AC – DC

Features

- Input Voltage: 100~240VAC/140~340VDC
- Built-in active PFC Function, PFC>0.95
- -30~+70℃ working temperature
- Approved to CE, CB, CCC, cULus
- Efficiency up to 91.5%
- Protection: OLP, OVP, OTP SCP
- Forced Air Cooling by Built-in DC Fan
- 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-500FKG-12P	12	500.4	100-240	90	0-41.7	30000μF
64A-500FKG-15P	15	501	100-240	90	0-33.4	15000μF
64A-500FKG-24P	24	504	100-240	92	0-21	20000μF
64A-500FKG-27P	27	502.2	100-240	92	0-18.6	18000μF
64A-500FKG-36P	36	496.8	100-240	92	0-13.8	18000μF
64A-500FKG-48P	48	504	100-240	93	0-10.5	4000μF

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

Input Specifications

Input Voltage	90-264VAC	
Rated Input Voltage (AC)	100-240VAC	
Rated Input Voltage (DC)	140-340VAC	
Input current	5.7A	100% load,115Vac
	2.7A	100% load,230Vac
Frequency Range	47~63Hz	
Inrush Current	120A/230/277VAC	
Leakage Current	240VAC/60Hz	

Output Specifications

Voltage Tolerance	±2.0%	12v, 15v
	±1.0%	Others
Voltage adj. Range	10.8-13.2	12v
	13.5-16.5	15v
	21.6-26.4	24v
	24.3-29.7	27v
	32.4-39.6	36v
	44-52	48v
Ripple & Noise (pk-pk)	200mV	12v, 24v, 27v
	250mV	15v,
	230mV	36v, 48v
Default voltage	11.88-12.12	12v
	14.85-15.15	15v
	23.76-24.24	24v
	26.73-27.27	27v
	35.64-36.36	36v
	47.52-48.48	48v
Rise Time	100ms/230VAC	
Turn on delay time	1000ms/230VAC	
Hold up Time	6ms/230VAC	
Line Regulation	±0.5%	All
Load Regulation	±1.0%	All

Notes:
Ripple and noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf and 47uf parallel capacitor.

EMS Standards

	Notes	Standards/ Criterion		
CE	Electrostatic Discharge (ESD)	EN 61000-4-2	Air 8 kV / contact 4 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
	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
	Voltage dips	EN61000-4-11	0%/100%/0.5 Period	Criteria C
			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	EN55032
Voltage Fluctuations & Flicker	EN61000-3-3
Safety Standard	UL 62368-1; EN62368-1; IEC 62368-1; GB 4943.1;

Protection

Overload	110% -150%
	Hiccup mode, can automatically resume normal operation after eliminating overload
Over voltage	110～135%
	Turn off output voltage, restore normal operation after fault elimination
Over temperature	Shut down output voltage, recovers automatically after temperature decreases
Short circuit	Power protection after shirt circuit at the output end, which can automatically restore output after eliminating the short circuit

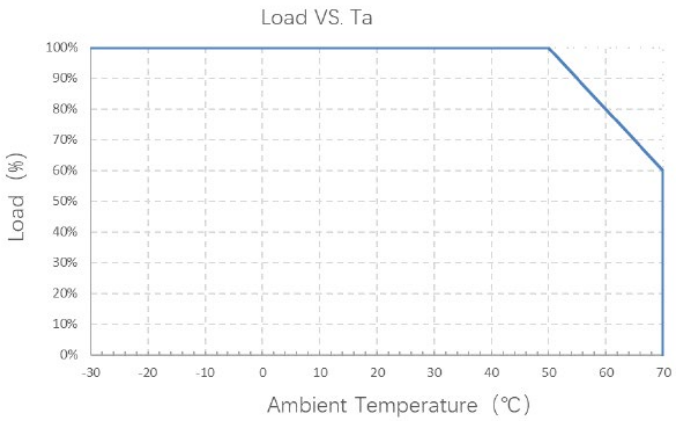
Environmental Characteristics

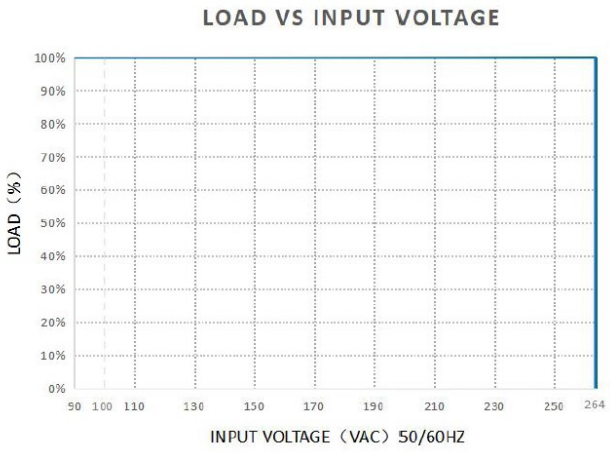
Working Temp & Humidity	-30~70℃ 20%~95%RH no condensing （refer to derating curve)		
Storage Temp & Humidity	-40℃~80℃ 10%~95%RH no condensing		
Temperature Coefficient	±0.03% (0-50℃)		
Altitude	5000m - The ambient temperature of derating of 0.5℃/100m for operating altitude higher than		
Dielectric Test	Input - Output	3000VAC	10mA@60s
	Input – Case	1500VAC	10mA@60s
	Input - Case	500VAC	10mA@60s
Ground Resistances	0.1Ω		
Insulation Resistance	100MΩ	500VDC, 60s	

Other Information

MTBF	100Khrs, 230VAC,25℃,80% Load (MIL-HDBK-217F)
SIZE	L230.0×W127.0×H40.5
Weight	970g
Output ON/OFF control	RC+ /RC-; 0-1 or short circuit or open circuit power on; 4-10v power off (optional)
Remote voltage compensation	S+/S- ; S- are connected to the positive and negative terminals of the load respectively, and the maximum line voltage drop can be compensated to 0.2V (optional)
Fan Control	RTH2 ≥ 50 ℃± 10 ℃ Fan on; RTH2 ≤ 40 ℃± 10 ℃ Fan shutdown

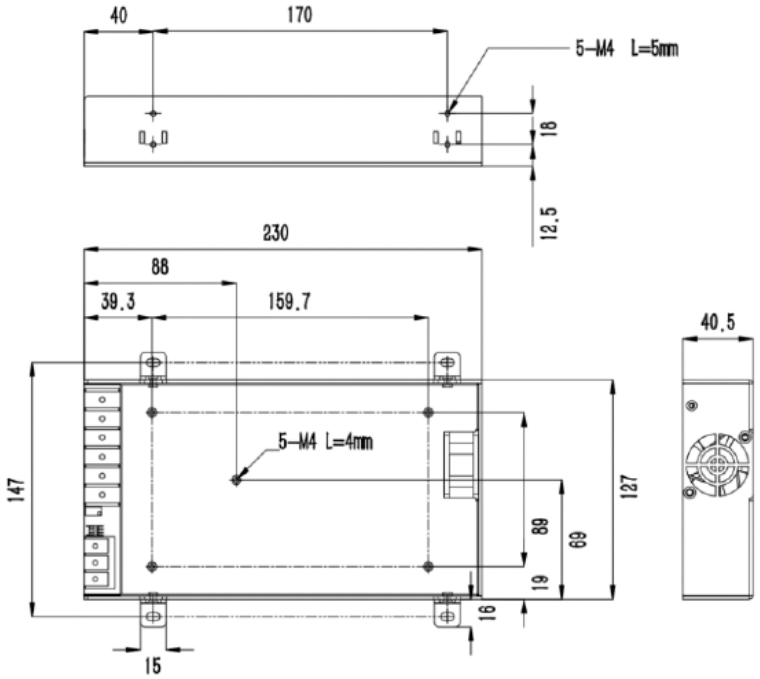
Derating Curve





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

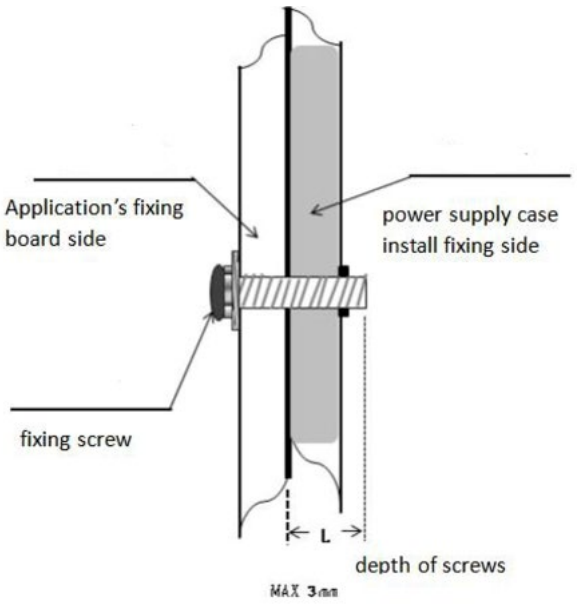
Dimensions and Recommended Layout



Other Information

PIN number	PIN Function	PIN Number	PIN Function
L	AC Line	V+	DC Output+
N	AC Neutral	V-	DC Output-
FG	Earth	RC+	Control signal +
S+	Induction signal+	RC-	Control signal -
S-	Induction signal-		

Installation Guide



Warning

1. Use mounting screws by M4*6mm,0.8N·m
2. 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. In order 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