DESCRIPTION

PRODUCT COVERED

USR, CNR Component – Switching Power Supply, **Models** 7001497-XXXX or A237, DS760SL-3, DS760SL-3-001, DS760SL-3-002, **DS760SL-3-003, DS760SL-3-403** where XXXX are any numbers or letters representing different customer identification, for use in Information Technology Equipment.

ELECTRICAL RATINGS:

MODEL	INPUT	OUTPUT
7001497-XXXX or A237	100 – 120 V ac 200 – 240 V ac 8.8 A max. 50/60 Hz	+12.0 V, 62.3 A max. +3.35 V, 3.6 A max. Total output power not to exceed 760 W
DS760SL-3 * 	100 – 120 V ac 200 – 240 V ac 8.8 A max. 50/60 Hz	+12.0 V, 62.3 A max. +5.0 V, 2.4 A max. Total output power not to exceed 760 W
DS760SL-3-001	100 – 120 V ac 200 – 240 V ac 6.8 A max. 50/60 Hz	+12.0 V, 49.0 A max. +5.0 V, 2.4 A max. Total output power not to exceed 600 W
DS760SL-3-002	100 – 120 Vac 200 – 240 Vac 8.8 A max. 50/60 Hz	+12.0 V, 62.3 A max. +3.35 V, 3.6 A max. Total output power not to exceed 760 W
DS760SL-3-003	100 – 120 Vac 200 – 240 Vac 6.8 A max. 50/60 Hz	+12.0 V, 49.0 A max. +3.35 V, 3.6 A max. Total output power not to exceed 600 W
DS760SL-3-403	**100 – 120 Vac 200 – 240 Vac 7.8 A max. 50/60 Hz**	**+12.0 V, 54.83 A max. +5.0 V, 2.4 A max. Total output power not to exceed 670 W**

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

General – The unit if for use in product where the acceptability of the combination is determined by Underwriters Laboratories Inc.

*Both USR and CNR indicate investigation to the Standard for Safety of Information Technology Equipment, **UL 60950-1, 2nd Edition, 2014-10-14 and CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10-14.**

Conditions of Acceptability – When installed in the end-use equipment, the following are the consideration to be made:

1. The components have been judged on the basis of the required creepages and clearance in the Second Edition of the Standard for Safety of Information Technology Equipment, UL60950-1, Second Edition and CAN/CSA C22.2 No. 60950-1-07, Second Edition Sub-clause 2.10 and Annex G, which covers the end-use product of which the component was designed. The operational insulations have been evaluated by conducting Component Failure Test per sub-clause 5.3.4. (C) of UL 60950-1 Second Edition, **2014-10-14,** CAN/CSA C22.2 No. 60950-1-07, Second Edition, **2014-10-14**.

2. The power supplies have only been evaluated for use in pollution degree 2 environment.

3. The power supplies were evaluated with the assumption that the power source is a TN-S system defined by UL 60950-1 Second Edition, **2014-10-14** and CAN/CSA C22.2 No. 60950-1-07, Second Edition, **2014-10-14.**

4. A suitable electrical, fire and mechanical enclosure shall be provided by end-use equipment.

5. The power supplies have been evaluated for use in Class I equipment as defined in UL 60950-1 Second Edition, **2014-10-14**, CAN/CSA C22.2 No. 60950-1-07 Second Edition, **2014-10-14** and shall be properly earthed or boned to earth in the end–use. An additional evaluation shall be made if these power supplies are intended for use in other than Class I equipment.

6. The secondary output +12.0, +3.35 V of the power supplies is earthed SELV. The secondary output +12.0 V is energy hazard. Method 1 of Sub-clause 2.2.3.1 per UL 60950-1 Second Edition, **2014-10-14** and CAN/CSA C22.2 No. 60950-1-07 Second Edition, **2014-10-14** was used to maintain the insulation of SELV output from AC primary circuits.

7. The power supplies have been evaluated for use in ambient up to 45°C or 60°C. (When the ambient is 45°C, the loading is full loading, when the ambient is 60°C, the loading is +12.0V/40A, 3.35V/3.0A for Model 7001497-XXXX or A237)

8. Transformers T1 and T2 employ Class 105(A) electrical insulation system, T3 and T4, T102 employ Class 155(F) electrical insulation system.

9. The DC output connector has not been evaluated for field connections.

10. The power supplies are intended to be operated at an altitude of 4000 meter above sea level and comply with the Annex G.

11. The suitability of mounting means shall be investigated in the end-use application.

12. The Class of laser product is Class 1.

CONSTRUCTION DETAILS

Spacing - the following spacings are provided in the power supply Model 7001497-XXXX or A237.

1. Minimum 2.6 mm creepage distance and minimum 2.6 mm clearance distance between Line and Neutral trace before the fuse F101, AC primary and protective earth trace.

2. Minimum 5.9 mm creepage distance and minimum 5.9 mm clearance distance between primary and secondary trace of transformer T1, T2, T3, T4

3. Minimum 7.4 mm creepage distance and minimum 6.2 mm clearance distance between primary and secondary of transformers T102.

4. Minimum 5.4 mm creepage distance and minimum 5.4 mm clearance distance between primary components/trace and secondary components/trace except items above.

See ILL. 1, 2, 3, 4, 5 and 6 for details.

MODEL DIFFERENCE

Model DS760SL-3 is identical to Model 7001497-XXXX or A237 except for output rating and auxiliary transformer.

Model DS760SL-3-001 is identical to Model 7001497-XXXX or A237 except for input rating, output rating, reverse airflow direction and auxiliary transformer.

Model DS760SL-3-002 is identical to model DS760SL-3 except for output rating (the stand by output is different).

Model DS760SL-3-003 is identical to model DS760SL-3-001 except for output rating (the stand by output is different).

Model DS760SL-3-403 is modified from model DS760SL-3. Model DS760SL-3-403 is identical to model DS760SL-3 except for input current and output power. DS760SL-3-403 input current is 7.8 A max. and output power is 670 W.

Section General - The following construction items are described in the Section General.

Factory Location and Identification	Wire Connections
Abbreviations	Connectors and Receptacles
C-UL Requirements	Earthing/Bonding
Corrosion Protection	Mechanical Assembly
Internal Wiring	Insulating Tubing/sleeving
Segregation	Earthing Symbol
Wire Positioning Devices	Tolerances
Marking Methods	Capacitors
Markings	Optocouplers
Internal Polymeric Materials	Printed Wiring Board

Illustrations:

ILL. 1 – PCB Trace Layout for Main Board (Solder side)
ILL. 2 – PCB Trace Layout for Main Board (Component side)
ILL. 3 – PCB Trace Layout for EMI Board (Solder side)
ILL. 4 – PCB Trace Layout for EMI Board (Component side)
ILL. 5 – PCB Trace Layout for Gate Drive Board (Solder side)
ILL. 6 – PCB Trace Layout for Gate Drive Board (Component side)

General - The general design, shape and arrangement shall be as illustrated, in the following figures, except where variations are specifically described.