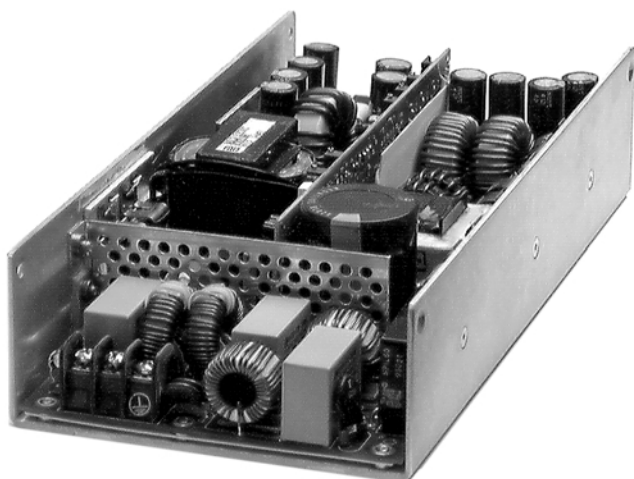


## 400 WATT AC/DC POWER SUPPLY

### PX401/403



#### DESCRIPTION

The PX401 is a compact 400 watt Power Factor Corrected, multiple output power supply. All outputs are fully isolated and regulated. Active current sharing circuitry, together with control functions and alarm options, simplifies N+1 and redundant applications. Fan and disk drive applications are handled by the peak current ratings of the auxiliary outputs.

#### FEATURES

- Active Power Factor Correction
- High Surge Current Auxiliary Outputs
- FCC/VDE Class B EMI Filter
- Fully Isolated and Regulated Outputs
- Compact Size: 10" x 4.85" x 2.19"
- One, Two, Three and Four Output Models
- Optional Cover With Fan

#### AGENCY APPROVALS



JV Rheinland

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# Input Specifications

| Parameter                     | Conditions  | Min | Typ | Max  | Units |
|-------------------------------|---|-----|-----|------|-------|
| Operating Range               | 47-63 Hz  | 90  |     | 264  | VAC   |
| Inrush Current Limiting       | 120 VAC, cold start                                 |     |     | 30   | APK   |
|                               | 240 VAC, cold start                                 |     |     | 60   | APK   |
| Efficiency                    | Nominal line and full load                          |     | 75  |      | %     |
| Power Factor Correction (PFC) | Meets IEC 1000-4-7/EN61000-3-2 (formerly IEC 555-2) |     |     | 0.99 |       |

## Remote Sense

Remote Sense is provided on Output #1 and will compensate for 1.0V of line drop. Remote Sense leads are protected against open, short and reversal.

## Remote On/Off

The power supply is turned on with a TTL logic '1' (or open) signal and turned off by a switch closure or TTL logic '0' referenced to (-) sense terminal. Consult the factory for other options.

## Over Voltage Protection

Output #1: 6.5V,  $\pm 0.5 V_{DC}$

The power supply will latch off until AC power is cycled.

## Over Current Protection

Individual current limit on all outputs. Automatic recovery upon fault removal.

## Transient Response

The peak output voltage excursion will not exceed 2% and will recover within 1% in 200  $\mu$ sec for a 25% step load.

## Output Isolation

All outputs are fully isolated.

## Reverse Voltage Protection

All outputs are protected to rated load current.

## Power Fail Signal

Upon AC input voltage removal, the power fail signal drops to logic zero at least 10msec before loss of DC output. Upon AC input turn-on, signal remains low until outputs are in regulation. Consult the factory for other options.

## N+1 Load Share (PX403)

Output #1 has active load sharing circuitry. Units will load share within 1% of Maximum Rated Load.

## Over Temperature Protection

Thermal switch turns off power supply if overheating occurs and automatically restarts.

## Safety

UL Recognized: UL File Number E14675 (1950 & 1012)

CSA Certified: CSA File Number LR 9070-154C  
(C22.2 No9. 234-M90, Level 6)

TUV License Number: R9576029 (EN60950) (IEC950)

## Cooling

The unit is designed to operate with 40 CFM airflow.

## Output Voltages and Maximum Rated Loads

| MODEL NUMBER  | OUTPUT #1        |                  | OUTPUT #2        |                                   | OUTPUT #3        |                                   | OUTPUT #4        |                  |
|---------------|------------------|------------------|------------------|-----------------------------------|------------------|-----------------------------------|------------------|------------------|
|               | V <sub>OUT</sub> | I <sub>MAX</sub> | V <sub>NOM</sub> | I <sub>MAX</sub> /I <sub>PK</sub> | V <sub>NOM</sub> | I <sub>MAX</sub> /I <sub>PK</sub> | V <sub>NOM</sub> | I <sub>MAX</sub> |
| PX401/403-U3A | ± 5V             | 50A              | ± 12V            | 12A/14A                           | ± 12V            | 12A/14A                           | -                | -                |
| PX401/403-U3B | ± 5V             | 50A              | ± 15V            | 12A/14A                           | ± 15V            | 12A/14A                           | -                | -                |
| PX401/403-U4C | ± 5V             | 50A              | ± 12V            | 10A/12A                           | ± 12V            | 10A/12A                           | ± 5V             | 3.0A             |
| PX401/403-U4D | ± 5V             | 50A              | ± 12V            | 10A/12A                           | ± 12V            | 10A/12A                           | ± 24V            | 2.0A             |
| PX401/403-U4E | ± 5V             | 50A              | ± 12V            | 10A/12A                           | ± 12V            | 10A/12A                           | ± 12V            | 3.0A             |
| PX401/403-U4F | ± 5V             | 50A              | ± 15V            | 10A/12A                           | ± 15V            | 10A/12A                           | ± 5V             | 3.0A             |
| PX401/403-U4G | ± 5V             | 50A              | ± 15V            | 10A/12A                           | ± 15V            | 10A/12A                           | ± 24V            | 2.0A             |
| PX401/403-U4H | ± 5V             | 50A              | ± 12V            | 10A/12A                           | ± 12V            | 10A/12A                           | ± 5.2V           | 10.0A            |
| PX401/403-U4I | ± 5V             | 50A              | ± 15V            | 10A                               | ± 15V            | 10A                               | ± 5.2V           | 10.0A            |
| PX401/403-U4J | ± 5V             | 20A              | ± 17V            | 3A                                | ± 17V            | 3A                                | ± 24V            | 10.0A            |
| PX401/403-U4K | ± 5V             | 25A              | ± 12V            | 10A                               | ± 12V            | 10A                               | ± 12V            | 4.0A             |
| PX401/403-U4L | ± 5V             | 30A              | ± 12V            | 10A                               | ± 12V            | 10A                               | ± 5.2V           | 3.0A             |
| PX401/403-U4M | ± 5V             | 30A              | ± 15V            | 12A                               | ± 15V            | 12A                               | ± 5.2V           | 10.0A            |
| PX401/403-U4N | ± 5V             | 70A              | ± 12V            | 12A                               | ± 12V            | 12A                               | ± 3.3V           | 10.0A            |
| PX401/403-U4P | ± 5V             | 30A              | ± 12V            | 10A                               | ± 12V            | 12A                               | ± 24V            | 3.0A             |
| PX401/403-U4R | ± 5V             | 20A              | ± 15V            | 4A                                | ± 15V            | 4A                                | ± 24V            | 10.0A            |
| PX401/403-U4S | ± 5V             | 20A              | ± 12V            | 8A                                | ± 12V            | 3A                                | ± 24V            | 10.0A            |

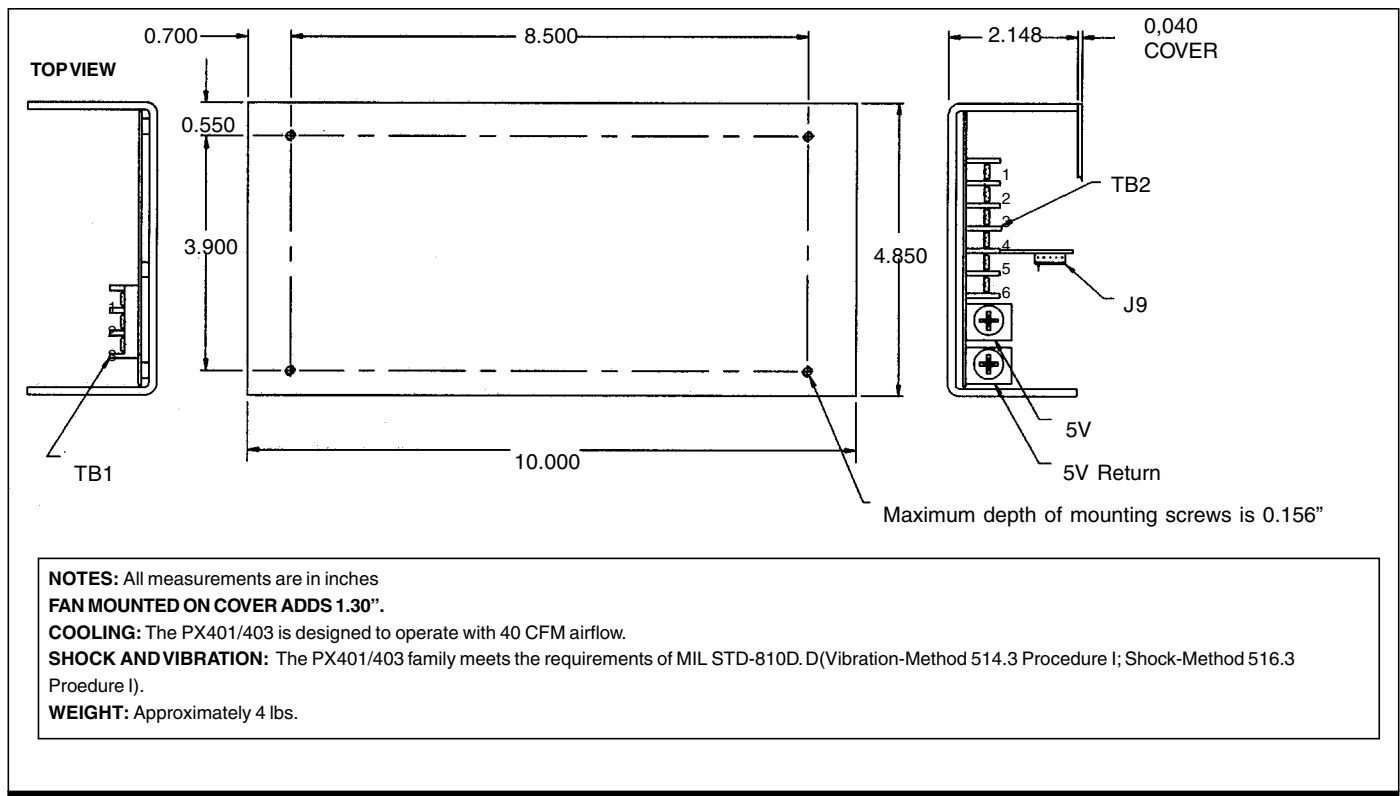
Note: Peak current ratings are for 10sec maximum. Total power not to exceed 400 watts.

## Output Specifications

| Parameter    | Limits              |
|--------------|---------------------|
| Regulation   |                     |
| Line         | ± 0.1%              |
| Load         | ±0.5%               |
| Cross        | ±0.1%               |
| Minimum Load |                     |
| Output #1    | 2.5A                |
| Hold-Up Time | 30mSec at Full Load |

| Parameter                    | Conditions              | Min | Typ    | Max | Units |
|------------------------------|-------------------------|-----|--------|-----|-------|
| Voltage Adjustment Range     |                         |     | ±5     |     | %     |
| PARD                         | 20 MHz bandwidth        |     | 0.5    |     | % P-P |
| Temperature                  |                         |     |        |     |       |
| Operating                    |                         | 0   |        | 50  | °C    |
| Storage                      |                         | -20 |        | +85 | °C    |
| Temperature Coefficient (Tc) | After half hour warm-up |     | ± 0.02 |     | %/°C  |

# Mechanical



## Pin Specifications

| Terminal Block 1 |            | Terminal Block 2 |          |
|------------------|------------|------------------|----------|
| POS              | FUNCTION   | POS              | FUNCTION |
| 1                | Ground     | 1                | -V4      |
| 2                | AC Neutral | 2                | +V4      |
| 3                | AC Line    | 3                | -V3      |
|                  |            | 4                | +V3      |
|                  |            | 5                | -V2      |
|                  |            | 6                | +V2      |

## Connector Specifications

| J9 Connector |                | J9 Connector |            |
|--------------|----------------|--------------|------------|
| PIN          | FUNCTION       |              | Molex No.  |
| 1            | - Sense        | Connector    | 22-28-1050 |
| 2            | + Sense        |              |            |
| 3            | Current Share  |              |            |
| 4            | Remote Inhibit |              |            |
| 5            | Power Fail     |              |            |

Model PX403 features Active Current Sharing

Standard Options are shown, consult factory for other available options.

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