

3200W 3 Phase Input Industrial Power Supplies

Features

- ◆ 400/440/480 VAC (Nominal) 3 Phase Delta or Wye
- ◆ Fully Regulated, Wide Range Adjustable Output
- ◆ Voltage and Current Programming
- ◆ -40°C (start up) to +70°C operation
- ◆ >92% Efficiency
- ◆ PMBus Communication
- ◆ Built in ORing FETs & Active I share for parallel operation
- ◆ Fully Featured



Key Market Segments & Applications



Specifications

Model	TPS3000-24	TPS3000-48
Input Voltage (47-63Hz)	VAC	350 - 528VAC, Delta or Wye 3 phase
Input Current	A	6A per phase max, steady state
Inrush Current	A	<16A per phase (excluding initial spike charging EMI capacitors lasting <2mS)
Power Factor Correction	-	0.93 typical
Efficiency (1)	%	92.5%
Ripple & Noise (Pk-Pk) (max) (2)	mV	130mV
Line Regulation	%	<0.25%
Load Regulation	%	<0.5%
Overcurrent Protection	-	Adjustable (70-105% of rated current)
Overvoltage Protection	V	115% of setpoint (tracking)
Thermal Protection	-	Internal thermostat. Automatic reset
Hold Up Time	ms	>10mS at 80% of rated current, nominal input/output voltage
Remote Sense	-	Compensates for a total of 1V cable drop
Dropped Phase Signal	-	Open collector; off during normal operation, strobing during dropped phase state
Remote On / Off	-	Selectable logic - Enable or Inhibit
AC Fail Signal	-	Open Collector, ON when AC is above 340VAC and unit is enabled
DC Good Signal	-	Open Collector, ON when output is above 85 to 95% of setpoint (tracking)
Remote Adjust	-	0 - 5V adjusts output from V max to V min
Parallel Connection	-	Single wire current share, up to 8 units. Built in ORing FET
Standby Voltage	-	12V, 0.5A
Operating Temperature	°C	-40 to +70°C, see derating curve (20 min warm up needed for <-10°C)
Storage Temperature	°C	-40 to +85°C
Temperature Coefficient	%/°C	0.02%/°C
Humidity (non condensing)	%RH	10 - 90%RH
Cooling	-	Internal variable speed fan
Withstand Voltage	VAC	Input - Ground 2,000VAC, Input - Output 3,000VAC, Output - Ground 500VAC
Isolation Resistance	MΩ	>100MΩ (25deg, 70%RH)
Vibration	-	Designed to meet MIL-STD-810F, Method 514.5, Procedure I, Cat 1, 10
Shock	-	Designed to meet MIL-STD-810F, Method 516.5, Procedure I, IV & VI
Safety Agency Certifications	-	UL/CSA60950-1, EN60950-1, CE mark for LVD and RoHS2
Leakage Current	mA	<3mA
Conducted Emissions	-	EN55022 Class A, FCC part 15 Class-A, (Class-B TBD)
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11
Altitude	m	2000m, (3000m TBD)
Weight	kg	2.7
Size (W x H x D)	mm	107 x 84.4 x 324mm (excluding output busbars)
Warranty	yrs	Three Years

(1) Typical, 75-100% at rated current

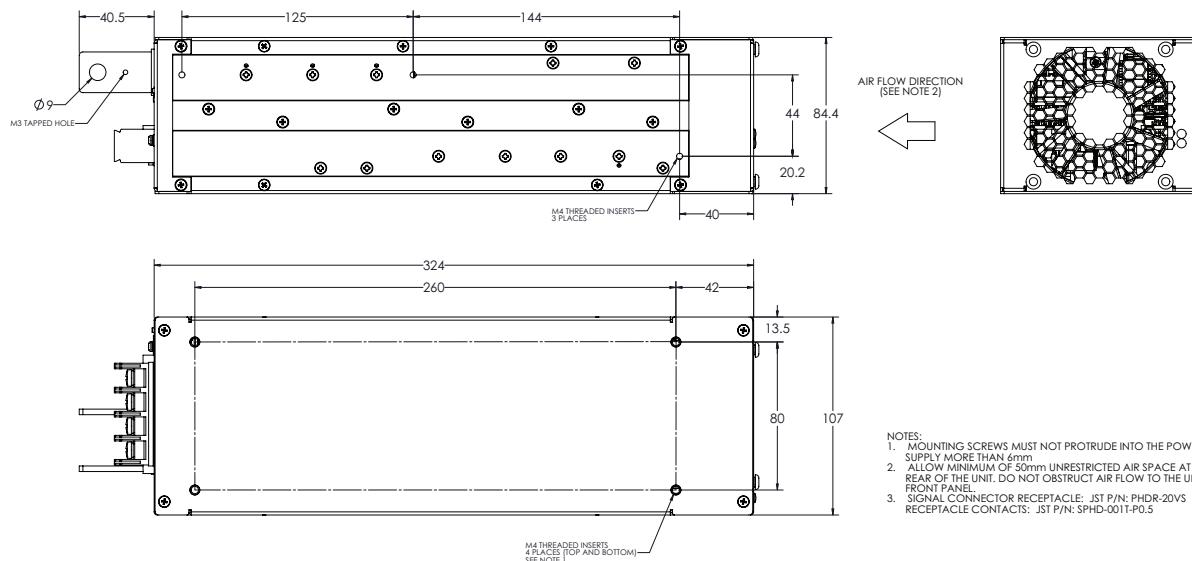
(2) Consult Installation Manual for detailed specifications, test methods and application notes

Specifications

Model	Nominal Voltage (V)	Adjust. Range (V)	Rated Current (A)	Maximum (3) Current (A)	Rated Power (W)	Maximum (3) Power (W)
TPS3000-24	24	19.2 - 29	125	134	3000	3200
TPS3000-48	48	38.4 - 58	62.5	TBD	3000	TBD

(3) Rating at nominal output voltage only.

Outline Drawing



NOTES:
 1. MOUNTING SCREWS MUST NOT PROTRUDE INTO THE POWER SUPPLY MORE THAN 6mm.
 2. ALLOW MINIMUM OF 50mm UNRESTRICTED AIR SPACE AT THE REAR OF THE UNIT. DO NOT OBSTRUCT AIR FLOW TO THE UNIT FROM THE REAR.
 3. SIGNAL CONNECTOR RECEPTACLE: JST P/N: PHDR-20VS
 RECEPTACLE CONTACTS: JST P/N: SPHD-001T-P0.5

Derating Curve

For Additional Information, please visit
us.tdk-lambda.com/lp/products/tps-series.htm

