SL POWER ELECTRONICS CORP.
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GNT400 SERIES
INSTALLATION INSTRUCTIONS

MODEL NUMBERS: GNT4WXYZ-XXXG, where W represents the output voltage which may be any number from 12 thru 48; X indicates the type of input connector which may be the letter A, B or C; Y indicates the type of output connector which may be the letter B or T; Z indicates the type of cover or cover/fan options which may be blank or the letter E or T; -XXX indicates value added configurations that have no impact on safety which may be any number from 001 thru 999; and G indicates compliance to RoHS.

RATINGS:

Input: 100-240 V ac, 5.5-2.5 A, 50/60 Hz

Output: 12 thru 48 V, 400 W maximum or see table for standard output voltage models.

Model	Main Output	MAXIMUM OUTPUT AMPERES AND WATTS Cover/Fan (options E and T)
GNT412	12 V dc	33.3 A 400 W
GNT415	15 V dc	26.7 A 400 W
GNT424	24 V dc	16.7 A 400 W
GNT428	28 V dc	14.3 A 400 W
GNT436	36 V dc	11.1 A 400 W
GNT448	48 V dc	8.4 A 400 W

NOTES:
1. Consult factory for application with convection cooling and usage at higher operating ambient temperature.
2. Maximum Operating Relative Humidity 96 %, no condensation.
3. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.

CERTIFICATION: All models are Certified to be in compliance with the applicable requirements of UL 60601-1, CSA 22.2 No. 601.1 (L5M1), EN 60601-1, IEC 60601-1, UL 60950-1, CSA 60950-1 (L5M1), and EN 60950-1.

CLASSIFICATION: (In accordance with sub-clause 5 of IEC 60601-1)
(5.1) Protection against electric shock = Class I
(5.2) Degree of protection against electric shock = Signal output or intermediate
(5.3) Protection against harmful ingress of water = Ordinary (no protection)
(5.5) Have not been evaluated for use in the presence of a flammable anaesthetic mixture with air, oxygen, or nitrous oxide. This evaluation is to be made on the end equipment by the OEM.
(5.6) Mode of operation = Continuous

CE **SAFETY DECLARATION:** SL Power Electronics Corp. declares under our sole responsibility that all models listed above are in conformity with the applicable requirements of EN 60950-1 following the provisions of the Low Voltage Directive 73/23/EEC. They are certified for Pollution Degree 2 environment and Class I TN-S power systems.

GROUNDING: Protection Class I requires that the chassis and/or TB1-3 or J1-1 be bonded to Protective Earth in the end application. Using TB1-3 or J1-1 for the end product's protective earthing terminal is not recommended. A separate dedicated protective earthing point should be used.

OUTPUTS: The outputs are not acceptable for direct patient connection without additional isolation. The DC outputs are SELV under normal and single fault conditions. The Main DC output is at a Hazardous Energy Level.

OVERVOLTAGE PROTECTION: The output is monitored for an overvoltage condition. In some applications where an overvoltage condition could result in a hazard as defined in applicable safety standards, redundant or additional overvoltage protection may be required. Consult factory for details.

CAUTION: When performing Dielectric Strength Tests, catastrophic failure of the unit may result if a Dielectric Strength test voltage greater than 1800 V ac is applied between primary and secondary circuits. The components providing isolation from primary to secondary cannot be tested while installed in the power supply without overstressing basic (primary to ground) insulation. All isolating components are individually 100 % tested at 4800 V ac prior to installation.

ISOLATION: The creepage distance between primary and secondary circuits is 8 mm minimum. The required creepage and clearance distances from primary to secondary circuits must be maintained after installation to preserve the intended safety.

TEMPERATURES: The maximum operating temperatures of certain safety components, as defined in the applicable safety standards, must not be exceeded after installation to preserve the intended safety. The output power, ambient air temperature and the availability, amount, direction and/or restriction of airflow influence the temperatures of these components.

FUSING: Fuses for both Line and Neutral are provided in the power supply, rated T 6.3 A/250 V. NOTE: For use in permanently installed equipment, remove Fuse F2 and replace with a jumper wire.

WARNING! RISK OF FIRE! A blown internal fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by SL Power Electronics Corp. authorized personnel.

WARNING! SHOCK HAZARD! Dangerous voltages are present on some components, printed wiring traces and heatsinks.

CONNECTIONS

J1	TB1	AC Input	Main DC Output Bus Bars	J3	Signal Out	J3	Signal Out	J4	FAN
1	1	Line	VOUT (+)	1	PS Off	5	Signal RTN	1	12 V (+)
2	2	Neutral	RTN (-)	2	Inhibit	6	+5 V dc/0.1 A	2	RTN (-)
3	3	Ground		3	PWR OK	7	-Sense		
				4	DC OK	8	+Sense		

CAUTION: Do not exceed 0.25 A on FAN output.

MATING CONNECTORS: J1 = Amp MTA-156 Receptacle, J3 and FAN = Amp MTA-100 Receptacle

EXPLANATION OF SYMBOLS	
~	Alternating Current
⎓	Direct Current
⚠	Attention, Consult Accompanying Documents
⚠	Attention, Dangerous Voltages
⏚	Earth (Ground)

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