## TECHNOLOGY DYNAMICS INC.

# TD RSP-3000 SERIES 3000 WATT SINGLE OUTPUT SWITCHING POWER SUPPLIES

10.95" x 7" x 2.5"
POWER FACTOR CORRECTED

#### **APPLICATIONS**

The TD RSP-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

- High Efficiency Up to 90%
- Active PFC for EN61000-3-2, -3 PF>0.95%
- AC Input 180-264 VAC
- Built In DC Fan for Cooling
- · Current Share Function
- AC & DC Good Signals
- Remote on/off & Remote Sense Functions
- 12V / 100 mA Auxiliary Output

#### **AVAILABLE OPTIONS**

- Hot Swap
- Parallel Operation
- ORing Diode for Redundant Operation
- Rack / Panel Mount
- Ruggedized for shock & vibration
- 400 Hz Operation
- · Conformal Coated

#### **SAFETY AND EMISSIONS**

- Designed to meet UL/cUL60950-1
- Designed to meet TUV EN60950-1
- Designed to meet CB Report (IEC 60950-1)
- Designed to meet CE Mark (LVD)
- Designed to meet EN55022 Class B (CISPR 22 B)



#### **SPECIFICATIONS**

#### **INPUT SPECIFICATIONS:**

Input:Universal AC Input Range 180-264VAC/254-370VDC

Input Frequency: 47-63Hz

Inrush Current: 60A at 230VAC (cold start)
Input Current: 20A/180VAC,16A/230VAC

Efficiency: 86-90% typical (depending on output model)

Hold-up time: 10ms at full load (minimum) Leakage Current: <2.0 mA maximum @ 240 VAC

Harmonics: EN 61000-3-2, -3 Class D Compliant (0.99 PF Typical)

#### **OUTPUT SPECIFICATIONS**

Adjustment Range: ± 10% (minimum)

Minimum Load: none

Regulation: Line  $\pm 0.5\%$  Load  $\pm 0.5\%$ 

Ripple/Noise: 150 - 200mV peak to peak maximum (20 MHz) Set Point Accuracy:  $\pm 1\%$  (except  $5V = \pm 2\%$ ) (maximum)

Output voltage adj: ±10% minimum

Overcurrent Protection: 100-112% of rated output power. Overlvoltage Protection: 115 -150% of V1 nominal

Overtemperature Protection: Heatsink Temp 90°C ± 5°C Auto Recovery.

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: -20°C to +50°C. Storage Temperature: -40°C to +85°C max Cooling: Internal ball bearing DC fan Humidity: 20-90% RH non condensing

Vibration: 10 - 500Hz, 2G 10 min / 1cycle for 60 min (3 axes)

Shock: 20 G Peak Acceleration Weight: Approx.: 7.5 LBS Size: 10.94" x 7.0" x 2.5"



### **MODEL SELECTION**

MODEL NUMBER	VOLTAGE	CURRENT
TD RSP-3000-12	12V	200A
TD RSP-3000-24	24V	125A
TD RSP-3000-28	28V	107A
TD RSP-3000-48	48V	62A

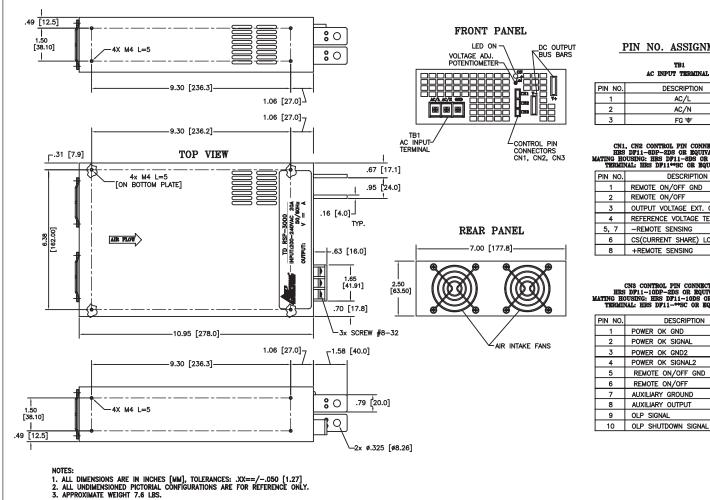
NOTE: OTHER VOLTAGES & CURRENTS AVAILABLE. CONSULT THE FACTORY.

### **OPTION DESIGNATIONS**

- HSP	Hot Swap
- ORD	Redundant Operation
- PAR	Parallel Operation
- CC	Conformal Coating

- MIL	Ruggedized/Militarized
- PNL	Panel Mount
- RK	Rack Mount
- 400Hz	400 Hz Operation

### **MECHANICAL OUTLINE**



#### PIN NO. ASSIGNMENT

PIN NO.	DESCRIPTION
1	AC/L
2	AC/N
3	FG 专

# CN1, CN2 CONTROL PIN CONNECTOR HBS DF11-8DP-2DS OR EQUIVALENT NG HOUSING: HBS DF11-8DS OR EQUIVALENT TERMINAL: HRS DF11\*\*SC OR EQUIVALENT

PIN NO.	DESCRIPTION
1	REMOTE ON/OFF GND
2	REMOTE ON/OFF
3	OUTPUT VOLTAGE EXT. CONTROL
4	REFERENCE VOLTAGE TERMINAL
5, 7	-REMOTE SENSING
6	CS(CURRENT SHARE) LOAD SHARE
8	+REMOTE SENSING

PIN NO.	DESCRIPTION
1	POWER OK GND
2	POWER OK SIGNAL
3	POWER OK GND2
4	POWER OK SIGNAL2
5	REMOTE ON/OFF GND
6	REMOTE ON/OFF
7	AUXILIARY GROUND
8	AUXILIARY OUTPUT
9	OLP SIGNAL
10	OLP SHUTDOWN SIGNAL