312LMX

1Ø, 2Ø or 3ø – Linear AC Power Source

1200 VA 15-5,000 Hz

$10 \rightarrow 0-150 V_{L-N}$ $20 \rightarrow 0-300 V_{L-L}$ $30 \rightarrow 0-150 V_{L-N} / 0-259 V_{L-L}$

Standard Features:

- Advanced Linear Amplifiers Provide Very Low Voltage Distortion, no Switching Noise, Fast Voltage and Current Slew Rates, Exceptionally Low Output Impedance and High Peak Current Capability
- Single, split or three phase selectable
 output from front panel or bus
 command
- 15 to 5,000 Hz. Full Power Bandwidth Operation – 5Hz to 50KHz small signal bandwidth, 3dB at 10% of full voltage
- Precision Voltage Programming
 0.05% with Continuous Self-Calibration (CSC) engaged
- True-RMS Metering of Volts, Amps, and Power
- Color touch screen front panel operation
- LAN (LXI), USB, GPIB and RS-232 Interfaces
- Arbitrary Waveforms
- Transients for Static and Dynamic Test Applications
- Programmable Output Impedance
- Harmonic Analysis and Waveform
 Synthesis
- PPSC Manager Windows 10 Software
- Embedded Web server



Model 312LMX

As one of the medium three phase power member of Pacific Power's LMX-Series popular family of high performance Linear AC Power Sources, the 312LMX offers the same low output voltage noise and distortion, ease of installation, and high AC waveform fidelity as found in all of Pacific Power's Linear AC Power Sources. Control and operational features provide a high degree of versatility and ease of use for applications ranging from simple, manually controlled frequency conversion to harmonic testing and sophisticated programmable transient simulation.

ACTEST POWER

All 312LMX models are equipped with a powerful micro-controller with the ability to operate as a fully integrated test system. This enables a variety of power conditions and transients to be applied to the device under test while metering and analyzing all output performance parameters. For higher power requirements, refer to the complete LMX series catalog.

FREQUENCY/ VOLTAGE CONVERSION

The 312LMX is an excellent source of stable AC Voltage over the frequency range of 15 to 5,000 Hz. The output frequency is quartz-crystal stabilized. Output voltages up to 150VL-N in single phase mode, 300VL-L in split phase mode or 259VL-L in three phase mode.

PHASE CONVERSION

With the ability to provide two or three phase output, the 312LMX is a good choice to convert one-phase line voltage into precisely controlled split (two-phase) or three phase output power.



312LMX Models Output Ratings

			Output Voltage Max ³ (I-n/I-I)				Output Current ⁴ (A _{rms})			
			Transformer					Transformer		
MODEL	Rated Power (VA) ¹	Output Form ²	Direct	Ratio 1.5:1	Ratio 2.0:1	Ratio 2.5:1	Direct	Ratio 1.5:1	Ratio 2.0:1	Ratio 2.5:1
312LMX	1200	1/2 3	0-150/300 0-150/260	n/a	n/a	n/a	10/3.3 3.3/ø	n/a	n/a	n/a

Notes:

1. Rated output power is based on a combination of output voltage, current and load power factor. Values stated represent the rated capabilities of a given model. Consult factory for assistance in determining specific unit capabilities as they might apply to your application.

2. Output Form: Unit is operable as single phase with dual range capability or three phase. Output voltage ranges and 10/20 or 30 conversions are selected by front panel or bus command.

3. Output voltage ranges listed are for standard units. VMAX is achievable with nominal input voltage at full load.

4. Current ratings at 125 $\mathrm{V}_{_{\mathrm{RMS}}}$ output. Current may vary with power factor.



R&D

MILITARY

CUSTOM



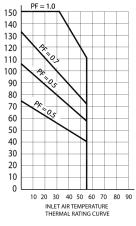
312LMX

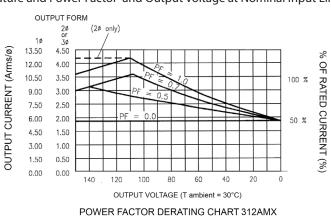
LMX Power Source Specifications (PF = 1.0, V_{aut} > 25% F.S.) **Line Regulation Ripple & Noise Output Frequency** Load Regulation¹ **Output Distortion Response Time** Full Power 5 µsec typ. For **Direct Coupled Ranges:** 0.1% max for a 0.1% THD_{AVG} 45 to 1,000 Hz 15-5,000 Hz Direct Coupled step load change. 0.25% 15 to 2,000 Hz. - 72 dB 45-5,000 Hz Transformer ±10% line change Small signal bandwidth = 5 0.25% THD_{AVG} 15 to 5,000 Hz 0.50% 2,000 to 5,000 Hz. Hz to 50 KHz Coupled

Note 1: Improves to less than 0.05% with external sense and CSC mode enabled. For transformer coupled voltage ranges, load regulation by step-up ratio is: 1.5:1 - 2%, 2.0:1 - 4%, 2.5:1 - 5%. Improves to < 0.1% with external sense and CSC mode enabled.

Thermal and Load Power Factor Rating Curves

Rated Continuous Load Current as a Function of Ambient Temperature and Power Factor and Output Voltage at Nominal Input Line.





THERMAL RATING -AC CURRENT RMS

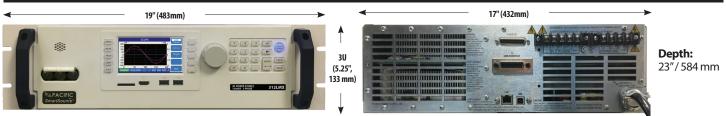
OUTPUT VOLTAGE-AC VOLTS RMS

Short term overloads to 150% of rated current are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

AC Input Power Requirements (47-63 Hz)

Input Voltage:	100 Vac ± 10%	110 Vac ± 10%	120 Vac ± 10%	200 Vac ± 10%	230 Vac ± 10%	240 Vac ± 10%
AC Input Current:	20 Arms	19 Arms	18 Arms	10 Arms	9 Arms	9 Arms
Recommended Input Service:	25 A	25 A	25 A	15 A	15 A	15 A

Chassis Dimensions and Weights



Ordering Information

Model	T Option Ratio	AC Input Voltage (1ø)	Options		
312LMX	n/a	Specify: 100, 110, 120, 200, 230 or 240	PPSC Test Manager SW License		
			Avionics or IEC Test Sequences		

Order Example:

- 312LMX, V_{IN}: 120VAC
- 1200VÄ, 3-Phase, AC Power Source
- 120VAC, 1 Phase Input Voltage

Export Version:

Three phase LMX Models intended for export outside of the USA must be ordered with the letter "E" (Export) post-fix. 312LMXTE



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Lbs / Kg

80/36.3

Model

312LMX