

### AMA40-Y







The AMA40-Y is a small industrial grade wall mount adapter. Offering a commercial input voltage range of 90-264VAC and an output power of 40W. This adapter will offer many benefits to powering your system such as low power consumption, high efficiency (complies with DoE level VI), 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) and over-voltage protection (OVP).

### **Features**



- Universal Input: 90 264VAC/47 63Hz
- Operating Temp: 0 °C to +40 °C
- High isolation voltage: 4242VDC
- Low ripple & noise, 120mV(p-p), max
- Output short circuit, over-current protection,
  Over-voltage protection
- Regulated Output





### **Training**



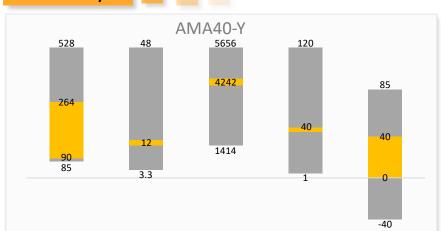
Product Training Video (click to open)



Coming Soon!

**Application Notes** 

### **Summary**



Isolation (VDC)

Power (W)

Temp. range (°C)

## **Applications**

Input voltage

(VAC)

Output voltage

(V)







Industrial

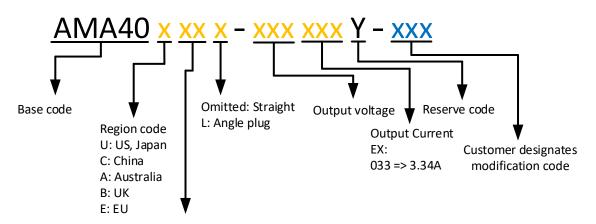


# **Models & Specifications**



General Feature					
Model	Input Voltage (VAC)	Output Voltage (VDC)	Output Current max (A)	Output Power max (W)	Efficiency (%)
AMA40E-120033Y	90 - 264	12	3.34	40	87

Please refer to below coding rule for completed part numbers. Eg. AMA40E35-120033Y for industrial grade adaptor with European wall plug which comes with 5.5mm\*2.5mm\*9.5mm straight standard output plug.



Plug type	Code	O. D.	I. D.	Length
Standard	R4	5.5mm	5.5mm 2.1mm 9.5i	
	R5	5.5mm	2.5mm	9.5mm
Locking	K1	5.5mm 2.1mm 9.5mn		9.5mm
	K2	5.5mm	2.5mm	9.5mm
USB	U2	* USB type C		
* NOTE: The LISP type C connector ention is only a physical LISP 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			1.6	Α
Leakage Current	240VAC/50Hz			10	uA

Output Specification					
Parameters	Conditions	Minimum	Typical	Maximum	Units
Output voltage			12		VDC
Output current		0		3.34	Α



Voltage accuracy				±5	%
Line regulation				±1	%
Load regulation				±5	%
Overshoot / Undershoot	During turn on and turn off			10	%
Ripple and Noise	20 MHz bandwidth			120	mVp-p
Start-up time	Full load, nominal input			3	S
Hold-up time	Vin at 115VAC	10			mS
Ripple and Noise are measured at 20MHz bandwidth by using a 0.1uF (M/C) and 10uF (E/C) parallel capacitor.					

<b>Isolation Specifications</b>				
Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec, leakage current < 10mA		4242(3000)	VDC(VAC)
Resistance	At DC500V	>50		MΩ

General Specification					
Parameters	Conditions	Minimum	Typical	Maximum	Units
Operating temperature		0		40	°C
Storage temperature		-25		70	°C
Efficiency	At active average mode	87.6			%
Power consumption	Vin at 115 -230VAC, no load			100	mW
Humidity	Non-condensing	5		95	% RH
Altitude		0		2640	m
Short circuit protection	Continuous, auto recovery				
Over current protection	Conti	nuous, auto reco	overy		
Over voltage protection	Full load			18	VDC
Vibration	1mm, 10-55 Hz, 15 minutes per cycle for each axis(X,Y,Z)				
Dimensions (L x W x H)	EU 3.23 x 1.36 x 3.53 inches (82.00 x 34.50 x 89.60mm)				
Output cable length	59.06 inches (1500mm)				
MTBF	> 200 000 hrs (Bell Core SR-332, t=+25°C)/Full Load/115Vac				
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.					

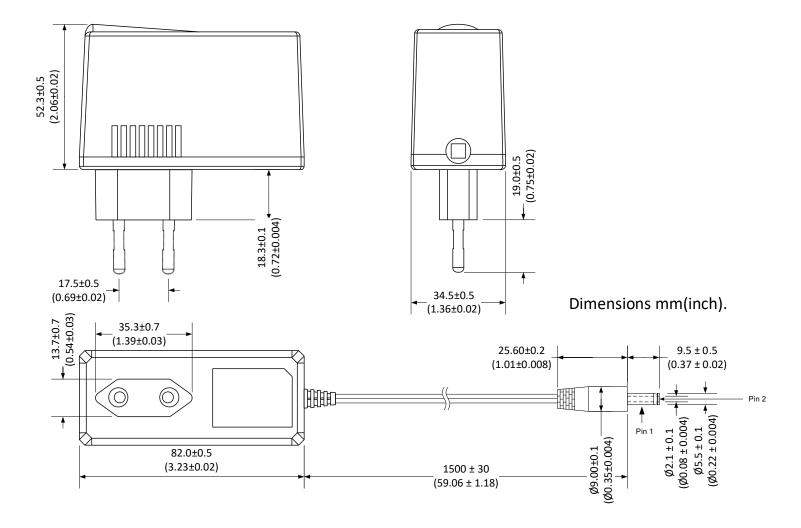
Safety Specifications		
Parameters		
Agency approvals	cULus UL62368-1, CE EN62368-1	
	Information technology Equipment	Design to meet IEC62368-1
Standards	EMC - Radiated & Conducted emission	CISPR32, Class B
	Surge immunity	Design to meet ITU-T.K.21 6KV



## **Dimensions**



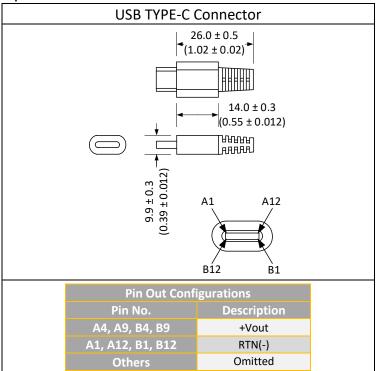
### European Plug:



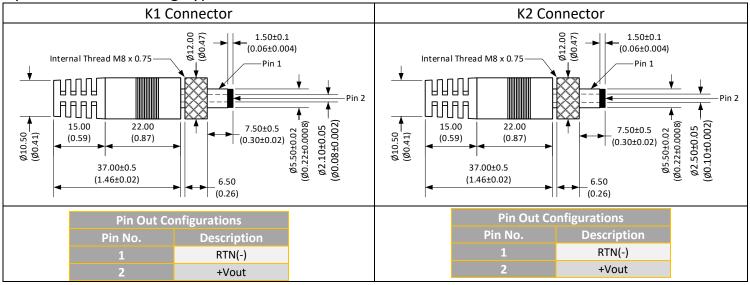
Pin Output Specifications		
Pin	Output Level	
1	RTN(-)	
2	+Vout	



#### **Optional USB Connector:**



#### **Optional Barrel Locking Type Connector:**



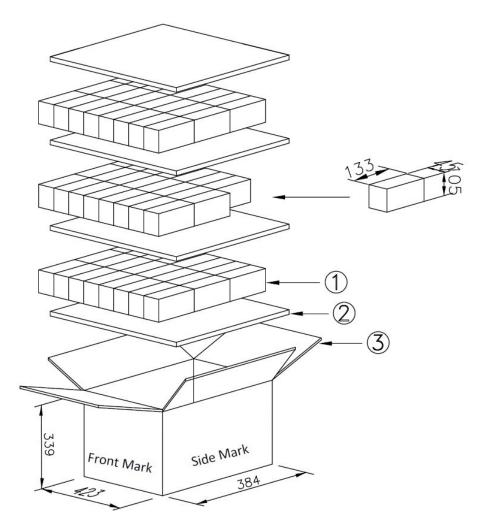
#### NOTE:

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



# Packing

#### For European Plug:



#### Packing information:

CARTON: L\*W\*H=(423\*384\*339) +/-5mm K=KCLAPBOARD: (406\*367) +/-3mm B33 4PCS

WHITE BOX: 45\*133\*105 C9

Q'TY: 24\*3=72PCSNET 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 <a href="https://www.aimtec.com">www.aimtec.com</a>. **8.** Adaptors are intended for industrial use only.