

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.

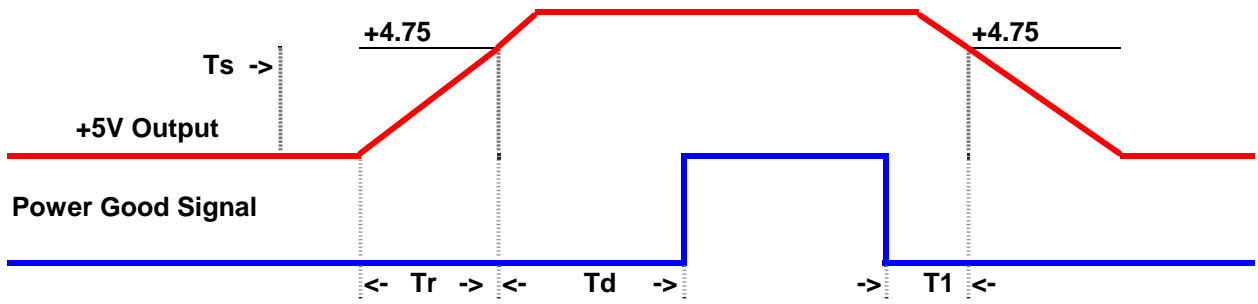
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle;
30 Minutes For Each Axis (X,Y,Z).

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

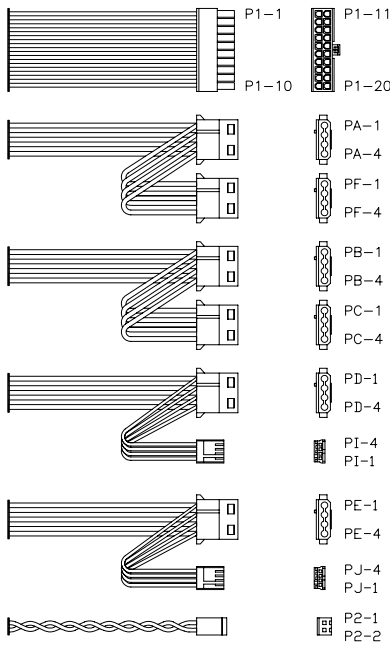
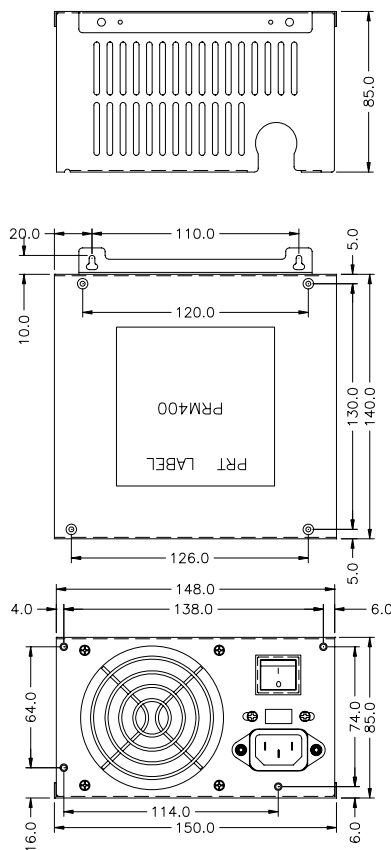


Note: $Tr \leq 100 \text{ ms}$, $T1 \geq 1 \text{ ms}$, $Td = 100 - 500 \text{ ms}$.

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 | |