

MILITARY GRADE TDRSP-3000 SERIES

3000-WATT SINGLE OUTPUT

AC-DC CONVERTER

3-PHASE INPUT

POWER FACTOR CORRECTED



APPLICATIONS

The TDRSP-3000 series of Power Factor Corrected AC-DC power supplies provides highly regulated output power to 3000-watts. Rugged construction and superior quality make this power supply ideal for harsh environment applications. Available in standard, modified, or fully custom configurations, for industrial, commercial, COTS ruggedized and Military applications.

STANDARD FEATURES

- Input and Output Good signals
- Internal EMI Filtering
- Forced air cooling, Internal fan
- Compact size
- High Power Density
- Rugged Construction
- OV, OL, OT protection
- ORing Diode for Redundant Operation
- Ruggedized for shock & vibration
- Conformal Coated all boards
- Meets the high transients of MIL-STD-704A, but will shut down when low voltage transients fall below 80V (L-N)

SAFETY AND EMISSIONS

- Designed to meet MIL-STD-461G, sections RE102 & CE102
- Designed to meet UL/cUL62368-1
- Designed to meet TUV EN62368-1
- Designed to meet EN55035

INPUT SPECIFICATIONS:

Input: 115/200, 3Φ, 50, 60, or 400Hz

Inrush Current: 50A max

Input Current: 17A

Efficiency: 86% typical

Hold-up Time: 16ms at full load (minimum)

Leakage Current: <5.0mA maximum at 115/200VAC

Harmonics: EN 61000-3-2

OUTPUT SPECIFICATIONS:

Minimum Load: none

Regulation: Line: $\pm 1\%$, Load: $\pm 1\%$

Ripple / Noise: $\pm 1\%$

Output Voltage Adj: $\pm 5\%$

Overcurrent Protection: 105-125% automatic recovery Constant Current

Oversupply Protection: 115-140% of V1 nominal

Overtemperature Protection: Heatsink Temp. $90^{\circ}\text{C} \pm 5^{\circ}\text{C}$ Auto Recovery

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature: -35°C to $+70^{\circ}\text{C}$. Derate to 50% at $+70^{\circ}\text{C}$

Storage Temperature: -40°C to $+85^{\circ}\text{C}$ max 95% Relative Humidity

Cooling: Internal ball bearing DC fan

Humidity: 20-90% RH non-condensing

Vibration: 10-500Hz, 2G 10min/cycle for 60 min (3 axes)

Shock: 20G Peak Acceleration

Size: 14" x 8" x 4.5"



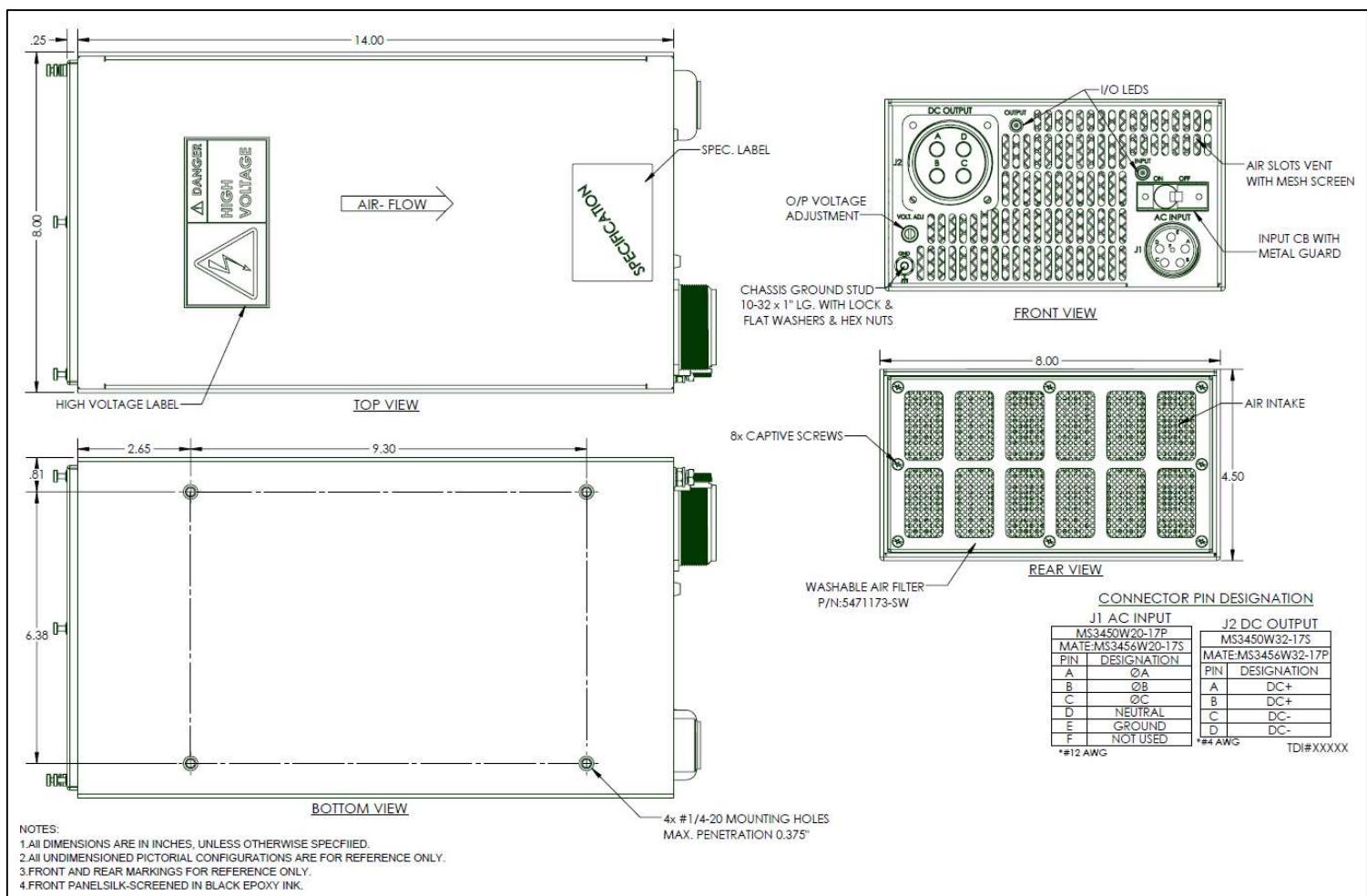
MODEL SELECTION

MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT CURRENT
TDRSP-3P-3000-24-MIL	24V	90A
TDRSP-3P-3000-48-MIL	48V	62.5A
TDHV-3P-3000-270-MIL	270V	11A

NOTE: OTHER VOLTAGES & CURRENTS AVAILABLE. CONSULT THE FACTORY.

INPUT VOLTAGE RANGE DETERMINE OUTPUT POWER.
CONTACT FACTORY FOR ADDITIONAL INFORMATION

MECHANICAL OUTLINE



Technology Dynamics Inc. is not responsible for any errors in this data sheet nor any damages or injuries resulting from the use of this product.