



POWER-ONE Inc.

531 DAWSON DR.
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(805) 484-2806

APPLICATION DATA

- Including:
1. Schematic
 2. Parts Lists
 3. Specification
 4. Outline & Mounting Dwg.
 5. General User Information

MODEL

HD5-12/OVP

SPECIFICATIONS

AC Input: 115/230 VAC $\pm 10\%$ 47-440 HZ. (Derate Current 10% for 50 HZ operation)

Input Fusing: See Table

DC Output: 5VDC @ 12A, OVP at 6.2 \pm .4VDC

Line Regulation: $\pm .05\%$ for a 10% input change

Load Regulation: $\pm .05\%$ for a 50% load change

Output Ripple: 1.5 mv PK-Pk, 0.4mv RMS

Transient Response: 30 μ sec for 50% load change

Overload & Short Circuit Protection: Automatic current limit/foldback

Temperature Coefficient: $\pm .03\%/^{\circ}\text{C}$ maximum

Cooling: Units are full rated to 50 $^{\circ}\text{C}$ in free air, must be derated or fan cooled when mounted in confined area

Temperature Rating: 0-50 $^{\circ}\text{C}$, full rated, derate linearly to 40% at 70 $^{\circ}\text{C}$

Efficiency: 50% at nominal input, full load on output

Weight: 7.5 lbs

Vibration: Per Mil-Std-810B, method 514, proc. I, curve AB (to 50 HZ)

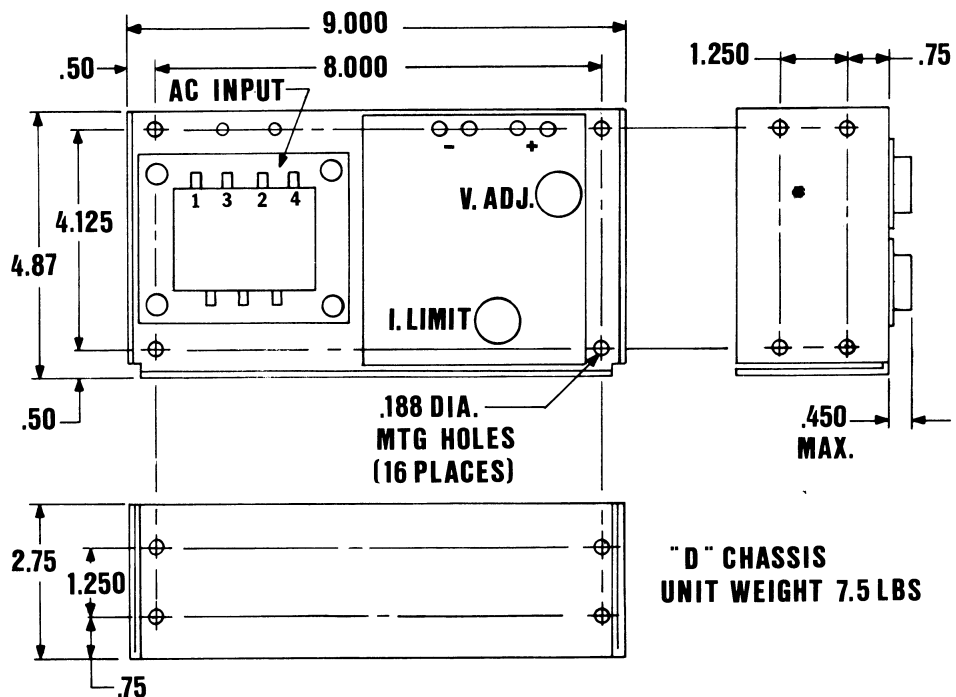
Shock: Per Mil-Std-810B, method 516, procedure V

AC Connection & Fuse Table

For Use At	Primary Fuse At	Connect	Apply Power to
115	2A	1-3, 2-4	1 & 4
230	1A	2-3	1 & 4

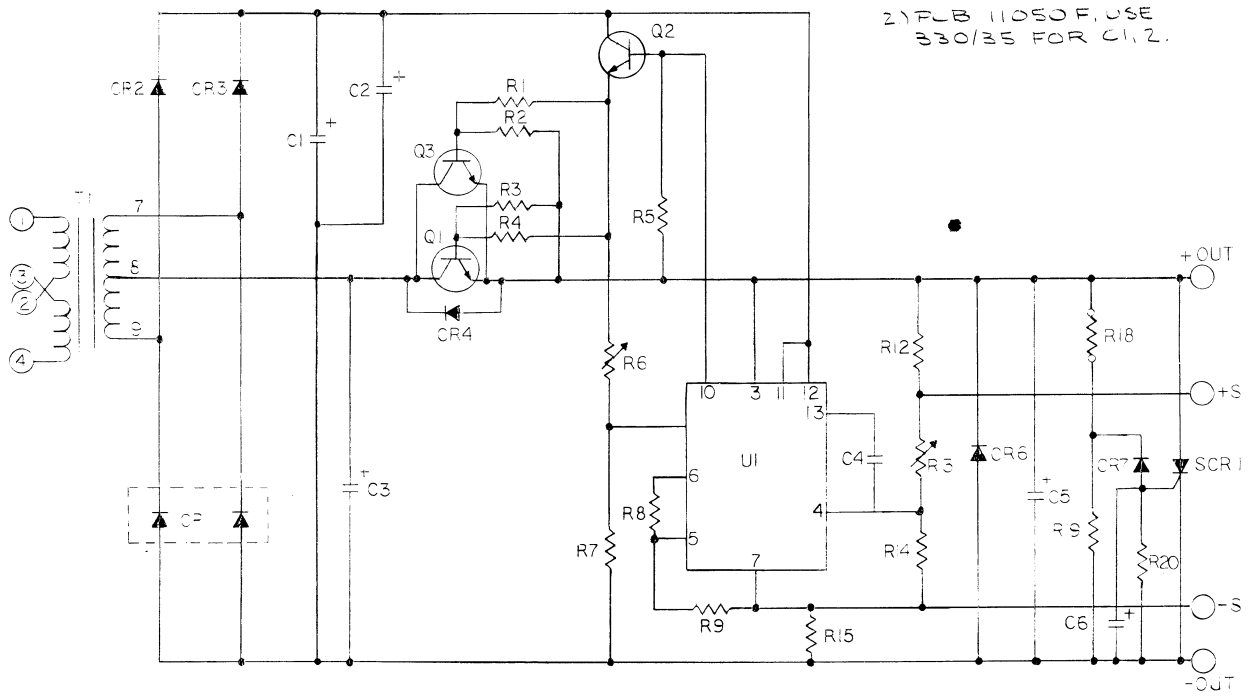
2 YEAR GUARANTEE

POWER-ONE will repair or replace any power supply of its manufacture that does not perform to published specifications as a result of defective materials or workmanship for a period of two years from date of original purchase. No other liabilities are implied or expressed. Returns must be freight prepaid.



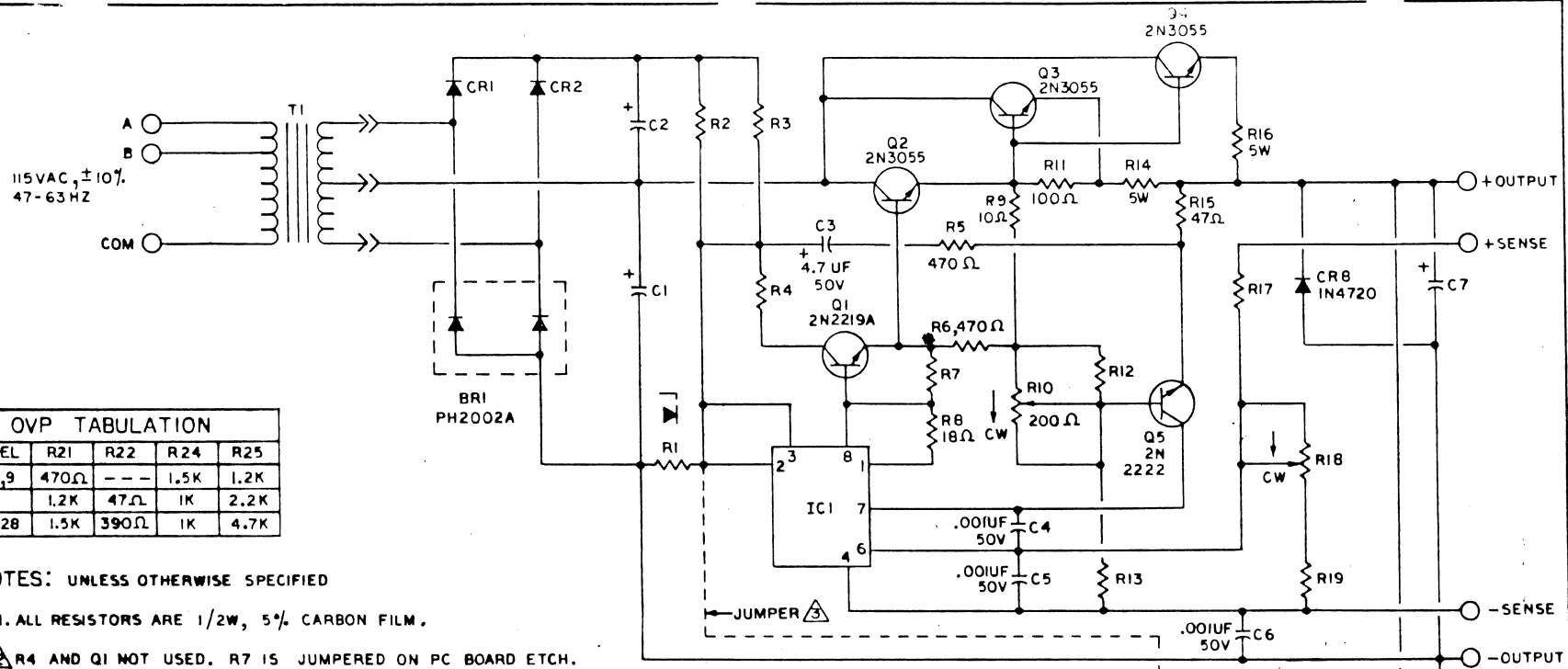
REF DES	HD5-12/OVP	DESCRIPTION
C4	0039/100	CAPACITOR MYLAR
C5	1000/16	ALUM. ELECT.
C3	50000/15	CAPACITOR ALUM. ELECT.
C6	10/25	CAPACITOR ALUM. ELECT.
C1,2	330/35	CAPACITOR ALUM. ELECT.
CR1	R71A	DIODE BRIDGE
CR2,3,4	AE1C	1A 200V
CR6	AE3B	3A 100V
CR7	1N752A	DIODE ZENER
Q1,3	12505-2	TRANSISTOR 2N3055
Q2	12500-5	TRANSISTOR
SCR1	SC508LS3	SCR 6A
U1	uA723	I.C. VOLTAGE REGULATOR
R20	47 Ω	RESISTOR 1/2W 5% CARBON
R2,3	22 Ω	1/2W 5% CARBON
R1,4,12,15	6.8 Ω	1/2W 5% CARBON
R5,8,9,7	2.2K	1/2W 5% CARBON
R14	1.62K	RESISTOR 1/4W 2% MF
R19	82 Ω	RESISTOR 1/2W 5% CARBON
R6,13	1.5K	POTENTIOMETER 2W WW
R18	2.7 Ω	MAY HAVE TO BE TRIMMED IN TEST. RESISTOR 1/2W 5% CARBON
T1	12235	TRANSFORMER
PCB	11050	PRINTED CIRCUIT BOARD
CHASSIS	11051	CHASSIS, ALUM

PROD. NOTES:
 1) PCB 11050 E, USE 1000/16 FOR C1,2.
 2) PCB 11050 F, USE 330/35 FOR C1,2.



THE INFORMATION AND DESIGN CONTAINED HEREIN
 ARE THE PROPERTY OF POWER ONE AND THE
 UNAUTHORIZED USE THEREOF IS PROHIBITED

- Xentec Brand Power Supply -

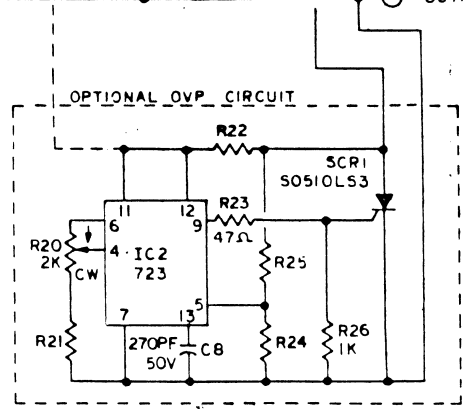


OVP TABULATION				
MODEL	R21	R22	R24	R25
3,5,9	470Ω	---	1.5K	1.2K
12	1.2K	47Ω	1K	2.2K
24,28	1.5K	390Ω	1K	4.7K

- NOTES: UNLESS OTHERWISE SPECIFIED**
- ALL RESISTORS ARE 1/2W, 5% CARBON FILM.
 - R4 AND Q1 NOT USED. R7 IS JUMPED ON PC BOARD ETCH.
 - JUMPER USED ON 3,5,9 MODELS WITH OVP.

PROPRIETARY INFORMATION
 NO INFORMATION GIVEN HEREIN MAY BE DISSEMINATED TO ANY PERSON OR COMPANY WITHOUT THE EXPRESS PERMISSION OF XENTEK INC.

TABULATION																
MODEL	INPUT TAP A	INPUT TAP B	IC1	C1	C2	C7	CR1,2	R1	R2,3	R12	R13	R14,16	R17	R18	R19	
XP60-3	2-3V, 12A	4V, 12A	LM300	56K UF 15V	100UF 16V	2.2KUF 10V	1N4001	-	100Ω	270Ω	220Ω	.1Ω	220Ω	2K	100Ω	
XP60-5	5V, 12A	6V, 10A	LM305	56K UF 15V	100UF 16V	2.2KUF 10V	1N4001	3.3K	470Ω	100Ω	270Ω	.1Ω	5.6K	2K	1.8K	
XP60-9	7V, 9A 8V, 8.6A	9V, 8.2A 10V, 7.8A	LM305	29K UF 25V	100UF 25V	1K UF 25V	1N4001	4.7K	1K	470Ω	1K	.1Ω	10K	2K	1.5K	
XP60-12	11V, 6.8A 12V, 6.5A 13V, 6.1A	14V, 6.4A 15V, 6.0A 16V, 5.6A	LM305	22K UF 35V	100UF 35V	1K UF 25V	1N4002	12K	3.9K	470Ω	1.5K	.22Ω	18K	2K	1.8K	
XP60-24	17±18V, 5.2A 19±20V, 5A	21±22V, 5.2A 23±24V, 5A	LM305A	18K UF 50V	47UF 63V	470UF 35V	1N4002	1N 4751A	8.2K	-	3.9K	.22Ω	15K	1K	1K	
XP60-28	25±26V, 3.2A 27±28V, 2.6A	29±30V, 2.4A 31±32V, 1.8A	LM305A	18K UF 50V	47UF 63V	470UF 35V	1N4002	1N 4753A	10K	10K	390Ω	5.6K	.22Ω	27K	1K	1.3K



XENTEK INC. SAN MARCOS CALIF.		DRAWN BY: G-1	
SCALE: ---	APPROVED BY:	REVISED:	
DATE: 8-5-74			
POWER SUPPLY SCHEMATIC			REV. A
MODEL XP60 SERIES			DRAWING NUMBER: C3012