

Single Output Industrial 60Watts DIN Rail Power **Supply RPS-60-S Series**

Features:



- Universal AC input range(90~264Vac)
- 300Vac surge for 3 seconds
- High efficiency, long life and high reliability
- Output protections: OVP/OLP/SCP
- Wide operating ambient temp (-25 °C ~50 °C)
- Can be installed on TS-35/7.5 or 35/15
- 100% full load burn-in test
- PCB with conformal coating
- > Suitable for critical applications
- Cooling by free air convection
- 3 years warranty

SPECIFICA	ATION		·			
MODEL			RPS-60-S12	RPS-60-S24	RPS-60-S48	
	DC Output		12V	24V	48V	
	Rated Current		5A	2.5A	1.25A	
	Current Range Note 1		0~5A	0~2.5A	0~1.25A	
	Ripple and Noise	10~50℃	≤60mV	≤50mV	≤120mV	
	Note 2	-25 ~10℃	≤120mV	≤100mV	≤240mV	
	Voltage ADJ. Range		12~14V	24~28V	48~56V	
OUTPUT	Voltage Accuracy		±1.0%			
	Line Regulation		±0.5%			
	Load Regulation		±1%			
	Set-up Time		<1.5S @230Vac Full load			
	Hold up Time		≥20mS @230Vac Full load			
	Temperature Coefficient		±0.03%/°C			
	Overshoot and Undershoot		<5.0%			
	Voltage Range		90Vac~264Vac, 127VDC-370VDC(input V+ connect L, input V- connect N)			
	Frequency Range		47Hz~63Hz			
INPUT	Efficiency (Typical) @230Vac		86%	88%	89%	
INPUT	AC Current (max.)		<1.6A			
	Inrush Current (Typical)		65A/230Vac Cold start	50A/230Vac Cold start	65A/230Vac Cold start	
	Leakage Current		Input—output: ≤0.25mA Input—PE: ≤3.5mA			
	Over Load		6~7.5A	3~4A	1.5~2.5A	
			Hiccup mode, auto recovery	Hiccup mode, auto recovery	Hiccup mode, auto recovery	
PROTECTION	Over voltage		15.4~18V	28.8~31.2V	58~63V	
			Hiccup mode, auto recovery	Hiccup mode, auto recovery	Hiccup mode, auto recovery	
	Short Circuit		Long-term mode, auto recovery			
ENVIRONMENT	Operatingamb.Temp.&Hum.		-25°C~50°C; 20%~90%RH No condensing			
ENVIRONMENT	Storage Temp. & Hum.		-40 ℃~85 °C; 5%~95%RH No condensing			
	Safety Standards		UL60950, EN60950			
	Withstand Voltage		Primary-Secondary: 3KVac/10mA;			
SAFETY&			Primary-PE: 1.5KVac/10mA;			
EMC			Secondary-PE: 0.5KVac/10mA			
	Isolation Resistance		>10M ohms			
Note 3	EMC Emission		Compliance to EN55022, EN55024 Class B			
	Harmonic Current		Compliance to EN61000-3-2, CLASS A			
	EMC Immunity		Compliance to EN61000-4-2,3,4,5,6,11; heavy industry level			
	MTBF (MIL-HDBK-217F)		590,000Hrs (25℃, Full load)			
OTHERS	Dimension (L*W*H)		103.7*32*97.5mm			
	Cooling method		Cooling by free air convection			



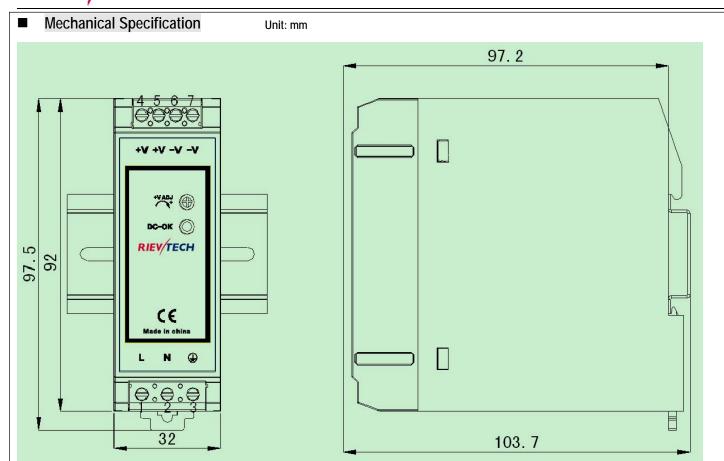
60Watts Single Output Industrial DIN Rail Power Supply RPS-60-S Series

NOTE

- 1. All parameters NOT specially mentioned are measured at rated input, rated load and $25^{\circ}\!\!\!\!\mathrm{C}^{\circ}$ of ambient temperature.
- 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor.
- 3. The power supply is considered as a component which will be installed into a final equipment. 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" on www.rievtech.com.



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1.AC Screw terminal information							
No.	Function	Wire Specs	Recommended torque				
1	L						
2	N	26-12AWG	0.5Nm				
3	PE						

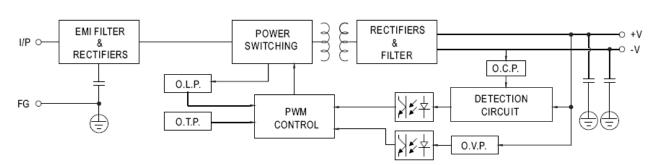
2.DC Screw terminal information						
No.	Function	Wire Specs	Recommended torque			
4	V+					
5	V T	26-12AWG	0.5Nm			
6	\/-					
7	V -					

	AO Tamain al	DO Tamainal	
	AC Terminal	DC Terminal	
Туре	Screw terminal blocks		
Solid Wire	0.32-2.5mm ²	0.65-2.5mm ²	
Strand Wire	0.32-2.5mm ²	0.65-2.5mm ²	
Wire Spec	AWG26-12		
Max Wire Diameter	2.05mm		
Recommended stripping length	6-7mm		
Screwdriver	3.5mm Straight Screwdriver		
Recommended Torque	0.5NM		



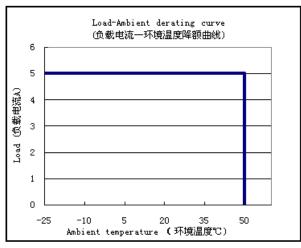
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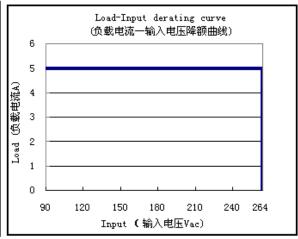
■ Block Diagram



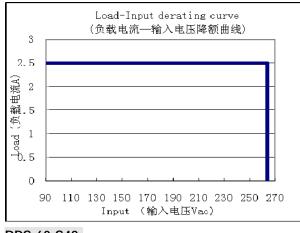
Derating Curve

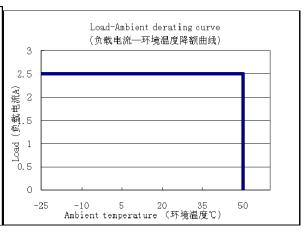
RPS-60-S12:



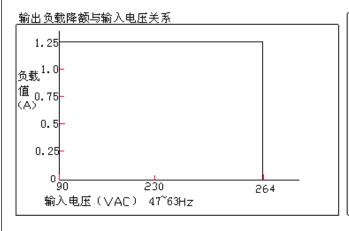


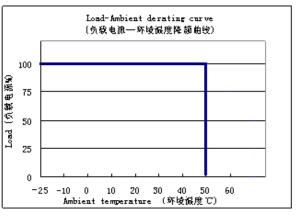
RPS-60-S24:





RPS-60-S48:







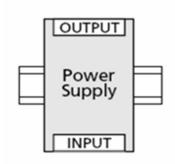
Mounting method instruction

A1 is recommended output current

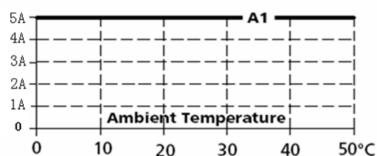
A2 is the allowed max output current (PSU lifetime is around half of A1)

RPS-60-S12:

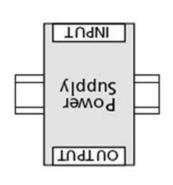
Mounting A:



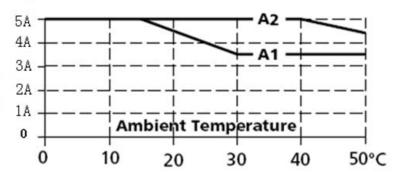
Output Current



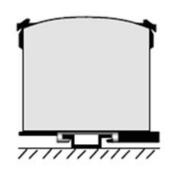
Mounting B:



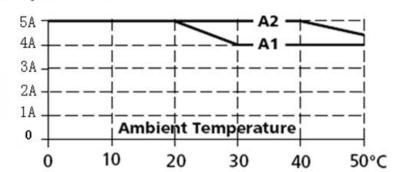
Output Current



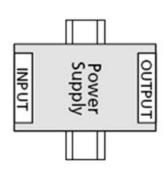
Mounting C:



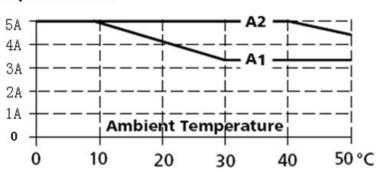
Output Current



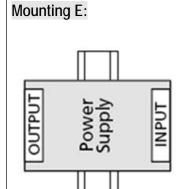
Mounting D:



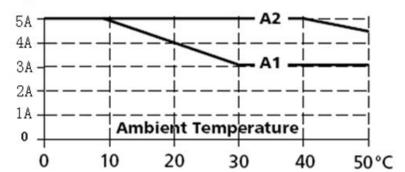
Output Current



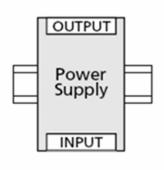




Output Current



RPS-60-S24: Mounting A:



Output Current 2.5A 1.5A 1. OA 0.5A Ambient Temperature 0

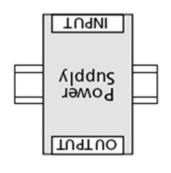
20

30

40

50°C

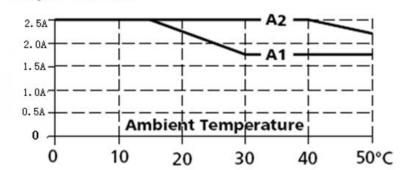
Mounting B:



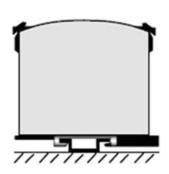
Output Current

0

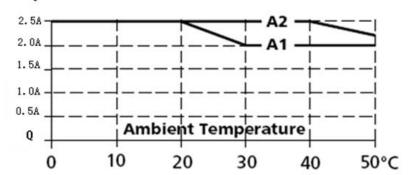
10



Mounting C:

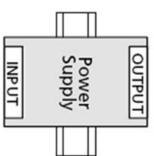


Output Current

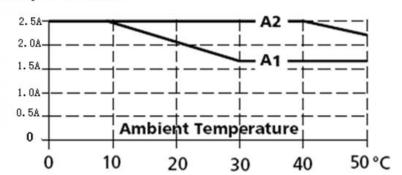




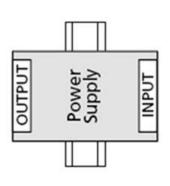




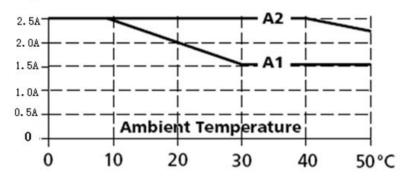
Output Current



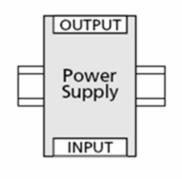
Mounting E:



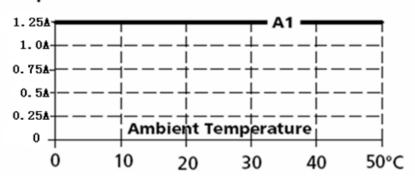
Output Current



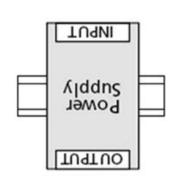
RPS-60-S48: Mounting A:



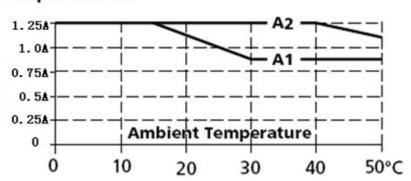
Output Current



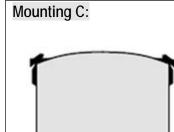
Mounting B:



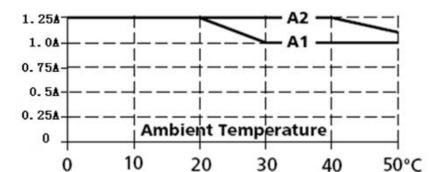
Output Current



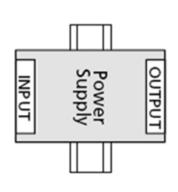




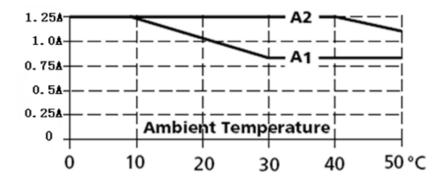
Output Current



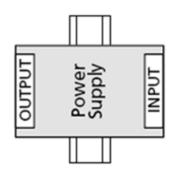
Mounting D:



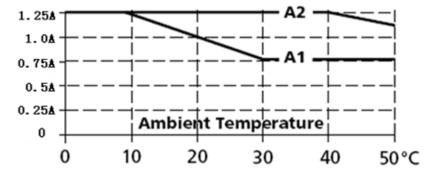
Output Current



Mounting E:



Output Current



Supply