志涛集团
ZHITAO GROUP

Indutrial power supply

Product specification

LRS-600

- product category: 600W Single output switching power supply
- version No：ZTAO3.0
- release date：May 1st, 2025

Description

The input range for AC is switched by a switch. The no-load power consumption is <3.8W. It has a small 1U low-profile design. Protection types include short circuit, overload, overcurrent, etc. Fan cooling. LED indicator light for power-on.100% full-load burn-in testing. 3-year warranty.

Model encoding

LRS - 600 xx

- xx: Output voltage
- 600: Rated wattage
- LRS: Series name

Features

- input range for AC is switchedbya switch
- The no-load power consumption is <3.8W
- no-load
- power consumption is <3.8W
- Protectio include short circuit, overload, overVoltage, etc.
- Fan cooling
- LED indicator light for power-on100%
- 100% full-load burn-in testing
- 3-year warranty.

CE FC RoHS ISO ISO9001

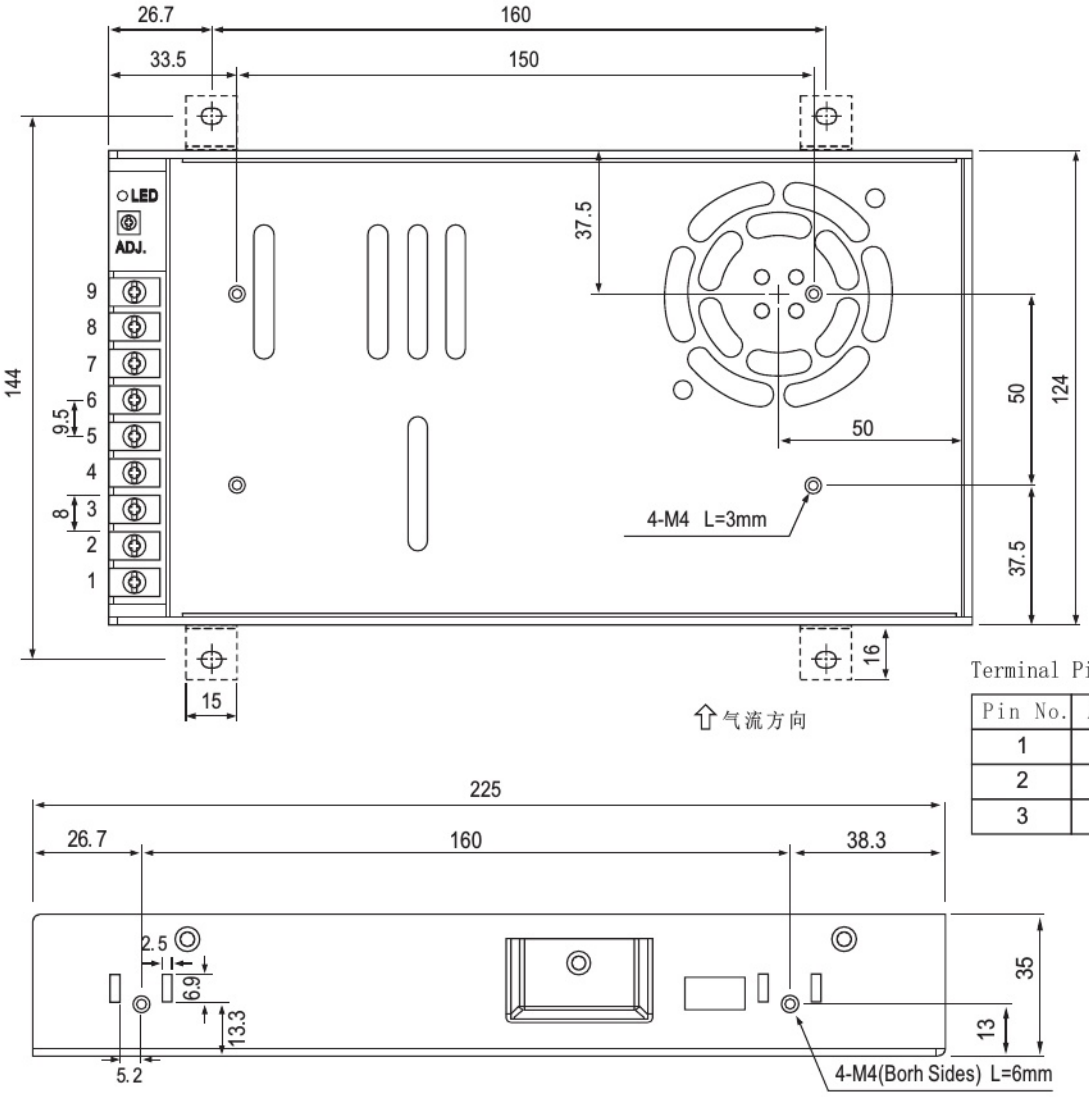
Application

Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)

Electrical Specifications

	Model number	LRS-600-12	LRS-600-15	LRS-600-24	LRS-600-36	LRS-600-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current	50A	40A	25A	16.6A	12.5 A
	Current range	0~50A	0~40A	0~25A	0 to 16.6 A	0 to 12.5 A
	Rated power	600W	600W	600W	600W	600W
	Ripple & Noise (Max)	200mVp-p	200mVp-p	240mVp-p	360mVp-p	360mVp-p
	Voltage adj. range	10.2 to 13.8volts	13.5 to 16.5 volts	21.6 to 26.4 volts	32.4 to 39.6 volts	43.2 to 52.8 volts
	Voltage accuracy	±1%	±1%	±1%	±1%	±1%
	Linear regulation rate	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Startup & Rise Time	1300ms,30ms/230VAC	1300 ms, 30 ms / 115 VAC (under full load)			
	Retention time	30mS/230VAC	16 mS / 115 VAC (full load)			
Input	Input voltage	95~132 VAC/185~264 VAC selected by switch	260~370VDC(switc on 230VAC)			
	Input frequency	50~60HZ				
	efficiency	87%	87%	89%	90%	90%
	Input current	10A/115VAC	6A/230VAC			
	Leakage current	< 1 mA / 240 VAC				
protection	Overload protection	105% to 125% of the rated power Protection mode: When Vo drops to the under-voltage point, it can automatically recover after the abnormal condition is removed.				
	Overvoltage protection	13.8 to 16.2 volts	18.7 to 21.7 volts	28.8 to 33.6 volts	41.4 to 48.6 volts	55.2 to 64.8 volts
	Over-temperature	Protection mode: Turn off output voltage, restart to restore. Turn off the output voltage and restart to restore.				
Function : Fan on/off control (Typ.)		RTH3: Fan on when ⩾ 50℃, Fan off when ⩽ 40℃				
environment	Working temperature	-20℃ to +65℃				
	Working humidity	No condensation at 20% to 90% RH				
Safety	Storage temp/ humidity	-40~+80℃, 10 to 95% RH, no condensation				
	Anti-vibration	10 - 500 Hz, 5G for 10 minutes per cycle, 60 minutes each for X, Y, and Z.				
	Pressure resistance	Input to output: 1.5 kVAC; Input to ground: 1.5 kVAC; Output to ground: 500 VAC				
	Insulation impedance	Input to output, input to ground, output to ground: 100 Ohms / 500VDC / 25℃ / 70%RH				
Others	Product dimensions	225*124*41mm (L*W*H)				
	Packaging	0.9 kilograms per piece				
Note		All parameters, unless otherwise specified, are measured values obtained under the conditions of 230VAC input voltage, rated load and 25℃. The ripple and noise voltages were measured at the end of a 12-inch twisted pair wire with 0.1μF and 47μF capacitors attached, using a 20 MHz bandwidth oscilloscope. The measurements were taken at a 20 MHz bandwidth. 3. Accuracy: It includes setting error, linearity adjustment rate and load adjustment rate. 4. Linear regulation measurement method: Test from low voltage to high voltage under rated load. 5. Load regulation measurement method: from 0% to 100% of rated load The startup time is measured under cold start conditions. Frequent and rapid on/off cycles may increase the startup time. 7. When operating at an altitude higher than 2000 meters (6500 ft): The operating environment temperature needs to be reduced by 5℃ for every 1000 meters.				

Overall dimensions and installation size (mm)



Terminal Pin No. Assignment

Pin No.	Assignment	Pin No	Assignment
1	AC/L	4~6	DCOUTPUT-V
2	AC/N	7~9	DCOUTPUT+V
3	FG ⏚		

Pin	Function	
L	AC LINE	Screw: M4*9. 5 Torque: 22Kgf·cm (2.2 N·m) 2N. m)
N	AC NETURAL	
⏚	EARTH	
-Vo	DC output -	Screw: M4*9.5 Torque: 22Kgf·cm (2.2N·m)
-Vo	DC output -	
-Vo	DC output -	
+Vo	DC output +	
+Vo	DC output +	
+Vo	DC output +	

8-M4 customer system installation holes

Installation screw: M4

Installation torque: 8Kgf·cm (0.8N·m)

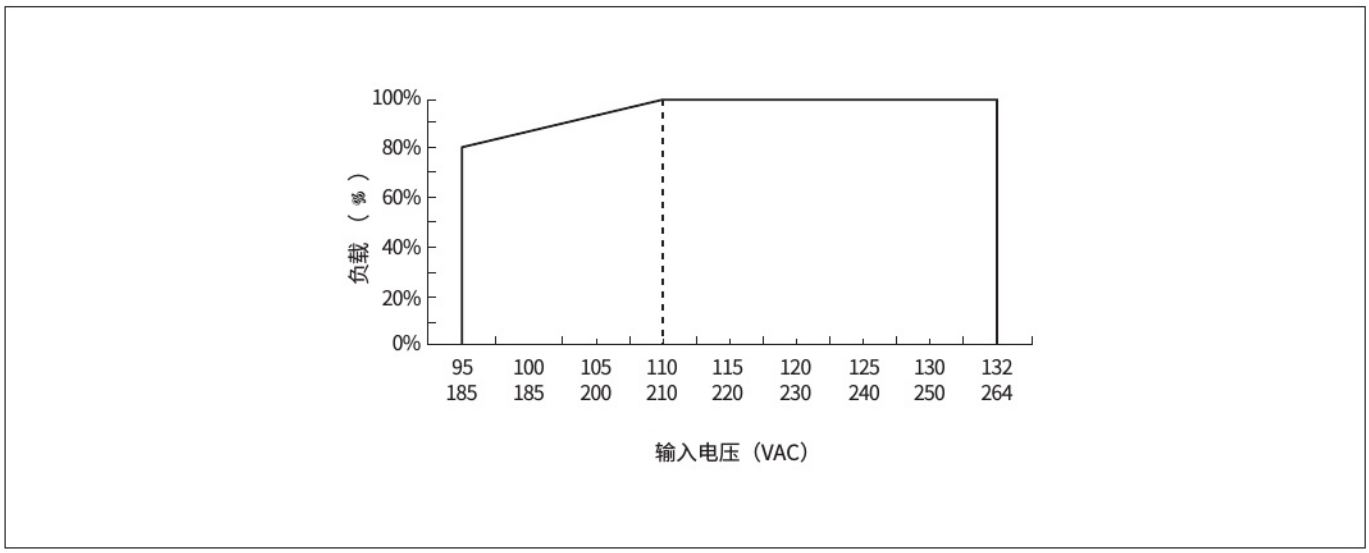
The screw should not extend into the casing by more than 3mm.

Note:

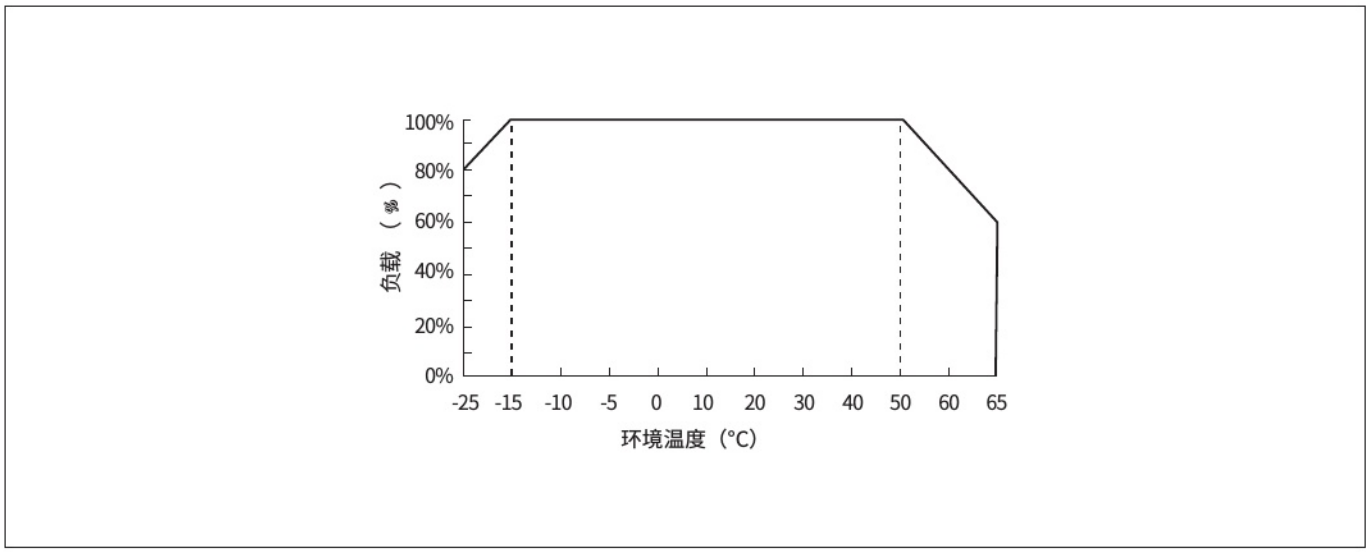
Unit: mm [inch]; Unmarked tolerance is ±0.5 [±0.020]

Characteristic curve

Input voltage VS Output load



Ambient Temperature vs Output Load



Note:

If you need to know more detailed test data when applying, please contact our technical support to obtain the application notes for the corresponding products.

2. This product is suitable for use in a natural air convection environment. If it is to be used in a closed environment, please contact our technical support staff.