# **Hot Plug DC to DC Single Output**

#### **FEATURES**

- 0°C to +50°C at Full Load
- Standard 5" x 5" x 14" Envelope
- Output Fully Floating
- Overcurrent Protection
- Overvoltage Protection
- Remote Sense
- Overtemperature Protection
- Self-contained Forced Air Cooling

# **SPECIFICATIONS**

# <u>INPUTS</u>

RANGE: 36 TO 75 VDC. 48VDC Nominal. INRUSH CURRENT: Less than 75 amps peak for 5.6ms.

INPUT CURRENT. FULL LOAD:

Continuous input current 40 amps DC max at min line.

**REVERSE POLARITY PROTECTION:** 

Reverse voltage within rating will not damage the power supply.

INPUT FUSING: Internal fuse.

### **OUTPUTS**

TOTAL POWER: 1kW - 1.2kW.

VOLTAGE/CURRENT: See Output Table.

ADJUSTMENT RANGE: ±10% of nominal

output voltage.

**POLARITY:** Output is fully isolated and regulated. It may be referenced

plus/minus as required.

**REMOTE SENSING:** Compensates for up to 0.5V total loop drop in the output line.

#### STATIC REGULATION:

<u>Line</u>: ±0.25% over full line range. <u>Load</u>: ±0.25%, min load to full load.

#### **DYNAMIC REGULATION:**

Output Transient Response: 3% deviation with recovery to 1% in <500 $\mu$ sec for a 25% load step, 1A/ $\mu$ sec slew rate.

**OVERSHOOT:** No turn-on or turn-off overshoot.

**VOLTAGE STABILITY:** ±0.1% for 24-hour period after 30-minute warm up.

TEMP COEFFICIENT: ±0.02%/°C from

0°C to +50°C.

P-P RIPPLE AND NOISE:

Differential: 1% or 50mV (20 Hz to 50 Mhz

bandwidth).



HOT
PLUG

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Elcon
Top
Drawer
Connector

**TURN ON DELAY:** 1 second max from application of line.

OVERVOLTAGE PROTECTION: 125% ±5% of nominal (5V output and above). OVP shutdown is latched until the input line is removed for 5 seconds and then reapplied. OVP sensing is done at the output terminals.

**OVERCURRENT PROTECTION:** Current Limit Point: 105% to 115% of full load. **REVERSE VOLTAGE PROTECTION:** 

Protected to rated load with the fan running.

## **ENVIRONMENTAL**

#### **OVERTEMPERATURE PROTECTION:**

Automatically shuts down and latches the unit in the event of an overtemperature condition. After cool down, power must be recycled to restart unit.

AUDIBLE NOISE: 63 dBA max at

1 meter.

**TEMPERATURE:** Operating: 0°C to +50°C full load. Storage: -55° to +85°C. **HUMIDITY:** 5% to 90% non-condensing. **ALTITUDE:** Operating: 5,000 feet.

Derates to 85% at 10,000 feet. Non-Operating: To 30,000 feet.

VIBRATION: Operating: From 5 to 27 Hz, 0.02 in double amplitude; from 27 Hz to 500 Hz, 0.75G, 3 axes, 3 min per octave sweep, dwell 15 min at resonance.

Non-operating: From 5 to 17 Hz, 0.10 in double amplitude, from 17 to 500 Hz, 1.5G peak; 3 axes, 5 min per octave sweep; dwell 15 min at resonance.

**SHOCK:** Operating: 5G, half sine, 11msec, 3 axes. Non-Operating: 15G, half sine, 11msec, 3 axes.

**COOLING:** Forced air, internal fan. Airflow exits at connector end.

EMI: Designed to meet Conducted and

Radiated: EN55022 Level A.

**SAFETY:** Designed to meet UL1950, CSA22.2 No. 950, TUV to EN60950.

## **OPTIONS**

(-1U) DC LINE MONITOR: Power fail signal that senses the input voltage and goes high to low when input voltage drops less than or equal to 40VDC.

(-2T) LOGIC INHIBIT: Two volts or more or an open circuit will enable the supply, less than 0.5 volts will inhibit the supply. Logic inhibit return should be connected to negative output.

(-6B) CURRENT SHARING: Allows two or more similar power supply main outputs to load share using a single wire.

### (-8UVL) UNDERVOLTAGE DETECT:

Signal pulls to 5V when output drops more than  $15\% \pm 5\%$  of nominal. High bad (LED off) and Low good (LED on).

**(-20C) DIODE ISOLATION:** Built-in Oring diodes in the positive output line to prevent a failed power supply from affecting the bus.

# **SPECIAL OPTION**

**Intelligent Power Supply** 



- Built-in microchip controls all power supply & battery parameters, plus stores data on history, operating conditions & address.
- Allows user to program system functions & alarms.
- Permits either local monitoring (via RS485 bus) or remote monitoring (via modem).

## <u>MECHANICAL</u>

**DIMENSIONS:** Case: 5" x 5" x 14" (127mm x 127mm x 356mm). Exclusive of I/O Connectors.

WEIGHT: 14 lbs.

MOUNTING: Designed to lock into matching

rack.

**I/O CONNECTORS:** Elcon Top Drawer Connector provides hot plug operation.

## **OUTPUT TABLE**

Model	PM3336BP-2	PM3337BP-2
Power	1000W	1200W
Input	36 to 75VDC	36 to 75VDC
VDC	DC Current	DC Current
2V	200A	240A
3.3V	200A	240A
5V	200A	240A
12V	83A	100A
24V	41A	50A
28V	36A	43A
32V	31A	37A
48V	21A	25A

Cat DC-DC (PM3336BP-2 & PM3337BP-2), 1kW – 1.2kW, Hot Plug, Generic, 11/8/00