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**RoHS** 

## MORNSUN®

#### **FEATURES**

- Universal input Voltage : 90 264VAC, 50/60Hz
- DoE Level VI efficiency
- Over voltage, Over current, Short circuit protection
- Fully enclosed plastic case
- 2 pole USA plug
- Small wall-mounted type

MH36-A-A series is a small wall-mounted type adapter. This series features universal input voltage, low power consumption, high efficiency, high reliability, and safer isolation, meets IEC/EN61000-4, CISPR22/EN55032 and UL60950. The entire series supplies different models with output voltages range between 5V and 24V that can satisfy the demands for the various types of consumer electronic devices, telecommunication devices, office and civil applications devices.

	Specifications	MH36-0500500A-A	MH36-0900300A-A	MH36-1200300A-A	MH36-1500240A-A	MH36-1800200A-A	MH36-2400150A-A	
		5V	9V	12V	15V	18V	24V	
Output	DC Voltage							
	Rated current	5.0A	3.0A	3.0A	2.4A	2.0A	1.5A	
	Current range	0-5.0A	0-3.0A	0-3.0A	0-2.4A	0-2.0A	0-1.5A	
	Rated power	25W	27W	36W	36W	36W	36W	
	Voltage Accuracy	±5%	±5%	±5%	±5%	±5%	±5%	
	Line Regulation	±1%	±1%	±1%	±1%	±1%	±1%	
	Load Regulation	±5%	±5%	±5%	±5%	±5%	±5%	
	Ripple & Noise*	80mVp-p max	90mVp-p max	120mVp-p max	150mVp-p max	180mVp-p max	240mVp-p max	
	Start-up time	3s@100-240VAC, full load						
	Hold-up time	10ms@115VAC, full load, 20ms@230VAC, full load						
	Rise time	30ms max						
	Overshoot/ Undershoot	±10%						
	Transient response	Output voltage range ±5%, load 25%-50%, 50%-75%, slope: 0.5A/us, frequency: 50Hz-10KHz						
	Input voltage	90 - 264VAC						
	Input frequency	47 - 63Hz						
	Efficiency(Typ.)	84.25%	86.62%	87.40%	87.40%	87.40%	87.40%	
Input	Input current	1.0A Max@100VAC, full load						
	Inrush current	Cold start: 40A/115VAC, 80A/230VAC						
	No load power	<0.1W						
	Leakage current	0.25mA Max@240VAC						
Protections	Over voltage	Rated output voltage 110%-150%						
	Over current	Rated output current 110%-200%, self-recovery						
	Short circuit	Hiccup, Continuous, self-recovery						
Note		and noise are measured by 20MHz bandwidth; at full load, 100-240VAC input, output terminated with a 0.1uF ceramic for and a 10uF electrolytic capacitor.						

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### 36W AC/DC Adapter

#### MH36-A-A Series

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General Specifications						
ltem	Operating Conditions	Min.	Typ.	Max.	Unit	
Isolation Voltage	Input-output, Test 1 minute, leakage current<5mA	3000			VAC	
Insulation Resistance	Input-output, add 500Vdc test voltage	100			MΩ	
Operating Temperature		-10		40		
Storage Temperature		-25		70	) °C	
Operating Humidity				90	0/ DI I	
Storage Humidity				95	%RH	
Altitude				2000	m	
Lifetime	25°C	2			years	
MTBF	MIL-HDBK-217F (25°C)	50000			hours	

Physical Specifications				
Casing Material	PC,120°C 94V-0			
Color	Black/White(Other color can be designed by customization)			
Dimension	(L)88.50mm*(W)43.50mm*(H)31.50mm			
Weight	142g(Typ.)			
Cooling Method	Free air convection			

EMC Spec	cifications		
EMI	RE	EN55032, CLASS B	
	CE	EN55032, CLASS B	
EMS	ESD	IEC/EN61000-4-2 Contact ±8KV/Air ±15KV	perf. Criteria B
	RS	IEC61000-4-3 3V/m	perf. Criteria A
	CS	IEC61000-4-6 3Vrms	perf. Criteria A
	Surge	IEC/EN61000-4-5 ±4KV/ ±4KV	perf. Criteria B

Safety Standards					
Application fields	Standard	Status	Note		
П	UL60950	Approved			
AV	UL1310	Meet			
Lighting	UL1310	Meet			

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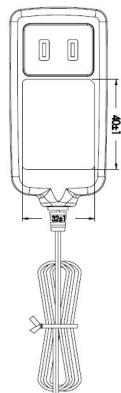
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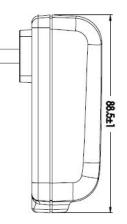
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### 36W AC/DC Adapter MH36-A-A Series

#### **Mechanical Drawing**

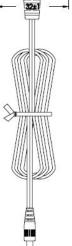


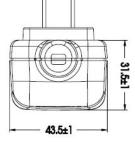




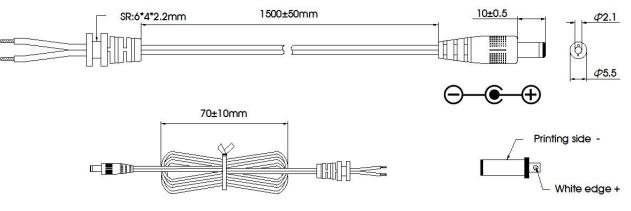
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Remark: No display tolerance: ±0.12 Unit: mm





DC Wire Drawing



Winding Pattern

NO. ITEM Q' TY DESCRIPTION Note: 1.Compliance with RoHS 5V/9V UL2468 18AWG/2C 80°C/300V L=1500mm 01 CABLE 1PCS 12V/15V UL2468 20AWG/2C 80°C/300V L=1500mm 2.No display tolerance: ±0.12 3.Unit: mm 18V/24V UL2468 22AWG/2C 80°C/300V L=1500mm PLUG 1PCS DC PLUG:5.5\*2.1\*10 02



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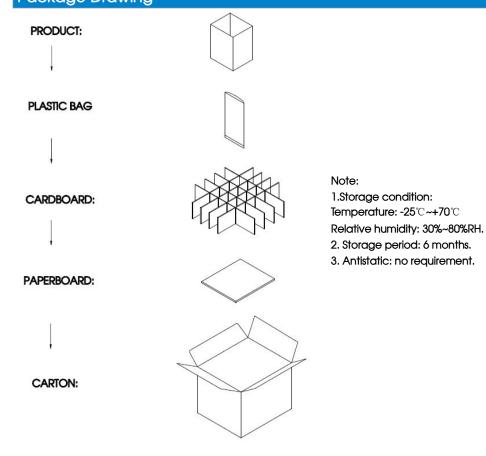
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### 36W AC/DC Adapter

MH36-A-A Series

Package Drawing

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#### Note:

- 1. Products are related to laws and regulations: see "Features" and "EMC".
- 2. Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.
- 3. If the product is not operated within the required load range, the product performance cannot be guaranteed to comply with all parameters in the datasheet;
- 4. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25 °C, humidity<75% with nominal input voltage and rated output load;
- 5. All index testing methods in this datasheet are based on our Company's corporate standards;
- 6. We can provide product customization service; Please contact our technicians directly for specific information;

#### Mornsun Guangzhou Science & Technology Co., Ltd.

 Address: No. 5, Kehui St. 1, Kehui Development Center, Science Ave., Guangzhou Science City, Luogang District, Guangzhou, P. R. China

 Tel: 86-20-38601850-8801
 Fax: 86-20-38601272

 E-mail: sales@mornsun.cn

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