harmonics Reduction
- ▶ Process Automation Equipment



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

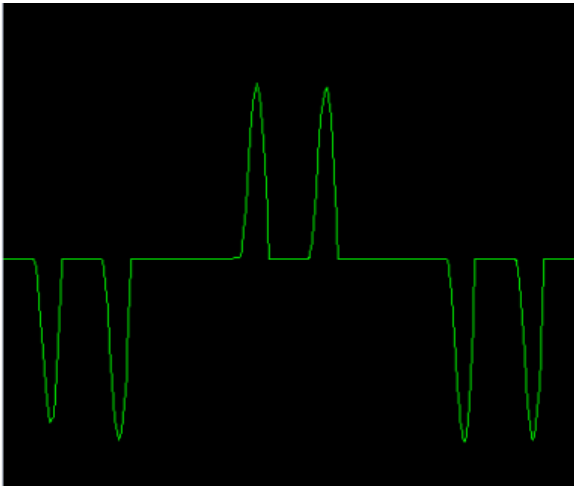


Technical Data

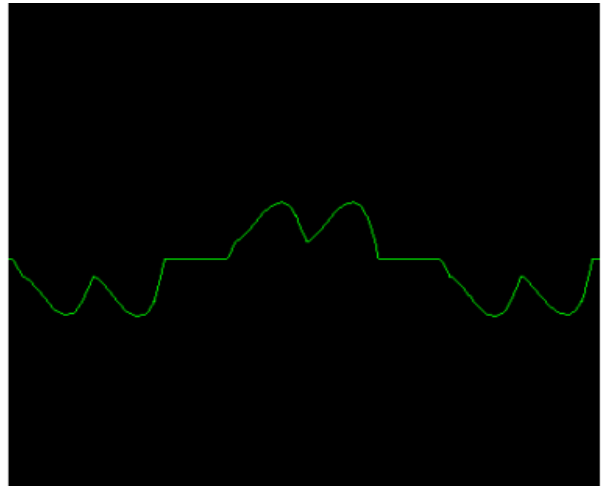
Part Number	Rated Current (Amps)	Rated Power @230V (KW)	Inductance (mH)	Termination	Major Dimensions in mm (L x W x H)
PQR-1000622440	6	1.2	2.44	Nut & Bolt / Connectors	76 x 65 x 65
PQR-1001021460	10	2	1.46	Nut & Bolt / Connectors	76 x 65 x 65
PQR-1001620910	16	3.3	0.915	Nut & Bolt / Connectors	76 x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

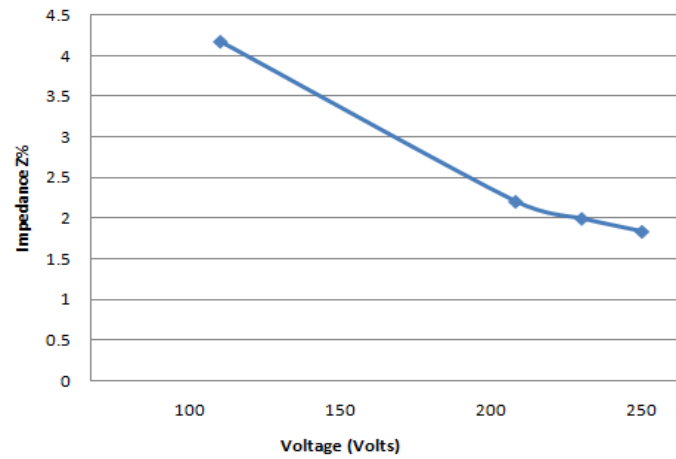


Without Line Reactor

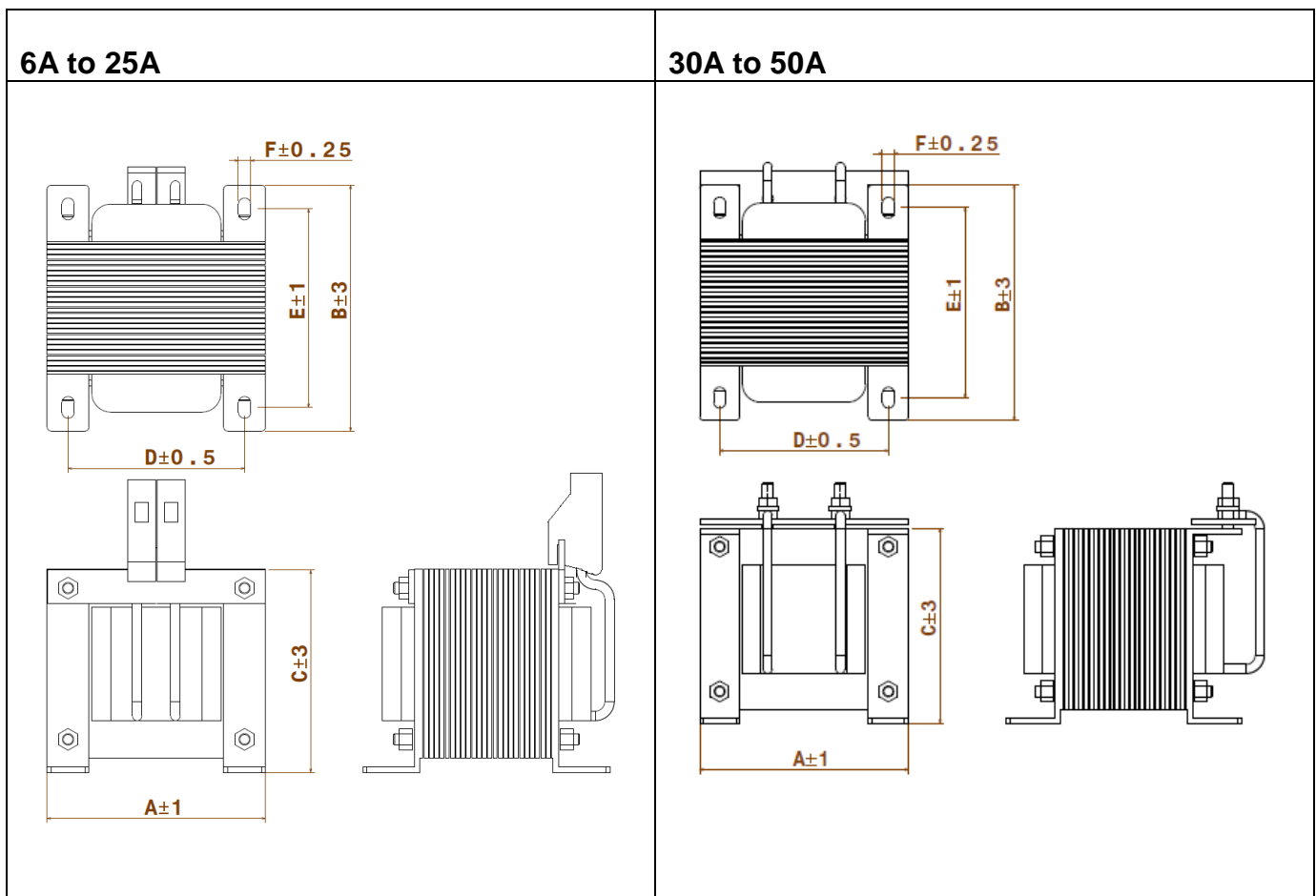


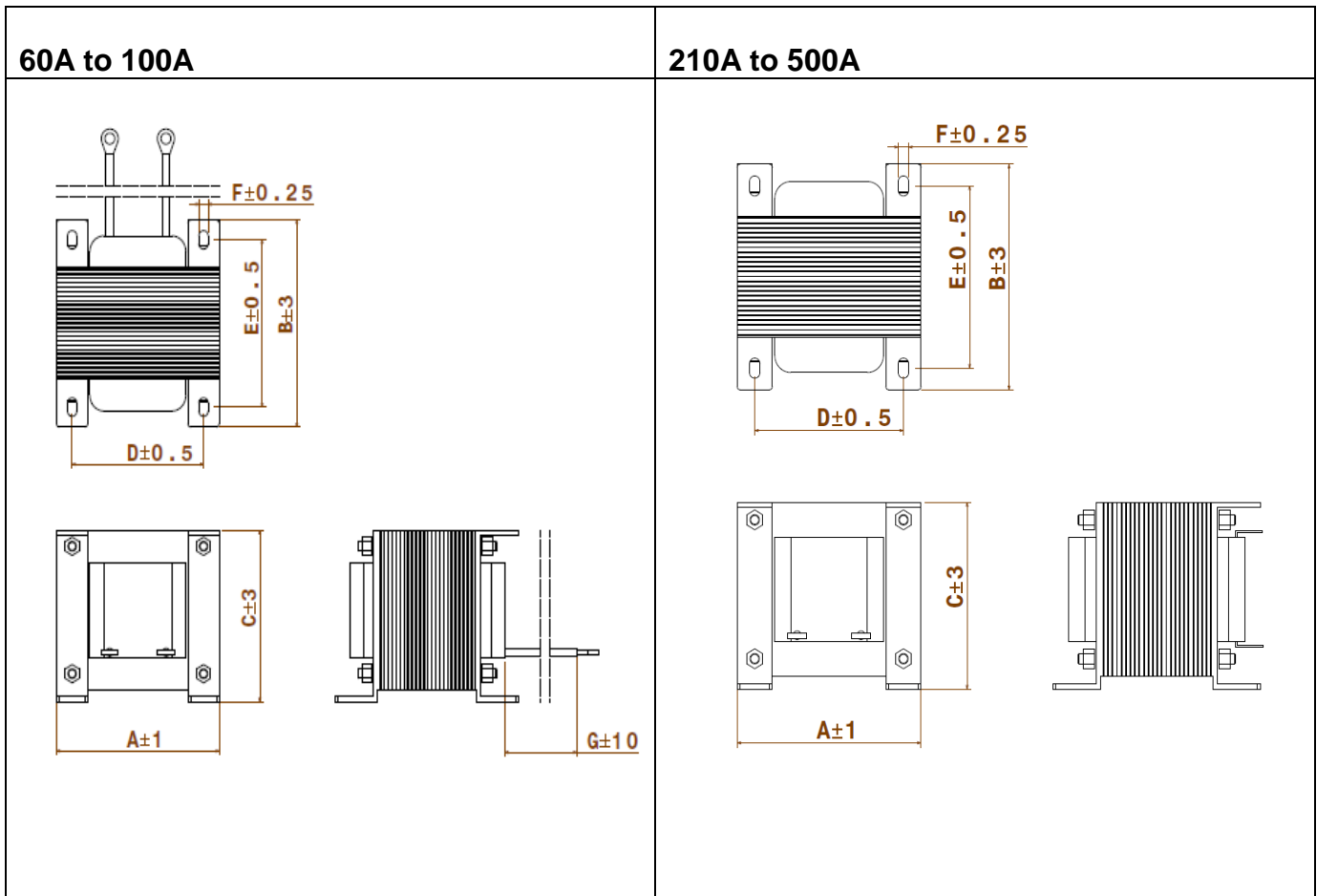
With Line Reactor

Impedance versus Voltage Plot



Mechanical Drawing





Mechanical Dimensions

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

*All Dimensions are in mm

EMI Solutions Private Ltd

#237-A5, Bommasandra Industrial Area, Bangalore-560099,
Marketing: +91 80 27836880, Email: marketing@emisindia.com

