

Hot Plug DC to DC Multiple Output

FEATURES

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

SPECIFICATIONS

INPUTS

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.

OUTPUTS

TOTAL POWER: 1000W Max.

VOLTAGE/CURRENT: See Output Table.

ADJUSTMENT RANGE: ±10% of nominal output voltage.

POLARITY: Outputs are fully isolated and regulated. They may be referenced plus/minus as required.

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

STATIC REGULATION:
Line: ±0.25% over full line range.
Load: ±0.25%, min load to full load.

DYNAMIC REGULATION:
 Output Transient Response: 3% deviation with recovery to 1% in <500µsec for a 25% load step, 1A/µsec slew rate.

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

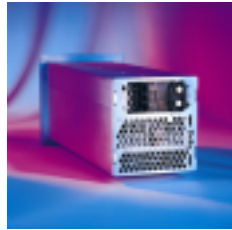
VOLTAGE STABILITY: ±0.1% for 24-hour period after 30-minute warm up.

TEMP COEFFICIENT: ±0.02%/°C from 0°C to +50°C.

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

P-P RIPPLE AND NOISE:

Differential: 1% on CH1 (20 Hz to 50 Mhz bandwidth). 1% or 120mV (whichever is greater) on CH2 to CH5.



HOT PLUG



Elcon Top Drawer Connector

MINIMUM LOAD: 100 watts required on CH1 to support the secondary channels.

OVERVOLTAGE PROTECTION: 125% ±5% of nominal. 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 is less than 85% ±5%. 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).

MECHANICAL

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	PM3376BP-2
Power	1000W
Input	36 to 75VDC
VDC	DC Current
CH1	➔ @ 150A or 750W Max
CH2	➔ @ 15A or 250W Max
CH3	➔ @ 15A or 250W Max
CH4	➔ @ 7.5A or 125W Max
CH5	➔ @ 7.5A or 125W Max
Size (")	5" x 5" x 14"
Size (mm)	127mm x 127mm x 356mm

➔ = 2, 3, 3, 5, 12, 24, 28, 32 or 48VDC
 ➔ = 2 to 28VDC

Cat DC-DC (PM3376BP-2), 1kW, Hot Plug, Generic, 11/8/00