

## 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	<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, 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	
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	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

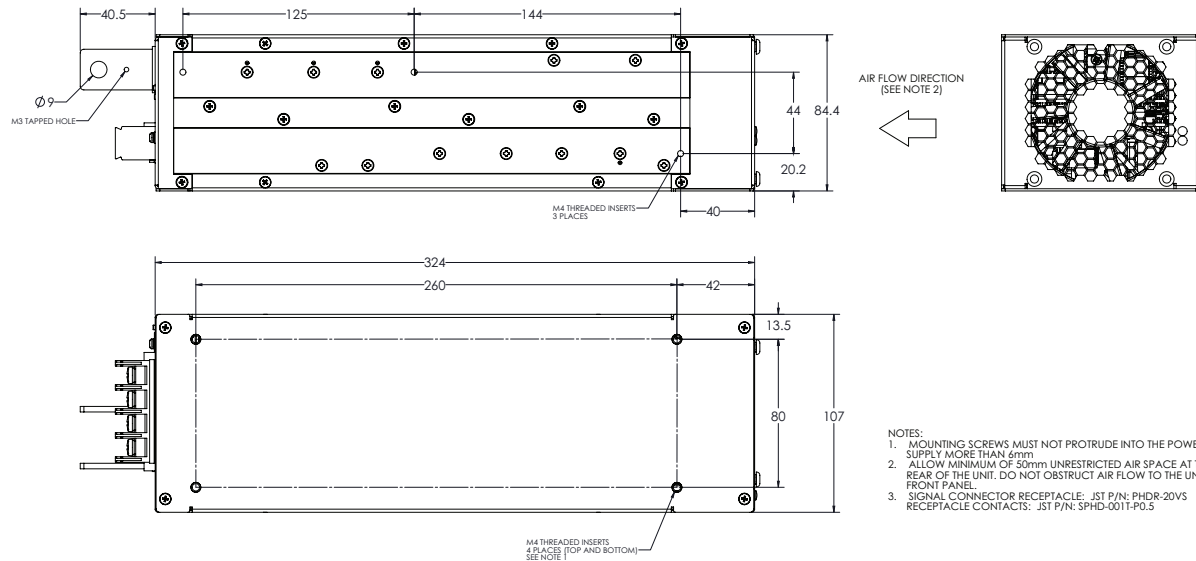
## Specifications

Model	Nominal Voltage (V)	Adjust. Range (V) (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 - 58	66.7	66.7	3200	3200

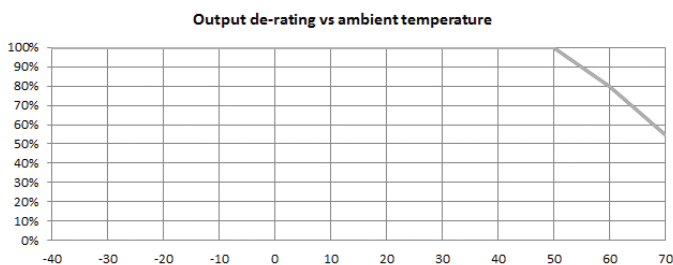
(3) Rating at nominal output voltage only.

(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](http://us.tdk-lambda.com/lp/products/tps-series.htm)

