File E181848 Project 95NK30863

July 19, 1996

REPORT

on

COMPONENT - POWER SUPPLIES FOR USE IN HAZARDOUS LOCATIONS

Vicor Corporation Andover, MA

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\*File E181848 Vol. 1 Sec. 2 Page 1 Issued: 7-19-96

and Report Revised: 11-4-96

## 

### PRODUCT COVERED:

USL, CNL Component - Power supplies, ComPac Series, Model
No. VI, followed by L, M, N, P, Q or R, followed
by C, followed by 1, W, 3, N or 6, followed by up
to three numbers or letters which may be Z, Y,
O, X, W, V, T, R, M, 1, P, 2, N, 3, L, J, K, 4,
H, F, D or B, followed by C, I, M or E, followed
by up to three numbers or letters which may be M,
P, Q, S, U, V, W, X, Y or Z, followed by two
optional digits 00 through 99.

Class I, Groups A, B, C and D, Division 2 only.

### NOMENCLATURE BREAKDOWN:

Refer to ILL. 2.

### **ELECTRICAL RATINGS:**

Refer to ILL. 2.

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

This product was investigated under the Standards for Electrical Equipment For Use in Class I and Class II, Division 2 and Class III Hazardous (Classified) Locations, UL 1604, and Information Technology Equipment, UL 1950, Second Edition (No. D3 Deviations) and the Standard for Telephone Equipment, UL 1459, Second Edition.

CNL indicates investigation to Canadian Standard C22.2 No. 2130M1987.

USL indicates investigation to United States Standards listed below.

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

This power supply consists on various R/C power supplies mounted on a printed wiring board with additional front end circuitry. Primary to secondary isolation is provided by these various R/C power supplies.

\*File E181848 Vol. 1 Sec. 2 Page 2 Issued: 7-19-96 and Report Revised: 11-4-96

## Conditions of Acceptability -

- 1. The supplies should be installed within an enclosure so that the exposed current-carrying parts (wiring terminals) are suitably enclosed.
- 2. The Temperature Test should be conducted in the end application to determine a T Code.
- 3. The need for the following instructions shall be determined in the end application.
  - A. SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D, AND CLASS II, DIVISION 2, GROUPS F AND G HAZARDOUS LOCATIONS, OR NONHAZARDOUS LOCATIONS ONLY.
  - B. WARNING EXPLOSION HAZARD SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, CLASS II, DIVISION 2.
  - C. WARNING EXPLOSION HAZARD DO NOT DISCONNECT
    EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR \*THE AREA IS
    KNOWN TO BE NONHAZARDOUS.
  - D. WARNING EXPLOSION HAZARD WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES.

File E181848 Vol. 1 Sec. 2 Ill. 2

Company: Vicor Corporation, 25 Frontage Road Andover, MA 01810 USA

# 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	b	Input Voltage (Vdc)		
	L = 1UP Single (1module, 1 output)		Nominal	Range	Max (A)
	M = 2UP Single (2 modules, 1 output)		1 = 24	21-32 @	26.7
	N = 3UP Single (3 modules, 1 output)		W = 24	18-36 @	31.2
	P = 2UP Dual (2 modules, 2 outputs)		3 = 48	42-60 @	18.0
	Q = 3UP Dual (3 modules, 2 outputs)		N = 48	36-76 @	15.6
	R = 3UP Triple (3 modules, 3 outputs)		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	ccc	Output voltage (Vdc) Nominal		
	M = 600W		Z = 2.0	2 = 15.0	
	P = 450W		Y = 3.3	N = 18.5	
	Q = 400W		O = 5.0	3 = 24.0	
	S = 300W		X = 5.2	L = 28.0	
	U = 200W		W = 5.5	J = 36.0	
	V = 150W		V = 5.8	K = 40.0	
	W = 100W		T = 6.5	4 = 48.0	
	X = 75W		R = 7.5	H = 52.0	
	Y = 50W		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