

OBSOLETE PRODUCT

Contact Factory for Replacement Model

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



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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 μ 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 _{OUT} | I _{MAX} | V _{NOM} | I _{MAX} /I _{PK} | V _{NOM} | I _{MAX} /I _{PK} | V _{NOM} | I _{MAX} |
| 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 |

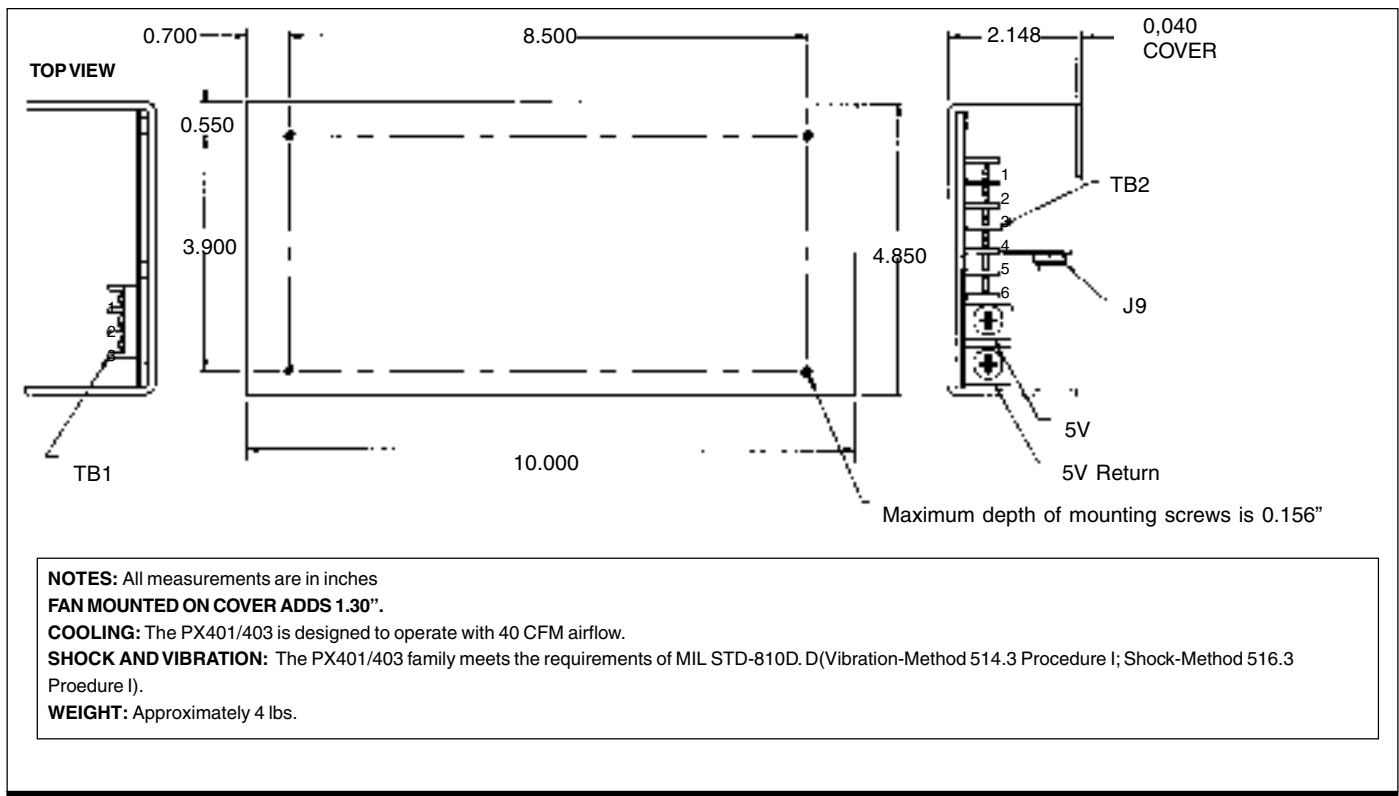
Note: Peak current ratings are for 10sec maximum. Total power not to exceed 400 watts.

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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