

30 WATT SWITCHING POWER SUPPLIES

DESCRIPTION

The PU30SL series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 25 to 30 watts of continuous output power. They operate at 85 to 264 VAC input voltage without the need of voltage selection. They are ideally suited for use in today's CRT terminals, disc drive systems, small microprocessor based systems and other mixed logic applications. All models meet the safety requirements of UL, CSA and IEC.

FEATURES

- Recognized or certified by UL, CSA and TÜV
- Small size, light weight
- 100% burn-in
- Wide input range 85 to 264 VAC
- Input surge current protection
- Overvoltage protection
- Overcurrent protection
- Open PCB construction

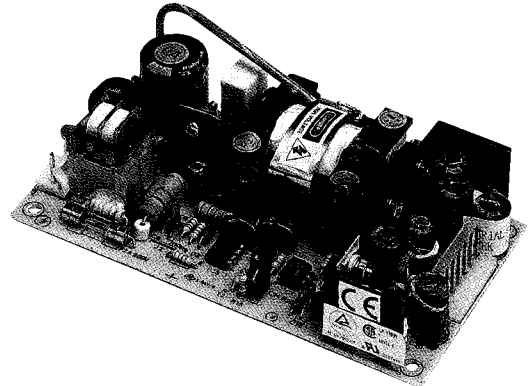
INPUT SPECIFICATIONS

Input voltage: 85 to 264 VAC
Input frequency: 47 to 63 Hz
Input current: 0.80A (rms) for 115VAC
 0.50A (rms) for 230VAC
Leakage current: 0.35mA max.@ 115VAC, 60Hz
 0.63mA max.@ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current : See rating chart
Total output power: 30 watts maximum
Ripple and noise : 1% peak to peak max.
Overvoltage protection : Provided on output #1 only; set at 112-132 % of its nominal output voltage
Overcurrent protection : All outputs protected to short circuit conditions
Temperature coefficient : All outputs +/-0.04%/°C maximum
Transient response : Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500us after a 25% step load change

PU30SL SERIES (LVD)



Safety Standard Approvals:



UL 1950
File No. E137410



C22.2 No. 950
File No. LR93632



EN 60950
Certificate No. R9172042

ENVIRONMENTAL SPECIFICATIONS

Operating temperature: 0°C to +70°C
Storage temperature: -40°C to +85°C
Relative humidity: 5% to 95% non-condensing
Derating: Derate from 100% at +50 °C linearly to 50% at +70 °C

GENERAL SPECIFICATIONS

Switching frequency : 32KHz +/-5KHz
Efficiency : 70% minimum on single output models with $V_o \geq 15V$, 65% minimum on the others
Hold-up time : 12 msec minimum at 110VAC
Line regulation : +/-0.5% maximum at full load
Inrush current : 15 amps @ 115VAC, or 30 amps @ 230VAC, at 25 °C cold start
Withstand voltage : 3000VAC from input to output
 1500VAC from input to ground
 500VAC from output to ground
MTBF : 800,000 hours minimum at full load at 25 °C ambient, calculated per MIL-HDBK-217F
EMI requirements : Meets conducted limits of
 (a) FCC Level B
 (b) EN 55022 Class B
Safety requirements : Meets or Exceeds:
 (a) UL 1950
 (b) CSA C22.2 No. 950
 (c) IEC 950 (EN 60950)

UNIVERSAL INPUT

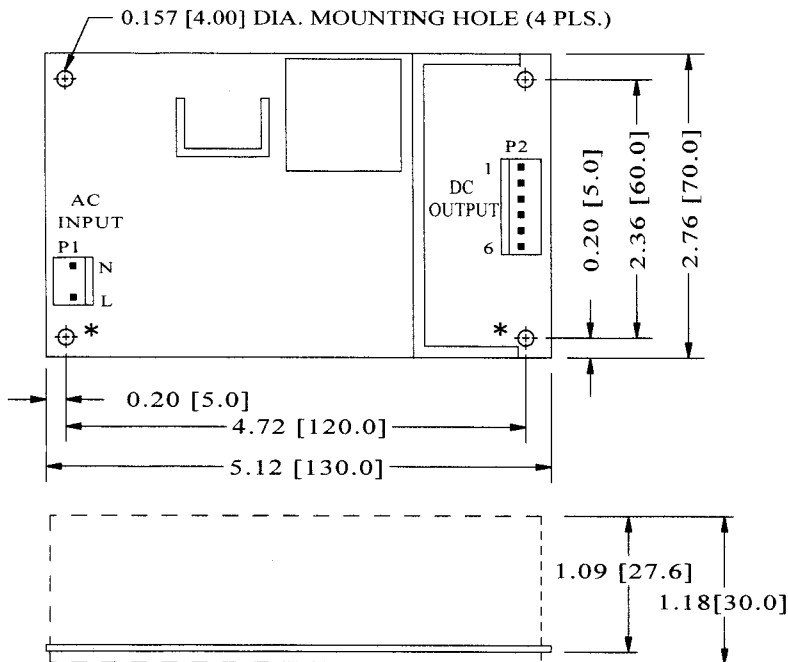
PU30SL SERIES

OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output #1				Output #2				Output #3				Maximum Output Power
	Vnom.	Imin.	I _{max}	Tol.	Vnom.	Imin.	I _{max}	Tol.	Vnom.	Imin.	I _{max}	Tol.	
PU30-10SL	5V	0A	5.0A	2%	(N/A)				(N/A)				25W
PU30-12SL	12V	0A	2.5A	1%	(N/A)				(N/A)				30W
PU30-13SL	15V	0A	2.0A	1%	(N/A)				(N/A)				30W
PU30-14SL	24V	0A	1.3A	1%	(N/A)				(N/A)				30W
PU30-23SL	+5V	0.3A	3.0A	3%	+12V	0.3A	1.5A	5%	(N/A)				30W
PU30-24SL	+5V	0.3A	3.0A	3%	+15V	0.2A	1.5A	5%	(N/A)				30W
PU30-25SL	+5V	0.3A	3.0A	3%	+24V	0.1A	1.0A	5%	(N/A)				30W
PU30-30SL	+5V	0.3A	3.0A	3%	+12V	0.3A	1.5A	5%	-5V	0.05A	0.2A	10%	30W
PU30-31SL	+5V	0.3A	3.0A	3%	+12V	0.3A	1.5A	5%	-12V	0.05A	0.2A	10%	30W
PU30-32SL	+5V	0.3A	3.0A	3%	+15V	0.2A	1.5A	5%	-15V	0.05A	0.2A	10%	30W
PU30-33SL	+5V	0.3A	3.0A	3%	+15V	0.2A	1.5A	5%	-12V	0.05A	0.2A	10%	30W

- Notes: (1) All multiple output models may be operated at no-load without damage. At no-load, output voltage tolerance increases to 10%.
 (2) Safety agency approvals are for the above listed models in PCB format. To order a model with a metallic L-bracket or box, add suffix "B" for L-bracket format or "C" for enclosed format to the model number (mechanical details shown in page 7-1), e.g. PU30-14SLC.

MECHANICAL SPECIFICATIONS



NOTES:

- Dimensions shown in inch [mm]
- Tolerance 0.02 [0.5] maximum
- Input connector mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminal.
- Output connector mates with Molex housing 09-50-3061 and Molex 2878 series crimp terminal.
- Weight: 220 grams (PCB format).
- It is strongly recommended to connect the two "*" marked mounting holes to system chassis through metallic stand-offs. This helps reduce greatly output noise.

PIN CHART

MODEL	PIN	1	2	3	4	5	6
PU30-10SL	PU30-12SL	OUTPUT #1	OUTPUT #1	OUTPUT #1	RETURN	RETURN	RETURN
PU30-13SL	PU30-14SL	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	N.C.	OUTPUT #2
PU30-23SL	PU30-24SL	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	N.C.	OUTPUT #2
PU30-25SL		OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #3	OUTPUT #2
PU30-30SL	PU30-31SL	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #3	OUTPUT #2
PU30-32SL	PU30-33SL	OUTPUT #1	OUTPUT #1	COMMON RETURN	COMMON RETURN	OUTPUT #3	OUTPUT #2