



### Features:

- Universal AC input range(90~264Vac)
- High efficiency up to 89%
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-20°C~70°C)
- Built-in DC OK function
- Can be installed on TS-35/7.5 or TS-35/15
- 100% full load burn-in test
- Suitable for critical applications
- Operating altitude up to 6000m
- PCB with conformal coating
- Ultra-slim,45mm width
- 18 months warranty

### SPECIFICATION

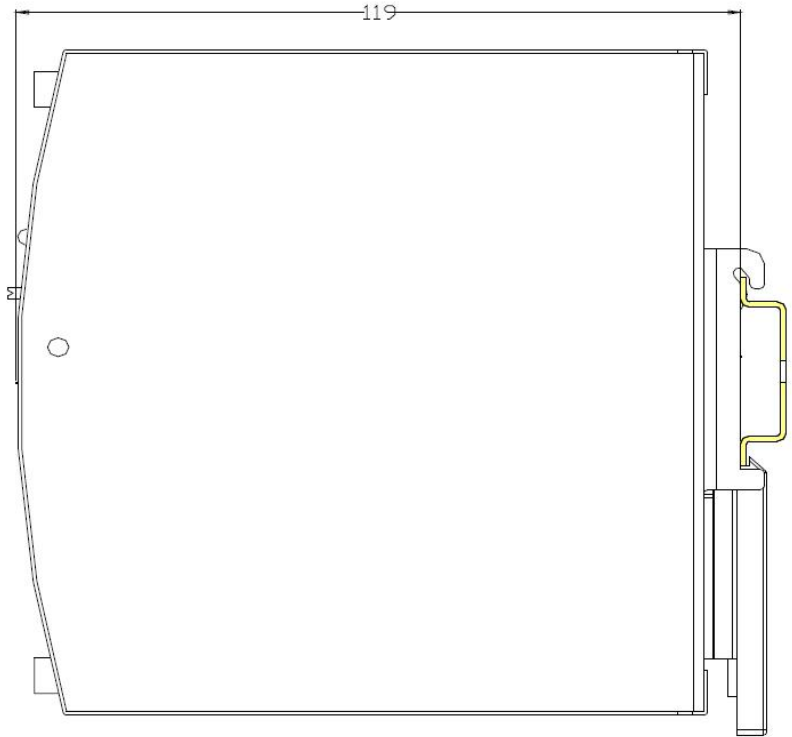
MODEL		RPS-U120S12	RPS-U120S24	RPS-U120S48	
OUTPUT	DC Output	12V	24V	48V	
	Rated Current	10A	5A	2.5A	
	Current Range	Note 1	0~10A	0~5A	0~2.5A
	Ripple and Noise	0~70°C	≤120mV	≤120mV	≤240mV
		Note 2	-20°C~0	≤240mV	≤240mV
	Voltage ADJ. Range		12~14V	24~28V	48~56V
	Voltage Accuracy		±1.0%		
	Line Regulation		±0.5%		
	Load Regulation		±1.0%		
	Set-up Time		<1.2S@230Vac ; <3.0mS@115Vac		
	Hold up Time		≥10mS@115Vac; ≥20mS@230Vac Full load		
	Temperature Coefficient		±0.03%/°C		
Overshoot and Undershoot		<5.0%			
INPUT	Voltage Range		90Vac~264Vac, 127Vdc-370Vdc		
	Frequency Range		47Hz~63Hz		
	Efficiency ( Typical)		85%	88%	89%
	AC Current (max.)		<2.7 A/115VAC ; <1.35A/230VAC		
	Inrush Current (Typical)		20A/115Vac ; 35A/230Vac Cold start		
	Leakage Current		Input—output:<0.25mA Input—PG:<3.5mA (264Vac input, 63Hz)		
PROTECTION	Over Load	10.5~13A	5.25~6.5A	2.75~3.25A	
		Protection type: Constant current			
	Over voltage	15~18V	29~33V	58~63V	
		Protection type: Shut down, re-power on.			
	Over temperature	100±5°C, detect on heat sink of power transistor; shut down O/P, re-power on.			
Short Circuit	Long-term mode, auto recovery				
Operating amb.Temp.&Hum.	-20°C~70°C; 20%~90%RH No condensing (pls refer to derating curve)				
ENVIRONMENT	Storage Temp. & Hum.	-40°C~85°C; 5%~95%RH No condensing			
	Safety Standards	UL508, UL60950, EN60950			
SAFETY & EMC Note 3	Withstand Voltage	Primary-Secondary:3.0KVac/10mA.			
		Primary-PG:1.5KVac/10mA.			
		Secondary-PG: 0.5KVac/10mA.			
	Isolation Resistance	10M ohms			
	EMC Emission	Compliance to EN55022, EN55024, FCC PART 15 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)	More than 500,000Hrs (25°C, Full load)				
OTHERS	Dimension (L*W*H)	124*119*45mm			
	Cooling method	Cooling by free air convection			

**NOTE**

1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C 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](http://www.rievtech.com).

### ■ Mechanical Specification

Unit: mm



#### 1.AC Screw terminal information

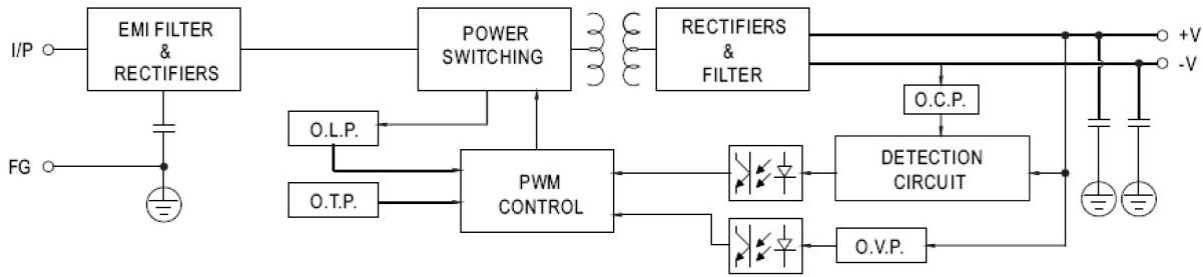
No.	Function	Wire Specs	Recommended torque
1	PE	20-10AWG	5Nm
2	N		
3	L		

#### 2.DC Screw terminal information

No.	Function	Wire Specs	Recommended torque
4~6	V+	20-10AWG	5Nm
7~9	V-		

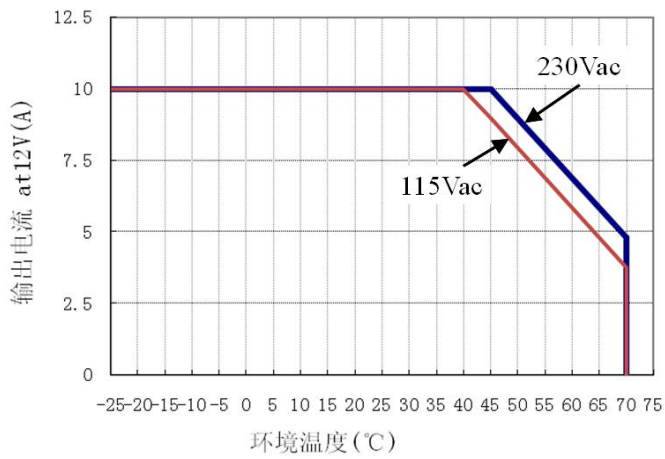
	AC/DC Terminal blocks
Type	Screw terminal blocks
Solid Wire	0.5-6mm <sup>2</sup>
Strand Wire	0.5-4mm <sup>2</sup>
Wire Spec	AWG20-10
Max Wire Diameter	2.8mm
Recommended stripping length	7mm
Screwdriver	3.5mm Straight or Cross Screwdriver
Recommended Torque	0.5NM

### Block Diagram

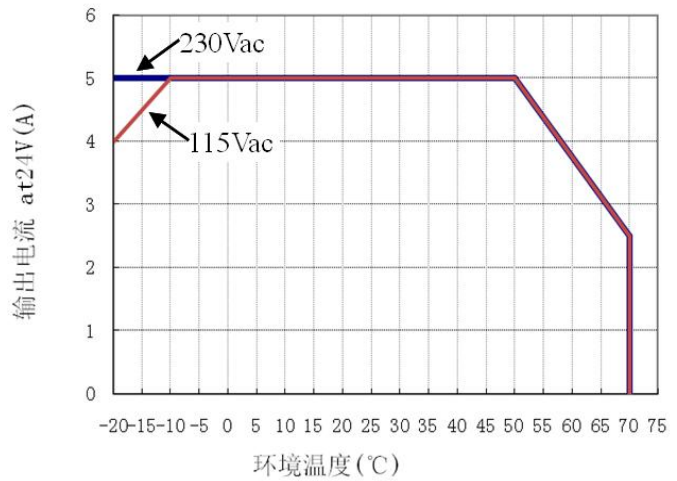


### Derating Curve

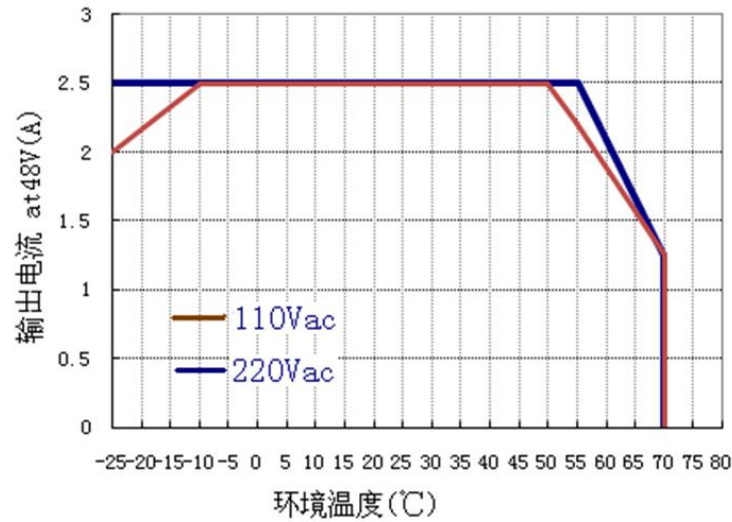
RPS-U120S12



RPS-U120S24



RPS-U120S48



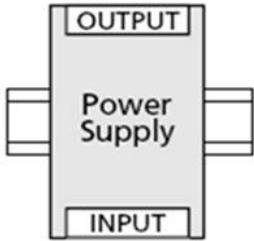
## ■ Mounting method instruction

A1 is recommended output current

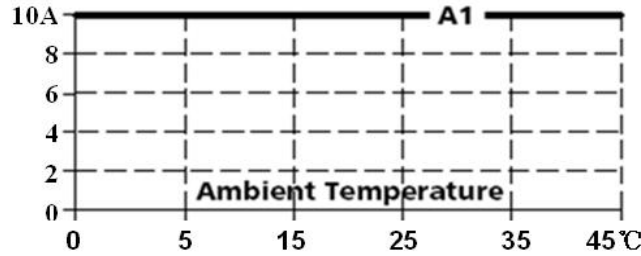
A2 is the allowed max output current (PSU lifetime is around half of A1)

### RPS-U120S12:

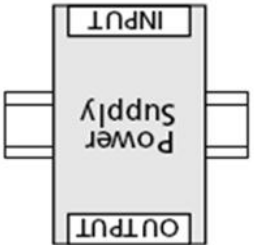
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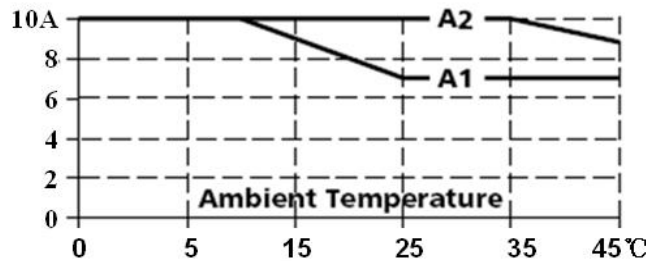
Output Current



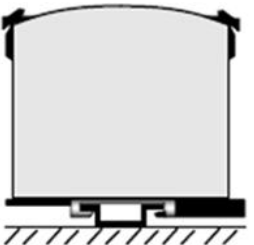
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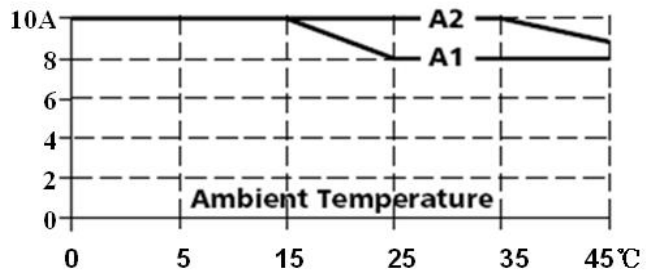
Output Current



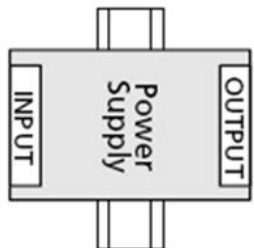
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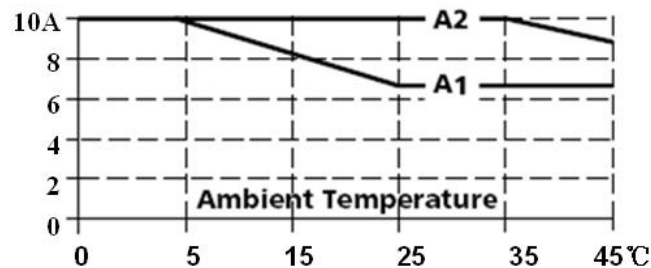
Output Current



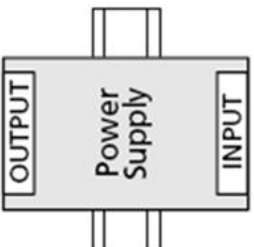
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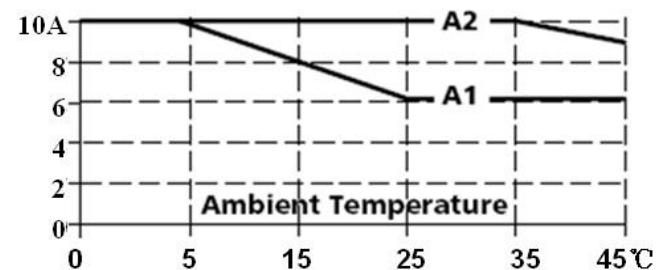
Output Current



#### Mounting E:

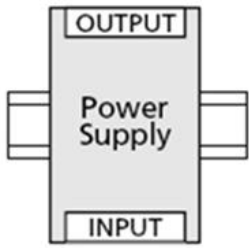


Output Current

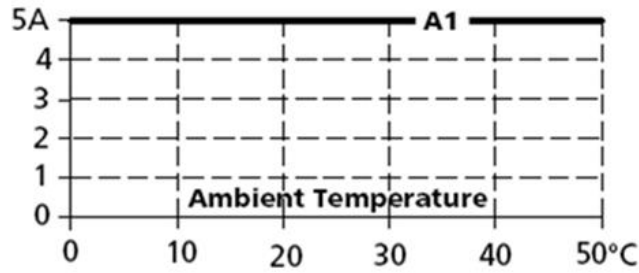


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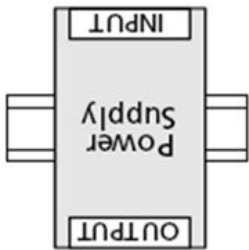
#### Mounting A:



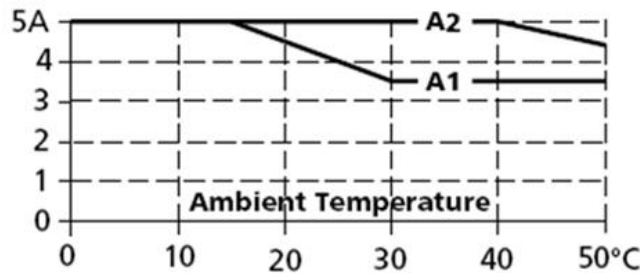
Output Current



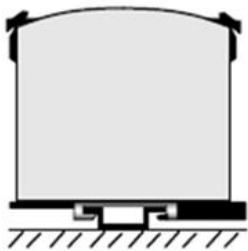
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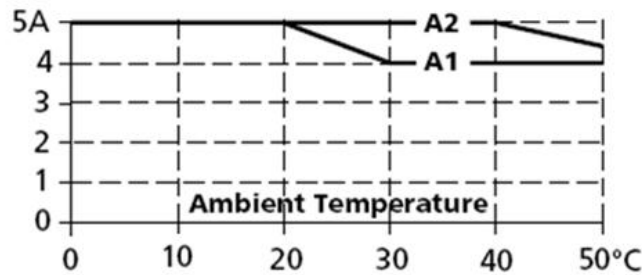
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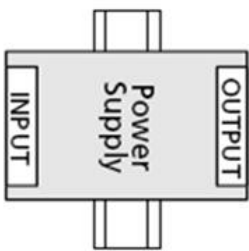
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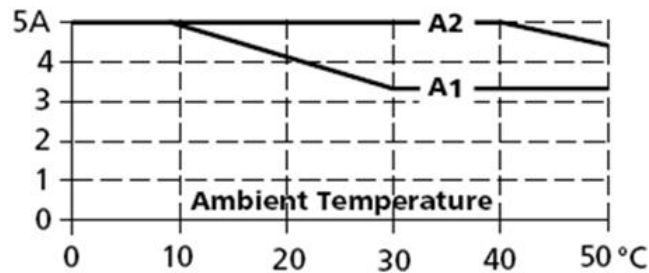
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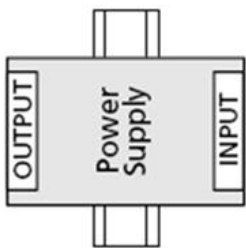
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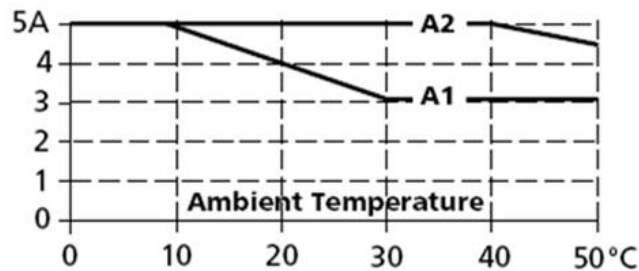
Output Current



#### Mounting E:

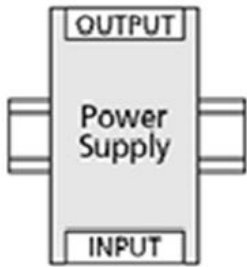


Output Current

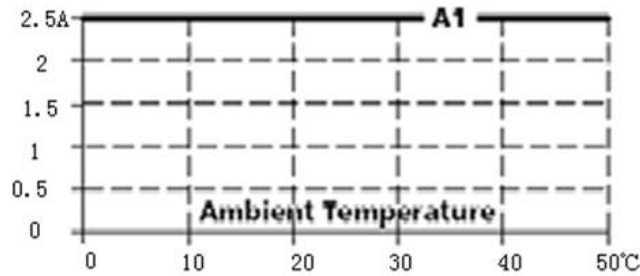


## RPS-U120S48:

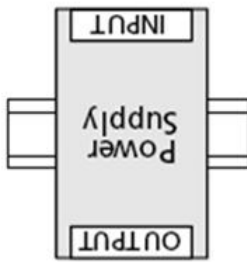
### Mounting A:



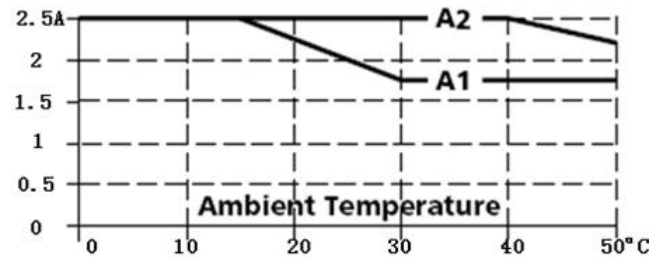
Output Current



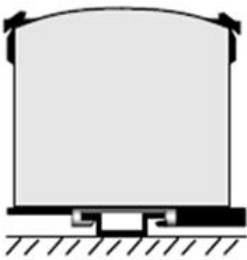
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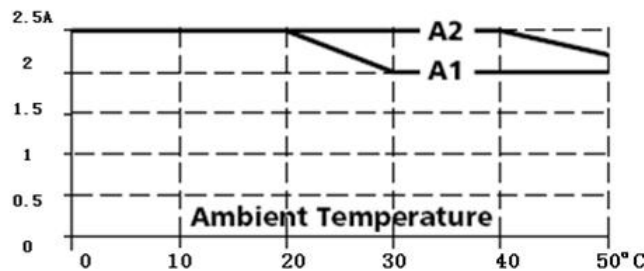
Output Current



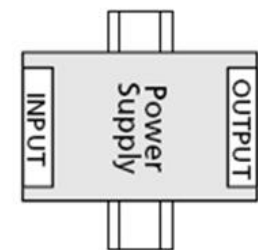
### Mounting C:



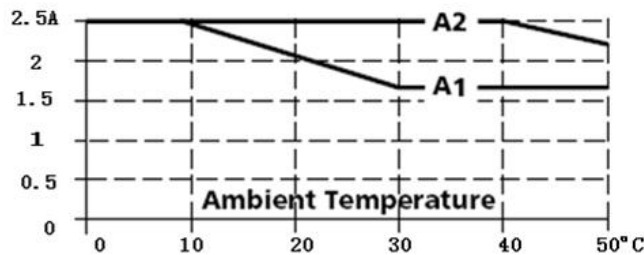
Output Current



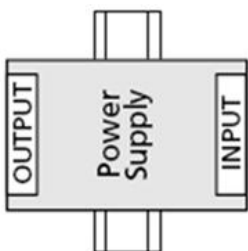
### Mounting D:



Output Current



### Mounting E:



Output Current

