

SWITCHING

SWITCHING POWER SUPPLY SPECIFICATION

CP-08032

CLAYPOWER
C O M P A N Y

REV.00

TEL 626.303.8885 FAX 626.301.0588 11911 Clark St. Suite C Arcadia, CA 91006

www.claypowercompany.com

1.Input Characteristics

- 1.1 Input Voltage Range -----90To264Vac Full Range, Active PFC,PF>0.90
- 1.2 Input Frequency Range -----47Hz To 63Hz.
- 1.3 Input Ac Current (Max) -----7A Max. @115Vac, 4A Max. @230Vac Full Load.
- 1.4 Inrush Current -----At 132Vac / 264Vac, Full Load Condition, No Damage Occur. Input Fuse Shall Not Blow.
- 1.5 Efficiency -----63% Min, At Typical Line Input Full Load.
- 1.6 Input Leakage Current -----Leakage Current From Line to Ground Will Be Less 3.5mA rms. Measurement Will Be Made At 240Vac/60Hz.

2.Output Characteristics

2.1 Static Output Characteristics.

	Output Voltage	Load Range		Surge 10 Sec.	Regulation		Ripple Max mV P-P	Ripple & Noise Max. mV P-P
		Min.	Max.		Min.	Max.		
1.	+5.0 V	2.5 A	32.0 A		- 5 %	+ 5 %	50 mV	100 mV
2.	+3.3 V	0.2 A	20.0 A		- 5 %	+ 5 %	50 mV	100 mV
3.	+12.0 V	0.5 A	11.0 A		- 5 %	+ 5 %	100 mV	150 mV
4.	-5.0 V	0.0 A	1.0 A		- 10 %	+ 10 %	150 mV	200 mV
5.	-12.0 V	0.0 A	1.0 A		- 10 %	+ 10 %	150 mV	200 mV
6.	+24.0 V	0.2 A	4.0 A		- 5 %	+ 5 %	240 mV	240 mV
7.	SB +5.0 V	0.0 A	1.0 A		- 5 %	+ 5 %	100 mV	100 mV

Note:

1. Noise Test ----- Noise Bandwidth Is From Dc To 20MHz.
2. Ripple Frequencies Greater Than 1 MHz Shall Be Attenuated By the Measurement System.
3. Add 0.1uF / 10uF Capacitor At Output Connector Terminals For Ripple & Noise Measurements.
4. Output Total Power Shall Not Exceed 320W Max.

2.2 Dynamic Output Characteristics:

- 2.2.1 Rise Time ---- 100 ms Max. At Nominal Line Full Load.
- 2.2.2 Turn-on Delay Time ----- 600mS Max. At Nominal Line Full Load.
- 2.2.3 Hold-up Time ----- 16 ms Min. For + 5V Output At Nominal Line Full Load.

2.2.4 Transient Overshoot ----- 10% Max. Of Delay State After Load Change Of 25% Within The Range Of 50% To 100% Of Full Load.

2.2.5 Temperature Coefficient ----- 0.03% Per °C Max.

3. Protections

- 3.1 Over Voltage Protection --Standard On +3.3V Output Set At 4.10Vdc At +/-0.40Vdc.
+5.0V Output Set At 6.25Vdc At +/-0.75Vdc.
+12.0V Output Set At 14.6Vdc At +/-1.0Vdc.
+24.0V Output Set At 25.6Vdc At +/-1.0Vdc.
- 3.2 Short Circuit Protection --- A Short Circuit Placed Between Dc Return And Output Shall Cause No Damage And The Power Supply Shall Shutdown.
- 3.3 Over Power Protection --- The Power Supply Can Use Electronic Circuit To Limit The Output. Power Against Excessing +150% Of Full Load. Or Protected against Excessive Power Delivery Due To Short Circuit Of Any Output Or Over Total Power.
- 3.4 No load Operation --- No Parts Damaged On Power Supply.

4. Dielectric Withstand Voltage

- 4.1 Primary to Secondary --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.
- 4.2 Primary to Safety Ground --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.
- 4.3 Insulation Resistance --- Primary To Safety Ground - 500Vdc, 50M ohms Min.

5. ELECTROMAGNETIC COMPATIBILITY

5.1 Electromagnetic Interference (EMI) :

- a. FCC Part 15, subject j, class B.
- b. EN55022 (CISPR 22), class B.
- c. VCCI Class " 2 ".

5.2 Electrostatic Discharge (ESD) / 8KV :

Comply with IEC 801-2 (1984).

5.3 Radio-Frequency Electromagnetic Field (RF) :

Comply with IEC 801-3 (1984).

5.4 Harmonics Current :

Comply with EN61000-3-2.

5.5 Fast Transient Burst (EFT) / 2KV :

Comply with IEC 801-4 (1988).

6.Product Safety This Power Supply Is Designed Can Meet The Following Spec.

6.1 UL/CUL ----- UL60950

6.2 TUV ----- EN 60950

6.3 CB----- EN 60950

7.Environment

7.1 Operation Temperature ----- Air Temperature 0 °C To 50 °C.

7.2 Operation Relative Humidity ----- 20% To 90%.

7.3 Storage Temperature ----- Air Temperature -20 °C To 60 °C.

7.4 Storage Relative Humidity ----- 5% To 95%.

7.5 Altitude ----- Operate Properly At Any Altitude Between
0 To 100,000 Feet. Storage 40,000 Feet.

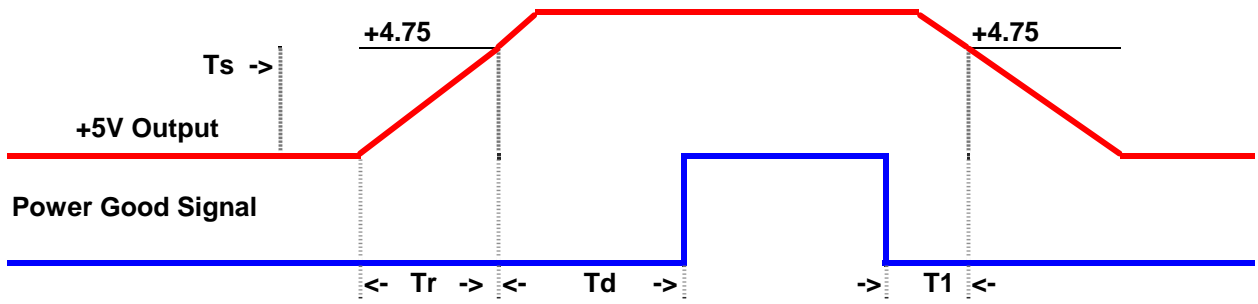
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle;
30 Minutes For Each Axis (X,Y,Z).

8.Burn-In

8.1 Burn-In ----- At 45 °C, Max. Load, 4 Hours.

9.Mean Time Between Failure ----- 50 KHrs Minimum At Full Load For
25 °C Ambient Temperature.

10.Power-Good Signal

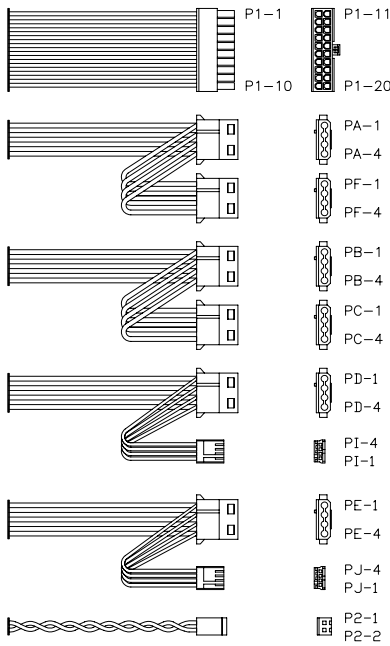
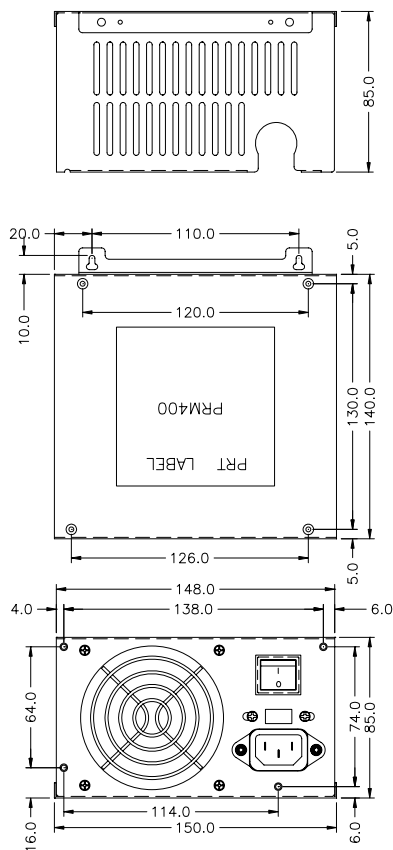


Note: $T_r \leq 100$ ms, $T_1 \geq 1$ ms, $T_d = 100 - 500$ ms.

11.Dimension

11.1 W x H x D ----- 150.0 x 86.0 x 140.0 (mm)

Note: See The Mechanical Drawing.



P1 HOUSING MOLEX 39-01-2205
SOCKET MOLEX 39-00-0039

PA,PB,PC,PD,PE,PF,PG,PH
HOUSING AMP 1-480424-0
SOCKET AMP 60619-1

PI,PJ
HOUSING AMP 171822-4
SOCKET AMP 170204-1

NOTE
1. POWER ON: TTL ACTIVE LOW.

CONN	PIN	COLOR	OUTPUT	LENGTH
P1	1	BROWN	+3.3V. S+	20.0(508) +2.0(50.8) -1.0(25.4)
	2	BROWN	+3.3V.	
	3	BLACK	G. +3.3V. S-	
	4	RED	+5V	
	5	BLACK	GND	
	6	RED	+5V	
	7	BLACK	GND	
	8	ORANGE	PG	
	9	PURPLE	+5VSB	
	10	YELLOW	+12V	
	11	BROWN	+3.3V.	
	12	BLUE	-12V	
	13	BLACK	GND	
	14	GREEN	PS-ON	
	15	BLACK	GND	
	16	BLACK	GND	
	17	BLACK	GND	
	18	WHITE	-5V	
	19	RED	+5V	
	20	RED	+5V	
P2	1	GRAY	+24V	27.6(700) +2.0(50.8) -1.0(25.4)
	2	BLACK	GND	
PA,PB PD,PE	1	YELLOW	+12V	20.0(508) +2.0(50.8) -1.0(25.4)
	2	BLACK	GND	
	3	BLACK	GND	
	4	RED	+5V	
PF,PC	1	YELLOW	+12V	FM PA to PF or PB to pc CONNECTOR 6.0 (152.4) ±0.5 (12.7)
	2	BLACK	GND	
	3	BLACK	GND	
	4	RED	+5V	
PI,PJ	1	RED	+5V	FROM PD,PE CONNECTOR 6.0 (152.4) ±0.5 (12.7)
	2	BLACK	GND	
	3	BLACK	GND	
	4	YELLOW	+12V	