DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Power Supplies, **Models PAE50S24, PAE50S48 and PAE100S48 series.**

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GENERAL CHARACTER AND USE:

The units covered by this Report are DC to DC converters. They are provided with input and output pins for PWB connection to the end use equipment.

MODELS AND RATINGS:

	Input		Output		
Model	Voltage (Vdc)	Operating Current (A) Max.	(Vdc)	Rated Current (A)	Rated Power (W)
*PAE50S24-5	18-36	**3.10** (Nom. **2.32** at 24Vdc)	5	10	50
*PAE50S24-6	18-36	**3.10** (Nom. **2.33** at 24Vdc)	6	8.4	50.4
*PAE50S48-1R8	36-76	**1.75** (Nom. **0.86** at 48Vdc)	1.8	20	36
*PAE50S48-2R5	36-76	**1.98** (Nom. **1.06** at 48Vdc)	2.5	18	45
*PAE50S48-3R3	36-76	**2.56** (Nom. **1.22** at 48Vdc)	3.3	16	52.8
*PAE50S48-5	36-76	**3.12** (Nom. **1.20** at 48Vdc)	5.0	10	50
*PAE100S48-1R8	36-76	**1.75** (Nom. 1.30 at 48Vdc)	1.8	30	54
*PAE100S48-2R5	36-76	**1.98** (Nom. 1.47 at 48Vdc)	2.5	25	62.5
*PAE100S48-3R3	36-76	**2.56** (Nom. 1.91 at 48Vdc)	3.3	25	82.5
*PAE100S48-3R3/H	36-76	3.12 (Nom. **2.31** at 48Vdc)	3.3	30	99
*PAE100S48-5	36-76	**3.12** (Nom. 2.32 at 48Vdc)	5.0	20	100

The models listed above may include the suffix as shown below.

/V = Auto restart.

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

For use only in complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

USR, CNR indicates investigation to 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).

Conditions of Acceptability - When installed in the end use equipment, the following are among the considerations to be made.

The component has been judged on the basis of the required creepage and clearance distances in the UL 60950-1, 2nd Edition, **2014-10-14** (Information Technology Equipment - Safety - Part 1: General Requirements), CSA C22.2 No. 60950-1-07, 2nd Edition, **2014-10** (Information Technology Equipment - Safety - Part 1: General **Requirements), 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 would cover the end use product for which the component was designed.

NOTE IMPORTANT SAFETY CONSIDERATION FOR INSTALLATION: -

1. As a component part, compliance with the standard will be based upon installation in the final application. This product must be installed within a host equipment and only be accessible to authorized competent personnel.

2. All dynamic testing was conducted with the units loaded to their specified output current with the units mounted on a PWB, which was then mounted in five different orientations i.e. horizontal and four vertical positions. Subject to loading and de-rating curves, these products can be convection or air cooled.

3. The units have been evaluated for use in a Pollution Degree 2 environment. The PWB used in these products is assumed to be material group IIIB.

4. The input to the units must be isolated from the mains by reinforced insulation in accordance with UL 60950-1, 2nd Edition, **2014-10-14/** CSA C22.2 No. 60950-1-07, 2nd Edition, **2014-10, UL 62368-1, 2nd Edition, 2014-12-01, and CSA C22.2 No. 62368-1-14, 2nd Edition, 2014-12-01** in order to maintain a SELV output.

5. The input and output connectors are not acceptable for field wiring connections and are only intended for connection to a PWB inside the end use equipment.

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

6. The input fuse used during testing was: F6.3A, 250V for the PAE50S24 and PAE100S48 series and F5A, 250V for the PAE50S48 series. The breaking capacity and voltage rating are subject to the end use application.

7. These products were assessed for basic insulation at working voltage between input and output. All fault testing across the barriers was conducted under all input and output earth combinations.

8. These models have been evaluated at the maximum ambient allowed based on the temperature of components Q2, Q104 or Q105. During the Heating Tests of the end product, these components shall not measure above 120 °C. See handbook for de-rating curves.