

DESCRIPTION

The PUP40/45/48N3 series of AC-DC switching power supplies are for 40-48 watts of continuous output power. They are enclosed in a 94V-0 rated polycarbonate case with an IEC320/C14, IEC320/C6 or IEC320/C8 inlet to mate with interchangeable cord for world-wide use. All models meet CISPR 22 and FCC class B emission limits and comply with UL, CSA, IEC and CE requirements.

FEATURES

- No load power consumption less than 0.075W
- Operation altitude up to 5000 meters
- High Efficiency
- Meet energy star EPS2.0 /ErP EC No 278/2009 (lot 7)
- Meet EU CoC EPS V5 Tier2
- Overvoltage protection
- Short-circuit protection
- Overcurrent protection
- 100% burn-in at full rated load
- Compliant with RoHS requirements
- Meet LPS requirements

INPUT SPECIFICATIONS

Input voltage: 90-264 VAC
 Input frequency: 47-63 Hz
 Input current: 1.0 A (rms) for 115 VAC
 0.6 A (rms) for 230 VAC
 Earth leakage current: 250 μ A 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 130-180% of its nominal output voltage
 Overcurrent protection: Set at 125-160% of its nominal output current
 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 500 μ s after a 25% step load change

ENVIRONMENTAL SPECIFICATIONS

Operating temperature: 0 $^{\circ}$ C to +40 $^{\circ}$ C
 Storage temperature: -20 $^{\circ}$ C to +80 $^{\circ}$ C
 Operating humidity: 20% to 80% non-condensing
 Storage humidity: 10% to 90% non-condensing
 Temperature derating: Derate from 100% at +40 $^{\circ}$ C linearly to 50% at +60 $^{\circ}$ C

PUP40/45/48N3 SERIES



SAFETY STANDARD APPROVALS



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



TÜV EN 62368-1

GENERAL SPECIFICATIONS

Hold-up time: ≥ 5 ms minimum at 115 VAC
 Turn on delay time: ≤ 3 s maximum at 115 VAC
 Efficiency: 80% min. on 5V models
 87% min. on 24V model
 Line regulation: $\pm 0.5\%$ maximum at full load
 Inrush current: 100 A @ 115 VAC or 200 A @ 230 VAC at 25 $^{\circ}$ C cold start
 Withstand voltage: 4242 VDC from input to ground and output
 MTBF: 100,000 hours at full load at 25 $^{\circ}$ C ambient, calculated per MIL-HDBK- 217F
 EMC Performance
 EN55032(CISPR 22): Class B conducted, Class B radiated
 EN61000-3-2: Harmonic distortion, Class A and D
 EN61000-3-3: Line flicker
 EN55035
 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

PUP40/45/48N3 ITE SERIES

Model ⁽¹⁾		Output						Average efficiency (typical) @ 115 / 230 Vac
Class I	Class II	V1	Min. Current	Max. Current	Tol.	Ripple & Noise ⁽²⁾	Max. Power	
PUP40N3-12	--	12 V	0 A	3.33 A	±5%	120 mV	40 W	88.60%
PUP40N3S-12	--	12 V	0 A	3.33 A	±5%	120 mV	40 W	88.60%
PUP45N3S-13-2	PUP45N3SF-13-2	19 V	0 A	2.37 A	±5%	380 mV	45 W	88.86%
PUP45N3S-14	PUP45N3SF-14	24 V	0 A	1.87 A	±5%	380 mV	45 W	88.86%
PUP48N3-12	--	12 V	0 A	4.00 A	±5%	120 mV	48 W	88.97%
PUP48N3S-12	--	12 V	0 A	4.00 A	±5%	120 mV	48 W	88.97%

1. PUP40/48N3 models are equipped with IEC320/C14 inlet, PUP40/45/48N3S models with IEC320/C6 inlet, and PUP45N3SF models with IEC320/C8 inlet.
2. 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 μ F electrolytic capacitor in parallel with a 0.1 μ F ceramic capacitor across the output.

Technical drawing of the LED indicator showing top, side, and detail views with dimensions in mm and inches.

Top View Dimensions:

- Overall width: 47.24 [1200.0]
- Overall height: 1.97 [50.0]
- Distance from left edge to LED indicator: 4.33 [110.0]
- Distance from left edge to mounting hole center: 1.00 [25.5]
- Distance from mounting hole center to LED indicator: 1.18 [30.0]
- Distance from left edge to mounting hole center (alternative): 0.37 [9.5]
- Distance from left edge to mounting hole center (alternative): 0.65 [16.5]

Side View Dimensions:

- Overall height: 1.26 [32.0] MAX

Detail View Dimensions:

- Mounting hole diameter: $\phi 0.22$ [$\phi 5.5$]
- LED indicator diameter: $\phi 0.10$ [$\phi 2.5$]

AC Input Inlets:

- AC INPUT IEC 320 / C14 INLET (Class I)
- AC INPUT IEC 320 / C6 INLET (Class I)

NOTES:

1. Dimensions shown in inches [mm].
2. Tolerance 0.02 [0.5] maximum.
3. The length of output cable for output voltage 24V is 59.06 [1500.0]; length of output cable for the rest models is 47.24 [1200.0].
4. Weight: 200 grams (0.44 lbs.) approx.
5. Output return (-) is electrically connected to incoming Earth Ground through a 0 ohm resistor as standard.