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REPORT

on

DIRECT PLUG-IN AND CORD-CONNECTED CLASS 2 POWER UNITS

Globtek Inc
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DESCRIPTION

PRODUCT COVERED:

USL CNL - Class 2 Power Unit, Models GT-DA-66-14G

ENGINEERING CONSIDERATION (NOT FOR UL REPRESENTATIVE USE):

The Standard used for the investigation of the USL products was UL1310, “Class 2 Power Units” Fifth Edition.

The Standard used for the investigation of the CNL products was CAN/CSA - C22.2 No. 223-M91 “Power Supplies with Extra-Low-Voltage Class 2 Outputs.

GENERAL CHARACTER:

The device covered by this report is a Class 2 Power unit cord connected intended to supply Class 2 circuits.

The unit covered by this Report consists of a transformer and other related electronic circuitry housed in a thermoplastic enclosure. The unit is provided with a cord terminated into either a grounded parallel type blades for insertion in a standard parallel blade receptacle. The output is provided with a cord terminating in a cord with three leads.

ELECTRICAL RATINGS:

	Input, 60 Hz		Output, AC	
Model	V	VA	V	A
GT-DA-66-14G	120	96	13.2	5

CONSTRUCTION DETAILS:

Spacings - Min spacings between live parts of opposite polarity, between live and dead-metal parts shall be as indicated below:

V rms	Min Spacings, in (mm) Through Air and Over Surface
150 or less	1/16 (1.6)

Class 2 Secondary Circuit System - Not specified, spacings are based on Dielectric Withstand Tests.

Marking - Permanently ink-stamped, hot-stamped, silk-screened or provided as label; label employed is covered as a Recognized Component marking and labeling system suitable for application to the surface involved and having a min operating temperature of 60°C.

Information Marking - Indicates company name, model no., date of other dating period of manufacture, and electrical ratings including: Input voltage frequency and current; Output voltage and current ac; and end-use marking: "Class 2 Transformer".

Cautionary Markings - The word "CAUTION" or "WARNING" in letters 1/8 in high and remaining letters of statement in letters not less than 1/16 in high.

Date of Manufacture Marking - Consists of four digits indicating week of year, and year of manufacture.

Example: 16/05 = 16th week of 2005.

The following markings are provided: “CAUTION – Risk of Electric Shock, Dry location use only”

Segregation - Insulated conductors of different circuits are provided with spacings as specified in this Report unless both circuits are insulated for the highest voltage involved. Insulated conductors are positively maintained away from bare live parts of different circuits, sharp edges, and heat producing components.

Soldered Connections - All soldered connections are mechanically secured before soldering.

Corrosion Protection - Parts are of corrosion resistant material or plated or painted as corrosion protection.

MODEL GT-DA-66-14G FIG. 1 – External View

1. Enclosure Assembly - Case and cover constructed from R/C plastic material (QMFZ2), EI Dupont De Nemours & Co Inc, material designation Zytel Type FR50, thickness 2 mm min, rated 130°C, 5VA. Case and cover secured together by four tamper proof screws. Provided with four mounting tabs. Overall dimensions: 137 mm by 91 mm by 72 mm.

2. Input Cord – (ELBZ), Type SJTW 18 AWG X 3C, rated 105 C, provided with a parallel blade plug with grounding terminal.

3. Enclosure Cover - 2.0 mm thick. 117 by 85 by 69.7 mm.

4. Enclosure Base - 2.0 mm thick. 137 by 91 by 8.5 mm.

5. Output Cord – Type 18 AWG, rated min. 80 C, terminating in 3 separate colored leads

6. Strain Relief – Two provided integrally molded with the Input Cord (Item 1) and Output Cord (Item 4). Secured by enclosure base, cover and integral slots.

MODEL GT-DA-66-14G

FIG. 2 - Internal View
FIG. 3 – Grounding

Detail

General - Illustrates internal view of Transformer.

1. Thermal Cutoff – R/C (XCMQ2) Rated 250V, 2A, 130° C Manufactured by Aupo Electronics Type P4. Located on Primary Winding

2. Transformer - Clamped between enclosure parts, constructed as follows:

Core - Laminated steel, 86 mm by 71.7 mm by 33.6 mm.

Bobbin - R/C (QMFZ2), manufactured by EI Dupont De Nemours, type 101L, 1.3 mm thick min, rated V-2. Integral barrier between primary and secondary windings measures 2.2 mm min thick.

Windings – R/C (OBMW2) Enameled copper magnet wire, random wound

Primary: 0.64 mm diameter. rated 130°C.
Secondary: 1.05 mm diameter. rated 155°C.

Windings to Core Insulation - Bobbin, 1.30 mm thick min.

Primary to Secondary Insulation - Bobbin center flange, 2.2 mm thick.

Outerwrap Insulation – 3layers of 0.05 mm thick polyester tape

TCO to Primary Winding Insulation – 3 layers of 0.05 mm polyester tape with 1 layer of electrical grade paper measuring 0.2 mm thick.

3. Internal Fuse – Listed 5 A, 125 V. Covered by R/ C (YDPU2) heat shrink tubing rated min. 150 V, 90° C.

4. External Fuse (Optional) - Listed 5 A, 125 V. User accessible. (Not Relied upon for Class 2 requirements or abnormals).