

NXT-100 SERIES OPERATING INSTRUCTIONS

INPUT RATING: 100-240VAC, 2.5 A, 50-60 Hz.

OUTPUT RATING: 100 Watts Maximum Total Continuous Output Power with 300 LFM Forced Air.
70 Watts Maximum Total Continuous Output Power Convection Cooled.

MODEL LISTING:

Model	OPEN FRAME		CHASSIS/COVER	
	300LFM	Convection Cooled	300LFM	Convection Cooled
NXT-100-1001	2.5V/20.0A	2.5V/14.0A	2.5V/18.0A	2.5V/12.6A
NXT-100-1002	3.3V/20.0A	3.3V/14.0A	3.3V/18.0A	3.3V/12.6A
NXT-100-1003	5V/20.0A	5V/14.0A	5V/18.0A	5V/12.6A
NXT-100-1004	12V/8.6A	12V/5.8A	12V/7.5A	12V/5.2A
NXT-100-1005	15V/6.7A	15V/4.7A	15V/6.0A	15V/4.2A
NXT-100-1006	24V/4.2A	24V/2.9A	24V/3.8A	24V/2.6A
NXT-100-1007	28V/3.6A	28V/2.5A	28V/3.2A	28V/2.3A
NXT-100-1008	48V/2.1A	48V/1.5A	48V/1.9A	48V/1.4A

NOTES: 1. A suffix may be added to the model number to indicate the following optional configurations:
(C-chassis, CO-cover, LS – load share, RE-remote inhibit).

CLASSIFICATION: 1. Protection against electric shock – Class I.
2. Protection against harmful ingress of water – IPXO (Non-protected), ordinary.
3. Methods of sterilization – None.
4. Suitability for use in oxygen rich environments – End user responsibility, not evaluated.
5. Mode of operation – Continuous.

WARNING! Dangerous voltages are present on some components, printed circuit board traces and heatsinks.

SHOCK HAZARD!

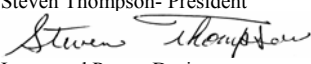
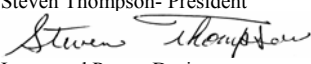
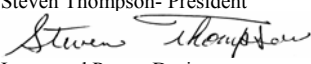
WARNING! An open internal fuse indicates a catastrophic failure of circuit component(s). Repair must be by authorized IPD personnel only.

RISK OF FIRE! Refer to fuse rating on power supply circuit board for rating.

INPUT FUSE: This product includes a single fuse in the phase lead only. In consideration of IEC 60601-1:2005 Clause 8.11.5, a second fuse may be required in the neutral lead of the end use equipment.

SEPERATION: Primary to secondary creepage distance is 8mm minimum, 5mm minimum clearance (2MOPP). Primary to ground creepage distance is 4mm minimum, 2.5mm minimum clearance (1MOOP). Secondary to ground creepage is 2.3mm minimum, clearance is 1.4mm minimum (Operational Insulation). Required seperation must be maintained in the end use equipment to preserve the established means of protection.

OUTPUTS: The outputs are not acceptable for patient connection without additional isolation. All outputs are SELV under normal and single fault conditions.

CE	<u>DECLARATION OF CONFORMITY</u>	12		
<p>Manufacturer: Integrated Power Designs, Inc. Manufacturer's Address: 300 Stewart Road, Wilkes-Barre, PA 18706 USA</p> <p>Declare that all models listed above including all options are in conformity with the applicable requirements of:</p> <p style="text-align: center;">EN 60950-1/A1:2010 Information Technology Equipment. General Requirements</p> <p>following the provisions of the Low Voltage Directive:</p> <p style="text-align: center;">2006/95/EC of 12 December 2006.</p> <p>In addition, all models are Certified to be in compliance with applicable requirements of UL 60950-1 2nd Edition, UL 60601-1 1st Edition, IEC 60950-1/A1:2009, IEC 60601-1:1988+A1:2991 +A2:1995 including all EU national deviations and IEC 60601-1:2005 including all EU national deviations, CAN/CSA-C22.2 No. 60950-1-07, CAN/CSA-C22.2 No. 601-1-M90, EN 60950-1/A1:2010, EN 60601-1/A2:1995 and EN 60601-1:2006.</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>BY: Steven Thompson- President </p> <p>PLACE: Integrated Power Designs 300 Stewart Road, Wilkes-Barre, PA 18706 USA</p> <p>DATE: April 27, 2012</p> </td> <td style="width: 50%; vertical-align: top;"> <p>EUROPEAN CONTACT: CompuMess Elektronik GmbH Lise-Meitner-Strasse 1 85716 unterschleißheim Phone: (089) 32 15 01-0</p> </td> </tr> </table>			<p>BY: Steven Thompson- President </p> <p>PLACE: Integrated Power Designs 300 Stewart Road, Wilkes-Barre, PA 18706 USA</p> <p>DATE: April 27, 2012</p>	<p>EUROPEAN CONTACT: CompuMess Elektronik GmbH Lise-Meitner-Strasse 1 85716 unterschleißheim Phone: (089) 32 15 01-0</p>
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TEMPERATURES: The maximum operating temperatures of safety components as defined in the applicable safety standards must not be exceeded after installation in the end use equipment. Output power, ambient air temperature and convection or forced air cooling availability should be considered in the end use equipment.

HIPOT: In consideration of IEC 60601-1:2005 Clause 8.8.3, care must be taken to insure the voltage applied to a reinforced insulation does not overstress different types and levels of insulation. Breakdown of basic insulation and catastrophic failure of the power supply may result if a test voltage of greater than 1800 VAC is applied between primary and secondary circuits. Each isolating component is factory tested at 4000 VAC minimum prior to installation. Primary and secondary to ground capacitors may need to be disconnected prior to performing a dielectric strength test on the power supply or the end product.

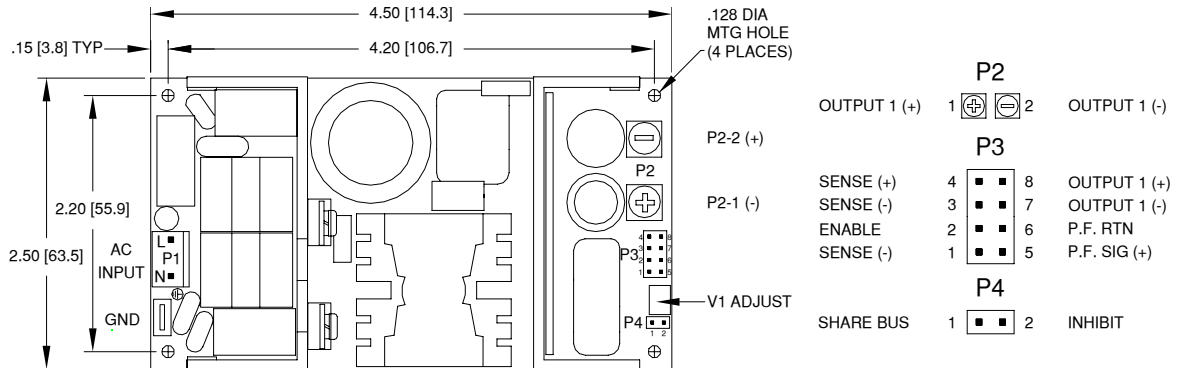
INSTALLATION: The power supplies included in model listing on reverse side are considered components intended for professional installation into end use equipment. The protective earth (ground) terminal and all four mounting hole pads must be bonded to protective earth in the end use equipment. Use of metallic spacers or the optional chassis is recommended.

EMISSIONS: All four PCB mounting holes must be connected to a common metal surface. Chassis/cover option recommended.

This product was tested for compliance with EN 55022 and EN 55011 conducted and radiated emissions using the techniques listed below and non-inductive load resistors to simulate operation in a typical installation.

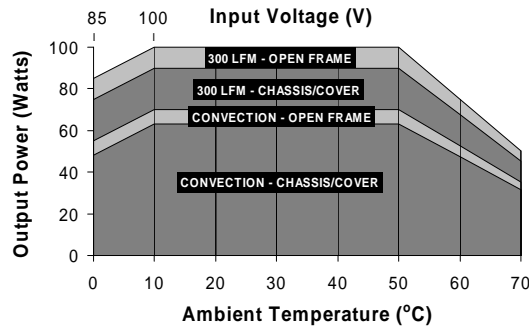
1. Input cable line neutral and ground wires are twisted together.
2. Input cable 2 x through Fair-rite 2643626402 near power supply.
3. Output cable twisted together.
4. Output cable 2 x through Fair-rite 2643626402 near power supply.
5. Chassis/cover used.

CONNECTIONS / DIMENSIONS:



- CONNECTORS:**
- P1: AC Input – 0.156 inch friction lock header mates with Molex 09-50-3031 or equivalent crimp terminal housing with Molex 2478 or equivalent crimp terminal.
 - P2: DC Output (Single Output) – 6-32 screw down terminal mates with #6 ring tongue terminal.
 - G: Protective Earth (Ground) – 0.187 quick disconnect terminal.
 - P3: Power Fail / Sense – 0.100 friction lock header mates with Molex 22-55-2081 or equivalent crimp terminal housing with Molex type 71851 or equivalent crimp terminal.
 - P4: Inhibit / Load Share- 0.100 breakaway header mates with Molex 22-01-2027 or equivalent crimp terminal housing with Molex type 6459 or equivalent crimp terminal.

DERATING:



DERATING REQUIREMENTS:

Chart above applies to models 1003 thru 1008 only. 100 Watts 300 LFM forced air, open frame. 70 Watts convection cooled, open frame. Derate 10% with chassis and cover. Derate 1.0 WOUT / 1 VIN below 100 VIN and between 100 VIN and 85 VIN. Use larger of the two deratings when using chassis/cover below 100 VIN. Derate output power linearly to 50% between 50° and 70° C.