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REPORT

on

COMPONENT - POWER SUPPLIES MEDICAL AND DENTAL

Astec Custom Power (Philippines) Inc
Pasig City 1605, Philippines

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DESCRIPTION

PRODUCT COVERED:

Component - Power Supplies, Models LPT62-M, LPT63-M, LPS63-M, LPS64-M, and LPS65-M, for Use in Medical Electrical Equipment.

ELECTRICAL RATINGS:

<u>Model</u>	<u>Input</u>	<u>Maximum Output Current</u>	<u>Maximum Output Voltage</u>
LPT62-M	100-250 V ac,	8.0 A	+5 V dc
	50/60 Hz,	3.5 A	+12 V dc
	2.3 A, or	1.0 A	-12 V dc
	140-300 V dc, 1.5 A		
LPT63-M	100-250 V ac,	8.0 A	+5 V dc
	50/60 Hz,	3.3 A	+15 V dc
	2.3 A, or	1.0 A	-15 V dc
	140-300 V dc, 1.5 A		
LPS63-M	100-250 V ac,	6.7 A	+12 V dc
	50/60 Hz,		
	2.3 A or		
	140-300 V dc, 1.5 A		
LPS64-M	100-250 V ac,	5.34 A	+15 V dc
	50/60 Hz,		
	2.3 A or		
	140-300 V dc, 1.5 A		

ELECTRICAL RATINGS: (Continued)

<u>Model</u>	<u>Input</u>	<u>Maximum Output Current</u>	<u>Maximum Output Voltage</u>
LPS65-M	100-250 V ac, 50/60 Hz, 2.3 A, or 140-300 V dc, 1.5 A	3.33 A	+24 V dc

Maximum Output Power:

60W Convection Cooling.
80W with 30 CFM Forced Air.

ENGINEERING CONSIDERATIONS: (Not For Field Representative Use)

For use only in complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc. The product covered in this Report is Medical Electrical Equipment, intended for Use in Health Care Facilities.

In addition to UL 2601-1, the following standards were utilized during the investigation of the subject products:

UL 1012 - Power Units Other Than Class 2
CSA 22.2 No. 601.1 - Medical Electrical Equipment

CONDITIONS OF ACCEPTABILITY - When installed in the end-use equipment, the following are the considerations to be made:

1. These components have been judged on the basis of the required creepages and clearances in the First Edition of the Standard for Medical Electrical Equipment, UL 2601-1, Subclause 57.10, which covers the end-use product for which the component was designed.
2. The device shall be installed in compliance with the enclosure, mounting spacing, casualty, markings and segregation requirements of the end-use application.
3. The need for conducting leakage current tests was determined as part of the end-product evaluation.
4. The temperature test was conducted in a 30 CFM forced air box measuring 29.5 by 21 by 11 cm. See ILL. 1 (C9901689.I00) for details. Consideration should be given to measuring the temperature on powered electronic components and transformer windings when the power supply is installed in the end-use equipment. Transformer T1 and common mode choke L3 employ a Class F Electrical Insulation System.
5. If the Fuse Replacement Marking on the Power Supply is covered, a Fuse Replacement Marking must be provided on the end-use product.
6. The input and output connectors are not acceptable for field connections and are only intended for connections to mating connectors of internal wiring inside the end-use product. The acceptability of these and the mating connectors relative to secureness, insulating materials, and temperatures shall be considered in the end use product.
7. These power supplies have not been evaluated for patient connected applications.
8. The secondary output of transformer T1 is unearthed Safety Extra Low Voltage. Double Insulation, as described in Subclauses 57.9.4 and 57.10, separates the primary circuits from the secondary circuits in this power supply.

CONDITIONS OF ACCEPTABILITY - (Continued)

9. These power supplies have been evaluated for use in Class I, Type B, continuous operation, ordinary equipment. They have not been evaluated for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide. An additional evaluation shall be made if the power supply is intended for use in other than Class I equipment.
10. This power supply has not been supplied with an enclosure. The suitability of the end-use enclosure shall be considered during end-use evaluation.
11. The acceptability of the power supply mounting means shall be considered in the end-use evaluation.
12. These power supplies are not directly connected to earth ground of the branch circuit, they shall be properly bonded to earth ground in the end-use product.