APPLIED POWER CONVERSION
Division of
TECHNOLOGY DYNAMICS INC.

NTDM SERIES
1500-3000 WATT SINGLE OUTPUT
SWITCHING POWER SUPPLIES
5" x 8" x 12.5"
POWER FACTOR CORRECTED, MILITARIZED

APPLICATIONS

The NTDM series of "BULK" Power Rugged 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%
- Rugged Construction
- AC Input 100-132/180-264 VAC
- Built In DC Fan for Cooling
- OV, OL, OT Protection
- DC Good Signals
- Remote on/off & Remote Sense Functions
- ±10% Voltage Adjust

AVAILABLE OPTIONS

- Active PFC (Power Factor Correction)
- Parallel Operation
- 3 Phase Input
- 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: Input Range (1500W) 90-132VAC/(2000-3000W) 180-264VDC 1Ø or 3Ø
Input Frequency: 47-63Hz (400Hz Optional)
Inrush Current: 30A at 115VAC/40A at 230 VAC (Cold Start)
Input Current: 1500W=24A, 2000W=16A, 2500W=20A, 3000W=24A
Efficiency: 83-90% Typical (Depending On Output Model)
Hold-up time: 20ms At Full Load (Minimum)
Leakage Current: <2.0mA maximum @ 240 VAC

OUTPUT SPECIFICATIONS

Adjustment Range: ±10% (Minimum)
Minimum Load: None
Regulation: Line ± 0.5% Load ± 0.5%
Ripple/Noise: 200mV Peak To Peak Maximum (20 MHz)
Set Point Accuracy: ±1%(Except 5V=±2%) (Maximum)
Output Voltage Adj: ±10% Minimum
Overcurrent Protection: 105-125% Automatic Recovery Constant Current
Overvoltage Protection: 115-140% Of V1 Nominal
Overtemperature Protection Heatsink Temp. 90°C ± 5°C Auto Recovery

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: -20°C to +50°C. Derate to 50% at +70°C
Storage Temperature: -40°C to +85°C Max
Cooling: Internal Ball Bearing DC Fan
Humidity: 20-90% RH Non Condensing
Weight: Approx: 12 Lbs
Size: 5" x 8" x 12.5"

AS 9100
BUREAU VERITAS
Certification
Certificate No: US008267-1

Design Excellence since 1976!

MODEL SELECTION

	1500 WATT OUTPUT		2000 WATT OUTPUT		2500 WATT OUTPUT		3000 WATT OUTPUT	
NOMINAL VALUE (VDC)	MAXIMUM CURRENT (ADC)	MODEL	MAXIMUM CURRENT (ADC)	MODEL	MAXIMUM CURRENT (ADC)	MODEL	MAXIMUM CURRENT (ADC)	MODEL
5V	300A	NTDM-5-300	CONSULT FACTORY					
12V	125A	NTDM-12-125						
15V	100A	NTDM-15-100						
24V	62A	NTDM-24-62	84A	NTDM-24-84	104A	NTDM-24-104	125A	NTDM-24-125
28V	54A	NTDM-28-54	72A	NTDM-28-72	89A	NTDM-28-89	107A	NTDM-28-107
48V	31A	NTDM-48-31	42A	NTDM-48-42	52A	NTDM-48-52	62A	NTDM-48-62
110V	14A	NTDM-110-14	18A	NTDM-110-18	22A	NTDM-110-22	27A	NTDM-110-27

Note: 2000 Watts - 3000 Watts Require 230 VAC Input.
Note: Other Voltages and Currents Available, Contact the Factory.

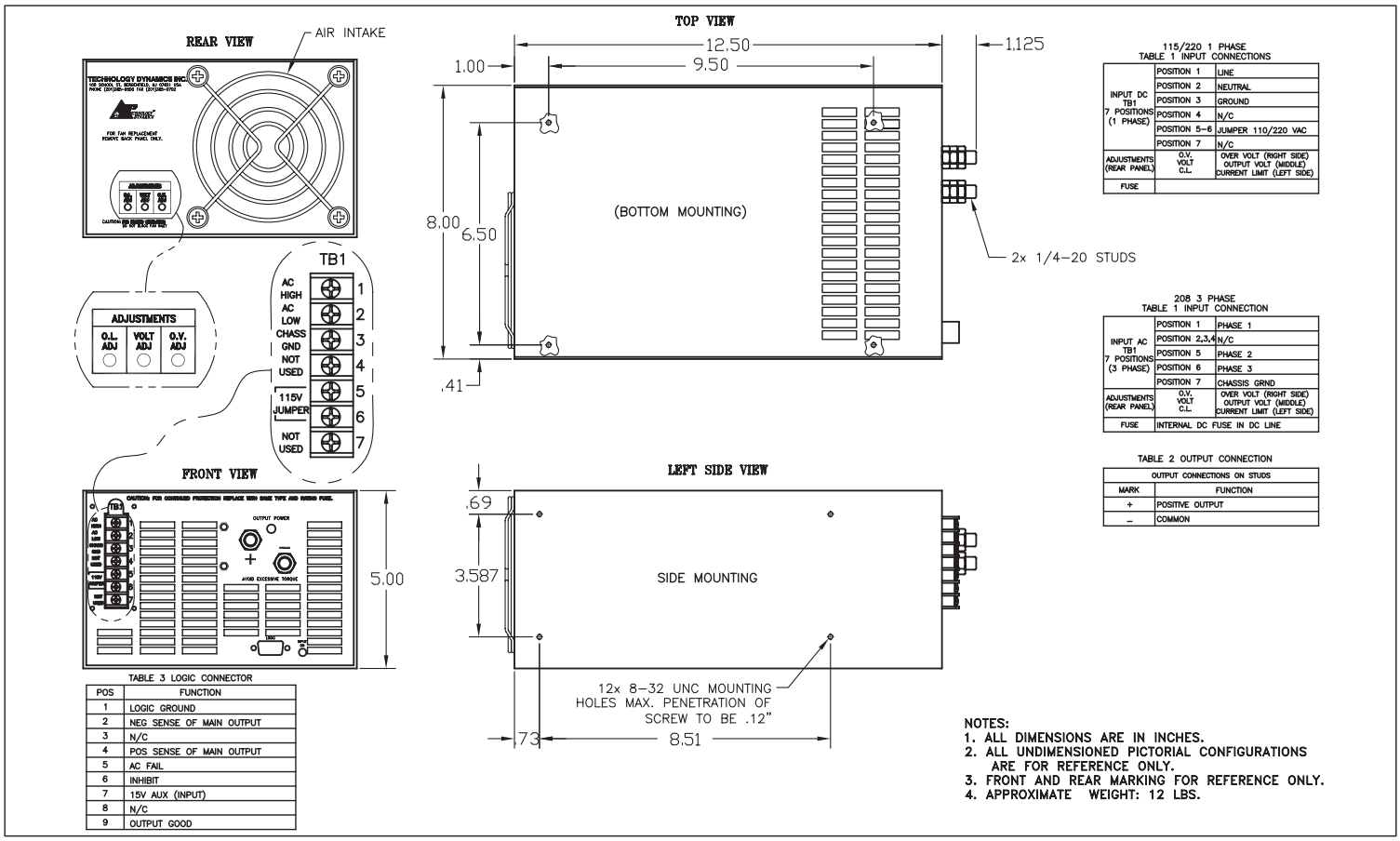
OPTION DESIGNATIONS

- PFC	Power Factor Correction
- PAR	Parallel Operation
- 3P	3 Phase Input
- RK	Rack Mount
- HS	Hot Swap

- CC	Conformal Coating
- 400Hz	400Hz Operation
- MIL	Ruggedized for Shock/Vibration
- ORD	Redundant Operation
- PNL	Panel Mount

Note: Other Options Available, Contact the Factory.

MECHANICAL OUTLINE



115/220 1 PHASE
TABLE 1 INPUT CONNECTIONS

INPUT DC TB1 7 POSITIONS (1 PHASE)	POSITION 1	LINE
	POSITION 2	NEUTRAL
	POSITION 3	GROUND
	POSITION 4	N/C
	POSITION 5-6	JUMPER 110/220 VAC
	POSITION 7	N/C
ADJUSTMENTS (REAR PANEL)	O.V. VOLT C.L.	OVER VOLT (RIGHT SIDE) OUTPUT VOLT (MIDDLE) CURRENT LIMIT (LEFT SIDE)
FUSE		

208 3 PHASE
TABLE 1 INPUT CONNECTION

INPUT AC TB1 7 POSITIONS (3 PHASE)	POSITION 1	PHASE 1
	POSITION 2,3,4	N/C
	POSITION 5	PHASE 2
	POSITION 6	PHASE 3
	POSITION 7	CHASSIS GRND
ADJUSTMENTS (REAR PANEL)	O.V. VOLT C.L.	OVER VOLT (RIGHT SIDE) OUTPUT VOLT (MIDDLE) CURRENT LIMIT (LEFT SIDE)
FUSE	INTERNAL DC FUSE IN DC LINE	

TABLE 2 OUTPUT CONNECTION

OUTPUT CONNECTIONS ON STUDS	
MARK	FUNCTION
+	POSITIVE OUTPUT
-	COMMON

TABLE 3 LOGIC CONNECTOR

POS	FUNCTION
1	LOGIC GROUND
2	NEG SENSE OF MAIN OUTPUT
3	N/C
4	POS SENSE OF MAIN OUTPUT
5	AC FAIL
6	INHIBIT
7	15V AUX (INPUT)
8	N/C
9	OUTPUT GOOD

NOTES:
1. ALL DIMENSIONS ARE IN INCHES.
2. ALL UNDIMENSIONED PICTORIAL CONFIGURATIONS ARE FOR REFERENCE ONLY.
3. FRONT AND REAR MARKING FOR REFERENCE ONLY.
4. APPROXIMATE WEIGHT: 12 LBS.

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