APPLIED POWER CONVERSION
Division of
TECHNOLOGY DYNAMICS INC.

TCP SERIES
400-1000 WATT SINGLE OUTPUT
SWITCHING POWER SUPPLIES
2.66" x 5.25" x 11.50"
RUGGED, HARSH ENVIRONMENT

APPLICATIONS

The TCP series 400-1000W AC-DC power supplies provides highly regulated output power from 400-1000 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

- Full Range Input
- Low Noise and Ripple
- Built In DC Fan For Cooling
- Current Share Function
- DC Good Signal
- Remote On/Off & Remote Sense Functions
- Rugged Construction

AVAILABLE OPTIONS

- Auto Line Selection
- 3 Phase Input
- Parallel Operation
- ORing Diode for Redundant Operation
- Rack / Panel Mount
- Ruggedized for shock & vibration (MIL-STD-810)
- 400Hz Operation
- Conformal Coating
- LVBD (Battery Back-up)

SAFETY AND EMISSIONS

- Designed to meet UL/cUL60950-1
- Designed to meet TUV EN60950-1
- Designed to meet EN55022 (Class A)

SPECIFICATIONS

INPUT SPECIFICATIONS:

Input: 90-132/180-26V VAC Switch Select
Input Frequency: 47-63Hz
Inrush Current: 60A max at 230VAC(cold start)
Input Current: 12A max @ 115VAC 6A max @ 230VAC
Efficiency: 85 typical (depending on output model)
Hold-up time: 16ms at full load (minimum)
Leakage Current: <3.5mA maximum @ 240 VAC

OUTPUT SPECIFICATIONS

Adjustment Range: ±10% (minimum)
Minimum Load: none
Regulation: Line ±0.5% Load ±0.5% Typical
Ripple/Noise: 150mV 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
Overlvoltage Protection: 115-140% of V1 nominal
Overtemperature Protection: Heatsink Temp. 90°C ± 5°C Auto Recovery

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 0°C to +50°C. Derate to 50% at +70°C
Storage Temperature: -40°C to +85°C max 95% Relative Humidity
Cooling: Internal ball bearing DC fan
Humidity: 20-90% RH non condensing
Vibration: 10-500Hz, 2G 10min/1cycle for 60 min (3 axes)(Standard Unit)
Shock: 20G Peak Acceleration (Standard Unit)
Weight: Approx: 6.6 LBS
Size: 2.66" x 5.25" x 11.50"

AS 9100
BUREAU VERITAS
Certification
Certificate No: US008267-1

Design Excellence since 1976!

MODEL SELECTION

400 WATTS			600 WATTS		800 WATTS			1000 WATTS	
Model	Nominal Voltage (VDC)	Maximum Current (ADC)	Model	Maximum Current (ADC)	Model	Nominal Voltage (VDC)	Maximum Current (ADC)	Model	Maximum Current (ADC)
TCP - 5 - 80	3.5/5V	80A	TCP - 5 - 100	100A	N/A	N/A	N/A	Consult Factory	
TCP - 12 - 34	12V	34A	TCP - 12 - 50	50A	TCP - 12 - 66	12V	66A		
TCP - 15 - 27	15V	27A	TCP - 15 - 40	40A	TCP - 15 - 53	15V	53A		
TCP - 24 - 17	24V	17A	TCP - 24 - 25	25A	TCP - 24 - 33	24V	33A	TCP - 24 - 41	41A
TCP - 28 - 14	28V	14A	TCP - 28 -21	21A	TCP - 28 - 28	28V	28A	TCP - 28 - 35	35A
TCP - 36 - 11	36V	11A	TCP - 36 -16	16A	TCP - 36 - 22	36V	22A	TCP - 36 - 27	27A
TCP - 48 - 8	48V	8A	TCP - 48 - 12	12A	TCP - 48 - 16	48V	16A	TCP - 48 - 16	20A

OPTION DESIGNATIONS

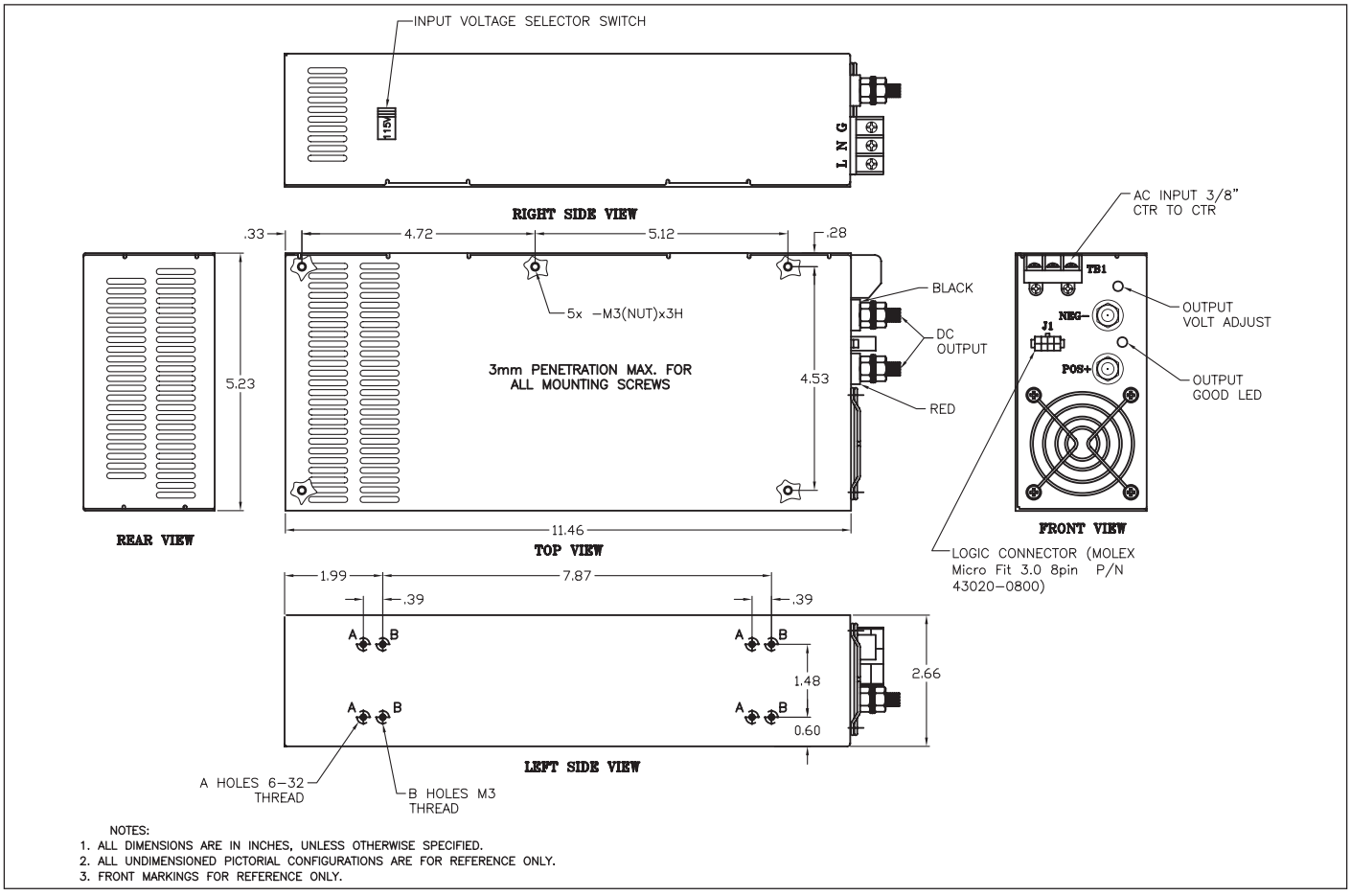
-ALS	AUTO LINE SELECT
-3P	3 PHASE INPUT
-ORD	REDUNDANT OPERATION (ORING DIODE)
-RK	RACK MOUNT
-MIL	RUGGEDIZED/MILITARIZED
-CC	CONFORMAL COATING
-LVBD	BATTERY BACK-UP

-PAR	PARALLEL OPERATION
-PNL	PANEL MOUNT
-400HZ	400 Hz OPPERATION

Low Voltage Battery Disconnect

The LVBD module adds a new dimension to battery backup power supplies. The power supply simultaneously charges the battery and powers the load. If the AC power fails, the battery continues to support the load. However, when the battery voltage drops below a predetermined level, the LVBD module disconnects the battery from the load, thereby protecting the battery from the damaging effects of complete discharge.

MECHANICAL OUTLINE



NOTES:
1. ALL DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED.
2. ALL UNDIMENSIONED PICTORIAL CONFIGURATIONS ARE FOR REFERENCE ONLY.
3. FRONT MARKINGS FOR REFERENCE ONLY.

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