

# 240-270 WATT ITE POWER SUPPLIES

#### **DESCRIPTION**

The PUP270 series of AC/DC switching power supplies are for 240-270 watts of continuous output power. They are enclosed in a 94V-0 rated plastic cases an IEC320/C14 inlet to mate with interchangeable cord for world-wide use. All models meet EN 55022, EN55024 and FCC class B emission limits, and comply with UL, CSA, IEC and CE requirements.

#### **PUP270 SERIES**



RoHS

#### **FEATURES**

- No load power consumption less than 0.15W
- Compliant with DoE level VI / CoC EPS V5 tier 2 requirements
- Meet energy star EPS2.0 /ErP lot 7
- With PFC circuit
- Operating altitude up to 5000 meters
- Wide input range 90 to 264 VAC
- 100% burn-in
- Overvoltage protection (latch)
- Overcurrent protection
- Over temperature protection (latch)
- Compliant with RoHS requirements

#### SAFETY STANDARD APPROVALS



UL 60950 3 rd, CSA C22.2 NO. 60950 3 rd File No. E190414





TÜV EN 60950-1

## INPUT SPECIFICATIONS

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

Input current: 3.0 A (rms) for 115 VAC

1.5 A (rms) for 230 VAC

Earth leakage current: 3.5 mA max. @ 264 VAC, 63 Hz Touch current: 100 μA max. @ 264 VAC, 63 Hz

#### **GENERAL SPECIFICATIONS**

Power factor: 0.98 Typical at 115 VAC
Efficiency: 89% min. at full load
Hold-up time: 10 ms minimum at 100 VAC
Line regulation: ±0.5% maximum at full load

Inrush current: 90 A @ 115 VAC or 180 A @ 230 VAC, at

25°C cold start

Withstand voltage: 1500 VAC from input to output

MTBF: 300,000 hours at full load at 25°C ambient,

calculated per SR332

# **OUTPUT SPECIFICATIONS**

Output voltage /current: See rating chart.

Maximum output power: See rating chart.

Ripple and noise: See rating chart.

Overvoltage protection: Provided and set at 110-140% of its

nominal output voltage

Overcurrent protection: Protected to short circuit conditions

Temperature coefficient: ±0.04% /℃ 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

### **EMC** Performance

EN55022: Class B conducted, class B radiated FCC: Class B conducted, class B radiated VCCI: Class B conducted, class B radiated EN61000-3-2: Harmonic distortion, Class D

EN61000-3-3: Line flicker

EN55024:

EN61000-4-2: ESD, ±15 KV air and ±8 KV contact

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:  $0^{\circ}$ C to +60°C Storage temperature: -20°C to +80°C

Relative humidity: 10% to 90% non-condensing

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

50% at +60°C

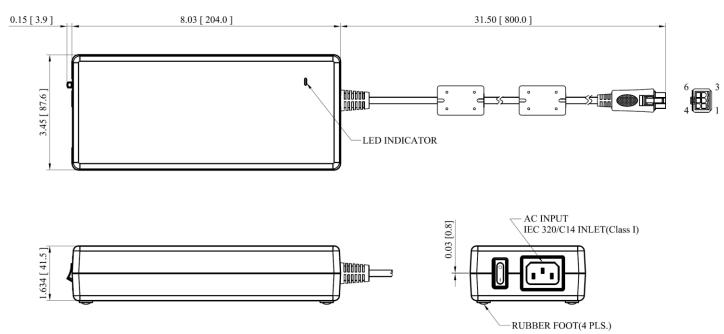
# **OUTPUT VOLTAGE/CURRENT RATING CHART**

Model	V1	Min. Current	Max. Current	Tol.	Ripple & Noise <sup>(1)</sup>	Max. Power	Average Active Efficiency (typical) @ 115 / 230 Vac
PUP270-12-S	12 V	0 A	20.00 A	±5%	240 mV	240 W	89 /89%
PUP270-13-2-S	19 V	0 A	14.21 A	±5%	300 mV	270 W	89 /89%
PUP270-14-S	24 V	0 A	11.25A	±5%	300 mV	270 W	89 /89%
PUP270-18-S	48 V	0 A	5.62 A	±5%	500 mV	270 W	89 /89%
PUP270-19-S	54 V	0 A	5.00 A	±5%	550 mV	270 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.

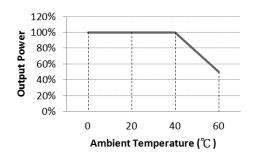
# **MECHANICAL SPECIFICATIONS**



### NOTES:

- 1. Dimensions shown in inches [mm]
- 2. Tolerance 0.02 [0.5] maximum
- 3. Weight: 1100 grams (2.425 lbs.) approx.
- 4. Output connector is JWT Mini Fit receptacle, P/N: C4202H00-2x3P with female terminal C4202T2\*-2 or equivalent, mating with JWT socket C4201H0\*-2x3P and male terminal C4201T2\*-2 or equivalent. It also mates with JWT headers C4201WR\*-2x3P, C4201WV\*-2x3P, or equivalent.
- 5. V1 return (-) is electrical connected to incoming Earth Ground through two 1.2K ohm resistors as standard.

# **OUTPUT POWER DERATING CURVE**



# **PIN CHART**

PIN	1	2	3	4	5	6
PIN6 PIN3 PIN5 PIN2 PIN4 PIN1	+V1	+V1	+V1	V1 Return	V1 Return	V1 Return