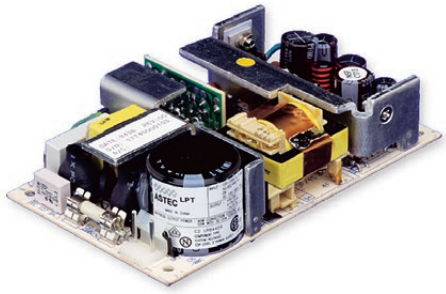
POWER

NLP40 Series

Single, Dual and Triple Output

Data Sheet

Total Power: 40 - 50 W
Input Voltage: 90 - 264 Vac
120 - 370 Vdc
# of Outputs: Single, dual, triple



SPECIAL FEATURES

- 4.25 x 2.5 x 1.15 inch package (1U applications)
- Universal input
- Overvoltage and short circuit protection
- 40 W with free air convection
- EN55022, EN55011 conducted emission level B
- EN61000-4-2, -3, -4, -5, -6 immunity compliant
- UL, VDE and CSA safety approvals
- NLP40 enclosure kit available
- RoHS compliant

SAFETY

- VDE0805/EN60950/IEC950
  File 10401-3336-0093
  Licence No. 93662
- UL 60950 File No. E132002
- CSA C22.2 No. 950
  File No. LR41062C

Electrical Specifications

Input		
Input voltage range (See Note 9)	Universal input	90 - 264 Vac 120 - 370 Vdc
Input frequency range		47 - 440 Hz
Input surge current	120 Vac, cold start 230 Vac, cold start	15 A max. 30 A max.
Safety ground leakage current	120 Vac, 60 Hz 230 Vac, 50 Hz	0.2 mA 0.4 mA
Input current	120 Vac 230 Vac	1.4 A rms 0.7 A rms
Input fuse	UL/IEC127	250 Vac H 3.15 A
Output		
Total regulation (Line and load)	Main output Auxiliary outputs	±2.0% ±5.0%
Rise time	At turn-on	1.0 s, max.
Transient response	Main output 25% step at 0.1 A/µs	5.0% max. dev., 1 ms rec. to 1.0%
Temperature coefficient		±0.02%/°C
Overvoltage protection	Main outputs	135%, ±15%
Short circuit protection	Cyclic operation	Continuous
Minimum output current	Single Multiple	0 A (See Note 5)

ARTESYN™
EMBEDDED TECHNOLOGIES

EMC Charateristics [10]		
Conducted emissions	EN55022, FCC part 15	Level B
Radiated emissions	EN55022, FCC part 15	Level A
ESD air	EN61000-4-2, level 3	Perf. criteria 1
ESD contact	EN61000-4-2, level 3	Perf. criteria 1
Surge	EN61000-4-5, level 3	Perf. criteria 1
Fast transients	EN61000-4-4, level 3	Perf. criteria 1
Radiated immunity	EN61000-4-3, level 3	Perf. criteria 1
Conducted immunity	EN61000-4-6, level 3	Perf. criteria 1
General Specifications		
Hold-up time	120 Vac 230 Vac	12 ms @ 40 W 20 ms @ 40 W
Efficiency		75% typical
Isolation voltage	Input/output Input/chassis	3000 Vac 1500 Vac
Switching frequency	Fixed	65 kHz, ±5 kHz
Approvals and standards (See Note 8)		UL, CSA VDE 60950, IEC950, UL1950 VDE0805, CSA C22.2 No. 950
Weight		200 g (7.06 oz)
MTBF demonstrated	MIL-HDBK-217F	150,000 hours min.

Environmental Specifications		
Thermal performance	Operating ambient (see derating curve)	0° C to +70 °C
(See Notes 6, 7, 9)	Non-operating	-40 °C to +70 °C
	50 °C to 70 °C ambient, convection cooled	Derate to 50% load
	0 °C to 50 °C ambient, convection cooled	40 W
	0 °C to 50 °C ambient, 20 CFM forced air	50 W
	Peak (0 °C to +50 °C, 60 s)	(See Note 2)
Relative humidity	Non-condensing	5 to 95% RH
Altitude	Operating	10,000 feet max.
	Non-operating	30,000 feet max.
Vibration (See Note 4):	5-500 Hz	2.4 G rms peak
Shock	Per MIL-STD-810E	516.4 Part IV