

DL-30W-EDC

Features

- Class II power supply
- Rated input voltage: 100-240Vac
- Meets EMC standards EN55035/55032 Class B for conducted and radiated emissions.
- The maximum operating temperature can reach 70°C
- Overvoltage level III
- Low no-load power consumption, no-load power consumption $\leq 0.5W$
- Short circuit, Overpressure, Overload protection
- Suitable for installation on TS-35/15/7.5 standard DIN rail
- Lifespan design, 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 voltage	Adjustable voltage
DL-30W-V12-EDC	100-240Vac	30W	12Vdc	2.5A	86%	150mV	±10%
DL-30W-V15-EDC	100-240Vac	30W	15Vdc	2A	86%	150mV	±10%
DL-30W-V24-EDC	100-240Vac	30W	24Vdc	1.25A	87%	150mV	±10%
DL-30W-V36-EDC	100-240Vac	30W	36Vdc	0.84A	88%	250mV	±10%
DL-30W-V48-EDC	100-240Vac	30W	48Vdc	0.63A	88%	250mV	±10%

NOTE:

- 1、The above parameter test conditions are as follows: Ta=25°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 0.1μF and 47μF capacitors connected in parallel at the terminal, and conduct measurements under a 20MHz bandwidth.

Input Characteristics

Parameter	MIN	TYP	MAX	NOTE
Rated input voltage	100Vac	230Vac	240Vac	-
Input voltage range	90Vac/120Vdc	/	264Vac/370Vdc	
Input frequency	47Hz	50/30Hz	63Hz	-
Power factor	-	N/A	-	-
Total harmonic distortion	-	N/A	-	-
Input current/100Vac	-	0.6A	-	100% load, 100Vac input
Input current/230Vac	-	0.4A	-	100% load, 230Vac input
Input surge current/115Vac	-	-	35A	115Vac input, cold start (25°C)
Input surge current/230Vac	-	-	60A	230Vac input, cold start (25°C)
Leakage current	-	-	0.25mA	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
Start-up time	-	-	1000ms/30ms	@230V input voltage
Hold time	16ms	-	-	100Vac input, rated load capacity

Protection

Included functions	Function Description
Output overload protection	Overload 1.3 to 1.8 times the rated power for shutdown protection. It can automatically recover after the abnormal load conditions are removed
Output short-circuit protection	Yes; Hiccup mode, which can automatically recover after abnormal conditions are removed
Over-temperature protection	/
Output overvoltage protection	Yes; in the event of hiccups or when the output is stuck at the maximum voltage state, the product will not be damaged. Once the fault is cleared, the power supply will resume normal operation.

Environmental Reliability

Environmental category	参数
Rated operating temperature	-40 ~ +50°C@100-240Vac
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 2%@230Vac
Working humidity	20-95% RH, no condensation
Storage temperature and humidity	-40~+80°C, 10 ~ 95% 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	50,000 hours @230Vac, ambient temperature 50°C. For details, please refer to the life curve

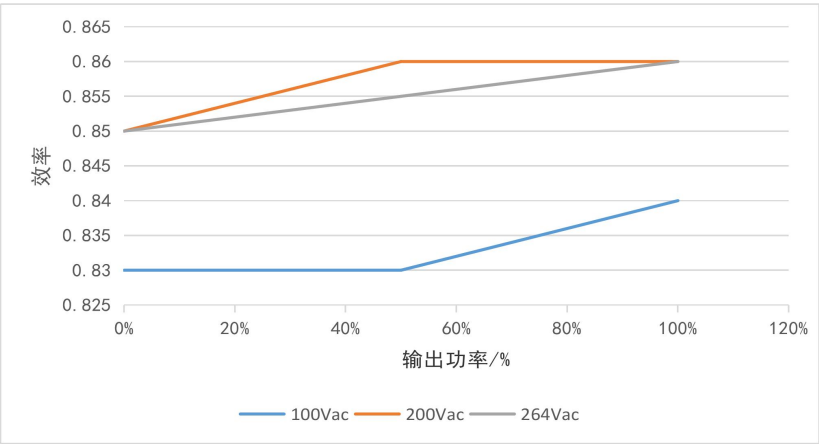
Safety and Electromagnetic Compatibility

Safety regulations category	Standard
Safety	GB4943.1、EN62368-1、EN61558-1-2、IEC62368-1、IEC61558-1-2、AS/NZS62368-1、AS62368-1、UL62368;
EMC Electromagnetic compatibility	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
Lightning protection grade	Differential mode L-N ± 2 KV (2 Ω) , Harmonic Current refer to IEC61000-4-5 2014
Pressure resistance	I/P-O/P:3.75KVac
Insulation impedance	I/P-O/P:100M Ω / 500VDC / 25°C/ 70% RH

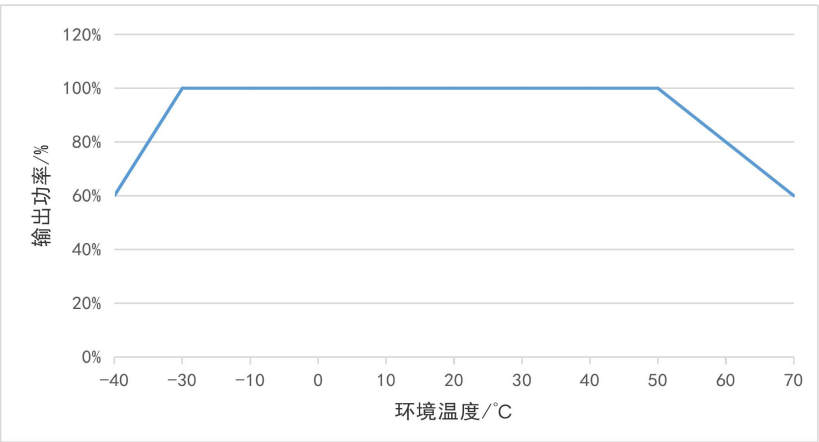
Note: As a component used in conjunction with terminal equipment, the power supply's EMC is affected by the entire set of devices. Terminal equipment manufacturers need to reconfirm the EMC of the entire set of devices.

Curve Graph

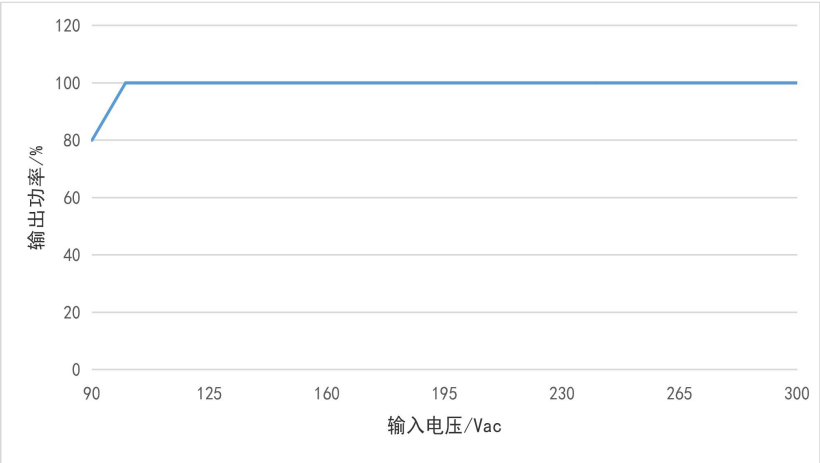
Input/Efficiency curve



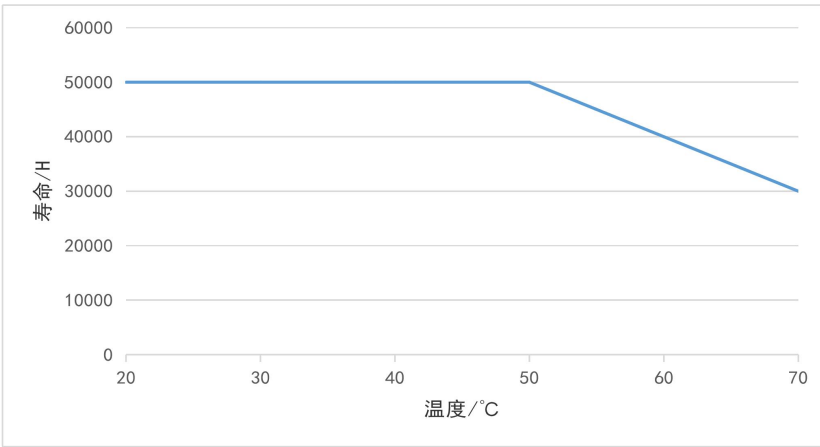
Power/Ambient temperature



Power/Input voltage

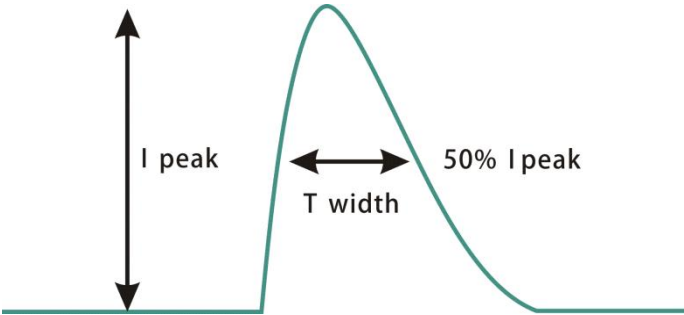


Lifespan/Ambient temperature



Inrush current

Input voltage	Peak current	T (@50% peak current)
100Vac	23A	160us
230Vac	50A	166us
264Vac	56A	206us

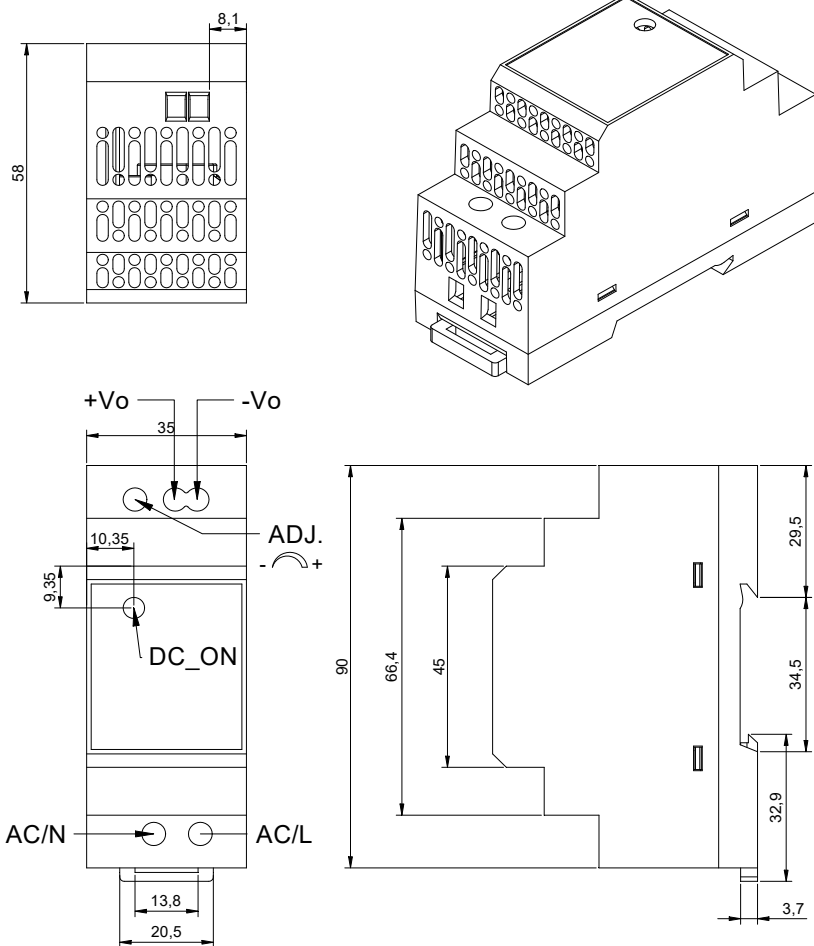


DL-30W-EDC

Size & Packaging

Weight

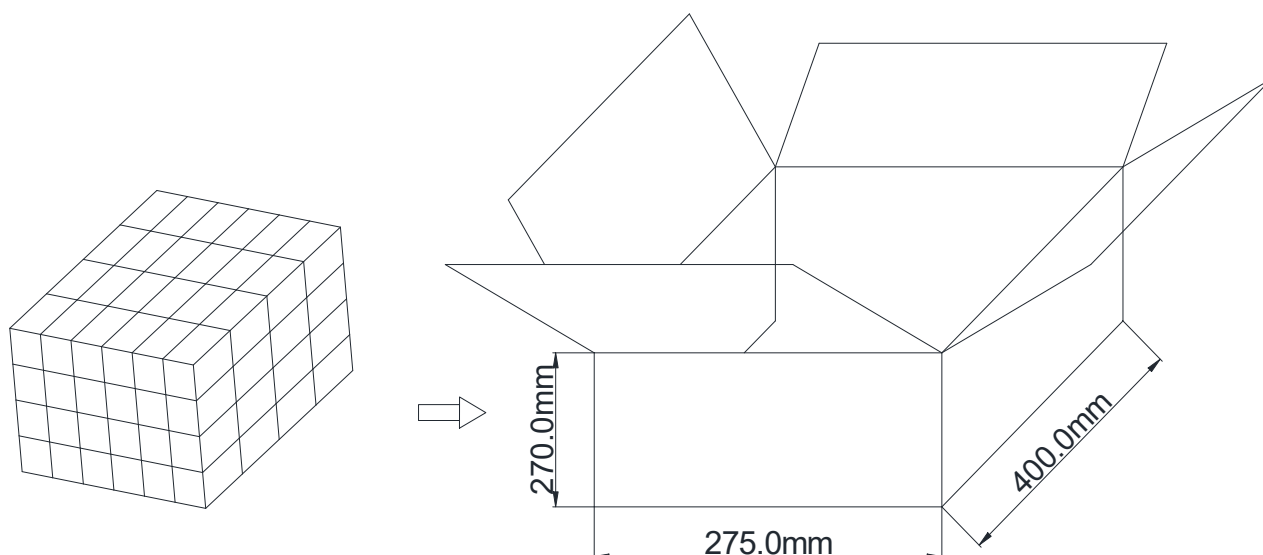
尺寸	L90mm*W35mm*H58mm
Weight	63.8g



Note:
Wiring range:24-12 AWG

Packaging

Packaging (mm)	L400*W275*H270
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NOTE:

1. Each box has 4 layers, with 24 pieces on each layer, totaling 96 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.