



3000W Power Supply with Single Output

RSP-3000 series



Dimension

L	*	W	*	H	
278	*	177.8	*	63.5(2U)	mm
10.9	*	7	*	2.5 (2U)	inch



Features

- AC input 180~264VAC
- Built-in active PFC function
- High efficiency up to 91.5%
- Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 9000W (2+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / power OK signal
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional conformal coating
- 5 years warranty

Certificates

- Safety: UL/EN/IEC 60950-1
- EMC: EN 55022 / 55024

Applications

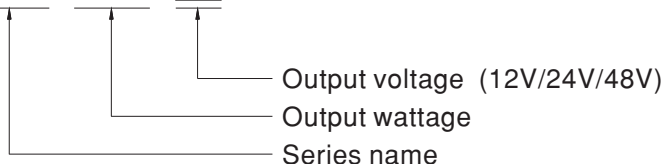
- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Burn-in facility
- Digital broadcasting
- RF application

Description

RSP-3000 is a 3KW single output enclosed type AC/DC power supply. This series operates for 180~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-3000 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

Model Encoding / Order Information

RSP - 3000 - 24



SPECIFICATION

MODEL		RSP-3000-12	RSP-3000-24	RSP-3000-48	
OUTPUT	DC VOLTAGE	12V	24V	48V	
	RATED CURRENT	200A	125A	62.5A	
	CURRENT RANGE	0 ~ 200A	0 ~ 125A	0 ~ 62.5A	
	RATED POWER	2400W	3000W	3000W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	10.8 ~ 13.2V	22 ~ 28V	43 ~ 56V	
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1000ms, 80ms at full load			
HOLD UP TIME (Typ.)	10ms at full load				
INPUT	VOLTAGE RANGE	180 ~ 264VAC 254 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR (Typ.)	0.95/230VAC at full load			
	EFFICIENCY (Typ.)	87.5%	90%	91.5%	
	AC CURRENT (Typ.)	20A/180VAC 16A/230VAC			
	INRUSH CURRENT (Typ.)	60A/230VAC			
	LEAKAGE CURRENT	<2.0mA / 240VAC			
PROTECTION	OVERLOAD	100 ~ 112% rated output power User adjustable continuous constant current limiting or constant current limiting with delay shutdown after 5 seconds, re-power on to recover			
	OVER VOLTAGE	13.8 ~ 16.8V	28.8 ~ 33.6V	57.6 ~ 67.2V	
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down Protection type : Shut down o/p voltage, re-power on to recover			
FUNCTION	OUTPUT VOLTAGE PROGRAMMABLE(PV)	2.4 ~ 13.2V	4.8 ~ 28V	9.6 ~ 56V	
	CURRENT SHARING	Up to 9000W or (2+1) units. Please refer to the Function Manual.			
	AUXILIARY POWER(AUX)	12V@0.1A(Only for Remote ON/OFF control)			
	REMOTE ON-OFF CONTROL	Please refer to the Function Manual			
	REMOTE SENSE	Compensate voltage drop on the load wiring up to 0.25V. Please refer to the Function Manual.			
	ALARM SIGNAL OUTPUT	Power OK signal. Please refer to the Function Manual			
	ENVIRONMENT	WORKING TEMP.	-20 ~ +70°C (Refer to "Derating Curve")		
WORKING HUMIDITY		20 ~ 90% RH non-condensing			
STORAGE TEMP., HUMIDITY		-40 ~ +85°C, 10 ~ 95% RH non-condensing			
TEMP. COEFFICIENT		±0.05%/°C (0 ~ 50°C)			
VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, EAC TP TC 004, BSMI CNS14336-1 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Parameter	Standard	Test Level / Note	
		Conducted	EN55032 (CISPR32) / EN55011 (CISPR11)	Class B	
		Radiated	EN55032 (CISPR32) / EN55011 (CISPR11)	Class A	
		Harmonic Current	EN61000-3-2	-----	
		Voltage Flicker	EN61000-3-3	-----	
	EMC IMMUNITY	EN55024, EN61204-3, EN61000-6-2, BSMI CNS13438			
		Parameter	Standard	Test Level / Note	
		ESD	EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact	
		Radiated	EN61000-4-3	Level 3	
		EFT / Burst	EN61000-4-4	Level 3	
		Surge	EN61000-4-5	Level 3, 2KV/Line-Earth ; Level 2, 1KV/Line-Line	
Conducted		EN61000-4-6	Level 3		
Magnetic Field		EN61000-4-8	Level 4		
Voltage Dips and Interruptions		EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
OTHERS	MTBF	223.8K hrs min. Telcordia SR-332 (Bellcore) ; 75.1K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	278*177.8*63.5mm (L*W*H)			
	PACKING	4Kg; 4pcs/16Kg/1.81CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).				