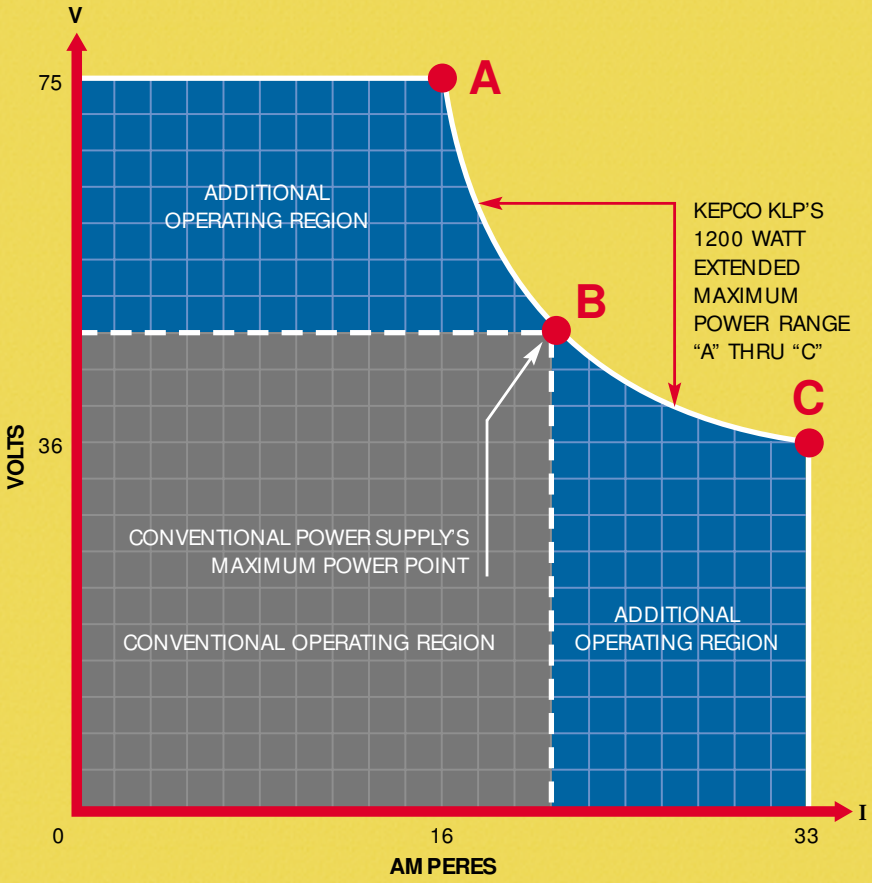
KEPCO IS NOT JUST AHEAD OF THE CURVE, WE'VE FORMED A WHOLE NEW ONE.

Introducing Hyperbolic Power.™ A new technology exclusively developed by Kepco.

The KLP is an entirely new laboratory grade power supply in which the voltage/current limits are automatically recalculated, forming a constant-power hyperbolic-shaped boundary between the voltage and current modes. This curve, which replaces the single max-power operating point of conventional power supplies, provides the user with a greatly expanded choice of maximum power volt-ampere combinations as illustrated in the diagram by points A to B to C. The constant-power limit of the KLP is 1200 watts. The KLP saves money and space by reducing the number of power supplies required.

For example: the single model KLP 75-33-1200 operates as a 0-75V/16A power supply or a 0-36V/33A power supply and all 1200W volt-ampere combinations in between.



KLP REPLACES THE NEED FOR MULTIPLE POWER SUPPLIES BY EXPANDING THE OPERATING REGION. THE BREAKTHROUGH OF A HYPERBOLIC POWER LIMIT DELIVERS A FULL 1200 WATTS OVER AN EXPANDED OPERATING RANGE, NOT JUST A SINGLE POINT.

MODEL KLP 75-33-1200
0-75V@16A TO 0-36V@33A

The KLP features:

- Switch mode topology for cool, efficient operation
- Built-in GPIB, RS232 and isolated analog programming at no extra cost
- 1U panel height at 1200 watts
- Front to back air flow allows full power operation without spacers between supplies
- Three models: KLP 75-33-1200, KLP 150-16-1200, KLP 300-8-1200
- Wide-range a-c input, 88-265V a-c with PFC

This KEPCO product is backed by a firm 5-YEAR WARRANTY

To receive a free demonstration of the money-saving, space-saving power of the new Kepco KLP, call (718) 461-7000 or visit www.kepcopower.com/klp.htm.

AN ISO 9001 COMPANY
KEPCO®
THE POWER SUPPLIER™
SINCE 1946

SEE REVERSE SIDE FOR KLP SPECIFICATIONS ▶

KLP MODEL TABLE

MODEL	RATED VOLTAGE RANGE(1)	MAXIMUM CURRENT FOR RATED VOLTAGE	RATED CURRENT RANGE(1)	MAXIMUM VOLTAGE FOR RATED CURRENT	RIPPLE AND NOISE rms	RIPPLE AND NOISE p-p(2)	EFFICIENCY
KLP 75-33-1200	0-75V	16A	0-33.33A	36V	10 mV	125 mV	84%
KLP 150-16-1200	0-150V	8A	0-16A	75V	10 mV	125 mV	86%
KLP 300-8-1200	0-300V	4A	0-8A	150V	20 mV	300 mV	87%

(1) The maximum current and voltage are constrained by the 1200 watt power limitation. (2) Bandwidth: 20 MHz, 10-100% load.

KLP INPUT CHARACTERISTICS

SPECIFICATIONS		RATING/DESCRIPTION	CONDITION
a-c Voltage	nominal	100-240V a-c	Single phase
	range	88-265V a-c	Wide range
Frequency	nominal range	45-66 Hz	Single phase
d-c Voltage	range	125-350V d-c	No regulatory approval
Power Factor	typical	0.99	Meets EN 61000-3-2
Inrush Current	264V a-c	40A	Peak
	132V a-c	20A	Peak
Input Protection		Circuit Breaker	2-line
Low Source Protection		Self Protected	No fixed limits
Output Hold Up	typical	10 milliseconds	Ride through

An a-c line cord is not supplied with the KLP. A 6 ft., 20A US line cord (p/n 118-0776) is available as an option. For other line cord options, please consult the factory.

Rear view of Model KLP showing the built-in GPIB, RS 232 and isolated analog programming controls.

To the right are 5 euro-block connectors providing remote metering and sensing outputs plus the current-share connection. The DIP switch adjacent to the GPIB connector provides for the selection of isolated analog programming by either voltage or resistance. The default is 0-10V or 0-10,000 ohms, but the maximum levels can be set in the calibration routine to match whatever a user has available. (0-5V, 0-3.3V etc.) The KLP has SELV analog programming referenced to chassis ground (same as the digital programming input). One of the DIP switches provides for hard lockout of the front panel controls for use when remote control is employed.

KLP OUTPUT CHARACTERISTICS

SPECIFICATIONS		RATING/DESCRIPTION	CONDITION
Stabilizer Type		CV/CC with hyperbolic power limit	Voltage/Current
Adjustment Range	voltage	0-100% of rated voltage	No minimum load required
	current	0-100% of rated current	No minimum load required
Source Effect	voltage	0.01% E_{max}	Over full source range
	current	0.01% I_{max}	Over full source range
Load Effect	voltage	0.02% E_{max}	Over full load current range
	current(1)	0.05% I_{max}	
Output Power		Full 1200 watts to +50°C	
Temperature Effect	voltage	0.2%/ºC	0-50ºC
	current	0.2%/ºC	
Time Effect (drift)	voltage	0.05%/24hr	After 30 minute warmup
	current	0.1%/24hr	
Error Sensing		0.25 volts per wire	Above rated output. Either output terminal to chassis.
Isolation Voltage		600V d-c or peak	
Transient Recovery for Load Change	excursion	1% E_{rated}	50% load step 2A/µsec max
	recovery	0.5 msec	Return to 0.1% of setting
Turnon/turnoff overshoot		Same as load transient response limits	
Overvoltage Protection	voltage	Programmable	Latched(2)
Overcurrent Protection	current	Programmable	Latched(2)
Over Temperature Protection		Shutdown	Latched(2)
Parallel Operation		Active load sharing within 5% of I_0 rated	

(1) After settling effect. (2) Requires the a-c input to be recycled for restart.

KLP PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

SPECIFICATIONS		RATING/DESCRIPTION	CONDITION
Dimensions	English	1.75'H x 19"W x 20"D	Depth excluding connectors and terminal blocks
	metric	44.45 x 482.6 x 508 mm	
Weight	English	14 lbs max	
	metric	6.4kg max	
Temperature	operating	-20 to +50ºC	Rated load
	storage	-40 to +85ºC	
Cooling		internal d-c fans	Exhaust to the rear

AN ISO 9001 COMPANY
KEPCO®
THE POWER SUPPLIER™
SINCE 1946

KEPCO, INC. • 131-38 Sanford Avenue, Flushing, NY 11352 USA
Tel: (718) 461-7000 • Fax: (718) 767-1102 • Email: hq@kepcopower.com • www.kepcopower.com