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REPORT

On

DIRECT PLUG-IN AND CORD CONNECTED CLASS 2 POWER UNITS

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Hsinchu, Taiwan

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DESCRIPTION

PRODUCT COVERED:

USL, CNL - Class 2 Power Unit, Indoor/Outdoor Use, Models TS-13W24V, TS-9W24V.

GENERAL:

These power units are not intended for use with Nonintegral Light-emitting-diode Decorative-lighting Strings.

These units covered by this Report are Direct Plug-In type indoor/outdoor use Class 2 Power Units.

These units consist of a transformer and other related electronic circuitry housed in a thermoplastic enclosure, and provided with parallel blades for connection to line voltage.

ELECTRICAL RATING:

Model	Input			Output	
	V ac	Hz	A	V dc	A
TS-13W24V	120	50/60	0.25	24	0.541
	Or				
	120	60	0.25	24	0.541
TS-9W24V	120	50/60	0.19	24	0.375

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USL - Indicates investigation to the Outline of Investigation for Class 2 Power Units, UL 1310, **Seventh** Edition.

*CNL - Indicates investigation to the Canadian Standard for Power Supplies with Extra-Low-Voltage Class 2 Outputs, CAN/CSA-C22.2 No. 223-M15, **Third** Edition.

*The spacings have been evaluated in accordance with the requirements of the Standard for Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840, Table 9.1 under conditions of pollution degree 3, and UL 1310, **Seventh** Edition, Clause 61, Table 24.1 to meet Subject 2749 Clause 5.1 requirement, and CAN/CSA-C22.2 No.223-M15, **Third** Edition, Tables 2 & 3.

CONSTRUCTION DETAILS:

These units shall be constructed in accordance with the following items. See also, Sec. Gen., Construction Details.

Markings - See Section General. The following additional markings shall be provided on the unit:

For Outdoor Use units only:

"Raintight"

For Indoor Use units only:

"CAUTION" or "WARNING" and "Risk of Electric Shock" and "Dry location use only" or "Do not expose to liquid, vapor, or rain."

Caution Markings - The following cautionary markings shall be located on a part that cannot be removed without impairing the operation of the unit (For Outdoor Use units only).

1. "WARNING: Risk of Electric Shock. Install only to a covered Class A GFCI receptacle that has an enclosure that is weatherproof with the attachment plug cap inserted or removed."
2. "WARNING: Not for use with receptacles that are weatherproof only when the receptacle is covered (attachment plug cap not inserted and receptacle cover closed)."

The words "WARNING" shall be in letters not less than 3.2 mm (1/8 in.) tall, remaining letters not less than 1.6 mm (1/16 in.) tall.

CONSTRUCTION DETAILS: (Cont'd)

Instruction Manual - **(For Outdoor Use units only)** The statement "READ AND FOLLOW ALL SAFETY INSTRUCTIONS" shall be prominently displayed and precede the list. The statement "SAVE THESE INSTRUCTIONS" shall be prominently displayed and follow the list. The word "WARNING" shall be entirely in upper case letters of 1/8 inch (3.18 mm) high or in a readily visible contrasting text. Important safety instructions shall be provided and include the items in the following list:

IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic precautions should always be practiced including the following:

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. Read and follow all instructions that are on the product or provided with the product.
3. Do not use an extension cord.
4. Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
5. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
6. Do not install or use within 10 feet of a pool.
7. Do not use in a bathroom.
8. **WARNING: Risk of Electric Shock.** When used outdoors, install only to a covered Class A GFCI protected receptacle that is weatherproof with the power unit connected to the receptacle. If one is not provided, contact a qualified electrician for proper installation. Ensure that the power unit and cord do not interfere with completely closing the receptacle cover.
9. **WARNING: Risk of Fire.** Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician.
10. **WARNING: Not for use with receptacles that are weatherproof only when the receptacle is covered (attachment plug cap not inserted and receptacle cover closed).**

SAVE THESE INSTRUCTIONS - This manual contains important safety and operating instructions for power units.