

External Plug In Adaptor multicomp^{PRO}

RoHS
Compliant

Scope

The purpose of the document is to specify the functional requirements of MP012113 switching power supply.

Input Characteristics

Rated Input Voltage	: 100V AC to 240V AC
Variable input voltage	: 90V—264V AC
Input Current	: 0.4A max when input rated voltage and output rated load.

Input Frequency

Rate Frequency	: 50Hz / 60Hz
Variation Frequency	: 47Hz to 63Hz
In-rush Current	: 30A mps Max Cold start at 240V AC input ,with rated load and 25°C ambient.
AC leakage Current	: 0.25mA Max .At 240V AC input

Output Characteristics

Rated Output Power	: 10W
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Combined Load/line Regulation

Voltage	: +5V
Min. Load	: 0A
Max Load	: 2A
Load Regulation	: 4.75V to 5.35V
Unload output voltage	: 4.75V to 5.35V
Efficiency	: 115V AC input, the average efficiency $\geq 78.7\%$ output rated load is 25%, 50%, 75%, 100% 4 situations of average efficiency 230V AC input, the average efficiency $\geq 78.7\%$ output rated load is 25%, 50%, 75%, 100% 4 situations of average efficiency
Unload standby Power	: 0.1W Max

Ripple And Noise

Ripple & Noise	: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 47uF electrolysis capacitor. (test under the condition of rated input and rated output)
Voltage	: +5V
current	: 2000mA
Ripple And Noise(Max)	: 200m Vp-p
Turn On Delay Time	: 5 second max. at 100V AC input and output Max. Load
Rise Time	: 100ms max. at 100V AC input and output Max. Load
Hold Up Time	: 5ms min. at 100V AC input and output Max. Load.
Overshoot	: 10% max. When power supply on or turn off.

Protection Function

Short circuit protection	: The Power Supply will be auto recovered when short circuit faults remove.
Over current Protection	: The power supply will be auto recovered when over current faults remove.

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Over Voltage Protection

The power supply shall protection when the output over voltage. The output shall latched and shall be recovery when the fault condition is removed and power on again

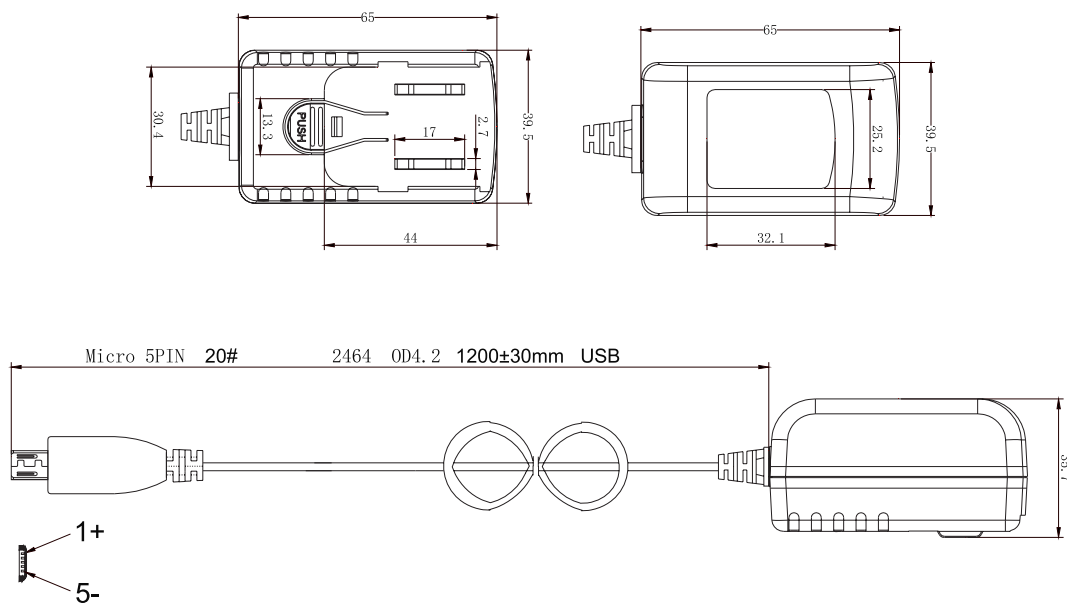
Environmental Requirements

Operating Temperature	: 0°C to +40°C, Full Load, Normal Operation.
Storage temperature	: With enclosure: -20°C to +70°C
Relative Humidity	: 5%(0°C)~90% (40°C) 72h Full Load , Normal operating.

Vibration

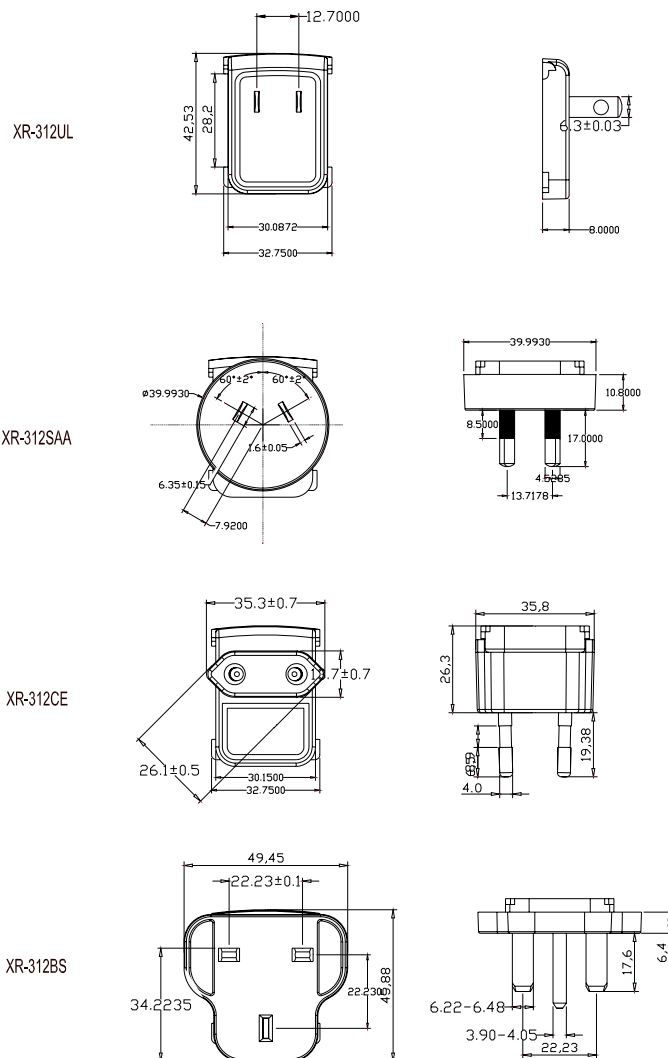
Operating	: IEC 721-3-3 3M3 5~9Hz, A=1.5mm (9-200Hz, Acceleration 5m/s)
Transportation	: IEC 721-3-2 2M2 5~9Hz, A=3.5mm 9~200Hz , Acceleration=5 m/s ² 200~500Hz , Acceleration=15 m/s ²
Axes, 10 cycles per axis	: No permanent damage occur during testing. The product has to restore to its original situation after power off/on

Outlook Drawing Drawing (Common difference: ±0.5mm)



Dimensions : Millimetres

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Part Number Table

Description	Part Number
Desk Top Adaptor, AC-DC, 10W, UK,US, EU Plug, Micro USB	MP012113

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