

Features

- Universal input 100-240VAC
- Class I (C14)
- Approved to CE, cULus, RCM (C-Tick) RoHS & REACH
- UL/EN/IEC 62368-1 Safety Approved
- Meets Efficiency Level VI & (EU) 2019/1782
- Single Output 12-48V DC



Ideal Power's 66JYH5Z-xy-BY-2.5 96W Series IEC 320-C14 DC/DC Converters are certified to cURus, UKCA, CE, RoHS, REACH & IEC/UL/EN 62368-1 Standards and comply with Efficiency Regulations. These are primarily used in ITE, Video & Audio Industries and customised solutions are available upon request.

Models

Model Number	Output Voltage	Output Current	Output Power
66JYH5Z-1200800-BY-2.5	12V DC	8A	96W
66JYH5Z-1500640-BY-2.5	15V DC	6.4A	96W
66JYH5Z-2400400-BY-2.5	24V DC	4A	96W
66JYH5Z-4800200-BY-2.5	48V DC	2A	96W

General Specification

Type	Switched Mode Power Supply
Input Connector	IEC 320-C14
Output Connection	2.5x5.5x11.0mm +ve inner/centre
Number of Outputs	1
Energy Efficiency Level	VI
Mounting Style	Desktop
MTBF	20,000 hours at maximum load /709.7K hrs min. MIL-HDBK-217F(25°C)
Switching Frequency	65KHz
Power Indicator	LED Indicator for power on
Cable Length	1200mm(±100mm)
Cable Type	16AWG/18AWG/20AWG (Depending on model)
Medical Approved	No

Input Specifications

Rated Input Voltage	100 to 240V ac
Full Input Voltage Range	90 – 264V ac
Rated Frequency	50/60Hz
Full Frequency Range	47/63Hz
Efficiency Level VI	Level VI / Efficiency (EU) 2019/1782
Power Factor	0.6
Input Current (RMS Max.)	2.5A
Inrush Current	80 Amps Max. Cold start at 240Vac input, with rated load and 25°C ambient.
Leakage Current (max.)	0.75mA / 240V ac
Input Protection	Thermal fuse in Primary; Current Limit, Short Circuit

Output Specifications

Output Regulation	+/-5%	
Ripple & Noise (max.)	120mVp-p ~ 240mVp-p (Depending on model)	
Voltage Tolerance	±5.0%	
Line Regulation	±1.0%	
Load Regulation	±5.0%	
No Load Power Consumption	<0.21W (<0.1W for 5V Model)	
Start-up, Rise Time	40ms Max at 115V ac input and output Max load.	
Hold Up Time (Typ.)	50ms Min. at 115V ac input and output Max Load.	
Transient Response	4% Deviation	
Number of Outputs	1	
Turn On Delay	3 Seconds Max. at 115V ac input and output Max Load.	
Insulation Class	I/II	
Switching Frequency	65KHz	
Isolation Resistance	20MΩ @500V dc	
Overload Protection	Hiccup mode, recovers automatically after fault condition is removed	
Over Voltage Protection	Auto recover when 120% ~ 170% of fault is removed.	
Over Temperature Protection	Shut down o/p voltage, re-power on to recover	
Short Circuit Protection	Auto recover when the short circuit fault is removed	
Voltage Isolation	Input-Output	1500V ac
	Input-Ground	1500V ac
	Output-Ground	500V ac

Mechanical Specifications

Housing Material	Fully Enclosed Plastic Case
Overall Dimensions	140mm x 60.5mm x 33mm
Overall Length	140mm
Overall Depth	60.5mm
Overall Width	33mm
Weight	380g

Environmental Data

Cooling	Natural convection
Operating Temperature Range	0 to 40°C
Operating Humidity	20% to 90% RH non-condensing
Storage Temperature Range	-20 to 80°C
Temperature Coefficient	± 0.03% / C
Altitude During Operation	2000m
Pollution Degree	2
Vibration Resistance	10-500Hz, 2G, along X, Y,Z each Axis, 60 min for each Axis
Shock Resistance	15G, 11ms, 3 Axis, 6 Faces, 3 times for each Face

Approvals

Compliance/Certifications	CB / TUV/GS / UL/CUL / PSE
Safety Standard	UL62368-1, EN 62368-1, IEC 62368-1, J60950-1 approved
EMC Emission	Compliance to EN 55032, EN 55024, EN 55014, FCC

Mechanical Drawing

