

3200W 3 Phase Input Industrial Power Supplies



Features	Benefits
• 400/440/480 VAC (Nominal) 3 Phase Delta or Wye	• Global Use
• Fully Regulated, Wide Range Adjustable Output	• Versatile Application
• Voltage and Current Programming	• Flexible Control Options
• -40°C (start up) to +70°C operation	• Suitable for Rugged Environments
• >92% Efficiency	• Easy System Cooling
• PMBus Communication	• Easier System Monitoring
• Built in ORing FET for parallel operation	• Suitable for N + 1 Redundancy

Specification			
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 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	-	11.2V to 12.5V, 0.3A	
Operating Temperature	°C	-40°C to +70°C, see derating curve (20 min warm up needed for <-10°C)	
Storage Temperature	°C	-40°C 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 Emissions	-	EN55022 Class A, FCC part 15 Class-A, (Class-B TBD)	
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11	
Altitude	m	4000m	
Weight	kg	3.5	
Size (W x H x D)	mm	107 x 84.4 x 324 (excluding output busbars)	
Warranty	yrs	3	

Notes: (1) Typical, 75-100% at rated current (2) Consult Installation Manual for detailed specifications, test methods and application notes

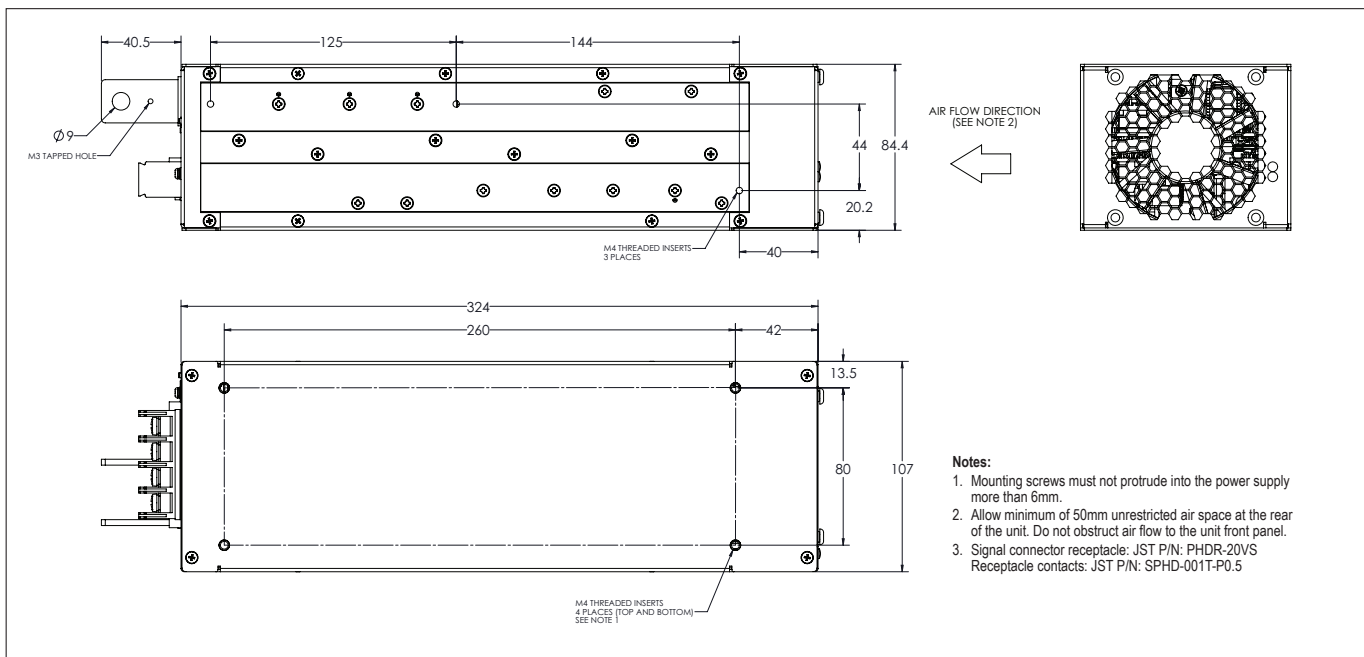
Model Selector

Model	Nominal Voltage (V)	Adjust. ⁽⁴⁾ Range (V)	Rated Current (A)	Maximum ⁽³⁾ Current (A)	Rated Power (W)	Maximum ⁽³⁾ Power (W)
TPS3000-24	24	19.2 - 29	125	133.3	3000	3200
TPS3000-48	48	38.4 - 58	66.7	66.7	3200	3200

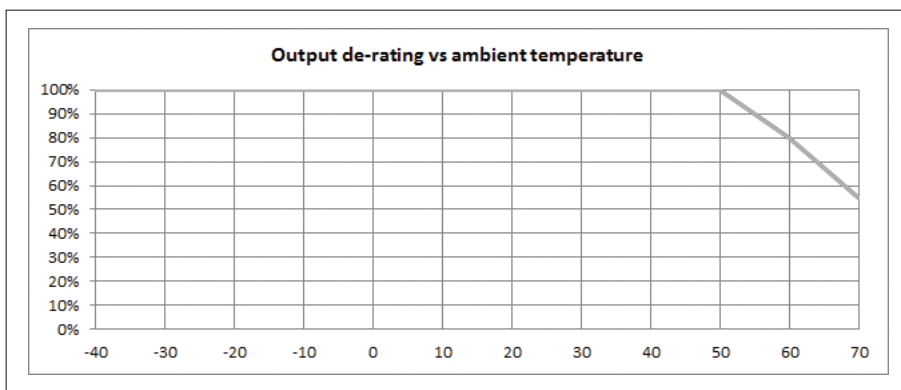
Notes: (3) Rated at nominal output voltage only.

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

Outline Drawing TPS3000 Series



Derating Curve TPS3000 Series





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