4000 VA 15-5,000 Hz

 $1\phi \rightarrow 0 - 338 \, V_{L-N}$  $2\phi \rightarrow 0 - 600 \, V_{L-L}$ 

#### **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 or Split 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 140LMX**

The 140LMXoffers 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 140LMX 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 140LMX 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 135VL-N in single phase mode and up to 270VL-L in split phase mode are available on the 140LMX model and up to 600VL-L in split phase mode on the 140LMXT model.

#### **PHASE CONVERSION**

With the ability to provide two phase output, the 140LMX is a good choice to convert one-phase line voltage into precisely controlled split (two-phase) output power.



# **140LMX Models Output Ratings**

				Output Voltage Max³ (l-n/l-l)			Output Current <sup>4</sup> (A <sub>rms</sub> )			
					Transformer				Transformer	
MODEL	Rated Power (VA) <sup>1</sup>	Output Form <sup>2</sup>	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
140LMX	4000	1/2	0-135/270	n/a	n/a	n/a	32/16	n/a	n/a	n/a
140LMXT	4000	1/2	0-135/270	0-202/404	0-270/540	0-338/600	32/16	21.3/10.7	16/8	12.8/6.4

#### 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. All single phase units are operable with dual voltage ranges as listed. Output voltage ranges and 10/20 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  $V_{\mbox{\tiny RMS}}$  output. Current may vary with power factor.





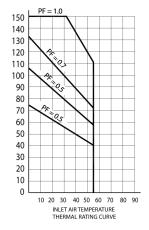
# LMX Power Source Specifications (PF = 1.0, $V_{...} > 25\%$ F.S.)

Output Frequency	Line Regulation	Load Regulation <sup>1</sup>	Output Distortion	Ripple & Noise	Response Time
Full Power 15-5,000 Hz Direct Coupled 45-5,000 Hz Transformer Coupled	0.1% max for a ±10% line change	Direct Coupled Ranges: 0.25% 15 to 2,000 Hz. 0.50% 2,000 to 5,000 Hz.	0.1% THD <sub>AVG</sub> 45 to 1,000 Hz 0.25% THD <sub>AVG</sub> 15 to 5,000 Hz	- 72 dB	5 μsec typ. For step load change. Small signal bandwidth = 5 Hz to 50 KHz

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.

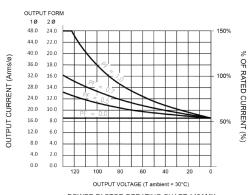
# **Thermal and Load Power Factor Rating Curves**

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

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.



POWER FACTOR DERATING CHART 140AMX

#### **OUTPUT VOLTAGE-AC VOLTS RMS**

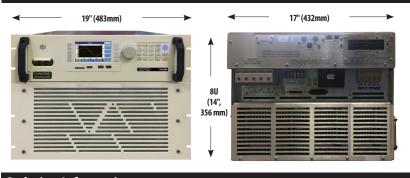
Short term overloads to 150% are permitted. Operating time before thermal shutdown or circuit breaker trip varies from seconds to several minutes depending upon line and temperature conditions.

#### **AC Input Power Requirements (47-63 Hz)**

Input Voltage:	208 Vac 3ø∆ ± 10%	220 Vac 3ø∆ ± 10%	240 Vac 3ø∆ ± 10%	380 Vac 3ø∆ ± 10%	416 Vac 3ø∆ ± 10%	480 Vac 3ø∆ Opt.
AC Input Current:	21 Arms	19 Arms	18 Arms	12 Arms	11 Arms	9 Arms
Recommended Input Service:	30 A	30 A	30 A	20 A	20 A	20 A

**Depth:** 23" / 584 mm

# Chassis Dimensions (w/o T Option) and Weights



Model	Lbs / Kg		
140LMX	185 / 84		
140LMXT	310 / 140.8		

# **Ordering Information**

Model	T Option Ratio	AC Input Voltage(3ø∆)	Options
140LMX	n/a	Specify: 208, 220, 240,	PPSC Test Manager SW License
140LMXT	1.5:1 or 2.0:1 or 2.5:1	380 or 416	Avionics or IEC Test Sequences

### **Order Example:**

140LMXT, T= 2.0:1, V<sub>IN</sub>: 380VAC

- 4000VA, 1-Phase, AC Power Source with optional transformer
- 2.0:1 Transformer Ratio
- 380VAC, 3 Phase Input Voltage



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