

Features

- Input Voltage: 100~240VAC/140~340VDC
- Standard ultra-thin product, height 30mm
- -30~+70°C working temperature
- Approved to CE, CB, CCC, cULus
- Efficiency up to 86%
- Protection: OLP, OVP, SCP
- 3 Years Warranty



Certified to EN 62368-1/IEC 62368-1/GB 4943.1 & CE, RoHS, REACH Standards and complies with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

Models

| Model Number | DC Voltage (V) | Output Power (W) | Input Voltage (V AC) | Efficiency (%) | Output Current (A) | Max Capacitive Load (μF) |
|---------------|-------------------|---------------------|-------------------------|-------------------|--------------------------|---------------------------------|
| 64A-50FGB-3.3 | 3.3 | 33 | 100-240 | 84 | 0-10 | 6000 |
| 64A-50FGB-5 | 5 | 50 | 100-240 | 83 | 0-10 | 6000 |
| 64A-50FGB-12 | 12 | 50.4 | 100-240 | 85 | 0-4.2 | 1800 |
| 64A-50FGB-15 | 15 | 51 | 100-240 | 85 | 0-3.4 | 1200 |
| 64A-50FGB-24 | 24 | 50.4 | 100-240 | 85 | 0-2.1 | 600 |
| 64A-50FGB-36 | 36 | 50.4 | 100-240 | 86 | 0-1.4 | 360 |
| 64A-50FGB-48 | 48 | 52.8 | 100-240 | 86 | 0-1.1 | 120 |

Notes:

All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.

Input Specifications

| Input Voltage | 90-264VAC | | | | | |
|--------------------------|-----------------|------------------|--|--|--|--|
| Rated Input Voltage (AC) | 100-240VAC | 100-240VAC | | | | |
| Rated Input Voltage (DC) | 140-340VAC | | | | | |
| Input current | 1A | 100% load,115Vac | | | | |
| | 0.55A | 100% load,230Vac | | | | |
| Frequency Range | 47~63Hz | | | | | |
| Inrush Current | 120A/230/277VAC | | | | | |
| Leakage Current | 240VAC/60Hz | | | | | |
| | | | | | | |

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Output Specifications

| | 3.3v | 5v | 12v | 15v | 24v | 36v | 48V | |
|------------------------|---------------|----------|-----------|-----------|-----------|---------|---------|--|
| Voltage Tolerance | ±2. | ±2.0% | | ±1.0% | | | | |
| Voltage adj. Range | 2.9-3.6 | 4.5-5.5 | 10.8-13.2 | 13.5-16.5 | 21.6-26.4 | 33-39 | 44-52 | |
| Ripple & Noise (pk-pk) | 80mV | 100mV | | 120mV | • | 200 |)mV | |
| Default voltage | 3.3-3.4 | 5-5.1 | 12-12.2 | 15-15.2 | 24-24.3 | 36-36.4 | 48-48.4 | |
| Rise Time | 50ms/230VA | C | | | | | • | |
| Turn on Delay Time | 2500ms/230VAC | | | | | | | |
| Hold up Time | 20ms/230VAC | | | | | | | |
| Line Regulation | ±0.5% | All | | | | | | |
| Load Regulation | ±2.0% | 3.3v, 5v | | | | | | |
| | ±1.0% | Others | | | | | | |

Notes:

Ripple & noise are measured at 20MHz f bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf and 47uf parallel capacitor.

EMS Standards

| | Notes | Standards/ Criterio | on | |
|------|---|---------------------|-------------------------|------------|
| | Electrostatic Discharge (ESD) | EN 61000-4-2 | Air 8 kV / contact 6 kV | Criteria B |
| | Radio-Frequency Electromagnetic Field Susceptibility Test-RS | EN 61000-4-3 | 80MHz–1GHz 10V/m | Criteria B |
| | Electrical Fast Transient / Burst-EFT | EN 61000-4-4 | ±2KV, (5 or 100) kHz | Criteria B |
| CE C | Surge Immunity Test | EN 61000-4-5 | CM±2KV/DM ±1KV | Criteria B |
| | Conducted Radio Frequency Disturbances Test-CS | EN 61000-4-6 | 10Vr.m. s; | Criteria A |
| | Power Frequency Magnetic Field Test | EN61000-4-8 | 30A/m | Criteria A |
| | | | 0%/100%/0.5 Period | Criteria C |
| | Voltage dips | EN61000-4-11 | 70%/30%/25 Period | Criteria B |
| | | | 0%/100%/250 Period | Criteria B |

Notes :

The power supply is considered a component which will be installed into a terminal equipment. All EMC tests should be confirmed with the final equipment.

| Safety & EMC | |
|---|--|
| Harmonic current | EN 61000-3-2 |
| Conducted emissions test & radiated emissions test | EN55032 |
| Voltage fluctuations & Flicker | EN61000-3-3 |
| Safety standard | UL 62368-1; EN62368-1; IEC 62368-1; GB 4943.1; |

Protection

| Our all and a material in | 110% -160% |
|---------------------------|--|
| Overload protection | Hiccup mode, recovers automatically after fault condition is removed |
| Over voltage protection | 110~130% |
| | Dual voltage loop voltage limiting |
| Short circuit | Hiccup mode, recovers automatically after fault condition is removed |

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64A-50FGB-xy AC-DC PSU Series Up to 50 Watts

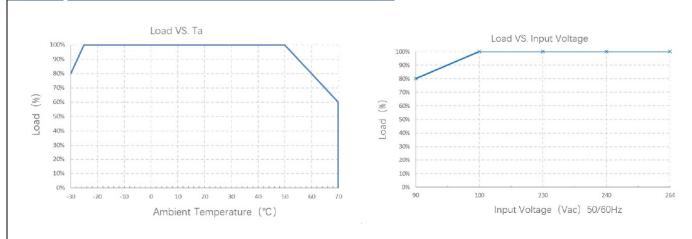
Environmental Characteristics

| -30~70°C 20%~9 | 95%RH no cond | ensing (refer to derating curve) | | | |
|--|---|---|--|--|--|
| -30°C~80°C 10%~95%RH no condensing | | | | | |
| 5000m - The ambient temperature of derating of 0.5°C/100m for operating altitude higher than | | | | | |
| Input-Output | 3000VAC | 7mA@60s | | | |
| Input- Case | 1500VAC | 7mA@60s | | | |
| Output-Case | 500VAC | 7mA@60s | | | |
| 0.1Ω | | | | | |
| 100MΩ | 500VDC, 60s | | | | |
| - | -30°C~80°C 10% 5000m - The amb Input-Output Input- Case Output-Case 0.1Ω | -30°C~80°C10%~95%RHno cond5000m - The ambient temperature ofInput-Output3000VACInput-Case1500VACOutput-Case500VAC0.1Ω | | | |

Other Information

| MTBF | 600Khrs, 230VAC,25°C,80% Load (MIL-HDBK-217F) |
|--------|---|
| SIZE | L99.0×W82.0×H30.0 |
| Weight | 200g |

Derating Curve



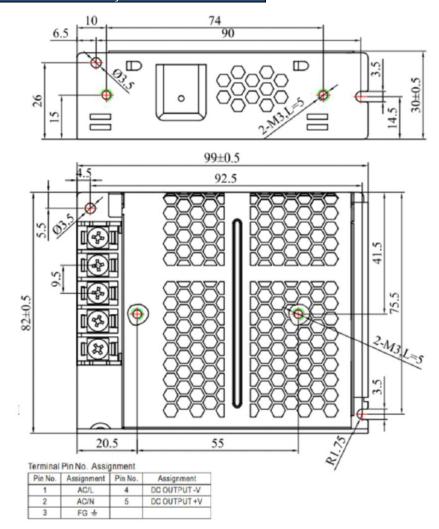
Notes:

To extend the service life, it is recommended to leave 30% more allowance when leading. For example, if the equipment needs 100W power, please choose the power supply over 130W.



64A-50FGB-xy AC-DC PSU Series Up to 50 Watts

Dimensions and Recommended Layout



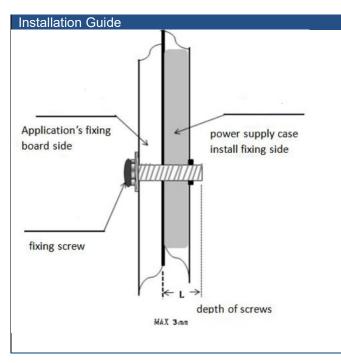
Other Information

| PIN number | PIN Function | PIN Number | PIN Function |
|------------|--------------|------------|--------------|
| L | AC Line | V+ | DC Output+ |
| Ν | AC Neutral | V- | DC Output- |
| FG | Earth | | |

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64A-50FGB-xy AC-DC PSU Series Up to 50 Watts



Warning

1. Use mounting screws by

M4*6mm,0.8N·m

Max depth of screws into housing is 3mm

3. Right picture with more details.

4. Connector tightening torque:

Input Terminal :1.0N·m

Output Terminal: 1.0N·m

Instructions :

1. Please follow the installation instructions when use the power supply.

2. Before power on test run after installation, please check and proofread the wiring on each terminal, make sure that the input and output, AC and DC, positive and negative, voltage and current values are correct, prevent the occurrence of wrong connection, and avoid damaging the power supply and user equipment.

3. Before power on, please use a multi meter to measure whether the live wire, zero wire and ground wire are short circuited, and whether the output terminal is short circuited; it is better to start without load when power on.

4. Do not exceed the nominal value of the power supply when using, so as not to affect the reliability of the product. If you need to change the output parameters of the power supply, please consult our technical department before using.

5. To ensure the safety of use and reduce interference, please ensure that the grounding terminal is reliably grounded (ground wire please thicker than AWG18#)

6. If the power supply fails, please do not repair it without permission. Please contact us on +44 (0) 1733 309865

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