Features

- 90–264V AC universal input
- IEC 320-C14 mains inlet
- 5–48V DC output, 40–72W
- Level VI average efficiency
- ≤0.21W no-load power consumption
- 2.1 x 5.5 x 11mm DC connector
- OVP, SCP

66JYH4Z-xy-BY

Up to 72W Desktop AC/DC Power Supply (PSU) Series

Image for illustration purposes only.

Description

The 66JYH4Z-xy-BY is a desktop AC/DC power supply series rated up to 72W, with an IEC 320-C14 mains inlet and seven output voltages from 5V to 48V DC. Its universal input lets one part number serve mains supplies worldwide, and low no-load power consumption suits equipment that is left connected. Overvoltage and short circuit protection recover automatically once the fault clears.

The full series is certified to CE, TUV-GS, cULus and FCC and built to EN 62368-1 and UL/CSA 62368-1, and the 24V model is also certified to UKCA, RCM (C-Tick) and PSE and built to BS EN 62368-1, K 62368-1, J 62368-1 and AS/NZS 62368.1, with EMC to FCC Part 15 Class B, EN 55032 and GB 9254 Class B. The units meet efficiency Level VI and RoHS requirements. These are primarily used in information technology, audio and video equipment, and customised solutions are available upon request.

Part Number Breakdown

66JYH4Z	xy	BY
Series Name	Output Voltage and Current: xy = voltage and current code e.g. 2400300 = 24.0V, 3.00A	Model Suffix

Models

Part Number	Output Voltage (V)	Output Current (A)	Output Power (W)	Ripple & Noise (mVp-p max.)
66JYH4Z-0500800-BY	5.0	8.00	40	50
66JYH4Z-1200500-BY	12.0	5.00	60	120
66JYH4Z-1500433-BY	15.0	4.33	65	150
66JYH4Z-1800350-BY	18.0	3.50	63	150
66JYH4Z-2400300-BY	24.0	3.00	72	240
66JYH4Z-3600200-BY	36.0	2.00	72	240
66JYH4Z-4800150-BY	48.0	1.50	72	300

Ripple & noise measured @ nominal input voltage and rated load, 20MHz bandwidth, with a 47µF electrolytic and a 0.1µF ceramic capacitor in parallel at the output.

Input Specifications

Parameter	Specification
Input Voltage Range	90–264V AC
Rated Input Voltage	100–240V AC
Input Frequency Range	47–63Hz
Rated Input Frequency	50–60Hz
Input Current	1.7A max. @ any input voltage, rated load
Inrush Current	**24V model:** 80A max. @ 240V AC input (cold start), rated load, 25°C ambient **Other models:** 120A max. @ 240V AC input (cold start), rated load, 25°C ambient

Output Specifications

Parameter	Specification
Line Regulation	**5V, 12V, 15V, 18V, 36V, 48V:** ±1% **24V:** ±5%
Load Regulation	±5%
Turn-on Delay Time	**5V, 12V, 15V, 18V, 36V, 48V:** 3S max. @ 115V AC input, max. load **24V:** 3S max. @ 115V AC and 230V AC input, max. load
Rise Time	**5V, 12V, 15V, 18V, 36V, 48V:** 40mS max. @ 115V AC input, max. load **24V:** 80mS max. @ 115V AC and 230V AC input, max. load
Hold-up Time	**5V, 12V, 15V, 18V, 36V, 48V:** 5mS min. @ 115V AC input, max. load **24V:** 5mS min. @ 115V AC and 230V AC input, max. load
Efficiency (av.)	**5V:** 86.065% min. @ 115V AC and 230V AC input, average of 25%, 50%, 75% and 100% load **12V, 15V, 18V, 36V**, **48V:** 88% min. @ 115V AC and 230V AC input, average of 25%, 50%, 75% and 100% load **24V:** >88% @ 115V AC/60Hz and 230V AC/50Hz input
No-load Power Consumption	**5V:** 0.1W max. **12V, 15V, 18V, 36V, 48V:** 0.21W max. **24V:** <0.21W @ 115V AC/60Hz and 230V AC/50Hz input
Power Indicator	**24V:** green LED, lit when the adaptor is working
No-load Output Voltage	**24V**: 24.0–25.0V
Full-load Output Voltage	**24V:** 23.0–25.0

Protection

Parameter	Specification
Short Circuit Protection	**5V, 12V, 15V, 18V, 36V, 48V:** automatic recovery once the short circuit is removed **24V:** input power falls and the unit is not damaged; automatic recovery once the short circuit is removed
Overvoltage Protection	**5V, 12V, 15V, 18V, 36V, 48V:** 120–170% of rated output voltage; automatic recovery once the fault is removed **24V:** 150–180% of rated output voltage; automatic recovery once the fault is removed
Overcurrent Protection	**24V:** 3.3–4.5A; output enters hiccup mode, with automatic recovery once the fault is removed

Environmental Characteristics

Parameter	Specification
Operating Temperature/Humidity	**5V, 12V, 15V, 18V, 36V, 48V:** 0°C to +40°C @ full load; 5% @ 0°C to 90% @ 40°C RH, 72 hours @ full load **24V:** 0°C to +40°C, 10–90%RH
Storage Temperature/Humidity	**5V, 12V, 15V, 18V, 36V, 48V:** -20°C to +80°C (packed) **24V:** -20°C to +80°C, 5–95%RH non-condensing
Altitude	**24V:** <2,000m above sea level
Vibration	**5V, 12V, 15V, 18V, 36V, 48V:** operating to IEC 721-3-3 3M3, 5–9Hz @ 1.5mm amplitude, 9–200Hz @ 5m/S²; transport to IEC 721-3-2 2M2, 5–9Hz @ 3.5mm amplitude, 9–200Hz @ 5m/S², 200–500Hz @ 15m/S²; 10 cycles per axis, no permanent damage **24V:** 10–300Hz sweep, 1.0G constant acceleration (3.5mm displacement), 1 hour on each of the X, Y and Z axes
Drop-in	**5V, 12V, 15V, 18V, 36V, 48V:** 760mm drop height **24V:** 1000mm drop height Onto hardwood ≥13mm thick on two layers of 19–20mm plywood, supported on concrete or an equivalent non-resilient floor; no mechanical damage and no loss of electrical performance after the test

Safety Standards

Parameter	Specification
Safety Standards	All models: EN 62368-1, UL/CSA 62368-1 **24V** also: BS EN 62368-1, K 62368-1, J 62368-1, AS/NZS 62368.1 **5V, 12V, 15V, 18V, 36V, 48V** also: IEC 62368-1
Certifications	All models: CE, TUV-GS, cULus, FCC, RoHS, REACH **24V** also: UKCA, RCM (C-Tick), PSE
Dielectric Strength (Hi-pot)	**5V, 12V, 15V, 18V, 36V, 48V:** primary to secondary: 1800V AC / 3.5mA / 60S, or 2412V DC / 3.5mA / 60S; 3S for production **24V:** primary to secondary: 1800V AC / 3.5mA / 60S, or 2424V DC / 3.5mA / 60S; 3S for production
Insulation Resistance	Primary to secondary: 20MΩ min. @ 500V DC
Leakage Current	**5V, 12V, 15V, 18V, 36V, 48V:** 0.25mA max. @ 264V AC/50Hz **24V:** 0.75mA max. @ 264V AC/50Hz
Efficiency Marking	Level VI

Electromagnetic Compatibility (EMC)

Parameter	Specification
EMI Standards	**5V, 12V, 15V, 18V, 36V, 48V:** FCC Part 15 Class B, EN 55032, EN 55024, EN 55014 Class B, GB 9254 Class B **24V:** FCC Part 15 Class B, EN 55032, GB 9254 Class B
Electrostatic Discharge (ESD)	**24V:** IEC 61000-4-2: Contact discharge: ±4kV, Air discharge: ±8kV 10 discharges at each point, no malfunction
Lightning Surge	**24V:** IEC 61000-4-5: Line to line: 1kV, Line to earth: 2kV Criteria B

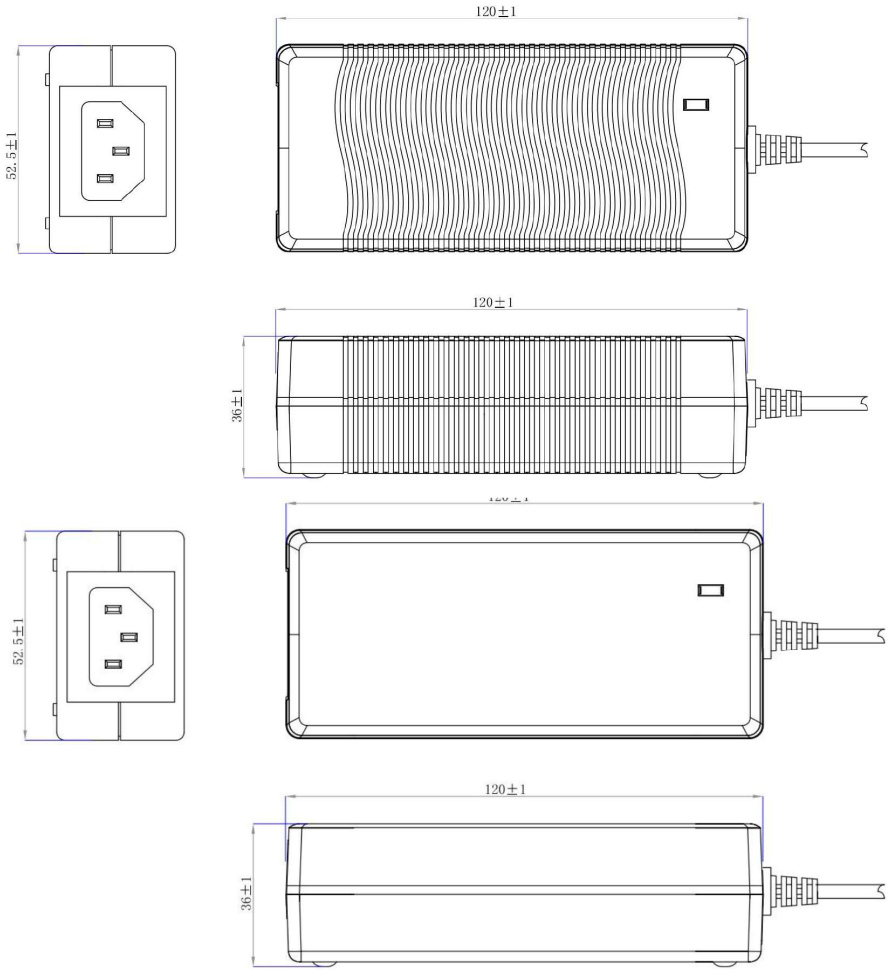
Reliability

Parameter	Specification
Burn-in	**24V:** 2 hours @ 35°C ±5°C, normal input, 100% rated load
MTBF	**24V:** ≥20,000 hours @ 25°C, full load, rated input

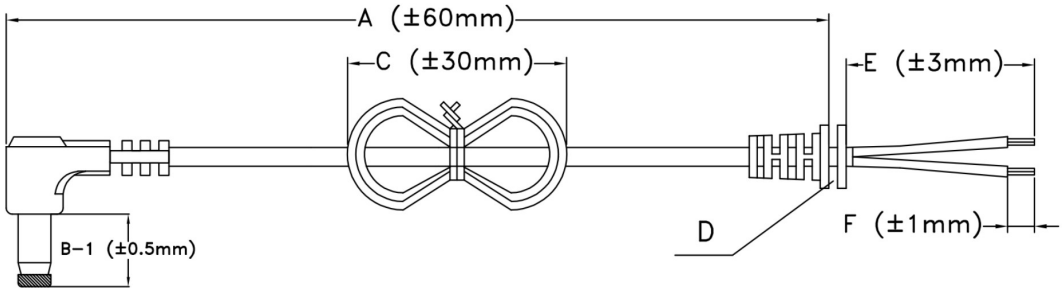
General Specifications

Parameter	Specification
Dimensions	120(L) x 52.5(W) x 36(H)mm
Enclosure Material	Black PC, 120°C temperature resistance, meets the ball pressure test
Flammability Rating	UL94V-0
Input Connector	IEC 320-C14
Output Cable	**5V:** UL 2464 #16 AWG, 80°C, VW-1, 300V, 1.2m **12V:** UL 2464 #16 AWG, 80°C, VW-1, 300V, 1.5m **15V:** UL 2464 #18 AWG, 80°C, VW-1, 300V, 1.5m **18V:** UL 2464 #20 AWG, 80°C, VW-1, 300V, 1.5m **24V:** UL 2464 #22 AWG, black, 80°C, 1.5m **36V:** UL 2464 #20 AWG, 80°C, VW-1, 300V, 1.5m **48V:** UL 2464 #22 AWG, 80°C, VW-1, 300V, 1.5m
Output Connector	**5V, 12V, 15V, 18V, 36V, 48V:** 2.1 x 5.5 x 11mm, straight **24V:** 2.1 x 5.5 x 11mm, right-angle
Output Polarity	Inner positive, outer negative

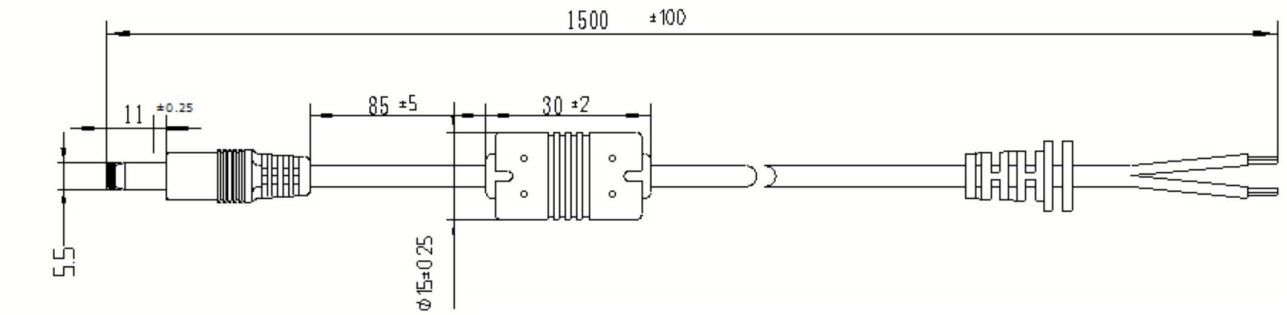
Mechanical Drawing

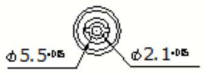


Dimensions in millimetres, tolerance of ±1.00mm.



24V model:
Cable: UL 2464 #22 AWG, black, 80°C
A: Length of DC cable: 1.5m ±60mm
B-1: DC connector (right-angle): 2.1 x 5.5 x 11mm, ±0.5mm
C: Length of coil: 100mm ±30mm
D: Strain relief: SR 5.7 x 6.7
E: Length of inlet wire: 40mm ±3mm
F: Tinned length: 4mm ±1mm



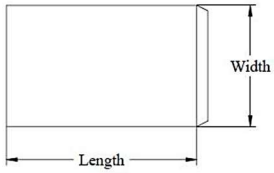
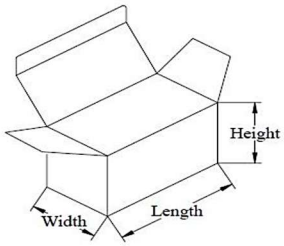
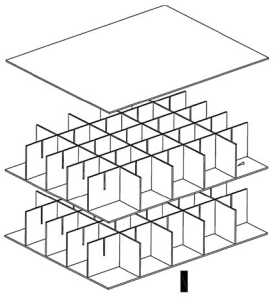
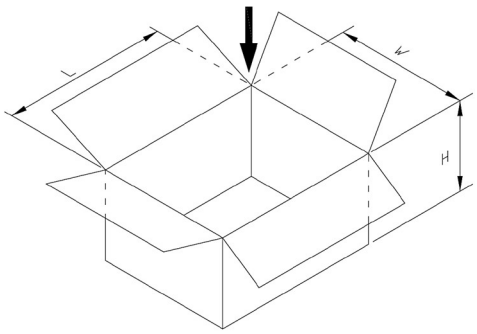


Fork style

Other models (5V, 12V, 15V, 18V, 36V, 48V):
DC connector (straight): 2.1 x 5.5 x 11mm
Length of DC cable: 1.5m ±100mm; 5V model: 1.2m ±100mm

Label Drawing

Label shown for the 24V model; the model number and output rating change per model.
Marking process: laser carving.
Date code XXYY: XX year, YY month.

Packaging

Parameter	Specification
Plastic Bag	PE bag (PE-LD)
White Box	80 x 35 x 150mm, 400g white board
Packing Method	Cardboard dividers and bag
Carton	415(L) x 370(W) x 170(H)mm
Quantity per Carton	50pcs
Carton Weight	13.5kg (5V, 12V, 15V, 18V, 36V and 48V models)