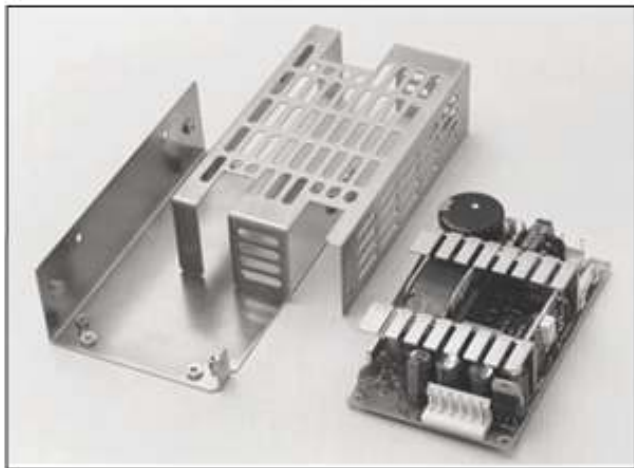


# NLP40 - 65 SERIES

AC/DC Single & Multi Output: 40 - 65 Watts



## Features

- Smallest industry package
- 85 to 264 VAC universal input range
- NLP65-76xxx models can operate from 120-370VDC • EN61000-3-2 PFC option NLP65-96xx
- UL, CSA, & VDE safety approvals
- EN55022 level B conducted noise
- EN55022 level A radiated noise
- CE - marked to LVD.
- Meets all applicable and relevant immunity standards EN61000-4-2,4,5 and ENV50140/1
- Optional safety cover

The new NLP40 and NLP65 offer the smallest open frame 40 and 65 watt power supply in the industry.

With Harmonic Correction and PFC option the NLP65 combines features and values to set new industry performance standards.

- Individual data sheets and detailed engineering specifications available on request.



## Specifications

|  |   |
|--|---|
| INPUT VOLTAGE:                         | 85 - 264 VAC  |
| FREQUENCY:                             | NLP40: 47-400HZ, NLP65 47-63HZ  |
| INPUT SURGE CURRENT:                   | Cold start: 17A @ 120 VAC,<br>32A @ 230 VAC   |
| INPUT FUSE:                            | NLP40: 250 VAC 2.0A<br>NLP65: 2.5A  |
| VOLTAGE ADJUSTMENT:                    | Output voltage is fixed   |
| OUTPUT POWER:                          | NLP40: 40W, 65W with 20CFM air cooling<br>NLP65: 65W, 75W with 20CFM air cooling            |
| TOTAL REGULATION (Line & Load):        | Main output V1±2.0%<br>Auxilliary outputs ±5.0%   |
| RISE TIME:                             | At turn on 1.0 second maximum   |
| TRANSIENT RESPONSE:                    | Main output V1 25% step at 1.0A/μs or<br>250mV max. dev. 1 ms max. recovery<br>to within 1% |
| TEMP. CO-EFFICIENT:                    | ±0.02% per °C   |
| OVP:                                   | Main output only set at 115%-145%   |
| SHORT CIRC. PROTECTION:                | Cyclic operation indefinite   |
| EMC:                                   |   |
| Radiated Noise:                        | EN55022 / 11 level A  |
| Conducted Noise:                       | EN55022 / 11 level B  |
| Electrostatic Discharge:               | EN61000-4-2 level 3   |
| Electrical Fast Bursts and Transients: | EN61000-4-4 level 3   |
| Surge Susceptibility:                  | EN61000-4-5 level3  |
| RF Susceptibility:                     | ENV50140 level3   |
| RF Conducted Disturbance:              | ENV50141 level3   |
| RIPPLE & NOISE:                        | Measured across a 20 to 50MHz<br>bandwidth with a 47μF capacitor.                           |
| HOLD-UP TIME:                          | 12ms/70ms at 120/230 VAC  |
| EFFICIENCY:                            | Typically 75% at rated load   |
| MINIMUM LOAD:                          | Minimum load of 10% required on<br>V1 and V2.<br>Consult Amtex for details                  |
| ISOLATION:                             | Input - output: 3000 VAC<br>Input - chassis: 1500 VAC                                       |
| SWITCHING FREQUENCY:                   | NLP40 fixed at 65kHz ±5kHz<br>NLP65 fixed at 100kHz ±5kHz                                   |
| SAFETY:                                | EN60950, UL1950, AS3260, IEC950<br>CSA approved   |
| OPERATING TEMP:                        | 0°C to + 70°C derate above 50°C<br>Consult Amtex for derating graphs                        |
| HUMIDITY:                              | 5% to 95% RH non-condensing   |
| ALTITUDE:                              | Operating 10,000 feet maximum   |
| VIBRATION:                             | 5Hz to 500Hz 2.4G rms peak  |
| SHOCK:                                 | Per MIL - STD - 810E 516.4 Part IV  |
| MTBF:                                  | 150,000 hours per MIL - HDBK - 217E   |
| DIMENSIONS:                            |   |
| (Open Frame)                           | NLP40: 108 x 63.5 x 30mm<br>NLP65: 127 x 76.2 x 32mm  |
| (Enclosed)                             | NLP40: 127 x 74 x 38mm<br>NLP65: 140 x 87 x 47mm  |
| WEIGHT:                                | NLP40: 200g. NLP65: 283g.   |
| CONNECTORS (Mating):                   | AC Molex 09 - 50 - 3031<br>DC Molex 09 - 50 - 3061  |

# NLP40 - 65 SERIES

AC/DC Single & Multi Output: 40 - 65 Watts

| MODEL                   | V1         | Output V2 | V3        | Power Convection Cooled | Power Fan Cooled |
|-------------------------|------------|-----------|-----------|-------------------------|------------------|
| NLP40-76T366            | +3.3V 4.5A | +12V 3.0A | -12V 0.5A | 40W                     | 50W              |
| NLP40-7608              | +5V 4.5A   | +12V 3.0A | -12V 0.5A | 40W                     | 50W              |
| NLP40-7610              | +5V 4.5A   | +15V 2.0A | -15V 0.5A | 40W                     | 50W              |
| NLP40-7627              | +12V 2.1A  | -12V 2.1A |           | 40W                     | 50W              |
| NLP40-7629              | +5V 4.5A   | +12V 3.0A |           | 40W                     | 50W              |
| NLP40-76S3              | 3.3V 9.0A  |           |           | 40W                     | 50W              |
| NLP40-7605              | 5V 9.0A    |           |           | 40W                     | 50W              |
| NLP40-7612              | 12V 4.0A   |           |           | 40W                     | 50W              |
| NLP40-7615              | 15V 3.3A   |           |           | 40W                     | 50W              |
| NLP40-7624              | 24V 2.0A   |           |           | 40W                     | 50W              |
| NLP40-7617              | 48V 1.0A   |           |           | 40W                     | 50W              |
| NLP65-7608 / NLP65-9608 | +5V 8.0A   | +12V 3.0A | -12V 0.8A | 65W                     | 75W              |
| NLP65-9610              | +5V 8.0A   | +15V 2.5A | -15V 0.8A | 65W                     | 75W              |
| NLP65-7620/ NLP65-9620  | +5V 8.0A   | +24V 2.0A |           | 65W                     | 75W              |
| NLP65-7629 / NLP65-9629 | +5V 8.0A   | +12V 3.0A |           | 65W                     | 75W              |
| NLP65-7605 /NLP65- 9605 | +5V 12.0A  |           |           | 65W                     | 75W              |
| NLP65-7612 / NLP65-9612 | 12V 6.5A   |           |           | 65W                     | 75W              |
| NLP65-7624/ NLP65-9624  | 24V 3.25A  |           |           | 65W                     | 75W              |

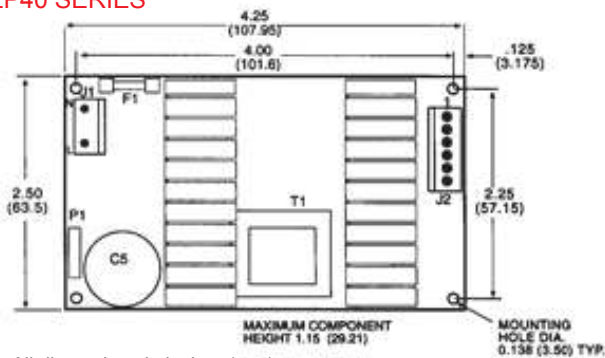
### NLP40:

- Natural convection cooling, maximum power 40W  
With 20CFM forced air cooling maximum power 50W
- Peak output at current available on V1 and V2 at approx. 112% of rating with duty cycle of 5%. Consult Amtex for details.
- Optional input/output cable harness available;  
Input H-IN-6, Output Singles H-OU-96, Multi Output H-OU-99

### NLP65:

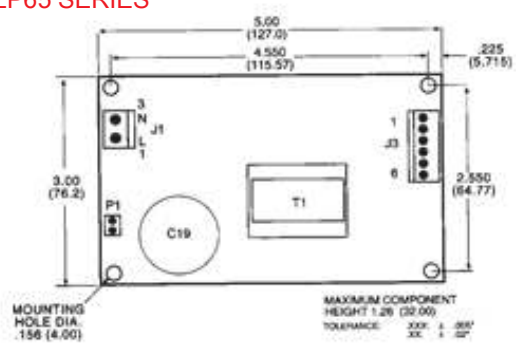
- Natural convection cooling, maximum power 65W.  
With 20CFM forced air cooling maximum power 75W.
- Peak output current available on all outputs at approx. 115% of rating with duty cycle of 5%. Consult Amtex for details.
- To order unit with PFC, order model NLP65-96xx
- Optional input and output cable harness available;  
Input H-IN-6, Output Singles H-OU-96, Multi output H-OU-99.

### NLP40 SERIES



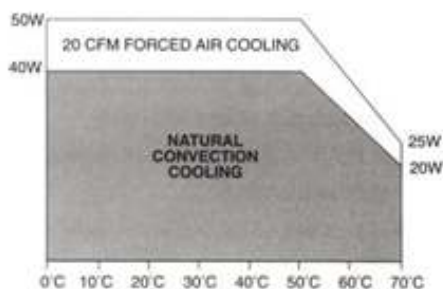
All dimensions in inches (mm)

### NLP65 SERIES



All dimensions in inches (mm)

### Derating Curve output power (watts)



### Derating Curve output power (watts)

