

DESCRIPTION

The PU66 series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 45 to 65 watts of continuous output power. They operate at 90 to 264VAC input voltage without the need of voltage selection. They are ideally suited for use in data networking, computing and telecommunication applications.

FEATURES

- EN61000-3-2 class A compliant
- 3" x 5" PCB and 1.2" height for 1u applications
- 65W output with free air convection cooling
- Wide input range 90 to 264VAC
- Overvoltage protection
- Overcurrent protection
- Compliant with RoHS requirements

INPUT SPECIFICATIONS

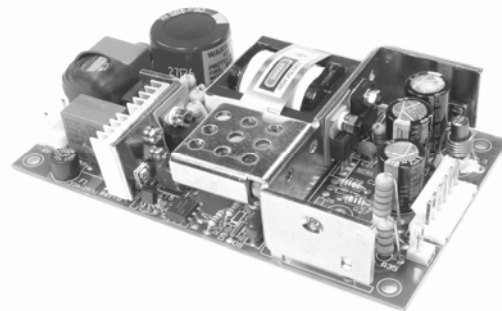
Input voltage :	90 to 264VAC
Input frequency :	47 to 63Hz
Input current :	1.60A (rms) for 115VAC 1.00A (rms) for 230VAC
Earth leakage current : (Touch current)	0.47mA max @ 115VAC, 60Hz 0.85mA max @ 230VAC, 50Hz

OUTPUT SPECIFICATIONS

Output voltage/current:	See rating chart
Total output power:	65 watts maximum
Ripple and noise:	1% peak to peak max. ($V_o \geq 5V$) 1.5% peak to peak max. ($V_o = 3.3V$)
Overvoltage protection:	Provided on output#1 only (V_o have 3.3V provided on output#2); set at 112-132% of its nominal output voltage
Overcurrent protection:	All outputs protected to short circuit conditions
Temperature coefficient:	All outputs $\pm 0.04\%$ / $^{\circ}C$ 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

ENVIRONMENTAL SPECIFICATIONS

Operating temperature :	0 $^{\circ}C$ to +70 $^{\circ}C$
Storage temperature :	-40 $^{\circ}C$ to +85 $^{\circ}C$
Relative humidity :	5% to 95% non-condensing
Derating :	Derate from 100% at +50 $^{\circ}C$ linearly to 50% at +70 $^{\circ}C$

PU66 SERIES


Safe



**CSA C22.2 No. 60950 3rd
Certificate No. 157810**



**TÜV EN60950-1
Certificate No. R50014720**

GENERAL SPECIFICATIONS

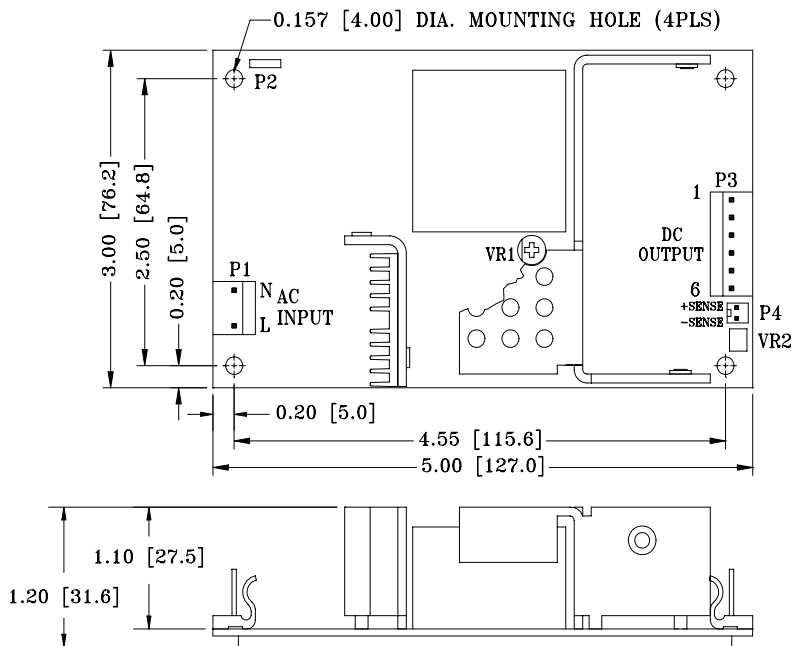
Switching frequency:	42 KHz \pm 5 KHz
Efficiency:	75% typical
Hold-up time:	10 msec minimum at 110VAC
Line regulation:	$\pm 0.5\%$ maximum at full load
Inrush current:	17 A @ 115 VAC or 40 A @ 230 VAC, at 25 $^{\circ}C$ cold start
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground 500 VAC from output to ground
MTBF:	400,000 hours minimum at full load at 25 $^{\circ}C$ ambient, calculated per MIL-HDBK-217F
EMC Performance (EN55024)	
EN55022:	Class B conducted, Class B radiated
FCC Part 15:	Class B conducted, Class B radiated
VCCI:	Class B conducted, Class B radiated
EN61000-3-2:	Harmonic distortion, Class A
EN61000-3-3:	Line flicker
EN61000-4-2:	ESD, $\pm 8KV$ air and $\pm 4KV$ contact
EN61000-4-3:	Radiated immunity, 3V/m
EN61000-4-4:	Fast transient/burst, $\pm 1KV$
EN61000-4-5:	Surge, $\pm 1KV$ diff., $\pm 2KV$ com.
EN61000-4-6:	Conducted immunity, 3Vrms
EN61000-4-8:	Magnetic field immunity, 1A/m
EN61000-4-11:	Voltage dips, 30% reduction for 500ms and >95% reduction for 10ms

OUTPUT VOLTAGE/CURRENT RATING CHART

(1)(2) MODEL	Output #1				Output #2				Output #3				Maximum Output Power
	Vnom.	Imin.	Imax.	Tol.	Vnom.	Imin.	Imax.	Tol.	Vnom.	Imin.	Imax.	Tol.	
PU66-10A	5.1V	0A	10A	3%									51W
PU66-12A	12V	0A	5.5A	2%									65W
PU66-13A	15V	0A	4.4A	2%									65W
PU66-14A	24V	0A	2.8A	2%									65W
PU66-15A	28V	0A	2.4A	2%									65W
PU66-18A	48V	0A	1.4A	2%									65W
PU66-23A	+5.1V	1A	6A	3%	+12V	0.5A	3A	5%					65W
PU66-23-3A	+3.3V	1A	6A	3%	+5.1V	0.5A	5A	4%					45W
PU66-25A	+5.1V	1A	6A	3%	+24V	0.3A	2A	5%					65W
PU66-30A	+5.1V	1A	6A	3%	+12V	0.5A	3A	5%	-5V	0.1A	0.5A	5%	65W
PU66-31A	+5.1V	1A	6A	3%	+12V	0.4A	3A	5%	-12V	0.1A	0.5A	5%	65W
PU66-31-1A	+5.1V	1A	6A	3%	+12V	0.4A	3A	5%	+12V	0.1A	0.5A	5%	65W
PU66-31-3A	+3.3V	1A	6A	3%	+5.1V	0.5A	4A	4%	+12V	0.1A	1A	5%	52W
PU66-32A	+5.1V	1A	6A	3%	+15V	0.4A	3A	5%	-15V	0.1A	0.5A	5%	65W
PU66-39A	+5.1V	1A	6A	3%	+24V	0.3A	2A	5%	-12V	0.1A	0.5A	5%	65W

- NOTES:
- All multiple output models may be operated at no-load without damage. At no-load, output voltage tolerance increases to 10%.
 - Ripple and noise: Peak to peak with 20MHz bandwidth and 10uF tantalum capacitor in parallel with a 0.1uF ceramic capacitor at rated line voltage and load ranges.

MECHANICAL SPECIFICATIONS



NOTES:

- Dimensions shown in inches [mm]
- Tolerance 0.02 [0.5] maximum
- Connector P1: Molex header 09-65-2038 or equivalent, mating with Molex housing 09-50-1031 or equivalent.
- Connector P3: Molex header 09-65-2068 or equivalent, mating with Molex housing 09-50-1061 or equivalent.
- Connector P4: Molex header 22-04-1021 or equivalent for single output models only, mating with Molex housing 22-01-1023 or equivalent.
- Weight: 330 grams (PCB format)
- VR1 is for voltage adjustment of output #1, except models PU66-23-3A and PU66-31-3A. On models PU66-23-3A and PU66-31-3A, VR1 is for voltage adjustment of output #2, and VR2 for output #1.

.PIN CHART

MODEL	CONN PIN	P1		P2	P3						P4	
		1	2	1	1	2	3	4	5	6	1	2
PU66-10A PU66-12A PU66-13A PU66-14A PU66-15A PU66-18A	AC LIVE NEUTRAL	AC LIVE	AC NEUTRAL	AC GROUND	OUTPUT #1	OUTPUT #1	OUTPUT #1	RETURN	RETURN	RETURN	+SENSE	-SENSE
PU66-23A PU66-25A	AC LIVE NEUTRAL	AC LIVE	AC NEUTRAL	AC GROUND	OUTPUT #2	OUTPUT #1	OUTPUT #1	COM. RET	COM. RET	N.C.		
PU66-30A PU66-31-1A PU66-32A PU66-31A PU66-31-3A PU66-39A	AC LIVE NEUTRAL	AC LIVE	AC NEUTRAL	AC GROUND	OUTPUT #2	OUTPUT #1	OUTPUT #1	COM. RET	COM. RET	OUTPUT #3		