

**TDST-10000 SERIES**  
**10000 WATT SINGLE OUTPUT**  
**SWITCHING POWER SUPPLIES**

21.25" x 16.70" x 3.28"

**POWER FACTOR CORRECTED, HIGH EFFICIENCY**

**APPLICATIONS**

The TDST-10000 Series of High Power Switching Power Supplies provides up to 10000 Watts of output power. Output Voltage and Current are adjustable making this Switching Power Supply ideal for Flexible, Reliable, Power Systems in OEM, Industrial and Laboratory applications. Available in stand alone or Rack Mount versions. Easily Customized or Modified to fit your exact needs.

**STANDARD FEATURES**

- Wide AC Input Range
- High Efficiency
- Programmable output Voltage (20% ~ 120%)
- Programmable output Current (20% ~ 100%)
- Forced Current Sharing at parallel operation
- Power Factor Corrected
- Compact Size
- Forced Current Sharing
- Remote ON / OFF, Remote sense function
- Protection: OVP, OLP, OTP, SCP, Fan Failure
- Parallel Operation

**AVAILABLE OPTIONS**

- Redundant Operation
- Ruggedized for Shock & Vibration
- 400Hz Operation
- Conformal Coating

**SAFETY AND EMISSIONS**

- Meets UL/cUL60950-1; EN 60950-1
- Meets EN55022; EN61204-3;
- Meets EN61000-3-2; EN61000-3-3
- Meets EN55024;
- Meets EN61000-6-1  
EN61000-4-2, 3, 4, 5, 6, 8, 11;



**SPECIFICATIONS**

**INPUT SPECIFICATIONS:**

Input: AC Input Range 196-305VAC 3Ø Δ, 340-530VAC 3Ø Y  
Input Frequency: 47-63Hz  
Inrush Current: 100A / 230VAC, 150 A / 400 VAC  
Input Current: 30A / 230VAC, 18A / 400VAC  
Efficiency: 88-91% typical (depending on output model)  
Hold-Up Time: 20ms at full load (minimum)  
Leakage Current: < 7 mA maximum @ 305 VAC  
Harmonics: EN 61000-3-2, -3 Class D Compliant (0.95 PF Typical)

**OUTPUT SPECIFICATIONS**

Adjustment Range: 24V (23.5 - 28.8), 36V (35-43.2), 48V (47 - 57.6)  
Minimum Load: none  
Regulation: Line ±1% Load ±.5%  
Ripple/Noise: 150 mV peak to peak maximum (20 MHz)  
Overcurrent Protection: 105% of rated output power constant current limit.  
Overvoltage Protection: 120% Vout  
Overtemperature Protection: Heatsink Temp 85°C ± 5°C Auto Recovery.

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: - 30°C to + 50°C. (Full Output Power)  
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.: 55 lbs  
Size: 21.25" x 16.70" x 3.28"



**NSF-ISR**

Registered  
to ISO 9001

## MODEL SELECTION

MODEL NUMBER	VOLTAGE	CURRENT
TDST-10000-24	24V	0 - 400A
TDST-10000-36	36V	0 - 276A
TDST-10000-48	48V	0 - 210A

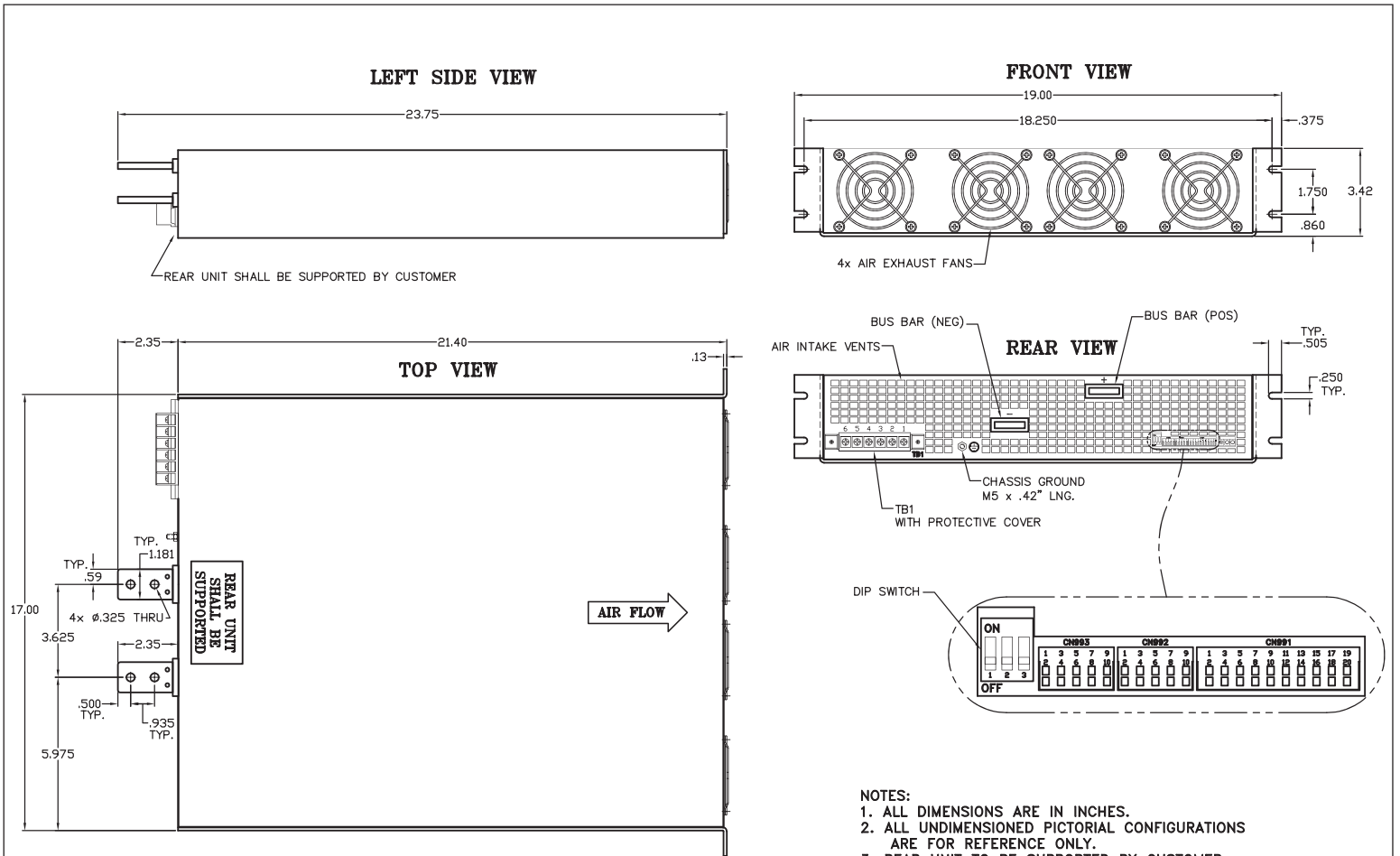
NOTE: OTHER VOLTAGES & CURRENTS AVAILABLE. CONSULT THE FACTORY.

## OPTION DESIGNATIONS

- ORD	Redundant Operation
- CC	Conformal Coating

- MIL	Ruggedized/Militarized
- 400Hz	400 Hz Operation

## MECHANICAL OUTLINE



- NOTES:**
1. ALL DIMENSIONS ARE IN INCHES.
  2. ALL UNDIMENSIONED PICTORIAL CONFIGURATIONS ARE FOR REFERENCE ONLY.
  3. REAR UNIT TO BE SUPPORTED BY CUSTOMER.

### CONNECTOR PIN DESIGNATIONS

**TB1**

PIN	DESCRIPTION
1	AC/L1
2	AC/N1
3	AC/L2
4	AC/N2
5	AC/L3
6	AC/N3

**CN992, CN993:HRS DF11-10DP-2DS OR EQUIVALENT**

PIN	DESCRIPTION	PIN	DESCRIPTION
1	CS-	6	PV+
2	CS+	7	PC-
3	+S	8	RC-
4	PV-	9	PC+
5	-S	10	RC+

**CN991 :HRS DF11-20DP-2DS OR EQUIVALENT**

PIN	DESCRIPTION	PIN	DESCRIPTION	PIN	DESCRIPTION	PIN	DESCRIPTION
1	12V-AUX	6	AC-FAIL2-GND	11	OTP2-GND	16	DC-OK1-GND
2	DC-OK2-GND	7	-V	12	FAN-FAIL2-GND	17	AC-FAIL1-GND
3	GND-AUX	8	AC-FAIL2	13	OTP1	18	FAN-FAIL1-GND
4	DC-OK2	9	OTP2	14	DC-OK1	19	AC-FAIL1
5	+V	10	FAN-FAIL2	15	OTP1-GND	20	FAN-FAIL1

**DIP SWITCH**

POSITION	DESCRIPTION
1	OLP MODE
2	PC MODE
3	PV MODE