

15-25 WATT ITE POWER SUPPLIES

DESCRIPTION

PROTEK POWER

The PUP15/25N3 series of AC-DC switching power supplies are for 15-25 watts of continuous output power. They are enclosed in a 94V-0 rated plastic case with an IEC320/C14 inlet to mate with interchangeable cord for world-wide use. All models meet EN55032, EN55024 and FCC class B emission limits and comply with UL, CSA, IEC and CE requirements.

FEATURES

- No load power consumption less than 0.075w
- Compliant with DoE level VI requirements
- Meet energy star EPS2.0 /ErP lot 7
- Meet EU CoC EPS V5 Tier2
- Operating altitude up to 5000 meters
- Overvoltage protection (auto-recovery)
- Short-circuit protection (auto-recovery)
- Overcurrent protection (auto-recovery)
- High Efficiency
- 100% burn-in at full rated load
- Compliant with RoHS requirements
- Meet LPS requirements

PUP15/25N3 SERIES CE **RoHS**

SAFETY STANDARD APPROVALS



UL 62368-1, CSA C22.2 No. 62368-1 File No. E190414



TUV EN 62368-1

INPUT SPECIFICATIONS

90-264 VAC Input voltage: Input frequency: 47-63 Hz

Input current: 0.8A (rms) for 115 Vac

0.45A (rms) for 230 Vac

Earth Leakage current: 250 µA max. @ 264 VAC, 60 Hz

OUTPUT SPECIFICATIONS

Output voltage /current: See rating chart. Maximum output power: See rating chart. Ripple and noise: See rating chart.

Overvoltage protection: Set at 115-200% of its nominal output

voltage

Protect to short circuit conditions Overcurrent protection: 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 500 us after a 25% step

load change

GENERAL SPECIFICATIONS

Hold-up time: 8 ms minimum at 115 VAC Turn on delay time: 3 s maximum at 115 VAC Efficiency: 85% up at full load

Line regulation: ±0.5% maximum at full load

Inrush current: 30 A @ 115 VAC or 60 A @ 230 VAC

at 25°C cold start

Withstand voltage: 4242 VDC from input to output,

2500 VDC from input to ground,

MTBF: 100,000 hours at full load at 25°C ambient,

calculated per SR332

EMC Performance

Class B conducted, Class B radiated EN55032: EN61000-3-2: Harmonic distortion, Class A and D Line flicker

EN61000-3-3:

EN55024

ESD,±8 KV air and ±4 KV contact EN61000-4-2:

EN61000-4-3: Radiated immunity, 3 V/m EN61000-4-4: Fast transient/burst, ±1 KV EN61000-4-5: Surge, ±1 KV diff., ±2 KV com. EN61000-4-6: Conducted immunity, 3 Vrms EN61000-4-8: Magnetic field immunity, 1 A/m

EN61000-4-11: Voltage dip immunity, 30% reduction for 500

ms. and >95% reduction for 10 ms

ENVIRONMENTAL SPECIFICATIONS

Operating temperature: 0°C to +40°C Storage temperature: -20°C to +80°C

Operating humidity: 20% to 80% non-condensing Storage humidity: 10% to 90% non-condensing

Temperature derating: Derate from 100% at +40℃ linearly to

50% at +60°C

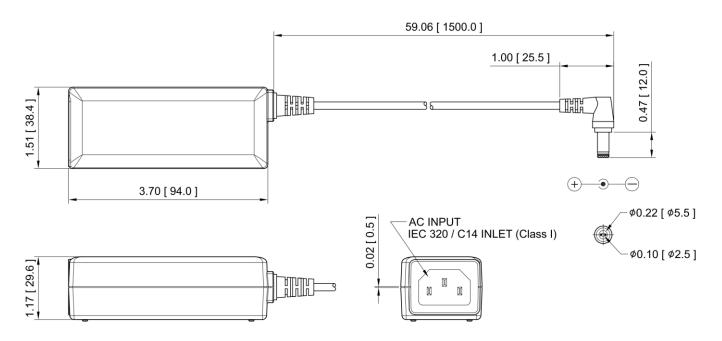
OUTPUT VOLTAGE/CURRENT RATING CHART

	Output						Average efficiency
Model	V1	Min. Current	Max. Current	Tol.	Ripple & Noise ⁽¹⁾	Max. Power	(typical) @ 115 / 230 Vac
PUP15N3-10	5 V	0 A	3.00 A	±5%	150 mV	15 W	83 /83%
PUP25N3-12	12 V	0 A	2.08 A	±5%	180 mV	25 W	87 /88%
PUP25N3-13-2	19 V	0 A	1.32 A	±5%	300 mV	25 W	88 /89%
PUP25N3-14	24 V	0 A	1.04 A	±5%	300 mV	25 W	89 /89%

NOTES:

Ripple and noise is maximum peak-to-peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 47 µF electrolytic capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

MECHANICAL SPECIFICATIONS



NOTES:

- Dimensions shown in inches [mm], tolerance 0.02 [0.5] maximum. 1.
- 2. Weight: 112 grams (0.25 lbs.) approx.
- Output return (-) is electrically connected to incoming Earth Ground through a 0 ohm resistor as standard. The length of output cable for PUP15N3-10 is 39.37 [1000.0]. 3.

PIN CHART

MODEL CONNECTION **Polarity**

OUTPUT POWER DERATING CURVE

