



## Typical Features

- ◆ AC input 180~264VAC
- ◆ Protections: Short circuit/ Overload/ Over voltage/ Over temperature
- ◆ Built-in cooling Fan ON-OFF control
- ◆ Withstand 300VAC surge input for 5 second
- ◆ Forced air cooling by built-in DC fan
- ◆ 100% full load burn-in test
- ◆ LED indicator for power on
- ◆ High reliability
- ◆ 3 years warranty
- ◆ Compliance to IEC/EN/UL 62368-1



## Typical Product List

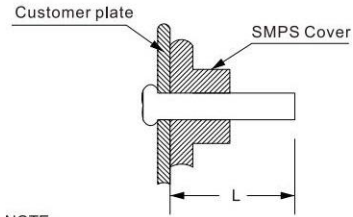
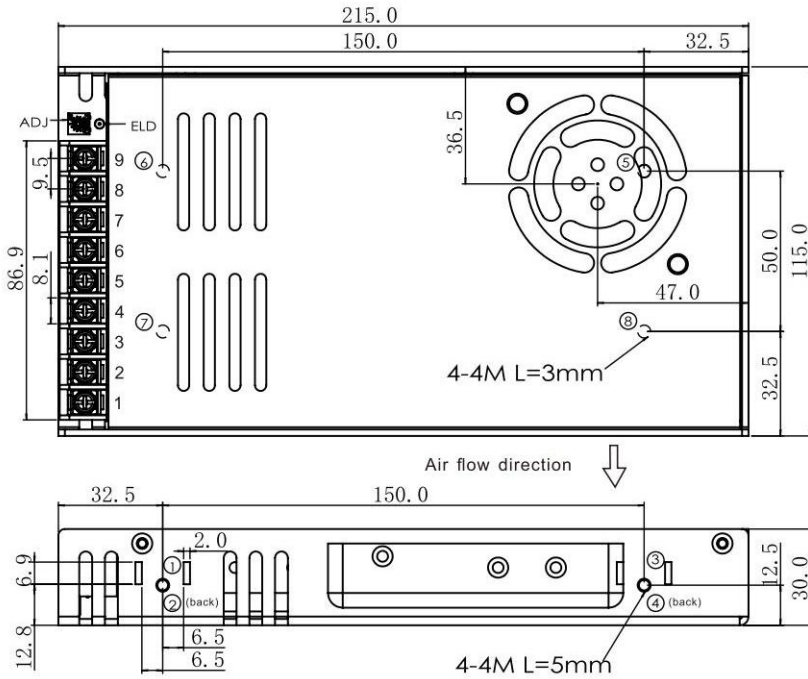
MODEL		AS-450-5	AS-450-6.5	AS-450-12	AS-450-15	AS-450-24	AS-450-36	AS-450-48
INPUT	VOLTAGE RANGE	180~264Vac 240~370Vdc(REFER TO 'STATIC CHARACTERISTIC')						
	FREQUENCY RANGE	47~63Hz						
	EFFICIENCY(Typ.)	84%	85%	85%	86%	87%	87.5%	88%
	AC CURRENT(Typ.)	5A/230Vac						
	NRUSH CURRENT(Typ.)	65A/230Vac (cold start)						
	LEAKAGE CURRENT	<2mA/240Vac						
OUTPUT	DC VOLTAGE	5V	6.5V	12V	15V	24V	36V	48V
	RATED CURRENT	70A	60A	37.5A	30A	18.8A	12.5A	9.4A
	CURRENT RANGE	0~70A	0~60A	0~37.5A	0~30A	0~18.8A	0~12.5A	0~9.4A
	RATED POWER	350W	390W	450W	450W	451.2W	450W	451.2W
	RPPL&NOISE(max)	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.5~5.5V	6~7.5V	10.2~13.8V	13.5~17.5V	21.6~28.5V	32.4~39.6V	43.2~52.8V
	VOLTAGE TOLERANCE	±3%	±2%	±1.5%	±1%	±1%	±1%	±1%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2%	±2%	±1%	±1%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	3000ms,50ms/230Vac						
	HOLD UP TIME(Typ.)	15ms/230Vac						
PROTECTION	OVER LOAD	105%~135% rated output power Protection type: 12V/15V/24V/36V/48V Constant current limiting, recovers automatically after fault condition is removed						
	OVER VOLTAGE	5.75~6.75V	9.4~11.3V	13.8~17V	18.2~22.5V	28.8~33.6V	41.4~46.8V	55.2~64.8V
	OVER TEMPERATURE	Protection type: Hiccup mode, recovers automatically after fault condition is removed						
FUNCTION	FAN QN/OFF QONTROL(Typ.)	RTH2≥50℃ FAN ON,≤40℃ FAN OFF						
ENVIRONMENT	WORKING TEMP, HUMDITY	-30~+70℃(Refer to "Derating curve"),20~90%RH non-condensing						
	STORAGE TEMP, HUMDITY	-40~+85℃,10~95%RH						
	TEMP. COEFFQIENT	±0.03%/℃(0~50℃)						
	VBRATION	10~500Hz,5G 10min./1 cycle, each along X、Y、Z axes						



Safety and electromagnetic compatibility	Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1			
	Withstand voltage and isolation resistance	I/P-O/P:3KVac; 100MQ/ 500Vdc / 25°C/70%RH			
		I/P-FG: 2KVac; 100MQ / 500Vdc / 25°C/ 70%RH			
		O/P-FG: 0.5KVac; 100MQ / 500Vdc / 25°C/70%RH			
	Electromagnetic	Parameter	Standard	Test Level / Note	
	Electromagnetic compatibility	Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 /CISPR22 ,GB9254.1		Class A
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 /CISPR22 ,GB9254.1		Class A
		Harmonic current	BS EN/EN61000-3-2,GB17625.1		Dos not meet
		Voltage flicker	BS EN/EN61000-3-3		
	Electromagnetic compatibility immunity	BS EN/EN55035			
		Parameter	Standard	Test Level /Note	
		ESD	BS EN/EN61000-4-2		Level 4, 8KV air, Level 2,4KV contact, criteria A
		RF field susceptibility	BS EN/EN61000-4-3		Level 3, criteria A
		EFT bursts	BS EN/EN61000-4-4		Level 3, criteria A
		Surge susceptibility	BS EN/EN61000-4-5		Level 3,1KV/L-N,2KV/L/N-FG criteria A
Conducted susceptibility		BS EN/EN61000-4-6		Level 3, criteria A	
Magnetic field immunity		BS EN/EN61000-4-8		Level 4, criteria A	
Voltage dips and interruptions		BS EN/EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods ,>95% interruptions 250 periods	
OTHERS	MTBF	≥300Khrs ML-HDBK-217F(25°C)			
	DIMENSION	215*115*30mm(L*W*H)			
	PACKING	0.75Kg; 15pcs/ 12.25Kg/ 0.77CUFT			
NOTE	<p>1.All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor. 3.Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. Load regulation is measured from 0% to 100% rated load</p> <p>6.Length of set up time is measured at cold first start, Turning ON/OFF the power supply very quickly may lead to increase of the set up time.</p> <p>7.The ambient temperature derating of 5°C/1000m is needed for operating altitude great than 2000m(6500ft).</p> <p>8.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 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives</p>				



**Dimension and Pin Specification**



NOTE:  
Unit: mm  
ADJ: Output adjustable resistor  
Torque: M3.5, 0.8N · m Max  
TOL: ±1.00

Position No.	Screw Size	L max	Torque max
⑤ - ⑧	M4	3mm	0.9N · m
① - ④	M4	5mm	0.9N · m

Screw Terminal			
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4,5,6	DC OUTPUT -
2	AC/N	7,8,9	DC OUTPUT +
3	FG		

**Product Characteristic Curve**

