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 90.5%
- 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, FCC, 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	756	100-240	90	0-63	20000
64A-500FKG-15P	15	765	100-240	90	0-51	20000
64A-500FKG-24P	24	792	100-240	91	0-33	18000
64A-500FKG-27P	27	791.1	100-240	91	0-29.3	18000
64A-500FKG-36P	36	792	100-240	91.5	0-22	15000
64A-500FKG-48P	48	796.8	100-240	91.5	0-16.6	8000

Notes:
All parameters NOT specially mentioned at 230VAC, 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	11A	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	10-13.2	12v
	13.5-15.5	15v
	20-26.4	24v
	25-29	27v
	32.4-39.6	36v
	41-56	48v
Ripple & Noise (pk-pk)	150mV	12v, 15v
	240mV	24v, 27v
	300mV	36v, 48v
Default voltage	12-12.2	12v
	15-15.2	15v
	24-24.3	24v
	27-27.3	27v
	36-36.4	36v
	48-48.4	48v
Rise Time	50ms/230VAC	
Turn on Delay Time	2000ms/230VAC	
Hold up Time	16ms/230VAC	
Line Regulation	±0.5%	All
Load Regulation	±2.0%	12v, 15v
	±1.0%	All

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/ Criterion		
CE	Electrostatic Discharge (ESD)	EN 61000-4-2	Air 8 kV / contact 6 kV	Criteria A
	Radio-Frequency Electromagnetic Field Susceptibility Test-RS	EN 61000-4-3	80MHz–1GHz 10V/m	Criteria A
	Electrical Fast Transient / Burst-EFT	EN 61000-4-4	±2KV, (5 or 100) kHz	Criteria A
	Surge Immunity Test	EN 61000-4-5	CM±2KV/DM ±1KV	Criteria A
	Conducted Radio Frequency Disturbances Test-CS	EN 61000-4-6	10Vr.m. s;	Criteria A

Notes：
The power supply is considered a component which will be installed into 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

Overload	105% -150%
	Hiccup mode recovers automatically after the fault condition is removed
Overvoltage	110～140%
	Constant voltage recovers automatically after the fault condition is removed.
Over Temperature	Shut down output voltage, recovers automatically after temperature decreases
Short circuit	Power protection after a short circuit at the output end, which can automatically restore output after eliminating the short circuit

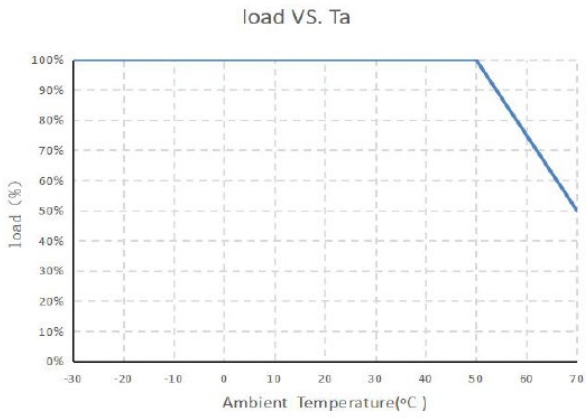
Environmental Characteristics

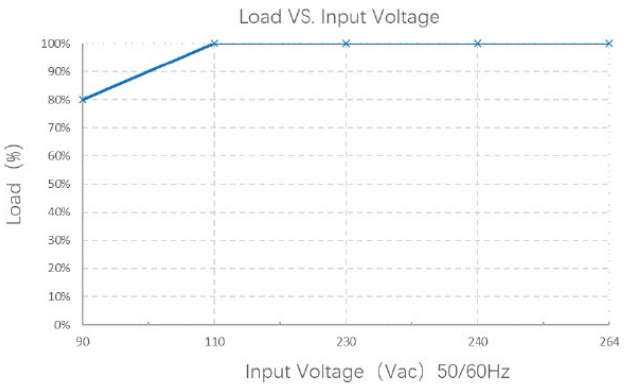
Working Temp & Humidity	-30~70℃ 20%~95%RH no condensing （refer to derating curve)		
Storage Temp & Humidity	-40℃~80℃ 10%~95%RH no condensing		
Temperature coefficient	±0.03% (0-50℃)		
Altitude	5000m - The ambient temperature of derating of 0.5℃/100m for operating altitudes higher than 2000m		
Dielectric test	Input-Output	3000VAC	10mA@60s
	Input- Case	1500VAC	10mA@60s
	Output-Case	500VAC	10mA@60s
Ground Resistances	0.1Ω		
Insulation Resistance	10MΩ	500VDC, 60s	

Other Information

MTBF	100Khrs, 230VAC,25℃,80% Load (MIL-HDBK-217F)
SIZE	L230.0×W127.0×H40.5
Weight	800g
Output ON/OFF control	RC+ /RC-; 0-1v or short circuit or open circuit power on; 4-10v power off (optional)
Cooling method	Forced air cooling by built-in fan

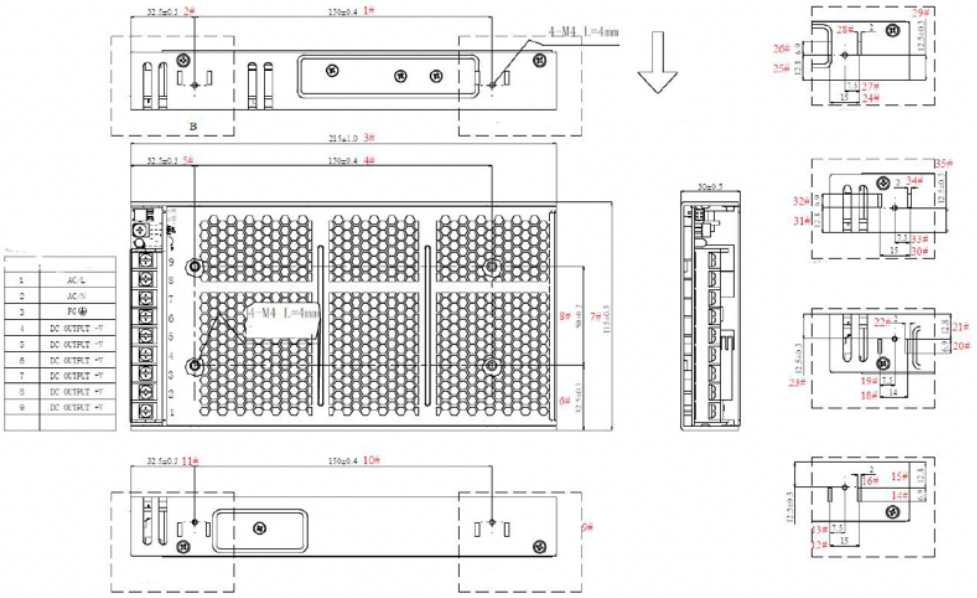
Derating Curve





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

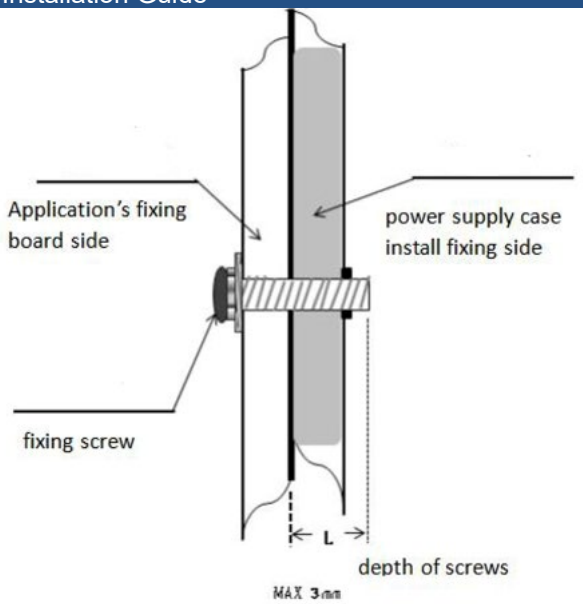
Dimensions and Recommended Layout



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+	signal+
		RC-	signal-

Installation Guide



Warning

1. Use mounting screws by M4*6mm,0.8N·m
2. Max depth of screws into the 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 using the power supply.

2. Before powering on the 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 powering on, please use a multimeter 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 powering on.

4. Do not exceed the nominal value of the power supply when using it, 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 it.

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