

NLP65 Series

Single, Dual and Triple Output

Data Sheet

Total Power: 65 - 75 W
Input Voltage: 85 - 264 Vac
 120 - 370 Vdc*
of Outputs: Single, dual, triple

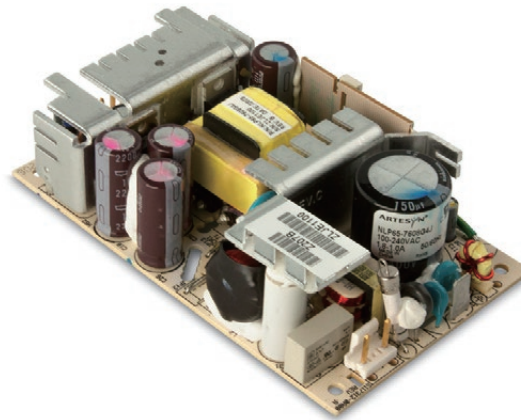
SPECIAL FEATURES

- Universal input
- 3" x 5" footprint
- Low profile fits 1U applications
- EN61000-3-2 compliance option (HCC)
- Overvoltage and short circuit protection
- 65 W with free air convection cooling
- EN55022, EN55011 conducted emissions level B
- EN61000-4-2, -3, -4, -5, -6 immunity compliant
- RoHS compliant
- LPX80 enclosure kit available
- Two year warranty

SAFETY

- VDE0805/EN60950-1
File No. 1040100-3336-0096
- License No. 114404
- UL 60950-1
- cUL 60950-1
- CCC 60950-1
- CE LVD Directive

*NLP65-76xx version only



Electrical Specifications

Input		
Input voltage range	Universal input (see Note 2) NLP65-76xx version only	85 - 264 Vac 120 - 370 Vdc
Input frequency range		47 - 63 Hz
Input current (cold start)	120 Vac 230 Vac	17 A max. 32 A max
Safety ground leakage current	120 Vac, 60 Hz 230 Vac, 50 Hz	0.7 mA 1.4 mA
Input current	120 Vac, with PFC 230 Vac, with PFC 120 Vac, without PFC 230 Vac, without PFC	1.4 A 0.51 A rms 1.40 A rms 0.80 A rms
Input fuse	UL/IEC127	5 A, 250 Vac In live and neutral
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% or 250 mV max. dev., 1ms max. recovery to 1%
Temperature coefficient		±0.02%/°C
Overvoltage protection	Main outputs	125%, ±10%
Short circuit protection	Cyclic operation	Continuous
Minimum output current	Single and multiple	(See Note 6)

All specifications are typical at nominal input, full load at 25 °C unless otherwise stated.

EMC Characteristics ^(11, 12)

Conducted emissions	EN55022, FCC part 15	Level B
ESD air	EN61000-4-2, level 3	Perf. criteria 1
ESD contact	EN61000-4-2, level 4	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 2
Conducted immunity	EN61000-4-6, level 3	Perf. criteria 2

General Specifications

Hold-up time	120 Vac, 60 Hz 230 Vac, 50 Hz	16 ms @ 65 W 78 ms @ 65 W
Efficiency	120 Vac, 65 W	72% typical
Isolation voltage	Input/output Input/chassis	3000 Vac 1500 Vac
Switching frequency	Fixed	100 kHz, ± 5 kHz
Approvals and standards (see Notes 9, 13)	EN60950-1, IEC60950-1	
Weight	283 g (10 oz)	
MTBF demonstrated	MIL-HDBK-217F	150,000 hours min

Environmental Specifications

Thermal performance:	Operating (See derating curve)	0° C to +70 °C
(See notes 1, 3, 10)	Non-operating	-40 °C to +85 °C
	50 °C - 70 °C ambient, convection cooled	Derate to 50% load
	0 °C to 50 °C, ambient, convection cooled	65 W
	0 °C to 50 °C, ambient 20CFM forced air (See Note 10)	75 W
	Peak (0 °C to 50 °C, 60 s)	See table
Relative humidity	Non-condensing	5 to 95% RH
Altitude	Operating	10,000 feet max.
	Non-operating	30,000 feet max.
Vibration (See Note 5)	5-500 Hz	2.4 G rms peak
Shock	per MIL-STD-810E	516.4 Part IV

