

Output Voltage	Output Current			Ripple <sup>(4)</sup>	Total Regulation <sup>(6)</sup>	Non-Harmonic Corrected	Harmonic Corrected	Ground Pin <sup>(12, 14, 17)</sup>
	Max <sup>(1)</sup>	Peak <sup>(3)</sup>	Fan <sup>(10)</sup>					
+5 V (IA)	7.5 A	9.1 A	8 A	50 mV	±2.0%	NLP65-7608J	NLP65-9608J <sup>(a)</sup>	NLP65-X608GJ
+12 V (IB)	2.5 A	3.3 A	3 A	150 mV	±5.0%			
-12 V	0.65 A	0.81 A	0.8 A	120 mV	±5.0%			
+5 V (IA)	7.5 A	9.1 A	8 A	50 mV	±2.0%	NLP65-7610J	NLP65-9610J	NLP65-X610GJ
+15 V (IB)	2.2 A	2.9 A	2.5 A	150 mV	±5.0%			
-15 V	0.65 A	0.85 A	0.8 A	150 mV	±5.0%			
+5 V	7.0 A	9.1 A	8.0 A	50 mV	±2.0%	NLP65-3322J <sup>(15)</sup>		
+24 V	1.5 A	2.6 A	2.0 A	240 mV	±5.0%			
+12 V	0.7 A	1.0 A	1.0 A	120 mV	±5.0%			
+5 V (IA)	7 A	9.1 A	8 A	50 mV	±2.0%	NLP65-7620J	NLP65-9620J	NLP65-X620GJ
+24 V (IB)	2 A	2.6 A	2 A	240 mV	±5.0%			
+5 V (IA)	7 A	9.1 A	8 A	50 mV	±2.0%	NLP65-7629J	NLP65-9629J	NLP65-X629GJ
+12 V (IB)	2.5 A	3.3 A	3 A	150 mV	±5.0%			
+5 V	10 A	13 A	12 A	50 mV	±2.0%	NLP65-7605J	NLP65-9605J	NLP65-X605GJ
+12 V	5.4 A	7 A	6.5 A	120 mV	±2.0%	NLP65-7612J	NLP65-9612J	NLP65-X612GJ
+24 V	2.7 A	3.5 A	3.5 A	240 mV	±2.0%	NLP65-7624J	NLP65-9624J	NLP65-X624GJ

**Notes**

1. Natural convection cooling. Models NLP65-X629J, NLP65-X608J, NLP65-X610J must not exceed 62.5 Watts continuous output power with natural convection. Model NLP65-X620J not to exceed 65 Watts continuous output power with natural convection. Model NLP65-3322J must not exceed 60 Watts continuous output power with natural convection.
2. When the input voltage is less than 90 Vac the operating temperature range is 0 °C to +40 °C. The ripple and regulation specifications may not be met.
3. Peak output current lasting less than 60 seconds with duty cycle less than 5%. During peak loading, output voltage may exceed total regulation limits.
4. Figure is peak-to-peak for convection power rating. Output noise measurements are made across a 20 MHz bandwidth using a 6 inch twisted pair, terminated with a 10 µF electrolytic capacitor and a 0.1 µF ceramic capacitor.
5. Three orthogonal axes, random vibration 10 minutes for each axes, 2.4 G rms 5 Hz to 500 Hz.
6. A minimum load on the main output is required for proper start up. For multiple outputs and single +5V output, the minimum load on the +5 V is 0.2 A. For single outputs greater than +5 V the minimum load is 0.1 A. To maintain stated regulation then:  
for single output units  
 $I \geq 0.2 \text{ A}$   
for multiple output units  
 $0.25 \leq I(A)/I(B) \leq 5$ , for  $I(A) \geq 0.2 \text{ A}$ .
7. For optimum reliability, no part of the heatsink should exceed 120 °C, and no semiconductor case temperature should exceed 130 °C.
8. CAUTION: Allow a minimum of 1 second after disconnecting line power when making thermal measurements.
9. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.
10. Maximum continuous output power for all multiple output models must not exceed 75 Watts (70 watts for NLP65-3322J) with 20 CFM forced air cooling.

11. Conducted emissions testing were performed using the standard EN55022 set-up with a stand alone NLP65 unit placed on a grounded metal plate with a line choke on the AC input and ground wires (i.e. the wires are looped through an EMI suppression toroid).  
For system compliance it is usually necessary to install an 'off-the-shelf' AC inlet with an integral line filter in the system chassis or to install a line choke on the input wires as close as possible to AC entry point of the system chassis. Please contact the applications group for assistance with EMI compliance.
12. The NLP65 units with the suffix 'G' is the ground pin and ground choke option. J2, L6 and JP10 are included. J2 is a safety agency approved grounding pin, L6 is a ground choke and JP10 is a jumper. This option is intended for use in non-metallic chassis applications where grounding is not possible via the mounting screws. The ground choke is provided to assist system EMC compliance. When performing conducted emissions testing on stand alone units, the 'G' option is required to meet level B. To order simply add the suffix 'G' to the standard model number, e.g. NLP65-7608GJ, NLP65-9608GJ. This option is available for both the PFC and non-PFC versions.
13. All models require a minimum mounting stand-off of 0.25 inches (6.35 mm) in the end use product.
14. The NLP65-9608J is available with an enclosure. To order an enclosed version, use NLP65-9608EJ.
15. No PFC version, EN61000-3-2 is not applicable to this model.
16. The 'J' suffix indicates that these parts are Pb-free (RoHS 6/6) compliant.
17. NOTICE: Some models do not support all options. Please contact your local Artesyn Embedded Technologies representative or use the on-line model number search tool at <http://www.artesyn.com/power>

### Model Numbering Options

- a) The enclosure version NLP65-9608EJ includes: IEC connector, on/off switch, wire harness output connector and fitted cover. To order, please add the suffix 'E' the model number. See NLP65 enclosure for details.
- b) A Safety earth ground pin and ground choke are available as an option.  
To order, please add the suffix 'G' the model number, e.g. NLP65-X608GJ.
- c) To order an enclosure kit (unfitted), order the part number LPX80.

### Mechanical Drawing

