

ED-PSU1201

2023-12-11



Overview

This specification defines the performance characteristics for a class II adapter, single-phase 12.0 watts. Single output level power supply.

Simple design philosophy.

Reliability level of 50K hours MTBF @ 25° C (rated input voltage and using the Telcordia SR-332 issue 3 method).

DC output voltage must be Safe Extra Low Voltage (SELV) & Limited Power as defined by IEC62368-1.

The maximum room ambient temperature (Tmra), as mentioned in clause B.1.6 and B.2.6 of IEC62368-1, for the external power supply is 40°C.

Cooling: natural convection.

Input & Output Requirements

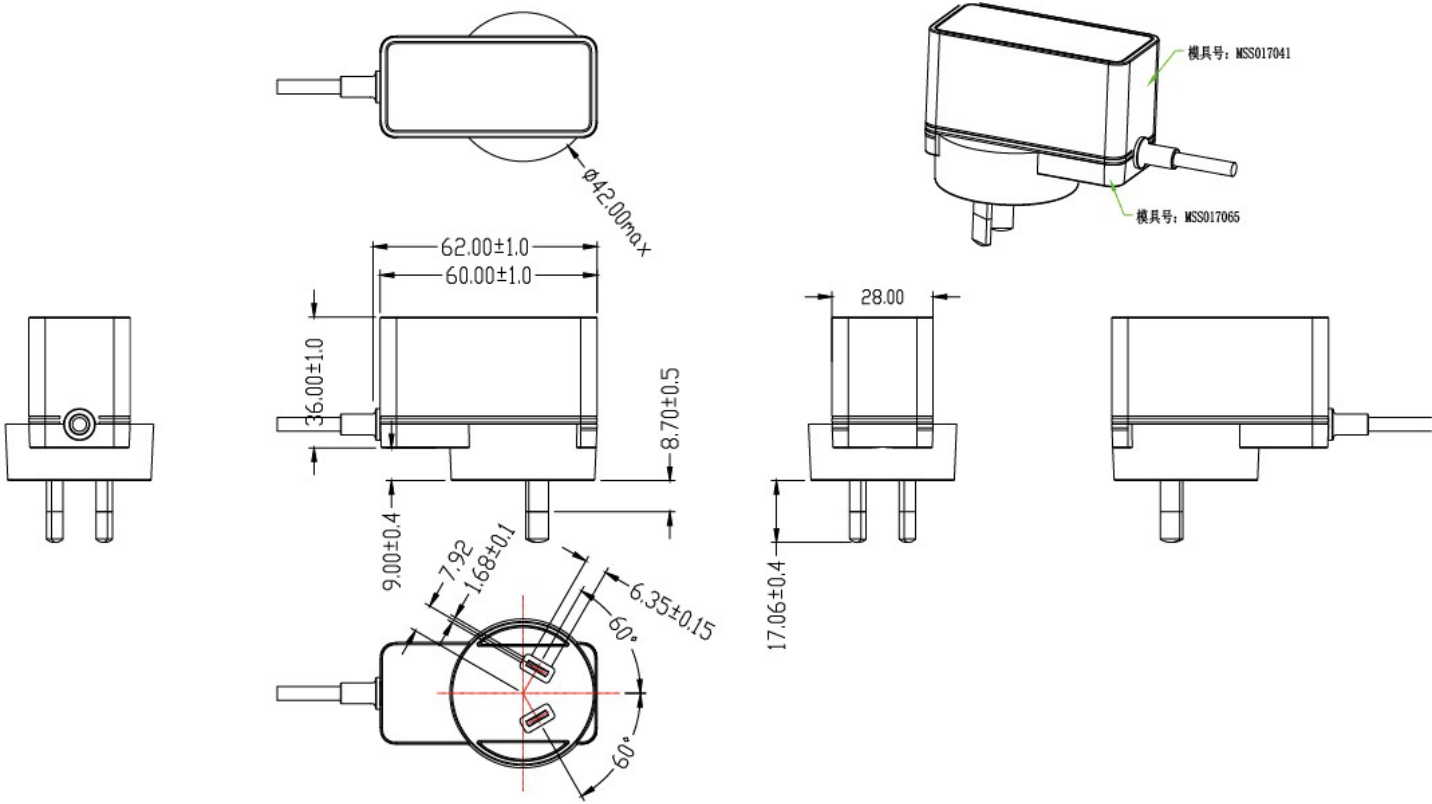
INPUT REQUIREMENTS	
Rated input voltage	100-240Vac
Operating range	90-264Vac
Rated input frequency	50/60Hz +/- 3Hz
Rated input current	0.4A max.
Power consumption (no-loading)	0.1W max.
Primary current protection	An adequate internal fuse on the AC input line is provided.
Configuration	2 Conductor
AC Inrush Current	No damage shall be occurred and the input fuse shall not be blown up nominal input voltage full load 25°C cold start.
OUTPUT REQUIREMENTS	
Nominal DC output voltage	+12.0V
Minimum load current	0.01A
Rating load current	1.0A
Peak load current	/
Rating output power	12.0W
Line regulation	The line regulation is less than $\pm 5\%$ while measuring at rated load and +/-10% of input voltage changing.
Load regulation	The load regulation for +12.0V is less than $\pm 5\%$, at measured output load from 10% to 100% rated load.
Peak load regulation	The peak load regulation for +12.0V is less than / , at measured output load from 30% to 100% rated load.
Ripple and noise	120 mVp-p
	Add 0.1uF/50V ceramic capacitor and 10uF/50V aluminum electrolytic capacitor across the output terminal. Measured with 20MHz Bandwidth Oscilloscope.
Average efficiency	82.96% minimum
	115V/60Hz and 230V/50Hz, output current from 100%, 75%, 50%, 25%.
Turn on delay time	3000 mS max. at nominal input AC voltage and full load
Rise time	The supply shall have a start-up rise time of less than 20mS to rise to within regulation limits for all DC outputs.
Hold up time	8 mS minimum at nominal input 100V AC minimum voltage and full load.
Output over-shoot	Less than 7% of nominal voltage value.
LED indication function	/
Protection function	Short-circuit protection : The adapter shall not be damaged by short the DC output to Ground. The adapter shall resume normal operation when a short circuited fault condition is removed.
	Over current protection : The output shall be protected against the over current conditions.

Regulatory Standard

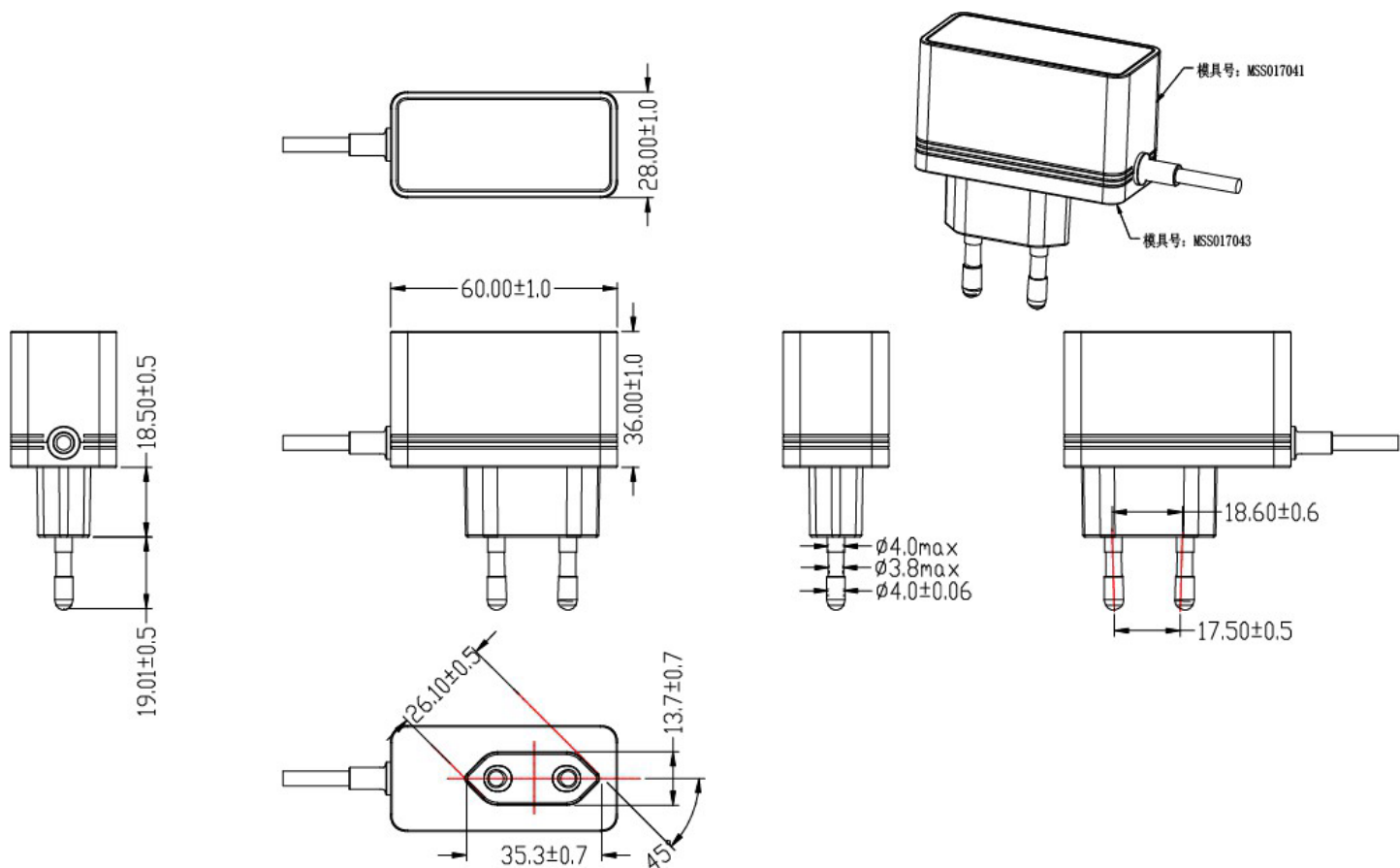
Regulatory Standard				
	For Short	Country	Certified Status	Standard
US	UL	USA	Meet	UL 62368-1
	CUL	Canada	Meet	CSA C22.2 NO.62368-1
UK	UKCA	UK	Meet	BS EN62368-1
	CE	Europe	Meet	Declared& CE Mark EN62368-1
AU	RCM	Australia	Meet	AS/NZS 62368-1
EU	GS	Europe	/	EN62368-1
	CE	Europe	Meet	Declared& CE Mark EN62368-1

Appearance Drawing Unit:mm

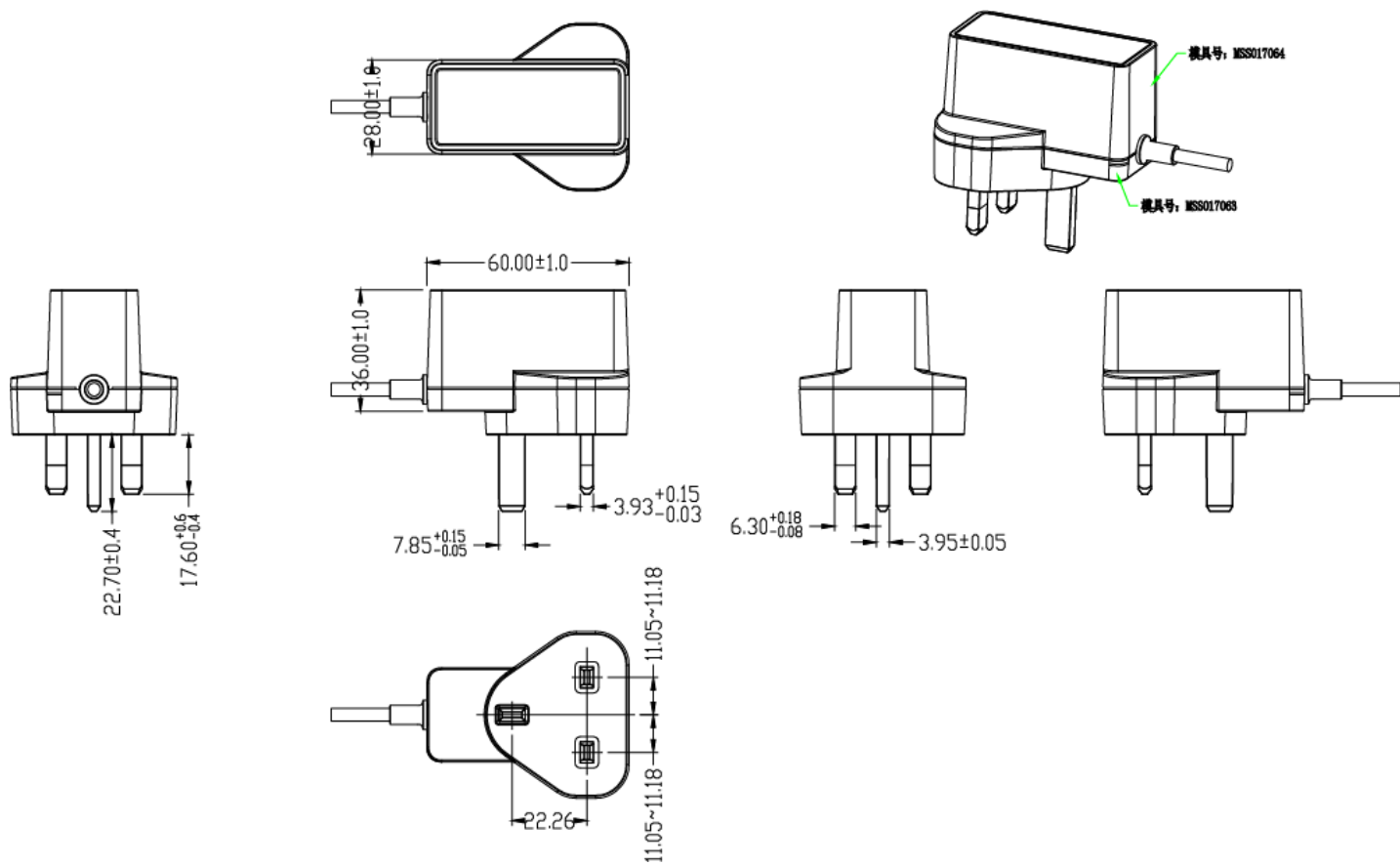
AU



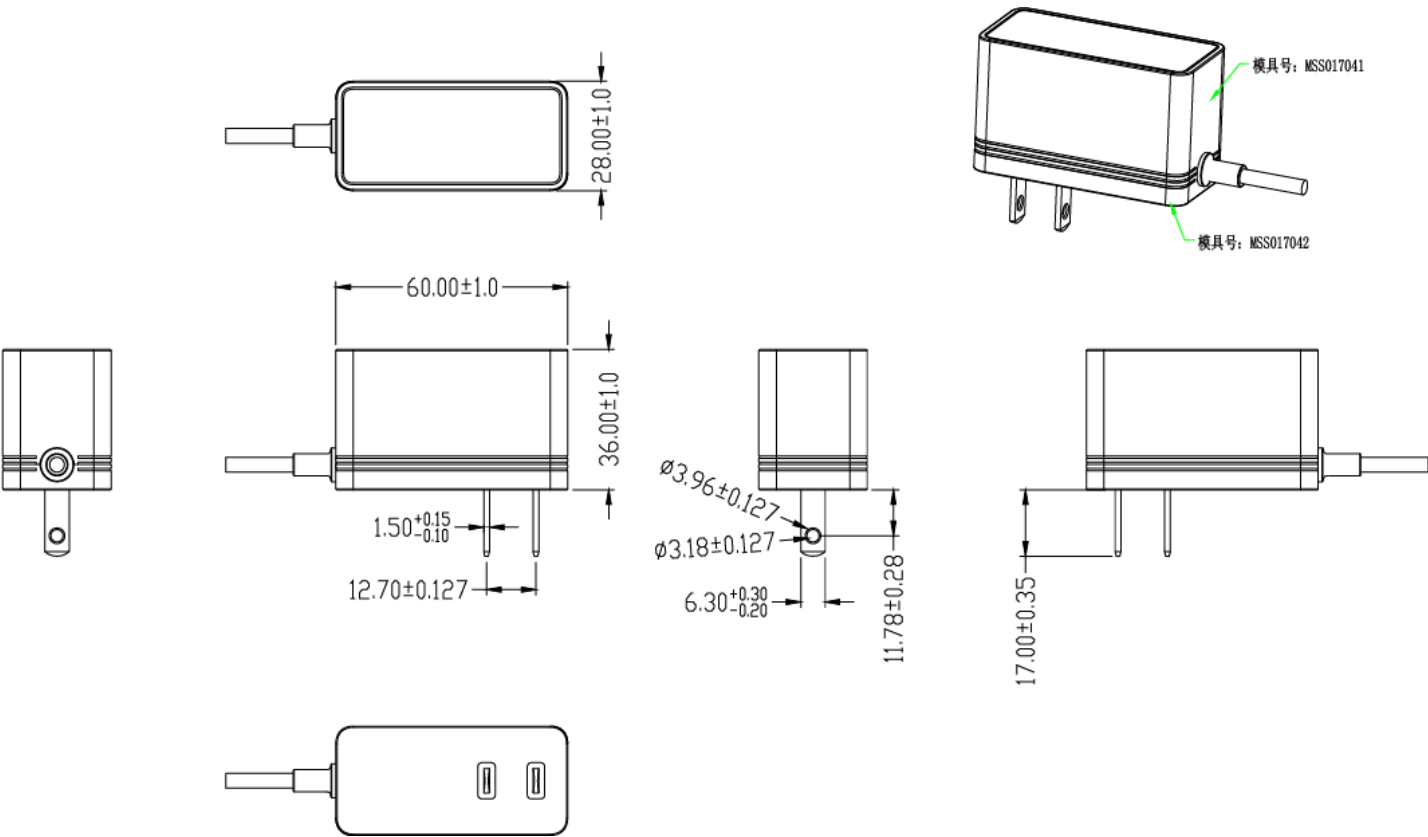
EU



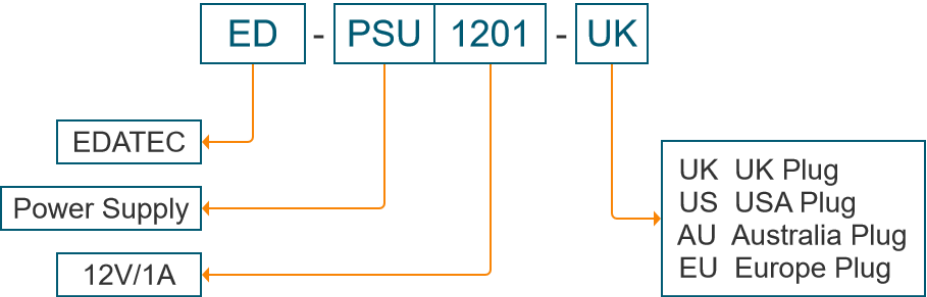
UK



US



Order Information



Example

Part# : ED-PSU1201-UK
Configuration :12V/1A, Black,UK Plug

Mouser Electronics

Authorized Distributor

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