

2000 WATT AC/DC POWER SUPPLY

TXD2000



DESCRIPTION

The TXD2000 Series is a flexible, modular, 2000 Watt design offering two high current outputs in a 5 x 8 x 12 package. Output voltages from 2.5 VDC through 48 VDC are standard. With Power Factor Correction, EMI compliance to FCC and CISPR22, CE Mark and immunity to EN61000-4, the TXD2000 Series is ready for global deployment. Standard features include Remote Sense Compensation, Output Voltage Adjustment, Active Current Sharing, Remote Inhibit, Power Fail Warning, DC OK Signal and Thermal Shutdown. An optional ORing diode is offered on models with an output voltage of 12 VDC or above.

FEATURES

- Wide Range Input of 90-264VAC, 1000 Watts,
High Range Input of 180-264VAC, 2000 Watts,
- Harmonic Correction to EN61000-3-2
- Active Current Sharing
- No Load Operation
- Optional ORing Diode
- 70-80% Efficiencies
- FCC / CISPR 22 Class A EMI Filtering
- Self-Cooled 5"x 8"x 12" Chassis
- EN61000-4 Immunity

AGENCY APPROVALS



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Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Operating Range					
1000W	47-63Hz	90		264	V _{AC}
2000W	47-63Hz	180		264	V _{AC}
Inrush Current	120V _{AC} , 25°C, cold start			80	A _{pk}
	240V _{AC} , 25°C, cold start			160	A _{pk}
Efficiency	Nominal line, full load	70	75	80	%
Holdup	Full load	20			msec
Power Factor ⁽¹⁾	Full load		0.99		

Notes: (1) Harmonic currents meet EN61000-3-2

Output Voltage Modules and Maximum Rated Load

Output Voltage Code	Output Voltage	Output Current (Maximum Continuous)	Output Power (Maximum Continuous)
A	5.0	200A	1000W
B	12.0	83A	1000W
C	15.0	67A	1000W
D	18.0	55A	1000W
E	24.0	42A	1000W
F	28.0	36A	1000W
G	36.0	28A	1000W
H	48.0	21A	1000W
J	20.0	40A	800W
K	3.3	182A	600W
L	2.5	200A	500W

Output Specifications

Parameter	Conditions	Min	Typ	Max	Units
Output Power	All environmental and line conditions				
90-264VAC				1000	Watts
180-264VAC	Limited by output module selection			2000	Watts
Voltage Adjustment Range	Relative to nominal output voltage		±5		%
Output Regulation	Line, load or cross			±0.2	%
Minimum Load		0			Amps
PARD	Measured at output terminals, 20MHz			50 mv or 1%	pk-pk
Temperature Coefficient	0° to 50°C		±0.2		%/°C

Environmental Specifications

Parameter	Conditions	Min	Typ	Max	Units
Ambient Temperature (Operating)	Output de-rated linearly to 50% of rated capacity between 50°C and 70°C	0		+70	°C
Ambient Temperature	Non-operating	-50		+85	°C
Altitude (Operating)		-200		+10,000	Feet
Altitude (Non-operating)		-200		+50,000	Feet
Shock	Per MIL-STD-810D, Method 516.3, Procedure II, in each axis, including NTSA drop test				
Vibration	Per MIL-STD-810D, Method 514.3, Procedure II, in each axis, including NTSA drop test				
Cooling	The TXD2000 is provided with internal cooling fans.				

Product Features

Features	Characteristic
Remote Sense	500mV compensation
Active Current Sharing	Single Wire; 5% current share if outputs are over 25% of rated load
ORing Diode	Optional (not available on modules below 12V)
OVP	125% of nominal ($\pm 7.5\%$)
Thermal Shutdown	Automatic Restart
DC OK Signal	Logic "1" when output is within $\pm 3\%$ of nominal
Power Fail Warning	Transition to Logic "0" at least 5msec before loss of output regulation
Remote Inhibit	Logic "0" applied will inhibit output (referenced to –Sense terminal)

Product Compliances

Approval	Characteristic
UL and cUL	UL1950, 3 rd Edition ⁽¹⁾
VDE	EN60950
FCC	Class A requirements for conducted emissions
CISPR 22	Class A requirements for conducted emissions
EN61000-4-2	Electrostatic Discharge, Level 4
EN61000-4-4	Electrical Fast Transients, Level 3
EN61000-4-5	Input Surge Immunity, Level 3
EN61000-3-2	Harmonic Currents, Class A
CE Mark	Low Voltage Directive

Notes: (1) UL1950, 3rd Edition incorporates the requirements of CSA 950.

Ordering Information

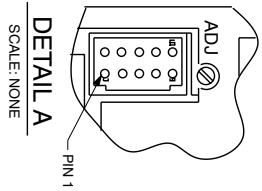
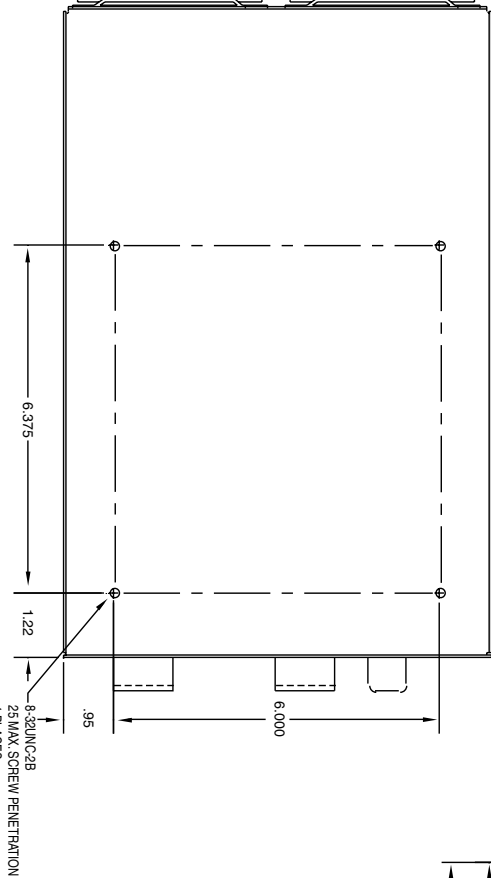
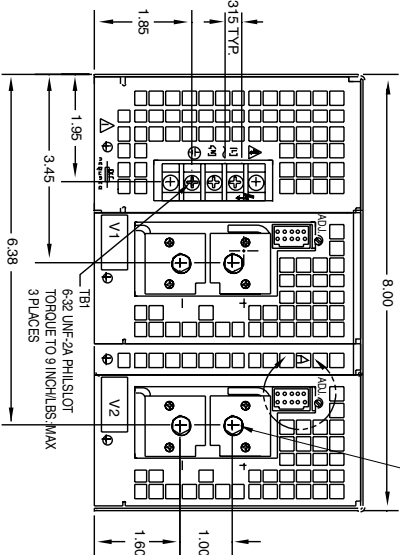
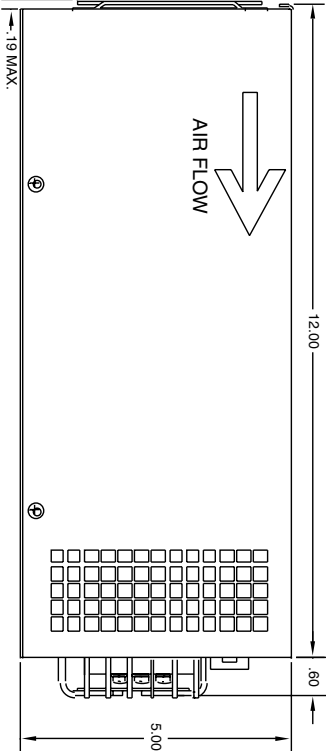
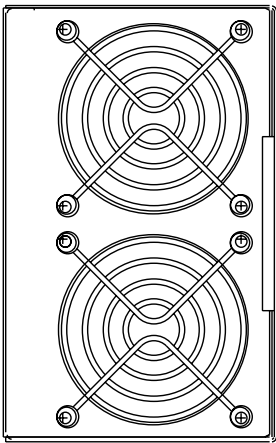
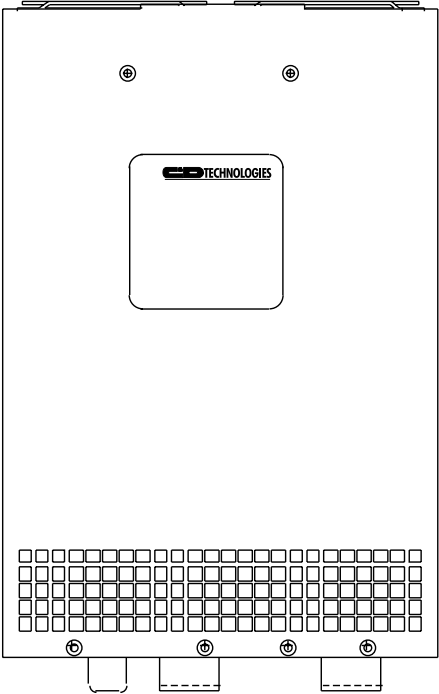
Model Designation	
BASE MODEL	TXD2000
Chassis: "8" = 5" x 8" x 12"; "M" = modified	
Output Voltage Module A: (see chart below)	
Output Voltage Module B: (see chart below)	
Standard Fan: "F":	
Remote Inhibit - TTL Logic Level "0" turns the power supply OFF:	
Power Fail Warning - TTL Logic Level "0" indicates AC is LOST:	
ORing Diode - "D" indicates an ORing Diode is installed in each module; "N" = None:	
DC OK - TTL Logic Level "1" indicates DC is OK:	

OUTPUT VOLTAGES

A = 5V	G = 36V
B = 12V	H = 48V
C = 15V	J = 20V
D = 18V	K = 3.3V
E = 24V	L = 2.5V
F = 28V	

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MECHANICAL



MODULE CONTROL CONNECTOR	
PIN NO.	FUNCTION
1	REMOTE INHIBIT
2	DC OK
3	N/C
4	N/C
5	POWER FAIL WARNING
6	CURRENT SHARE
7	+ SENSE
8	N/C
9	- SENSE
10	N/C