



AMA60-Y



Picture coming soon

Wall Mount Adaptor

The AMA60-Y is a small industrial grade wall mount adapter. Offering a commercial input voltage range of 90-264VAC and an output power 60W, this adapter will offer many benefits to your new system design: low power consumption, high efficiency (complies with DoE level VI), meets IEC62368-1, FCC, Class B, CISPR22, Class B.

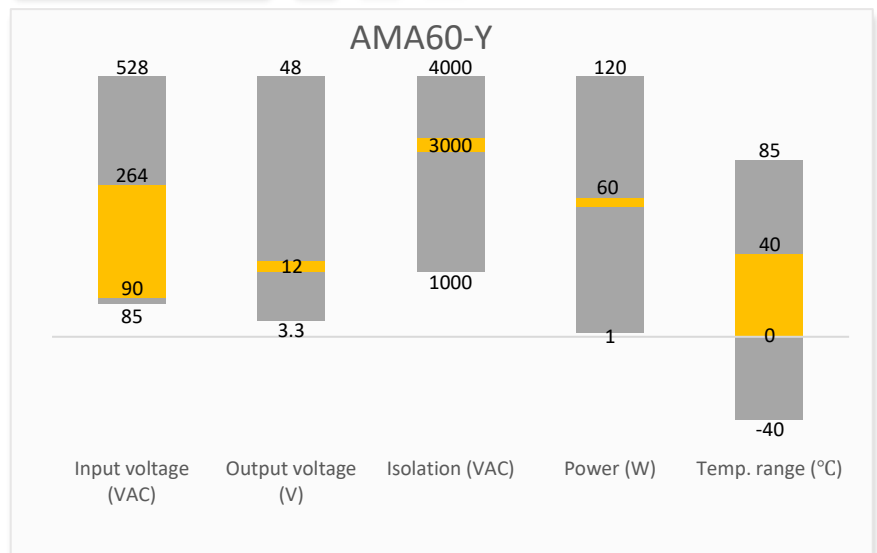
It also features an isolation of 3000VAC for improved reliability and system safety. Furthermore, an output short circuit protection (OSCP) and output over-current protection (OCP) come standard. The AMA60-Y is perfect for powering many lighting devices such as a LED desk lamp, neon box, etc.

Features

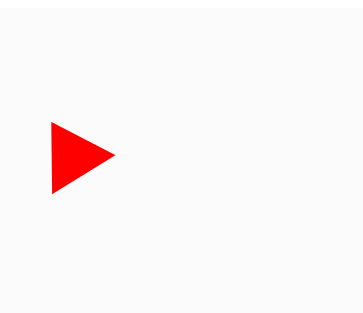


- Universal Input: 90 - 264VAC/47 - 63Hz
- Operating Temp: 0 °C to +40 °C
- High isolation voltage: 3000VAC
- Low ripple & noise, 200mV(p-p), max
- Output short circuit, over-current protection
- Regulated Output

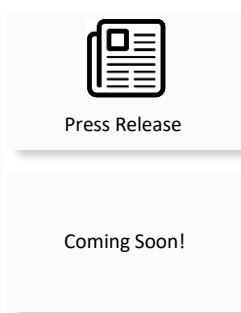
Summary



Training



Product Training Video
(click to open)



Application Notes

Applications



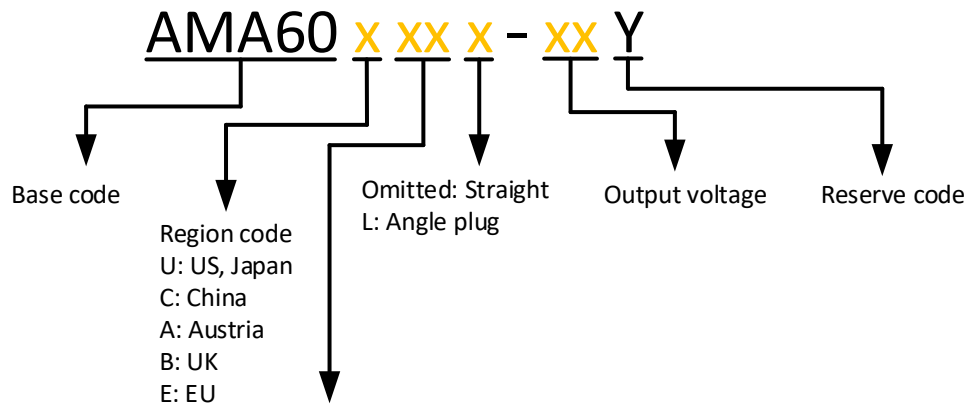
Lighting

Models & Specifications

General Feature

| Model | Input Voltage (VAC) | Output Voltage (VDC) | Output Current max (A) | Output Power max (W) | Efficiency (%) |
|-----------|---------------------|----------------------|------------------------|----------------------|----------------|
| AMA60-12Y | 90 - 264 | 12 | 5 | 60 | 87 |

Please refer to below coding rule for completed part numbers. Eg. AMA60**URS**-12Y for industrial grade adaptor with US wall plug 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 | U1 | Micro USB | | |
| | U2 | USB type C | | |

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 | | | 2 | A |
| Leakage Current | 230VAC/50Hz | | 0.25 | | mA |

Output Specification

| Parameters | Conditions | Minimum | Typical | Maximum | Units |
|--------------------|------------------|---------|---------|---------|-------|
| Output voltage | | | 12 | | VDC |
| Output current | | 0 | | 3 | A |
| Voltage regulation | | | | ±5 | % |
| Ripple and Noise | 20 MHz bandwidth | | | 200 | mVp-p |

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 |
| Efficiency | At active average mode | 87.67 | | | % |
| Power consumption | Vin at 100 -240VAC , no load | | | 100 | mW |
| Humidity | Non-condensing | 20 | | 90 | % RH |
| Altitude | | 0 | | 2000 | m |
| DOE LEVEL | | VI | | | |
| Short circuit protection | | Auto recovery | | | |
| Over current protection | | Auto recovery | | | |
| Dimensions (L x W x H) | US | 4.15 x 1.65 x 3.41 inches (105.40 x 42.00 x 86.50mm) | | | |
| | EU | 4.15 x 1.65 x 3.89 inches (105.40 x 42.00 x 98.80mm) | | | |
| MTBF | | > 175 000 hrs (Telcordia SR-332, t=+25°C)/Full Load | | | |

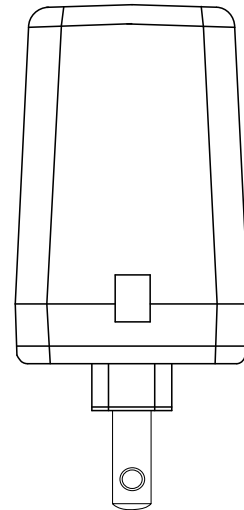
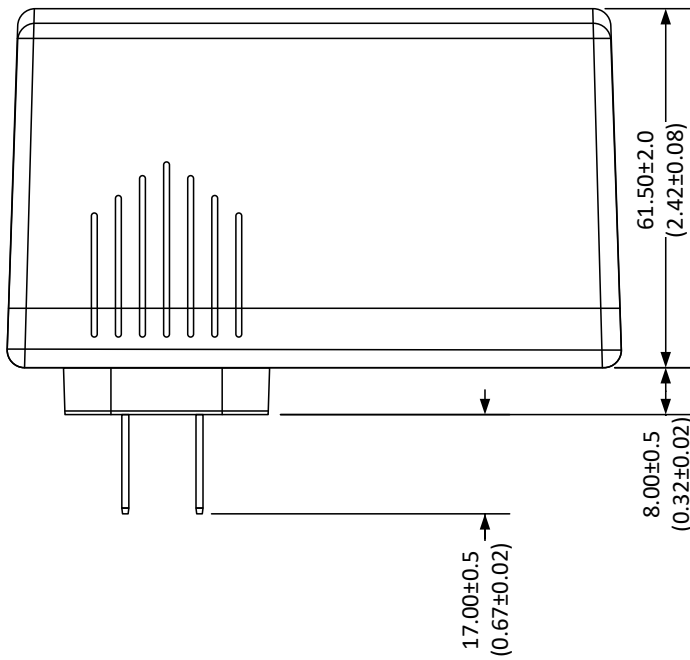
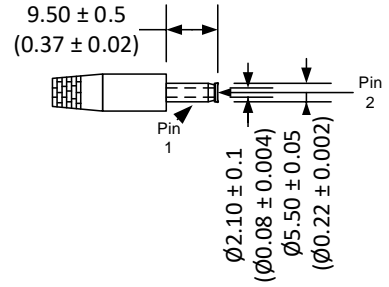
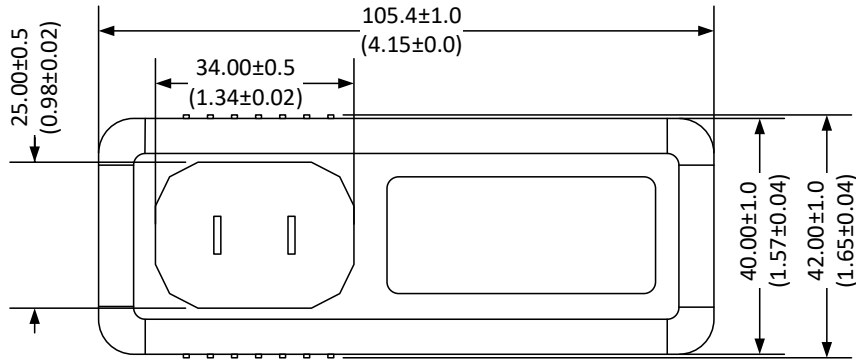
All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Safety Specifications

| Parameters | | |
|------------|-------------------------------------|---|
| Standards | Information technology Equipment | Design to meet IEC62368-1 |
| | EMC - Radiated & Conducted emission | FCC, Class B CISPR22, Class B |
| | Surge Immunity | IEC61000-4-5, L-N 1KV/1.2*50us, 5 time, no function error |

Dimensions

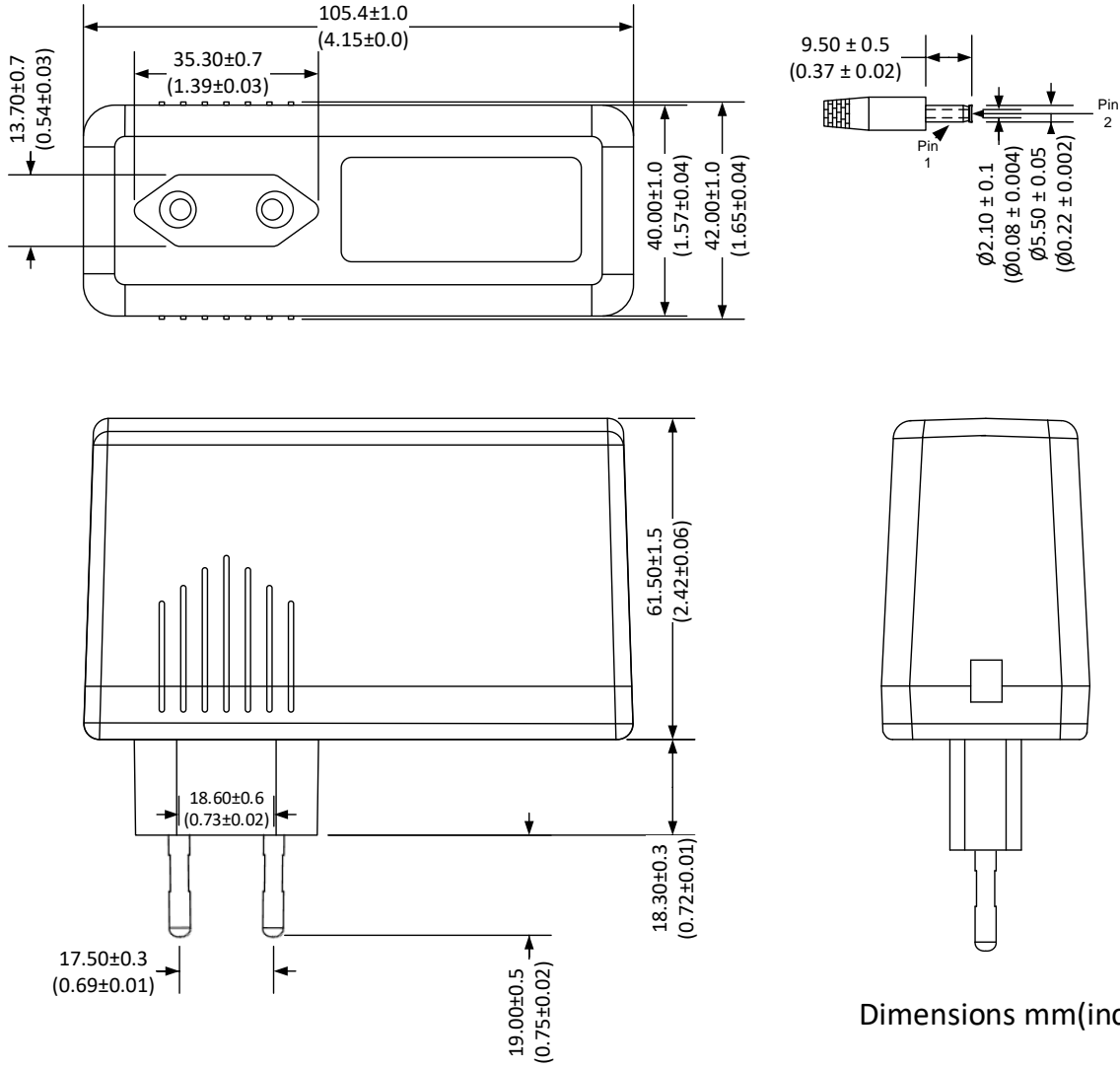
US Plug:



Dimensions mm(inch).

| Pin Output Specifications | |
|---------------------------|--------------|
| Pin | Output Level |
| 1 | RTN(-) |
| 2 | +12V |

European Plug:



Dimensions mm(inch).

| Pin Output Specifications | |
|---------------------------|--------------|
| Pin | Output Level |
| 1 | RTN(-) |
| 2 | +12V |

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.