

# KEPCO SERIES KLP 2.4kW



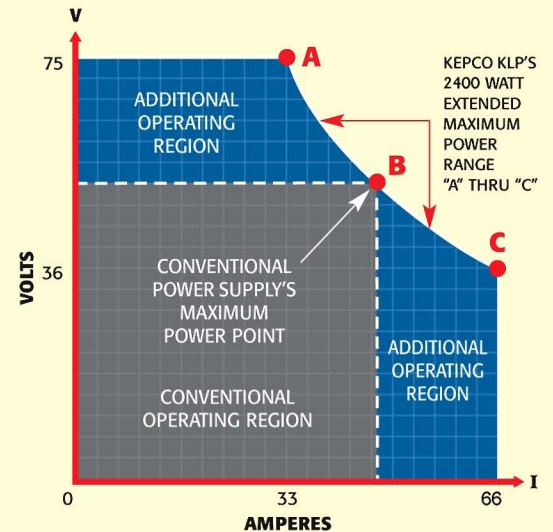
- **2400W Output Power**
- **90-264V a-c Input**
- **2U high**



Using high-frequency switch-mode topology for high efficiency and small size, the KLP provides 2400 watts of well-regulated, controllable d-c power in a 2U (3.47 inch high) by 19 inch rack-mountable package. KLP replaces the need for multiple power supplies by expanding the operating region. The breakthrough of a hyperbolic power limit delivers a full 2400 Watts over an expanded operating range, not just the conventional rectangular operating area.



[www.kepcopower.com/klpmod2.htm](http://www.kepcopower.com/klpmod2.htm)



KLP MODEL TABLE							
MODEL (3)	RATED VOLTAGE RANGE (1)	MAXIMUM CURRENT FOR RATED VOLTAGE	MINIMUM PROGRAMMABLE CURRENT	RATED CURRENT RANGE (1)	MAXIMUM VOLTAGE FOR RATED CURRENT	RIPPLE AND NOISE (2) p-p	EFFICIENCY @ 115V a-c
KLP 36-120	0-36V	66A@36V	0.8A	0-60A	20V@120A	60 mV	83%
KLP 75-66	0-75V	33A@75V	0.4A	0-33.3A	36V@66.6A	60 mV	84%
KLP 150-32	0-150V	16A@150V	0.2A	0-16A	20V@32A	125 mV	86%
KLP 300-16	0-300V	8A@300V	0.1A	0-8A	150V@16A	150 mV	87%
KLP 600-8	0-600V	4A@600V	0.05A	0-4A	300V@8A	150 mV	88%
KLP 1000-4	0-1000V	2.4A@1000V	0.05A	0-4A	600V@4A	150 mV	88%

- (1) The maximum current and voltage are constrained by the 2400W power limitation.  
 (2) Bandwidth: 20MHz; low frequency ripple may be higher at loads less than 30 Watts.  
 (3) Standard models (no suffix) include built-in GPIB and RS-232 interfaces.  
 E-Series models (E suffix) include built-in GPIB and LAN interfaces.



KLP 2.4kW PHYSICAL SPECIFICATIONS			
SPECIFICATION		RATING/DESCRIPTION	CONDITION
Weight	English	30 lbs	Shipping 40 lbs
	Metric	13.64 Kg	Shipping 18.14 kg
Dimensions W x H x D	English	19" x 3.47" x 20.78"	Depth excluding connectors and terminal blocks
	Metric	482.6mm x 88.14mm x 527.8mm	
Source Power Connection		Field-Wiring Euroblocks	250V a-c, 32A (VDE) 125V a-c, 40A (UL)
Load Connections	36V model	Nickel-plated copper busbar with integral threaded stud (1/4-20-1/2in.)	Provision for safety covers
	75-1000V models	Shock-safe Euroblock, single conductor size: 20-10 AWG 0.5-5.0 mm <sup>2</sup>	
Analog Programming Port		15 pin D-sub	
Digital Programming Ports	Primary	Standard GPIB connector	IEEE 488.2 (GPIB)
	Secondary	9 pin D-sub	RS 232 (standard models only)
	Secondary	RJ45	LAN (E-Series models only)
Feedback/Control Input		5 position low profile Euroblocks	

## FEATURES:

**KLP:** Provides 2400W output power over a hyperbolic power envelope, resulting in full output power availability over a range of 20V, 120A to 1,000V, 2.4A

Switch mode topology for cool, efficient operation

GPIB and isolated analog programming included on all models

Standard models have an RS-232 interface

E-Series models replace the RS-232 interface with an Ethernet (RJ-45) connector supporting LAN (LXI certified for KLP)

2U panel height at 2400 watts

Front to back air flow allows full power operation without spacers between supplies

Operates over universal a-c mains voltage range of 90 - 264V a-c with PFC

Stud-style output power terminals for LV model (36V) and Euroblock output power terminals for HV models (75V, 150V, 300V 600V and 1,000V)

## MARKETS AND APPLICATIONS

- Electric Vehicles and Components
- Battery Charging and Testing
- Aerospace and Satellite Test
- Telecom and IT Industry
- Automated Test Equipment
- Factory Automation
- QC Testing
- Burn-in
- Solar
- Water Purification
- Thermal Process Control
- Chemical Processing
- Semiconductor Manufacturing
- Electroplating, Sputtering and Coating
- New Energy R&D



### KLP 2.4kW INPUT SPECIFICATIONS

SPECIFICATION		RATING/DESCRIPTION	CONDITION
a-c Voltage	Nominal	100-240V a-c	Single phase
	Range	90-264V a-c	Wide range
Input Frequency	Nominal Range	50-60 Hz	
	Maximum	45-440 Hz	Increased leakage above 66 Hz
Power Factor (PF)	Typical	0.99	Meets EN 61000-3-2
Maximum Input Current	120V a-c	26A rms	Rated load (2400W)
	240V a-c	13A rms	Rated load (2400W)
	230V a-c	12A rms	Rated load (2400W)
Inrush Current	265V a-c	80A	Peak
	132V a-c	40A	Peak
Input Fusing		Circuit breaker	2-line
Low a-c Protection		87V a-c self protected	User-selectable recovery <sup>(1)</sup>
Output Holdup	Typical	10 milliseconds	Ride through
Leakage Current	115V a-c, 60 Hz	2.4mA max	
	230V a-c, 50 Hz	4.6mA max	

(1) Either PROTECTED (output disabled and locked until source power recycled) or SAFE (output disabled with unit programmed to last setting; power recycling not needed for recovery) or AUTO (when fault clears, unit automatically recovers to programming setpoints and output state (enabled/disabled) as before fault was detected.

NOTE: Contact Kepco Applications Engineering for d-c input.