

File E135493  
Project 91EK524

March 31, 1992

REPORT

on

COMPONENT-POWER SUPPLIES

Vicor Corp.  
Andover, MA

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## D E S C R I P T I O N

## PRODUCT COVERED:

USR, CNR: Component - Power Supply, ComPac Series, Model No. VI-aCbccc-deee-xx. VI may be replaced by IP for all Models. Refer to Ill. 2 **and Ill.3.**

## ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

\* This product was investigated for compliance with the Standard for Information Technology Equipment, **UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements)** CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements).

Based on the March 15, 1991 Industry Review and per the manufacturer's request. This section of this report was transferred to the category for Power Supplies For Use In Electronic Data Processing Equipment, General Purpose Power Supplies, and Power Supplies For Use In Information Technology Equipment, Including Electrical Business Equipment.

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

This power supply consists of an already Recognized power supplies mounted on a printed wiring board with additional front end circuitry. Primary to secondary isolation is provided by these Recognized power supplies.

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

- \*1. This component has been judged on the basis of the required spacings in the Standard for Information Technology Equipment, **UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements)** CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (**Information Technology Equipment - Safety - Part 1: General Requirements**), which would cover the component itself if submitted for unrestricted Listing, Fourth Edition of the Standard for Information Processing and Business Equipment, UL 478, and Power Supplies, UL 1012.
2. This power supply shall be installed in compliance with the enclosure, mounting, creepage, clearance, casualty, markings and segregation requirements of the end-use application.
3. The need for conducting leakage current tests is to be determined as part of the end-product evaluation.
4. This power supply has only been evaluated for use in a pollution Degree 2 environment.
5. Secondary outputs 2 V - 48 V comply with SELV requirements. Secondary outputs 52 V - 95 V are non SELV outputs.

5. A Heating Test should be conducted in the end product.
6. The base plate temperature of each DC/DC module should be monitored.
7. A baseplate temperature of 85°C should not be exceeded.
8. The input and output connectors have not been evaluated for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use machine. The acceptability of these and the mating connectors relative to secureness, insulating materials, and temperature shall be considered.
9. These units shall be provided with external primary fuses.
10. The following is the maximum primary fuse value acceptable:

<u>Output Power</u>	<u>Nominal Input, dc</u>	<u>Fuse Size</u>
200 W	24 V	10 A
<b>200 W</b>	<b>24 V (wide)</b>	<b>12 A</b>
200 W	48 V	7 A
<b>200 W</b>	<b>300 V</b>	<b>2 A</b>
400 W	24 V	20 A
400 W	48 V	15 A
<b>400 W</b>	<b>300 V</b>	<b>4 A</b>
600 W	24 V	30 A
600 W	48 V	25 A
<b>600 W</b>	<b>300 V</b>	<b>6 A</b>

11. Based on Par. 35A.1 of the Standard for Telephone Equipment, UL 1459; these products are acceptable for use with Telephone Equipment.

## VI - a C b c c c - d e e e - f f f

### ComPAC Family Tree

**VI Product Type**

VI = VI (Vicor), VI = VE (Vicor RoHs), VI = IP (VJCL), VI = IE (VJCL RoHs), MI = Military

**a Module Configurations**

- L = 1UP Single (1module, 1 output)
- M = 2UP Single (2 modules, 1 output)
- N = 3UP Single (3 modules, 1 output)
- P = 2UP Dual (2 modules, 2 outputs)
- Q = 3UP Dual (3 modules, 2 outputs)
- R = 3UP Triple (3 modules, 3 outputs)

**b Input Voltage (Vdc)**

Nominal	Range	Max (A)
1 = 24	21-32 @	26.7
W = 24	18-36 @	31.2
3 = 48	42-60 @	18.0
N = 48	36-76 @	15.6
6 = 300	200-400 @	3.9

**d Product Grade**

- C = Commercial -20C to 85C
- I = Industrial -40C to 85C
- M = Military -55C to 85C
- E = Economy 0C to 85C

**eee Output Power**

- M = 600W
- P = 450W
- Q = 400W
- S = 300W
- U = 200W
- V = 150W
- W = 100W
- X = 75W
- Y = 50W

**ccc Output voltage (Vdc) Nominal**

- Z = 2.0      2 = 15.0
- Y = 3.3      N = 18.5
- O = 5.0      3 = 24.0
- X = 5.2      L = 28.0
- W = 5.5      J = 36.0
- V = 5.8      K = 40.0
- T = 6.5      4 = 48.0
- R = 7.5      H = 52.0
- M = 10.0     F = 72.0
- 1 = 12.0     D = 85.0
- P = 13.8     B = 95.0

**fff Factory assigned code**

Non-safety related, any alphanumeric combination or blanks, 0-3 characters

**Example**

VI-PC601-CUX-23

P = 2Up (2 modules, 2 outputs), 6 = 300 V Input, 0 = 5V output, 1 = 12Vdc output

C = Commercial product Grade, U = 200W output, X = 75W output, 23 = Customer Code