

AMA36D-Y

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Desktop Adaptor

The AMA36D-Y is a small desktop adapter offering a commercial input voltage range of 90-264VAC and output power from 30W to 36W. This adapter will offer many benefits to powering your system such as low power consumption, high efficiency, meeting IEC60950-1, FCC, Class B, CISPR22, Class B.

It also features an isolation of 3000VAC for improved reliability and system safety and comes standard with output short circuit protection (OSCP) and output over-current protection (OCP).

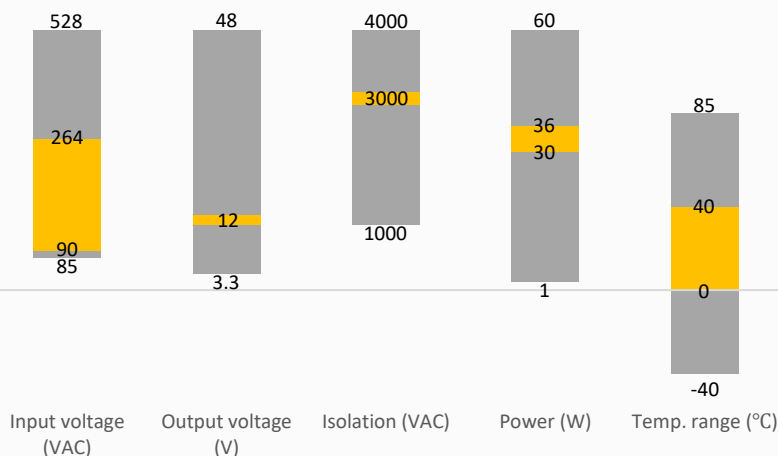
Features

- Universal Input: 90 - 264VAC/47 - 63Hz
- Operating Temp: 0 °C to +40 °C
- High isolation voltage: 3000VAC
- Low ripple & noise, 200mV(p-p), max
- Output short circuit, over-current protection
- Regulated Output



Summary

AMA36D-Y



Training



Product Training Video
(click to open)



Press Release

Coming Soon!

Application Notes

Applications



Portable Equipment



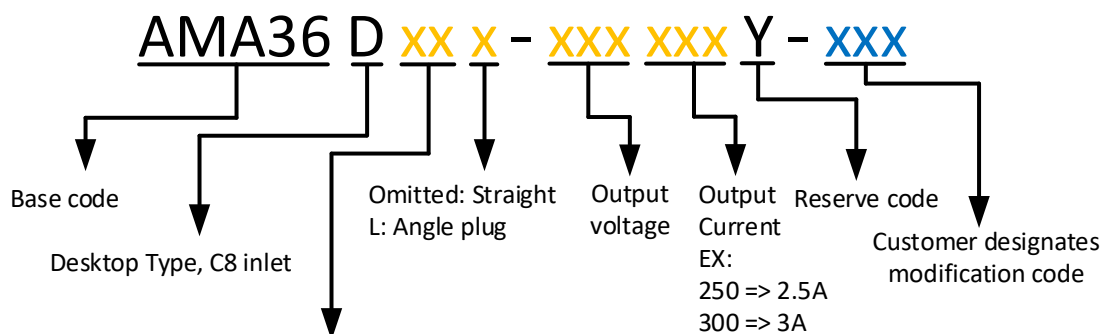
Industrial

Models & Specifications

General Feature

Model	Input Voltage (VAC)	Output Voltage (VDC)	Output Current max (A)	Output Power max (W)	Efficiency (%)
AMA36D-120250Y	90 - 264	12	2.5	30	87
AMA36D-120300Y	90 - 264	12	3	36	87

Please refer to below coding rule for completed part numbers. Eg. AMA36D^{R5}-120300Y for industrial grade desktop type adaptor which comes with 5.5mm*2.5mm*9.5mm straight standard output plug.



Plug type	Code	O. D.	I. D.	Length
Standard	R1	3.5mm	1.35mm	9.5mm
	R2	3.8mm	1.05mm	9.5mm
	R3	3.8mm	1.35mm	9.5mm
	R4	5.5mm	2.1mm	9.5mm
	R5	5.5mm	2.5mm	9.5mm
Locking	K1	5.5mm	2.1mm	9.5mm
	K2	5.5mm	2.5mm	9.5mm
USB	U2	* USB type C		
* NOTE: The USB type C connector option is only a physical USB type-C connector which does not support PD and programmable power supply.				

Input Specification

Parameters	Conditions	Minimum	Typical	Maximum	Units
Voltage range		90	100 - 240	264	VAC
Frequency		47	50 - 60	63	Hz
Input current	Vin at 100 -240VAC			1	A
Inrush current	Vin at 240VAC	30W output		50	A
		36W output		80	
Leakage Current	240VAC/50Hz		0.25		mA

Output Specification

Parameters	Conditions	Minimum	Typical	Maximum	Units
Output voltage			12		VDC
Output current	30W output	0		2.5	A
	36W output	0		3	
Voltage regulation				±5	%
Ripple and Noise	20 MHz bandwidth			200	mVp-p
Start-up time	Full load, Vin at 115VAC/60Hz			3	S
Hold-up time	90% load, Vin at 115VAC/60Hz	10			mS

30W output model Ripple and Noise are measured at 20MHz bandwidth by using a 0.1uF (M/C) and 47uF (E/C) parallel capacitor.
36W output model Ripple and Noise are measured at 20MHz bandwidth by using a 0.1uF (M/C) and 10uF (E/C) parallel capacitor.

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec, leakage current < 10mA		3000	VAC

General Specification

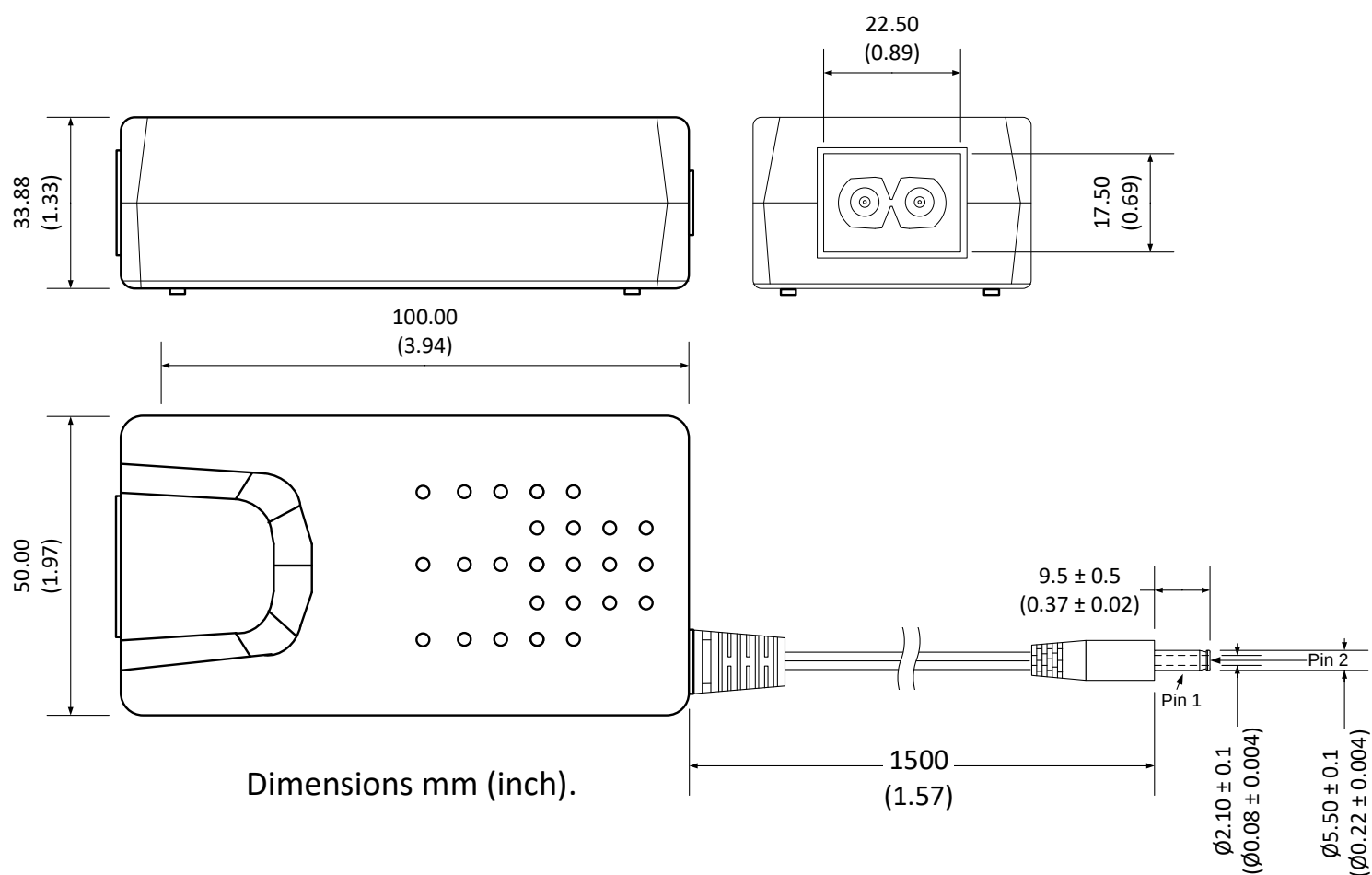
Parameters	Conditions	Minimum	Typical	Maximum	Units
Operating temperature		0		40	°C
Storage temperature		-20		70	°C
Power consumption	Vin at 100 -240VAC, no load			100	mW
Humidity	Non-condensing	20		90	% RH
Altitude		0		2000	m
Short circuit protection	Continuous, auto recovery				
Over current protection	Continuous, auto recovery				
Dimensions (L x W x H)	3.94 x 1.97 x 1.33 inches (100.00 x 50.00 x 33.88mm)				
Output cable length	59.06 inches (1500 mm)				
MTBF	> 175 000 hrs (Telcordia SR332, t=+25°C)/Full Load				

All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Safety Specifications

Parameters		
Agency approvals	cULus UL62368-1, CE EN62368-1	
Standards	Information technology Equipment	Designed to meet IEC62368-1
	EMC - Radiated & Conducted emission	FCC, Class B CISPR22, Class B
	Surge immunity	IEC-61000-4-5 L-N 1KV/1.2*50us 5 time, no function error.

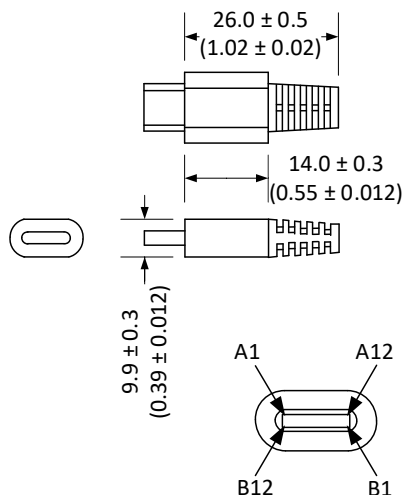
Dimensions



Pin Output Specifications

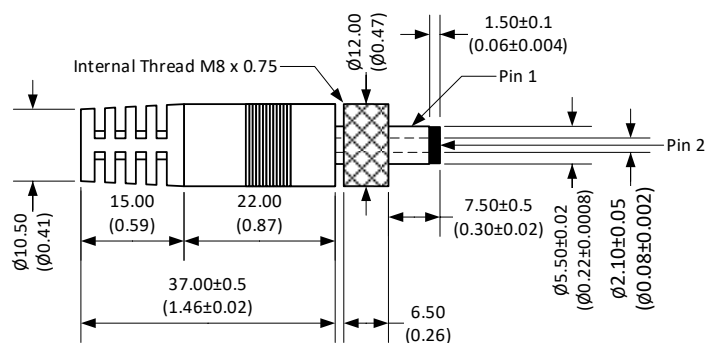
Pin	Output Level
1	RTN(-)
2	+Vout

USB TYPE-C Connector



Pin Out Configurations	
Pin No.	Description
A4, A9, B4, B9	+Vout
A1, A12, B1, B12	RTN(-)
Others	Omitted

K1 Connector



Pin Out Configurations	
Pin No.	Description
1	RTN(-)
2	+Vout

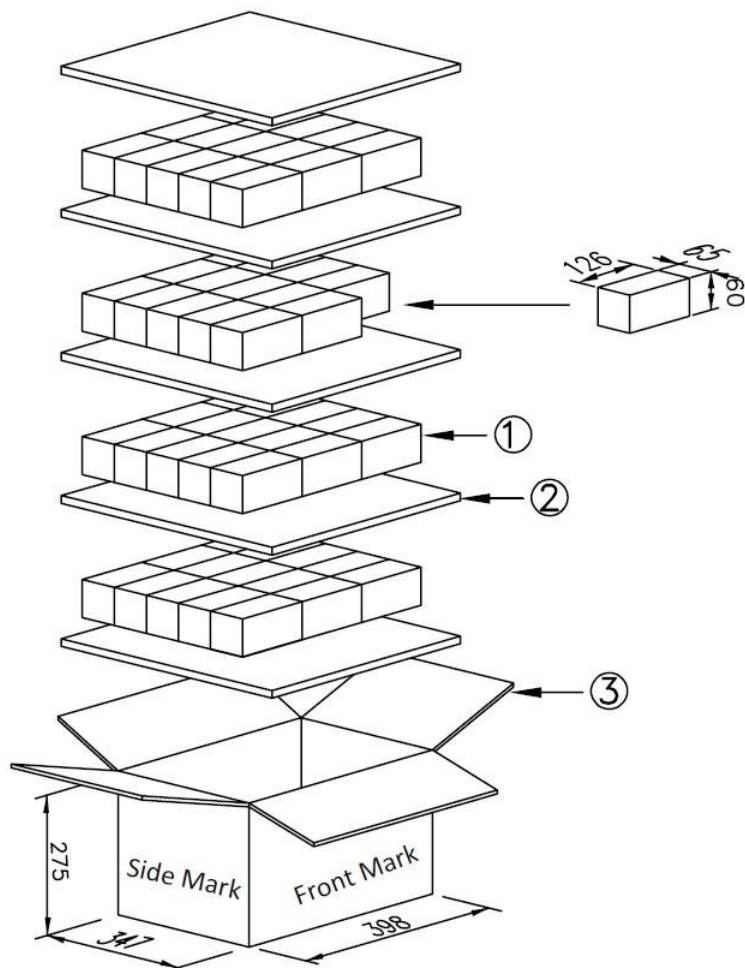
Technical drawing of a mechanical part (Fig. 10) showing dimensions and tolerances. The part has a total length of 37.00 ± 0.5 (1.46 ± 0.02). It features an internal thread of M8 x 0.75, a diameter of Ø12.00 (Ø0.47), and a distance of 1.50 ± 0.1 (0.06 ± 0.004) from the end to the thread. The drawing also shows a distance of 6.50 (0.26) from the end to the start of the thread, and a distance of 7.50 ± 0.5 (0.30 ± 0.02) from the end to the start of the internal thread. The drawing includes a cross-section view showing the internal thread and a detail view of the thread.

Pin Out Configurations	
Pin No.	Description
1	RTN(-)
2	+Vout

1. USB TYPE-C connector: Limited maximum output voltage of 20V, and maximum output current of 5A.

Packing

For US and European Plug:



Packing information:

- CARTON : L*W*H=(398*347*275) +/-5mm A=A
- CLAPBOARD : (378*325) +/-3mm B33 5PCS
- WHITE BOX : 126*65*60 C9
- Q'TY : 15*4=60PCS
- NET WEIGHT : (g)(ref)
- UNIT : mm

NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com. 8. Adaptors are intended for industrial use only.