DESCRIPTION

PRODUCT COVERED:

USR, CNR Switching Power Supply, Models MTW60-51212 and MTW60-51515 may be followed by a letter (to indicate options).

ELECTRICAL RATINGS:

Input: 100-240 V ac, 1.4-0.8 A, 50-60 Hz

Output: (MTW60-51212)
+5 V dc, 5.0 A (7.0 A peak)
+12 V dc, 2.5 A (3.5 A peak)
-12 V dc, 0.5 A (0.7 A peak)
Total Power: 61 W max.

Output: (MTW60-51515)
+5 V dc, 5.0 A (7.0 A peak)
+15 V dc, 2.0 A (3.5 A peak)
-15 V dc, 0.5 A (0.7 A peak)
Total Power: 62.5 W max.

Peak load is for 10 seconds maximum, for Model MTW60-51212, total power does not exceed 61 W during peak load, for Model MTW60-51515, total power does not exceed 62.5 W during peak load.

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

Use: For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

USR, CNR - Indicates investigation to the U.S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, UL 60950-1, 2nd Edition, **2014-10-14** (Information Technology Equipment - Safety - Part 1: General Requirements) and CSA C22.2 No. 60950-1-07, 2nd Edition, **2014-10** (Information Technology Equipment - Safety - Part 1: General Requirements)

USR, CNR - Indicates investigation to UL 62368-1, 2nd Edition, 2014-12-01 (Audio/Video, Information and Communication Technology Equipment - Part 1: Safety Requirements) and CSA C22.2 No. 62368-1-14, 2nd Edition, 2014-12-01 (Audio/Video, Information and Communication Technology Equipment - Part 1: Safety Requirements)

The equipment is for building-in, Class I (earthed), intended for TN power systems. The -12 V dc output of Model MTW60-51212 was evaluated as a Limited Power Source. The -15V dc output of Model MTW60-51515 was evaluated as a Limited Power Source.

Tma is 50°C.

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

1. These power supplies have been judged on the basis of the required creepage and clearance distances specified in the U. S. and Canadian (Bi-National) Standard for Safety of Information Technology Equipment, UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) and CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information TechnologyEquipment - Safety - Part 1: General Requirements), subclause 2.10, **UL 62368-1, 2nd Edition, 2014-12-01 (Audio/Video, Information and Communication Technology Equipment - Part 1: Safety Requirements), and CSA C22.2 No. 62368-1-14, 2nd Edition, 2014-12-01 (Audio/Video, Information and Communication Technology Equipment - Part 1: Safety Requirements)** which covers the end-use product for which the component was designed.

2. These power supplies shall be installed in compliance with the enclosure, mounting, creepage, clearance, casualty, marking and segregation requirements of the end-use application.

3. The Touch Current Test was conducted at 255 V ac, 60 Hz. The measured current was 0.65 mA. The necessity of re-conducting the Touch Current Test is to be determined during end-product evaluation.

4. These power supplies have only been evaluated for use in a Pollution Degree 2 environment.

5. A Temperature Test should be conducted in the end-product. Consideration should be given to measuring the temperature on power electronic components, inductors and transformer windings when the power supply is installed in the end-use equipment. Transformers T1 and T2 utilize a Class B electrical insulation system.

6. The terminal blocks are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use machine. The acceptability of connections relative to secureness, insulating materials and temperature shall be considered.

7. These power supplies should be properly bonded to earth ground in the end-use product, as this unit was investigated for Class I construction. The bonding terminal has not been investigated as a protective earthing terminal.

8. The secondary outputs of these power supplies are reliable SELV and are not at hazardous energy levels.

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***9. These power supplies have been evaluated for use in Class I equipment, as defined in UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements) and CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements). An additional evaluation should be made if the power supply is intended for use in other than Class I equipment.**

10. These power supplies were evaluated under the assumption that the power source is a TN-S system, as defined by UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements) and CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements).

11. Consideration should be given to the accessibility of hazardous primary circuits and outputs in the end-use product.

12. These power supplies are provided with overcurrent protection on one side of the input line. Consideration should be given to protecting both sides of the line if one side is not considered to be neutral.

13. Inductor L1 has been evaluated as suitable for 120°C.

14. The -12 V output of Model MTW60-51212 complies with the limited power source requirements. The -15V output of Model MTW60-51515 complies with the limited power source requirements.

15. Clearance and creepage distances in the end product should be based on 285 V rms, 566 V pk for Model MTW60-51212 and 269 V rms, 533 V pk for Model MTW60-51515.

16. The unit has been evaluated for tropical climate and altitude up to 3,000 m.

17. Output circuit was considered ES1/PS3.

18. Classification of PIS has not been conducted. Therefore, all electrical components and conductors including printed wirings were assumed to be arcing PIS and resistive PIS.

19. This component has been evaluated in "control of fire spread" method assuming appropriate fire enclosure is provided in end product. Unless the fire enclosure is made of non-combustible or V-0 material, the separation from the PIS shall be considered.