

Features

- Class I power supply
- Rated input voltage: 100-120Vac/200-240Vac ~ 50/60Hz
- Compliant with EMC EN55035/55032 Class A
- The maximum operating temperature can reach 70°C
- Over voltage level III
- Low no-load power consumption, no-load power consumption $\leq 0.75W$
- Short-Circuit, Overvoltage and Overload Protection
- Designed for Service Life, 3-Year Warranty



Application

Industrial control, Industrial equipment, Power systems, Rail transit, Lighting systems



Model List

Model No.	Rated input voltage	Max output power	Output voltage	Output current max.	Efficiency typ.	Ripple current	Adjustable voltage
DL-300W-V12-EXL	100-120Vac/200-240Vac 50/60Hz	300W	12Vdc	0-25A	91%	150mV	$\pm 10\%$
DL-300W-V15-EXL	100-120Vac/200-240Vac 50/60Hz	300W	15Vdc	0-20A	91%	150mV	$\pm 10\%$
DL-300W-V24-EXL	100-120Vac/200-240Vac 50/60Hz	300W	24Vdc	0-12.5A	92%	150mV	$\pm 10\%$
DL-300W-V36-EXL	100-120Vac/200-240Vac 50/60Hz	300W	36Vdc	0-8.34A	93%	250mV	$\pm 10\%$
DL-300W-V48-EXL	100-120Vac/200-240Vac 50/60Hz	300W	48Vdc	0-6.25A	93%	250mV	$\pm 10\%$

NOTE:

- 1、The above parameter test conditions are as follows: $T_a=25^{\circ}C$, 230Vac input, and the test results are obtained after full-load operation for 30 minutes.
- 2、Ripple and noise measurement method: Use a 12" twisted-pair cable, with $0.1\mu F$ and $47\mu F$ capacitors connected in parallel at the terminal, and conduct measurements under a 20MHz bandwidth.

Input Characteristics

Parameter	MIN	TYP	MAX	NOTE
Rated input voltage	100-120Vac 250Vdc	230Vac	200-240Vac 370Vdc	250-370Vdc (Switch to 230VAC)
Input voltage range	90Vac/132Vdc	/	176-264Vdc	90-132Vac/176-264Vac (Switch to select and switch)
Input frequency	47Hz	50/60Hz	63Hz	-
Power factor	-	>0.5	-	-
Total harmonic distortion	-	<10%	-	-
Input current/115Vac	-	-	6A	100% load, 115Vac input
Input current/230Vac	-	-	2.5A	100% load, 230Vac input
Input surge current/115Vac	-	-	30A	115Vac input, cold start (25°C)
Input surge current/230Vac	-	-	44A	230Vac input, cold start (25°C)
Leakage current	-	-	0.75mA	RMS Max.

Output Characteristics

Parameter	MIN	TYP	MAX	NOTE
Output accuracy	-	±2%	-	0-100% load
Linear adjustment rate	-	±1%	-	Rated load
Load regulation rate	-	±1%	-	Input voltage: 230Vac
Setup/Rise Time	-	-	500ms	@230Vac
Hold time	16ms	-	-	@230Vac

Protection

Included functions	Function Description
Output overload protection	1.4-1.8 times the rated output power; hiccup restart mode, which enables automatic recovery after the abnormal load condition is removed.
Output short-circuit protection	Yes; Hiccup Mode, which can automatically recover after the abnormal condition is removed
Output over current protection	Yes; the output voltage will shut down when it exceeds 1.08-1.2 times the operating voltage.

Environmental Reliability

Environmental category	参数
Rated operating temperature	-40 ~ +50°C@100-120Vac/200-240Vac 50/60Hz
Maximum operating temperature range	-40 to 70°C When the operating temperature exceeds 50°C, for every 1°C increase in temperature, the load power should be reduced by 3.5%@230Vac
Working humidity	20-90% RH, no condensation
Storage temperature and humidity	-40~+80°C, 10 ~ 90% RH
Vibration-resistant	10 to 500Hz, 5G 12 minutes per cycle, 72 minutes for each of the X, Y, and Z axes
MTBF	230Khrs min. MIL-HDBK-217F (Ta=25°C)
Lifespan	30,000 hours, 230Vac, 100% load, @Ta≤50°C (derating by 20% for every 10°C increase)

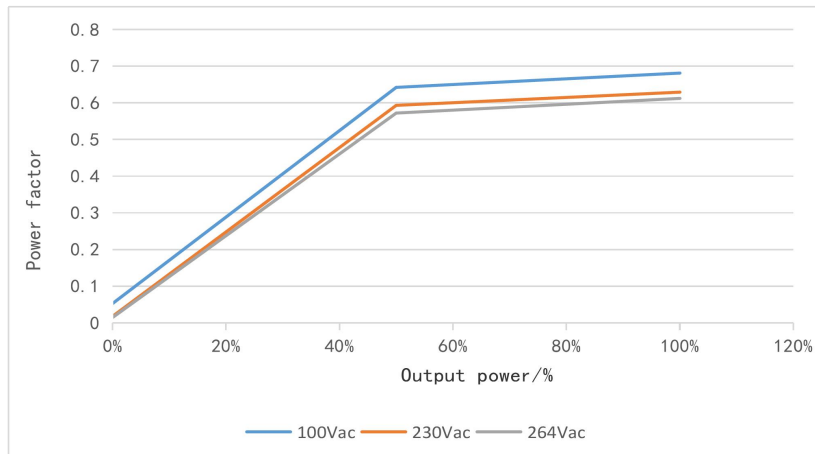
Safety and Electromagnetic Compatibility

Safety regulations	Standard
Safety	Compliance to UL62368-1, TUV BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1/-2-16,GB 4943.1
EMC	EMI BS EN/EN55032, EN55035, Class A
	ESD BS EN/EN 61000-4-2
	EFT/Burst BS EN/EN 61000-4-4
Surge protection	Differential mode L-N \pm 2KV (2 Ω), common mode L, N-G \pm 4 KV (12 Ω) Harmonic Current Refer to IEC61000-4-5 2014
Withstand voltage	I/P-O/P:4KVac I/P-PE :2KVac O/P-PE: 1.25KVac
Insulation resistance	I/P-PE:100M Ω / 500VDC; I/P-O/P:100M Ω / 500Vdc / 25°C/ 70% RH

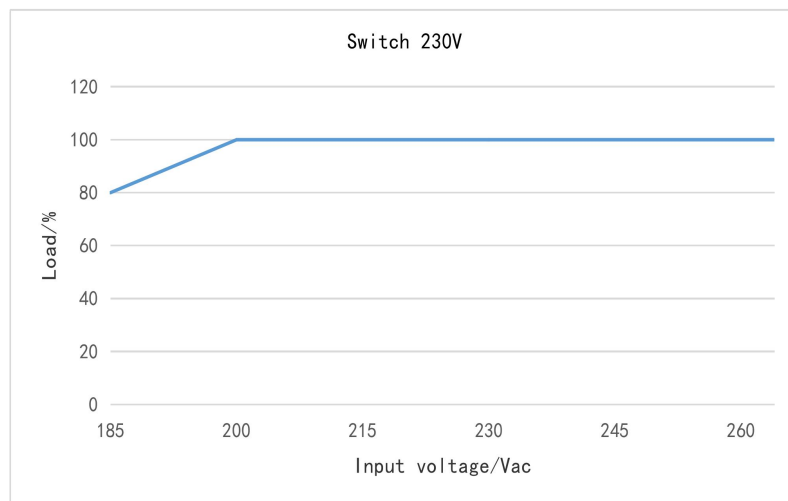
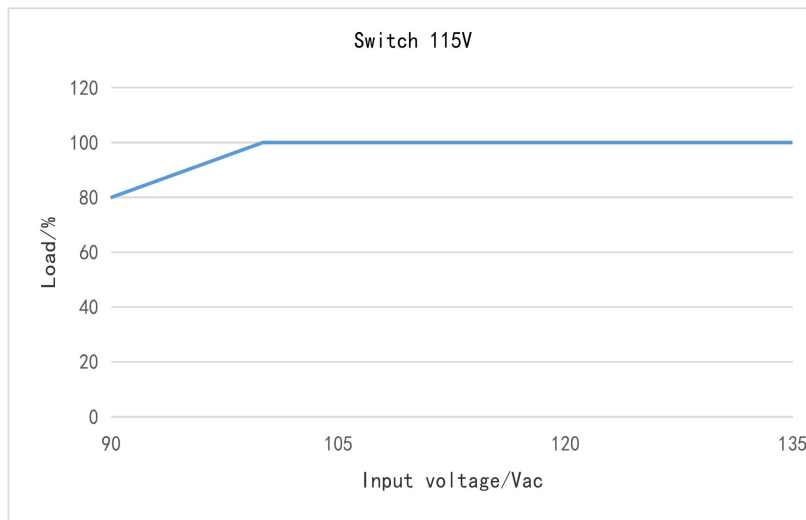
Note: As a component used in conjunction with terminal equipment, the power supply's EMC is affected by the entire set of devices. Terminal equipment manufacturers need to reconfirm the EMC of the entire set of devices.

Parametric curves

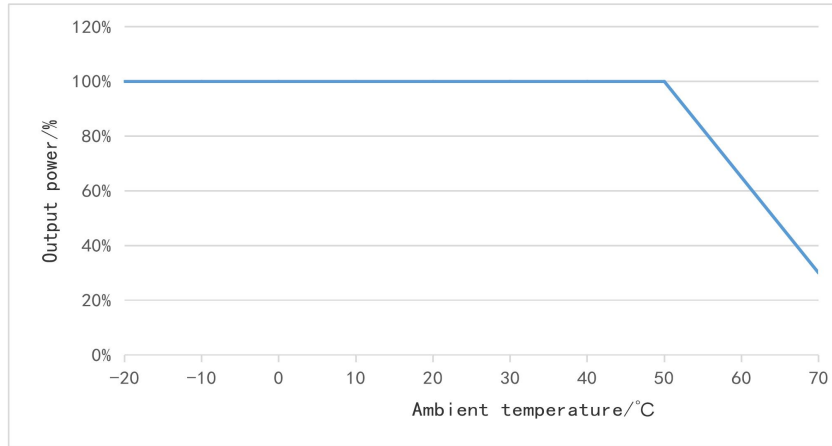
Factor/Output power



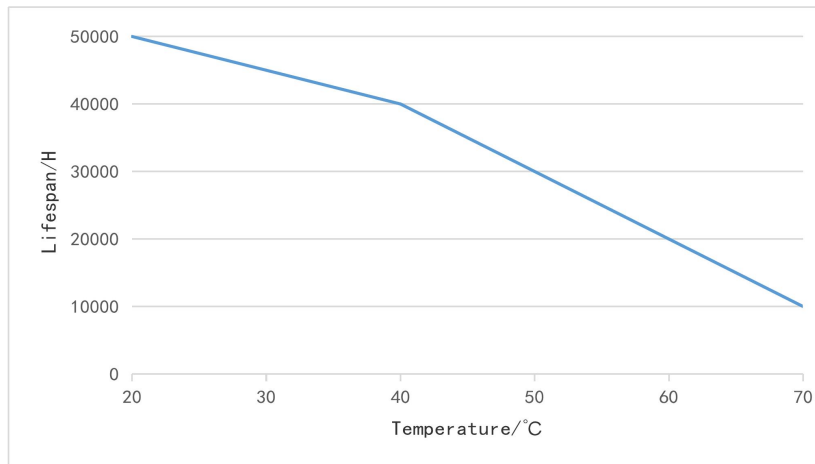
Power/ Input voltage



Power/Ambient temperature

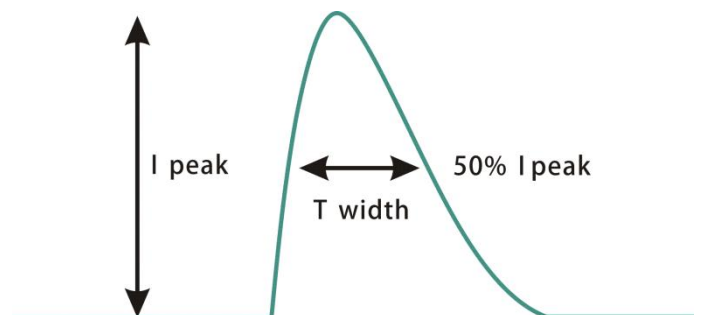


Lifespan/Ambient temperature



Inrush Current

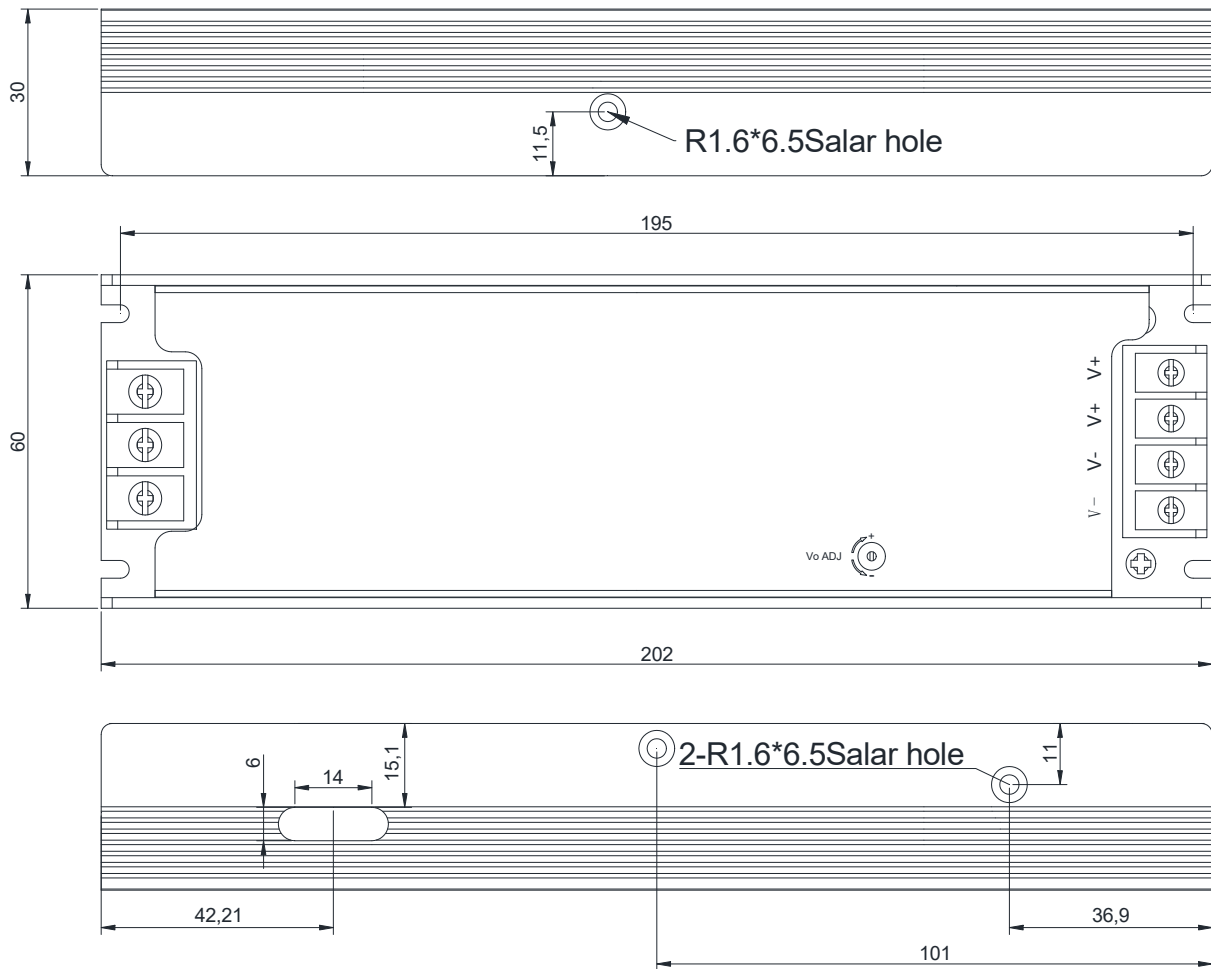
Input voltage	Peak current	T (@50% peak current)
100Vac	25A	720us
230Vac	44A	600us
264Vac	60A	430us



Size & Packaging

Weight

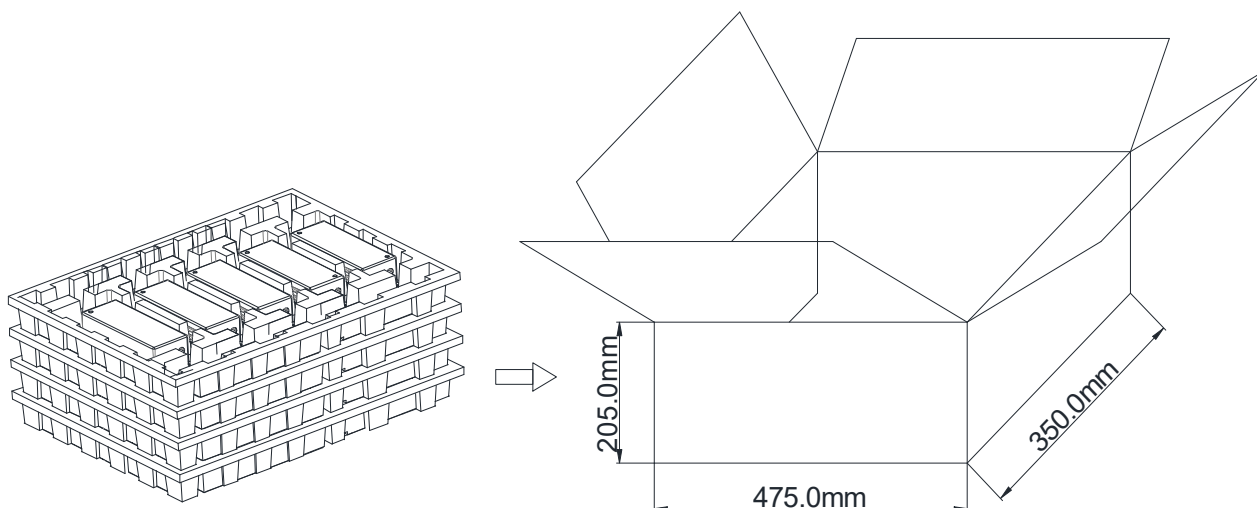
Size	L202mm*W60mm*H30mm
Weight	550 g



Packaging

Packaging (mm)

L435mm*W350mm*H205mm



NOTE:

1. Each box has 4 layers, with 5 pieces on each layer, totaling 20 pieces per box.
2. According to the certificates obtained by LED DRIVER, LED DRIVER with English labels are sold in Europe, America and India.
3. LED driver power supplies with Chinese labels are only for the Chinese market.