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Project 99ME48077

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REPORT

on

UNINTERRUPTIBLE POWER SUPPLY ACCESSORY

American Power Conversion Corp.
North Billerica, MA

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DESCRIPTION

PRODUCT COVERED:

*Listed Accessory - Step-Down Transformer, Model AP9621, SYTF2.

ENGINEERING CONSIDERATIONS (not for UL representative's use):

The product covered by this report is a step-down transformer for use with A.P.C. uninterruptable power supplies. All components are housed in a metal enclosure.

ELECTRICAL RATINGS:

Input: 208 V ac, 1 ϕ , 26 A, 57-63 Hz

Output: 120 V ac, 42 A, 57-63 Hz, 5000 VA, 3750 W

CONSTRUCTION DETAILS:

Spacings - This equipment has been evaluated to spacing requirements for controlled environments. Minimum spacing between live parts of opposite polarity and between live and dead-metal parts shall be as indicated below.

TABLE I

Spacings Other Than at Field Wiring Terminals

<u>Potential Involved, V</u>	<u>Minimum Spacing, inches (mm) Through Air Over Surface</u>			
50 or less	3/64	(1.2)	3/64	(1.2)
51 - 150	1/16	(1.6)	1/16	(1.6)
151 - 300	3/32	(2.4)	3/32	(2.4)

TABLE II

Spacings to Enclosures

<u>Potential Involved, V</u>	<u>Minimum Spacing Through Air and Over Surface, Inches (mm)</u>	
0 - 50	1/16	(1.6)
51 - 150	¼	(6.4)
151 - 300	½	(12.7)

Where the enclosure has been investigated for mechanical strength, spacing to the enclosure may be less than specified in Table II, but not less than the values specified in Table I.

* Model Variations:

* Model SYTF2, same as the Model AP9621, except has a black bezel and no handles.

MODEL AP9621

FIG. 1 (M0004145.P00)

General - Fig. 1 shows a front/top/right side view of the unit.

1. Enclosure Chassis (APC 870-1161). Constructed from pre-plated cold rolled steel 0.060 inch thick. One piece construction held together with rivets. Overall dimensions are 3.300 inches high by 17.000 inches wide by 23.940 inches deep. All sides of the panels are smooth and well rounded. No sharp edges.
2. Chassis Top Cover (APC 870-1163). Constructed from pre-plated cold rolled steel 0.060 inch thick. Secured to the enclosure by screws. Overall dimensions are 16.875 inches by 23.875 inches.
3. Bezel (APC 870-1169). R/C (QMFZ2) rated 94-HB. Secured to the chassis by spring clips and the end caps. (General Electric ABS GPM5500; Chi Mei Corporation PA-746).
4. Ventilation Openings - 288 openings 0.25 inch in diameter.

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FIG. 2 (M0004148.P00)

General - Fig. 2 shows a rear/bottom/left side view of the unit.

1. Ventilation Openings - 252 openings 0.25 inch in diameter.

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FIG. 3 (M00-04147)

General - Fig. 3 shows the rear view of the unit.

- *1. Output Receptacles - (APC 770-0102). R/C (RTRT2) six duplex type rated 20 A, 120 V. Receptacles are secured to rear panel by screws. Bonded to chassis by a buss bar.
2. Input Circuit Breaker - (APC 530-0077). R/C (QVGK2) 2 Pole, rated 30 A, 250 V ac. (Carlingswitch Inc., Type AB2-XO-06-302-XD1-C; Philips Technologies, Type IEG26-30509-1-V).
3. Output Circuit Breaker - (APC 530-0084). R/C (QVNU2) Four, Single Pole, rated 15 A, 125 V ac. (Airpax, PR11-62-15.0-30633-1-V).
4. Power Cord - (APC 650-0113). R/C Type SJ10-3, terminating in a NEMA L6-30P twist-lock plug, 38 inch length. (Manufactured by Rapid Manufacturing; Manage, Inc.).
5. Strain Relief - (APC 652-09P2). R/C (NYYV2) (Heyco Molding Products, No. SR9-P2).

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FIG. 4 (M0004146.P00)

General - Fig. 4 shows the front view of unit with the decorative bezel removed.

1. Fan - (APC 490-0019). R/C (GPWV2) rated 115 V ac, 3.15 inch square. (NMB Technologies, Inc., AC3115PS-12T-B30-A00).
2. Ventilation Openings - 128 concentric openings 0.195 wide varying in length between 0.26 inches to 0.66 inches.

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FIG. 5 (M0004149.P00)

General - Fig. 5 shows a top view of the unit with the cover removed.

1. Transformer - (APC 430-2057). Toroid, Class H (180°C) insulation system. (Amveco Magnetics, Inc., 27291B, Plitron Manufacturing Inc., 7177-V2-20).
- * 2. Capacitor (APC 234-0126). R/C (CYWT2) Polypropylene, rated 12 uF, 250 V. (Cornell-Dubilier Electronics Inc., SMP37U1255M24)
3. Buss Bar (APC 880-0033). 0.025 inch thick by 0.25 inch wide tin plated brass alloy.
4. Sponge Rubber Strip - (APC 825-0015). R/C (QMFZ2) 3/8 inch thick, rated 94V-0 (Rogers Corp. HT-800).
5. Connector - (APC 724-0012). R/C (ECBT2) 4 position connector plug, (AMP Inc., Mate-N-Lock 1-480703-0).
6. Connector - (APC 724-0005). R/C (ECBT2) two 6 position connector housing MNL plug, (AMP Inc., Mate-N-Lock 1-480704-0).

CONCLUSION

A sample of the product covered by this Report has been found to comply with the requirements covering the class and the product is judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the Laboratories' Mark on such products which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Laboratories' Mark are considered as Listed by Underwriters Laboratories Inc.

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