

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		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	<15A per phase (excluding initial spike charging EMI capacitors lasting <2ms)	
Power Factor Correction	-	0.93 typical	
Efficiency (1)	%	92.5%	92.5%
Ripple & Noise (Pk-Pk) (max) (2)	mV	130mV	260mV
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 (2)	-	Open collector signal; 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	-	11.2 - 12.5V, 0.3A	
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, Proc I, Category 4, 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	
Voltage Dips	-	SEMI F47-0706	
Leakage Current	mA	<3mA	
Conducted & Radiated Emissions	-	EN55022 Class A, FCC part 15 Class-A	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11	
Altitude	m	4,000m	
Weight	kg	3.5	
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

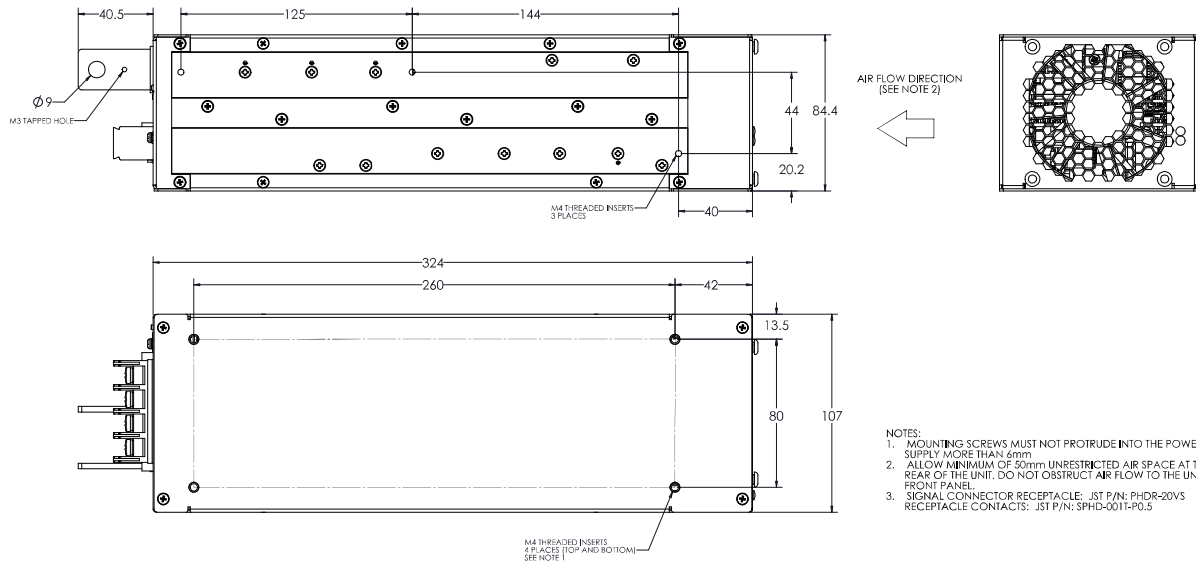
Specifications

Model	Nominal Voltage (V)	Adjust. Range (V) (4)	Rated Current (A)	Maximum (3) Current (A)	Rated Power (W)	Maximum (3) Power (W)
TPS3000-24	24	19.2 - 28.5	125	133.3	3000	3200
TPS3000-48	48	38.4 - 56.5	66.7	66.7	3200	3200

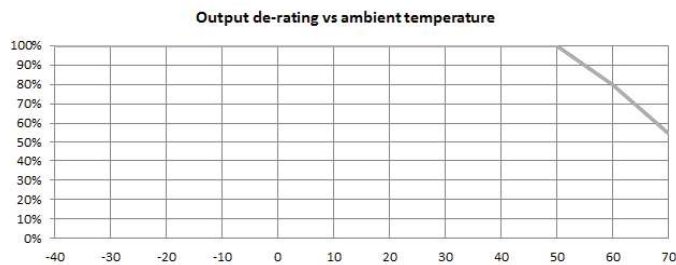
(3) Rating at nominal output voltage only.

(4) A minimum load of 0.5A is required to maintain regulation and ripple spec throughout the output voltage adjustment range.

Outline Drawing



Derating Curve



Recommended Filter

RTMN-5010



<http://us.tdk-lambda.com/lp/products/r-series.htm>

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

