

Multiheaded 12V 2000mA Barrel Jack Power Supply



SKU: 223-7609

SCOPE

This document specifies the functionality of the OKdo-223-7609 switching power supply.

INPUT CHARACTERISTICS:

Input voltage:

Rated Input Voltage: 100-240Vac.

Variable input voltage : 90V—264Vac.

Input current:

0.6A max at input rated voltage and output rated load.

Input frequency:

Frequency:50/60Hz.

Frequency range: 47-63Hz.

In-rush current:

60 A Max Cold start at 240Vac input, at rated load and 25°C ambient temperature.

AC leakage current:

0.25mA Max at 240Vac input.

OUTPUT CHARACTERISTICS:

Rated Output Power: 24W

Combined load/line regulation

Voltage	Min Load	Max Load	Load Regulation	Unloaded output voltage
+12V	0A	2.0A	11.4V-12.6V	11.4V-12.6V

Efficiency:

115VAC input, average efficiency $\geq 86.20\%$.

230VAC input, the average efficiency $\geq 86.20\%$.

115VAC/230VAC input, the reference is 72.88%. at 10% of the rated load.

Unloaded standby power: 0.1W Max

Ripple and noise:

Measurement was carried out using a 20MHz bandwidth oscilloscope with the output paralleled with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor.

Voltage	Current	Ripple and noise(max)
+12V	2000mA	180mV p-p

Turn on delay:

3 second Max at 100Vac input and output max. load.

Rise time:

100ms Max. at 100Vac input and output max. load.

Hold up time :

5ms Min. at 100Vac input and output max. load.

Overshoot:

10% Max. when power supply switched on or off.

PROTECTION FUNCTIONS

Short circuit protection:

The Power Supply will auto recover when short circuit faults are removed.

Over current protection:

The output shall temporarily switch off if an overcurrent state occurs. It will auto recover when the fault condition is resolved.

Over Voltage protection:

The power supply will shutdown if the output experiences overvoltage. It will recover if the fault condition is removed and the supply is power cycled.

Over temperature protection:

If the operating temperature of the power supply is exceeded, it will pause output power momentarily then retry. When the operating temperature falls within specification it will

provide uninterrupted power again.

ENVIRONMENTAL REQUIREMENTS

Operating temperature:

0°C to +40 °C , full load, normal operation.

Storage temperature:

-10 °C to +55 °C

Relative humidity:

5%(0 °C) ~ 90%(35 °C) 72h full load, normal operation.

Vibration:

Operating: IEC 721-3-3 3M3.

5~9Hz, A=1.5mm.

9~200Hz, acceleration 5m/s².

Transportation:

IEC 721-3-2 2M2.

5~9Hz, A=3.5mm.

9~200Hz, acceleration=5 m/s².

200~500Hz , acceleration=15 m/s².

Tests conducted on all 3 axes, 10 cycles per axis :

No permanent damage occurred during testing. The product restored original functionality when power cycled.

MECHANICAL CHARACTERISTICS

Drop testing

The product was be dropped from a height of 1-meter height on to a wooden floor - no breakage.

Cable flexing testing

The DC power cord was fitted with a weight of 250g, then swung to an angle of 45°for 2000 cycles. Minimum bending speed was 40 cycles per minute.

No visible or electrical damage occurred.

SAFETY STANDARDS

Compliance testing:

Safety compliance tests in accordance with IEC 62368-1: 2014, EN60950-1+62368-1, UL62368-1, GB4943.1.

Note: AC pins corresponding to relevant national standards, e.g. CE corresponds to EN60950-1+62368-1; 3000Vac.

DIELECTRIC STRENGTH Hi-Pot :

Primary to secondary, 3000Vac/5mA/5s.

Insulation resistance:

Primary to secondary :10MΩ Min at 500V DC.



www.okdo.com

EMC STANDARD

EMC---EN55032+55024

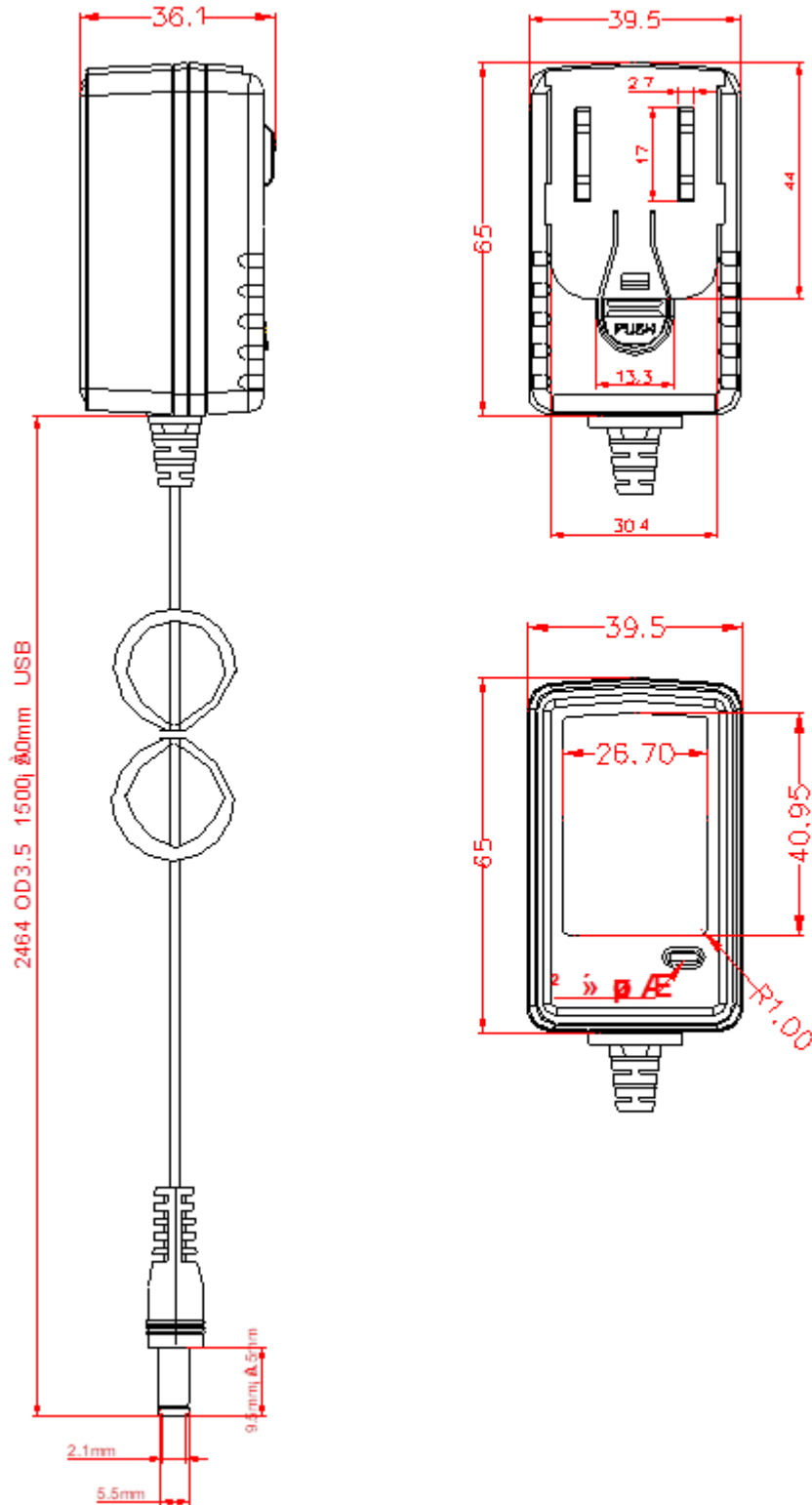
VOLUME

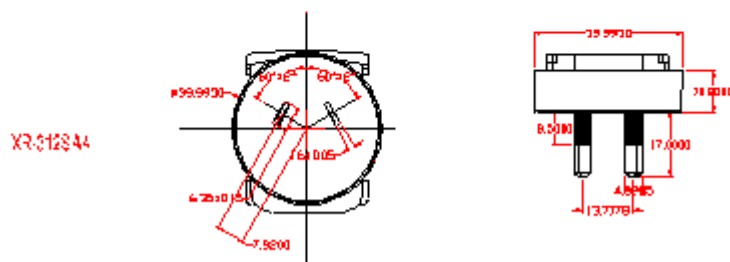
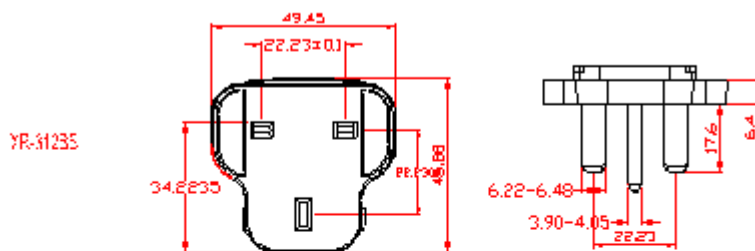
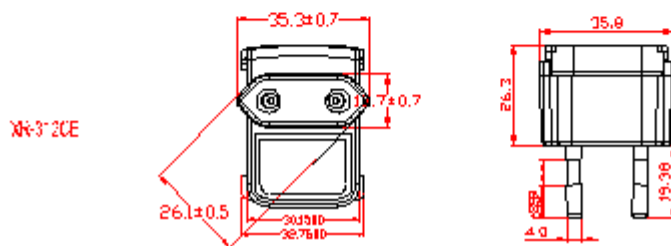
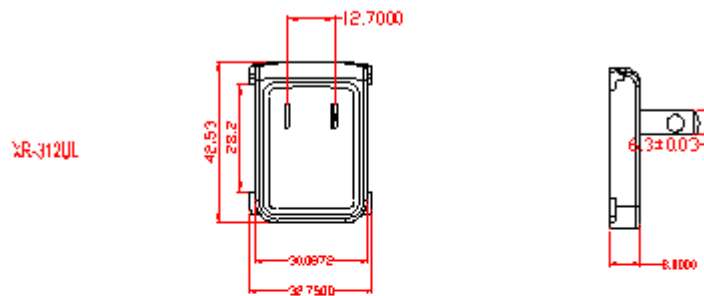
(L)65mm × (W)39.5mm × (H)36.1mm

WEIGHT

100g ±20g

MECHANICAL DRAWINGS





CE /BS, REACH, UL, CA65, SAA, ROHS

LABEL



Scale:1:1



Scale:3:1

Notes

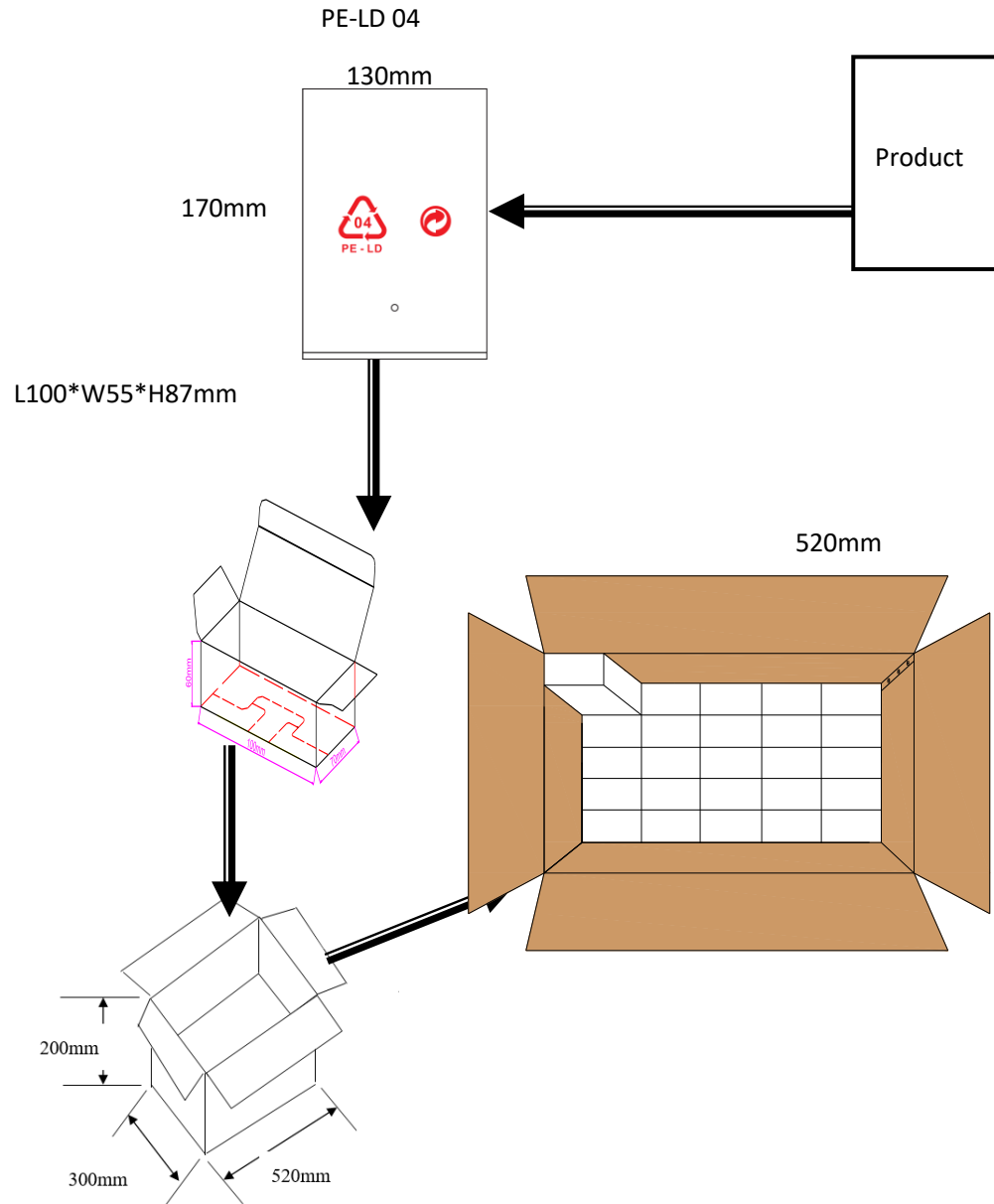
Material: PVC, REACH, CA65

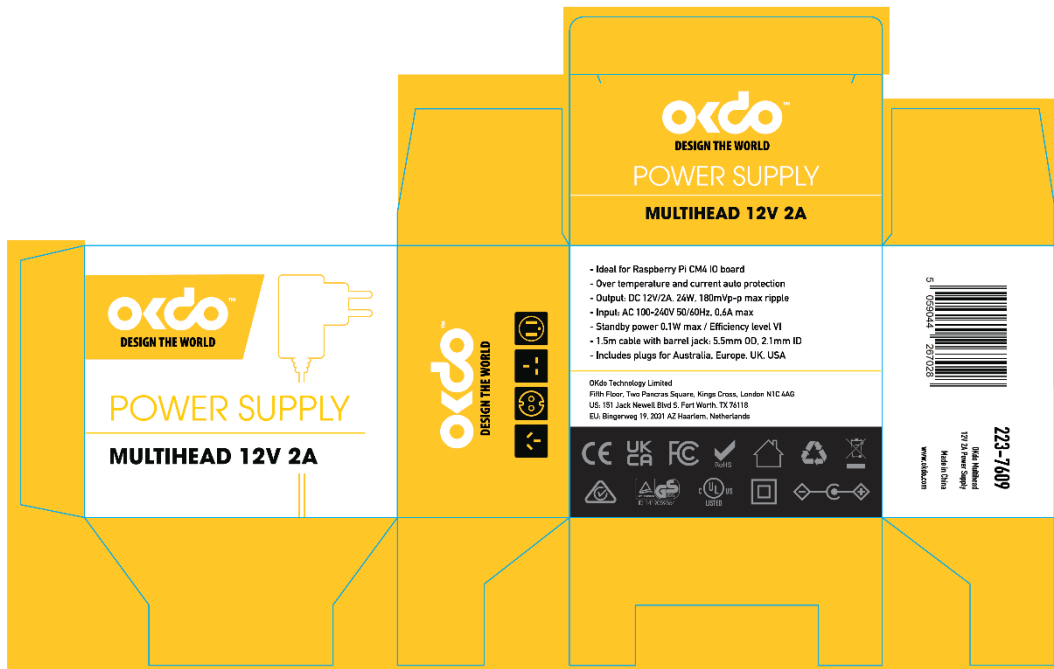
Printing: black background, white characters

Size: (W)40.3 +/-0.2mm (H)26.1 +/-0.2mm

Thickness: 0.15mm

PACKAGING





Individual box dimensions: 100 x 55 x 87

Weight: 400g