

## DESCRIPTION

## PRODUCT COVERED:

USR, CNR - Component - Power Supplies, Models: PAF600F280 and PAF450F280 series, for use in Information Technology Equipment Including Electrical Business Equipment

## 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 in the end use equipment.

MODELS AND RATINGS:INPUT:

<u>Model</u>	<u>Input</u>		<u>Output</u>		
	<u>Voltage</u> <u>(Vdc)</u>	<u>Operating</u> <u>Current (A) Max.</u>	<u>(Vdc)</u>	<u>Rated</u> <u>Current</u> <u>(A)</u>	<u>Rated</u> <u>Power</u> <u>(W)</u>
PAF600F280-12	200-400	<b>4.0</b>	12	50	600
PAF600F280-24	200-400	<b>4.0</b>	24	25	600
PAF600F280-28	200-400	<b>4.0</b>	28	21.5	600
PAF600F280-48	200-400	<b>4.0</b>	48	12.5	600
PAF600F280-24/KTH	245-373	<b>4.0</b>	28	25	700
PAF450F280-12	200-400	<b>3.0</b>	12	38	450
PAF450F280-24	200-400	<b>3.0</b>	24	19	450
PAF450F280-28	200-400	<b>3.0</b>	28	16.5	450
PAF450F280-48	200-400	<b>3.0</b>	48	9.5	450

The models listed above may include one or more of the suffix's as shown below.

Suffix /T = No threads in the corner studs.

## 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 Safety of Information Technology Equipment - **Safety - Part 1: General Requirements, UL 60950-1, 2nd Edition, dated 2007-03-27 and CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, dated 2007-03-27** bi-national standard.

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

\*1. The component has been judged on the basis of the required creepage and clearance distances in the Standard for Safety of Information Technology Equipment - **Safety - Part 1: General Requirements, UL 60950-1, 2nd Edition, dated 2007-03-27 and CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, dated 2007-03-27** bi-national standard, which would cover the end use product for which the component was designed.

## NOTE IMPORTANT SAFETY CONSIDERATION FOR INSTALLATION: -

- a) These products shall be installed in accordance with the requirements of **UL 60950-1, 2nd Edition, dated 2007-03-27, Information Technology Equipment - Safety - Part 1: General Requirements and CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, dated 2007-03-27, Information Technology Equipment - Safety - Part 1: General Requirements** for the end use application. The DC to DC converters were tested with a heatsink mounted below the baseplate of the device (worst case).
- b) These products must be installed in a host equipment accessible to authorized competent personnel only. These products were assessed for reinforced insulation at working voltage between input and output. These converters may have a mains derived DC supply attached to the input and still provide a SELV output. All outputs are at hazardous energy levels. To maintain the SELV output under fault conditions, the output must be connected to earth in the final application.

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- c) The DC to DC converter baseplate shall be properly bonded to earth ground in the end use product as this unit was investigated for Class I construction. Basic insulation from primary to baseplate and secondary to baseplate is present. However to maintain SELV, the baseplate must be earthed.

- d) The operation of these DC to DC converters is subject to the end customer maintaining a maximum baseplate temperature of:
- PAF600F280. 85°C at 100% load and 100°C at 80% load
- PAF450F280. 100°C at 100% load.
- PAF600F280-24/KTH - 70°C at 100% load, 90°C at 30% load in accordance with the de-rating curve included within the specification for this model.
- e) The input and output connectors are not acceptable for field wiring connections and are only intended for connection to a PCB inside the end use equipment.
- f) The Listed input fuse rating used during testing was: F6.3AH 250V. The breaking capacity and voltage rating are subject to the end use application.

NOTE IMPORTANT SAFETY CONSIDERATION FOR INSTALLATION (CONTINUED):

- g) Transformer T102 uses spirally wrapped triple insulated wire with a class H insulation. Transformer T3 uses extruded triple insulated wire with a class F insulation.
- h) The input to this product was considered to be DC provided from a non isolated 250VAC source.
- i) The equipment has been evaluated for use in a Pollution Degree 2 environment.
- j) A suitable electrical and fire enclosure shall be provided.