

Features

- Class I Power Supply
- Rated Input Voltage: 100-240V AC
- Complies with the EMC EN 55035/EN 55032 Class B conducted emission standards
- The maximum operating temperature can reach 70°C
- Overvoltage Category III
- Low no-load power consumption, with no-load power consumption < 0.5W
- Short-Circuit, Overvoltage and Overload Protection
- Designed for Service Life, 3-Year Warranty.



Applications

Industrial control system, industrial equipment, power system, rail transportation, lighting system

Model list

Model No.	Input Voltage	Power max.	Output Voltage	Output Current max.	Efficiency typ.	Ripple Voltage	Voltage ADJ.
DL-100W-V12-EXC	100-240Vac	100W	12Vdc	8.34A	90%	240mV	±10%
DL-100W-V15-EXC	100-240Vac	100W	15Vdc	6.67A	90%	240mV	±10%
DL-100W-V24-EXC	100-240Vac	100W	24Vdc	4.17A	91%	240mV	±10%
DL-100W-V36-EXC	100-240Vac	100W	36Vdc	2.78A	92%	360mV	±10%
DL-100W-V48-EXC	100-240Vac	100W	48Vdc	2.08A	92%	360mV	±10%

Remark:

1. The above parameters are tested under the following conditions: Ta = 25°C, 230Vac input, and after 30 minutes of full load operation.
2. Ripple and noise measurement method: use a 12" twisted-pair wire terminated with 0.1μF & 47μF parallel capacitor, and measured at 20MHz bandwidth.

Input characteristics

Parameter	Min.	Typ.	Max.	Remark
Rated input voltage	100Vac/140Vdc	230Vac	240Vac/330Vdc	-
Input voltage range	90Vac	-	264Vac	-
Rated frequency	47Hz	50/60Hz	63Hz	-
Power factor	-	>0.5	-	100% load, 230Vac
T.H.D.	-	N/A	-	-
Input current/100Vac	-	-	1.7A	100% load, 100Vac
Inrush current/230Vac	-	-	70A	230Vac, cold start (25°C)
Leakage current	-	-	0.75mA	RMS Max.

Output characteristics

Parameter	Min.	Typ.	Max.	Remark
Output tolerance	-	±1%	-	0-100% load
Line regulation	-	±1%	-	Rated load
Load regulation	-	±1%	-	@230Vac
Setup/Rise Time	-	-	500ms/30ms	@230Vac
Hold up time	16ms	-	-	100Vac, rated load

Protection

Function	Description
Output Overload Protection	1.4-1.8 times the rated output power; hiccup restart mode, which can automatically recover after the abnormal load condition is removed
Output Short-Circuit Protection	Hiccup Mode, which can automatically recover after the abnormal condition is removed
Output Overvoltage Protection	Output voltage > working voltage 1.08-1.2times hiccup

Environmental

Environmental Categories	Parameter
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Rated working temperature	-40 ~ +40°C@100-120Vac/-40 ~ +50°C200-240Vac 50/60Hz
Max. operating temperature range	-40 ~ 70°C; When the operating temperature exceeds 50°C, the power will be reduced by 2% for per 1°C increase in temperature. please refer to the derating curve for details.
Working humidity	20 ~ 90% RH, non-condensing
Storage temperature, humidity	-30~+85°C, 10 ~ 95% RH non-condensing
Vibration	10 ~ 500Hz, 5G 12min/cycle, 72 min, each along X, Y, Z axes
MTBF	230Khrs min. MIL-HDBK-217F (Ta=25°C)
Lifetime	50000 hours@230Vac, ambient temperature 50°C, please refer to "Lifetime/ Ambient temperature curve"

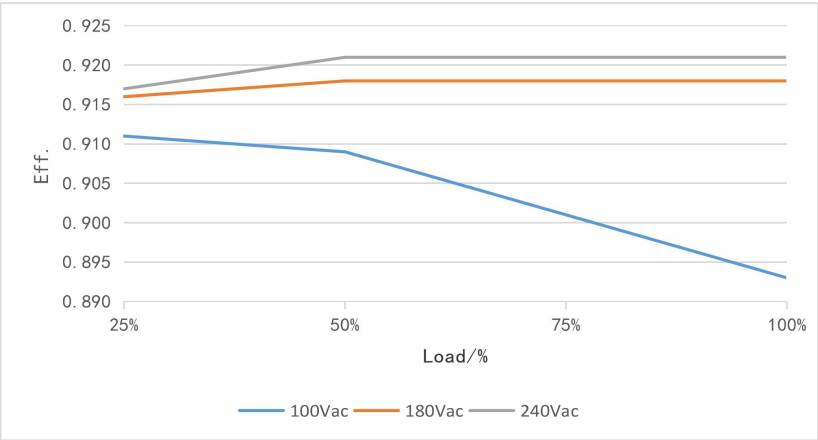
Safety and EMC

Safety categories	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 B	
	Harmonic Current	BS EN/EN 61000-3-2	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		

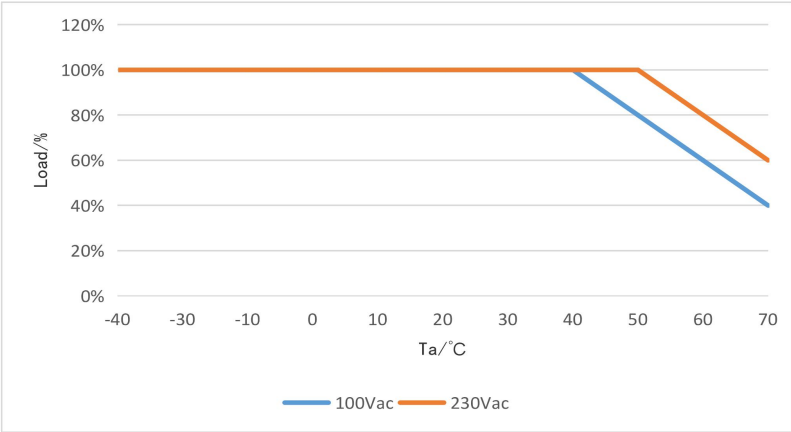
Note: The power supply is considered a component which will be installed into the terminal equipment. The EMC is affected by the entire equipment. The terminal equipment must be reconfirmed to meet the EMC directives.

Parametric curves

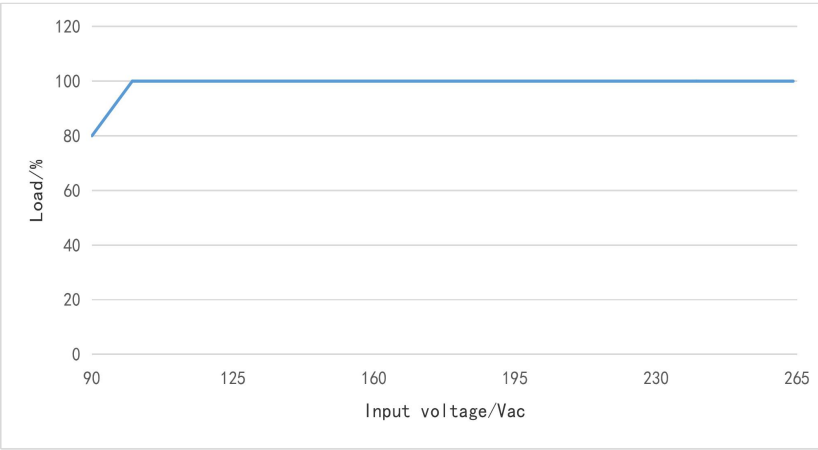
Power/ Efficiency curve



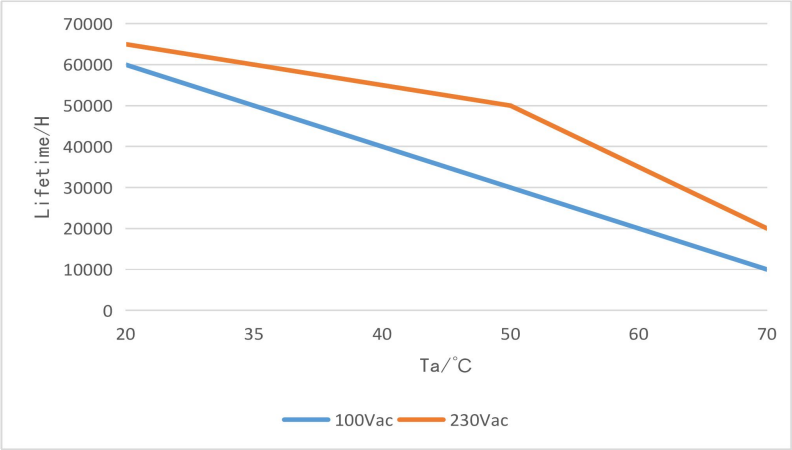
Power/ Ambient temperature



Power/ Input voltage

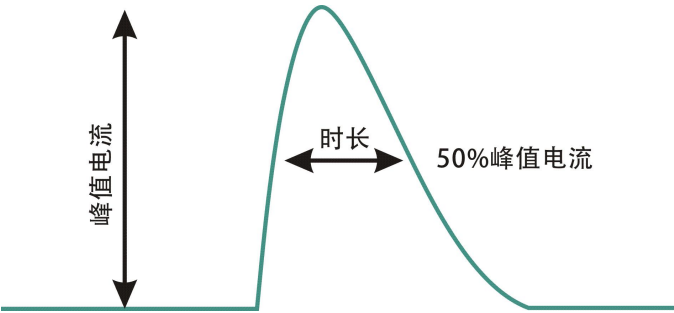


Lifetime/ Ambient temperature



Inrush current

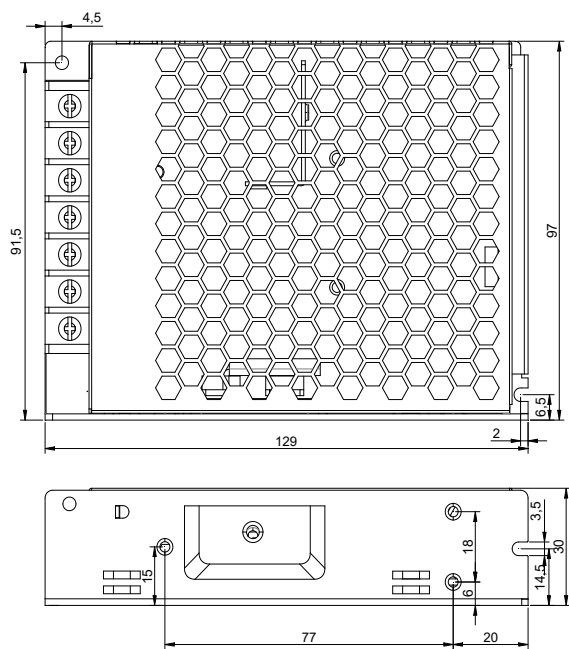
Input voltage	Peak current	T (@50% peak current)
100Vac	30A	180us
230Vac	70A	275us
240Vac	82A	230us



Mechanical specification

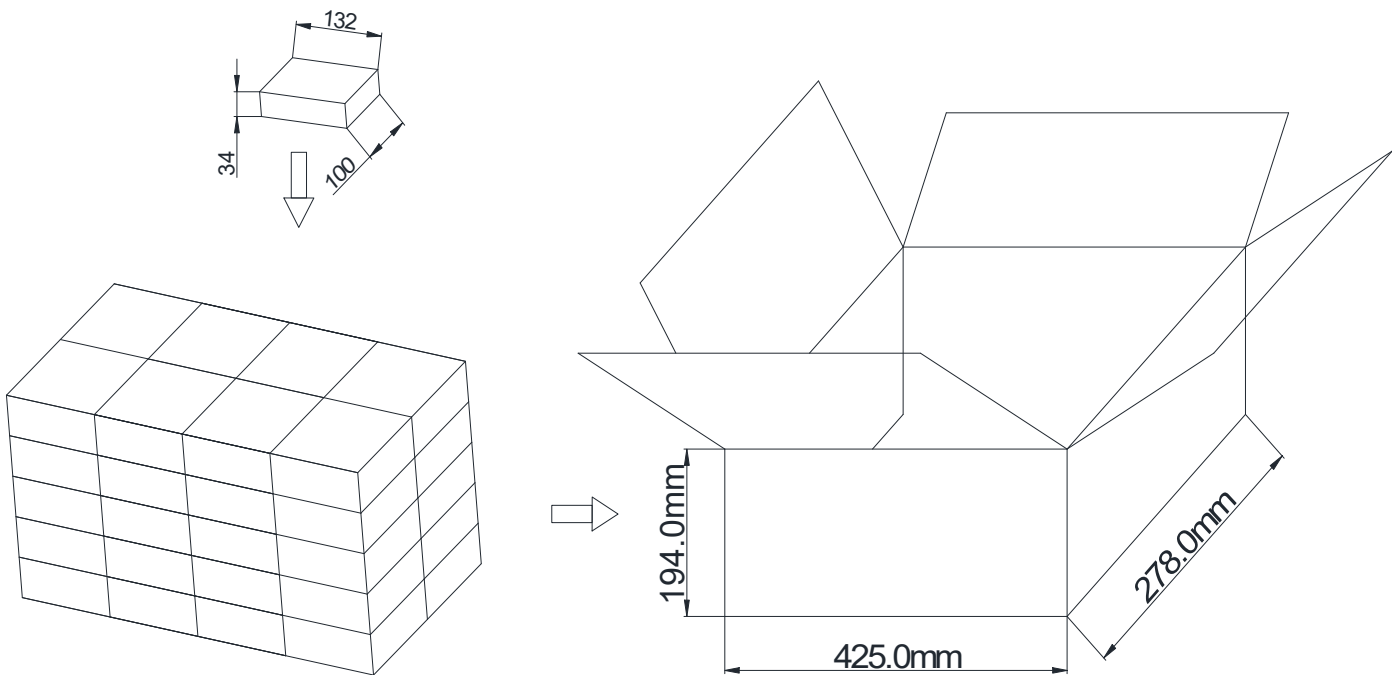
Weight

Size	L129mm*W97mm*H30mm
Weight	310g



Packaging

packaging (mm)	L425mm*W278mm*H194mm
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NOTE:

- 1. Each box has 5 layers, with 8 pieces on each layer, totaling 40 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.