

SPECIFICATIONS

Product Features:

- ◆ Input Voltage Range:100~277VAC;
- ◆ High Power Factor;
- ◆ Efficiency Up to 88%;
- ◆ Meet UL8750 CB CE;
- ◆ International Protection:IP66;
- ◆ Dimming With 0-10V/PWM/VR;
- ◆ For Outdoor LED lights;
- ◆ 5 Years Warranty;



SELV CE CB IP66



Model List:

Model	Certification	Output Voltage	Output Current(Max)	Output Power(Max)	Efficiency
DF120W-40C3000□	UL/CUL/CB/CE/SAA/FCC	28-40V	2000mA	80W	88%

DFxxxW-40Cyyyyz

XXX are 3 digits ranging from 090 to 120, which indicates output power in Wattage; For example, 120 represent output wattage 120W;

YYYY are 4 digits from 50 to 3000, which indicates output current in mA. For example, 3000 represents output current 3000mA;

Z maybe A or B, where A indicates no dimming function, B indicates dimming function.

Revision History:

Change Date	Rev:	Before Change	After Change
2017/06/03	1.0	/	Datasheets Release
2017/07/14	2.0	-30-70°C	-40-60°C
2017/12/09	2.1		Add modulation and output frequency

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DF120W Series LED Driver

Input: 100-277VAC High Power Factor High efficiency Low THD IP66 UL CB CE

Electrical Specifications:

1. Input Specifications

Parameter	Notes	Min.	Typ.	Max.	Unit
Input Voltage Range		90		305	Vac
Input Frequency Range		47		63	HZ
Input AC Current	100%Load at 115V Input			1.5	A
Inrush Current	100%Load at 230V Input Cold start			30	A
Power Factor	70%-100%Load at100-277V Input	0.9			
THD	70%-100%Load at100-277V Input			20%	

2. Output Specifications

Parameter	Notes	Min.	Typ.	Max.	Unit
Output Voltage	Load at 100-277V Input	70%		100%	
	No-load at 100-277V Input			120%	
Line Regulation	70%-100%Load at100-277V Input	-1%		+1%	
Load Regulation	70%-100%Load at100-277V Input	-1%		+1%	
Current deviation	70%-100%Load at100-277V Input	-5%		+5%	
Output frequency	100%Load at120V 60HZ Input		120		HZ
Output current modulation	100%Load at120V 60HZ Input			30%	
Starup Overshoot Current	100%Load at LED load			10%	
Efficiency	100%Load at 230V Input		88%		
Turn-on Delay Time	100%Load at120V Input(Oscilloscope)			1000	ms

3. Dimming Features

Parameter	Notes	Min.	Typ.	Max.	Unit
Dimming Port input current			100		uA
Dimming ratio	At 100-277V Input	10%		100%	
DC dimming mode	Amplitude voltage	0	10	12	V
PWM dimming mode	PWM Amplitude voltage	10		12	V
	PWM Frequency	1		10	KHZ
VR dimming mode	Resistance range	0		100	K Ω

4. Environment Features

Parameter	Notes	Min.	Typ.	Max.	Unit
Operating TEMP. range		-40		60	°C
Storage TEMP. Range		-40		85	°C
International Protection:			IP66		
Case TEMP. (Tc) (2)	When Ta=60°C			85	°C

Notes:

1. Test sample model: DF120W-40C3000B
2. Refer to mechanical

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5. Safety Features

Parameter	Notes	Min.	Typ.	Max.	Unit
Leakage Current	L,N To GND 25°C 70%RH			1	mA
Withstand Voltage	L,N To GND 25°C 70%RH	2200			Vdc
	L,N To OUTPUT 25°C 70%RH	3750			Vac
Grounding Contnuity	GND Line To Case at 25A 25°C 70%RH			100	mΩ
Insulation Resistance	Iput To Output (500Vdc 25°C 70%RH)	10			MΩ

6. Protection Functions

Parameter	Notes	Protection Performance
Over Voltage Protection	When the load voltage exceeds 1.2 times the rated voltage	Auto Restart
Over Load Protection	When the load power exceeds 1.2 times the rated power	Auto Restart
Short Circuit Protection	When the output is shorted	Auto Restart
Over Temperature Protection	When the case temperature is over 110°C	Shutdown

7. Product Specifications

Parameter	Notes	Protection Performance
Size	151*56*37mm	
Weight	800g	
Color	Black	
MTBF	200000Hours	TA=25°C (MIL-HDBK-217F)
Life Time	When Tc<85°C Life Time>50000Hours	

8. Safety Certification

Safety Category	Standard
UL/CUL	UL8750 ,
CE	EN61347-1:2008+A1,EN61347-2-13:2006,EN62493:2010
CB	IEC61347-1:2007+A1,IEC61347-2-13:2006

9. Electromagnetic Compatibility

EMI	Notes
EN55015B	Conducted Emission Test & Radiated Emission Test
EN61000-3-2	Harmonic current emissions
EN61000-3-3	Voltage fluctuations & flicker
FCC Part 15	ANSI C63.4:2009 Class B
EMS	Notes
EN61000-4-2	Electrostatic Discharge (ESD): 8 kV air discharge, 4 kV contact discharge
EN61000-4-3	Radio-Frequency Electromagnetic Field Susceptibility Test-RS
EN61000-4-4	Electrical Fast Transient / Burst-EFT: Level 3, Criteria A
EN61000-4-5	Surge Immunity Test: AC Power Line: Line to Line 4 kV Line to GND 6KV
EN61000-4-6	Conducted Radio Frequency Disturbances Test-CS
EN61000-4-8	Power Frequency Magnetic Field Test
EN61000-4-11	Voltage Dips
EN61547	Electromagnetic Immunity Requirements Applies To Lighting Equipment

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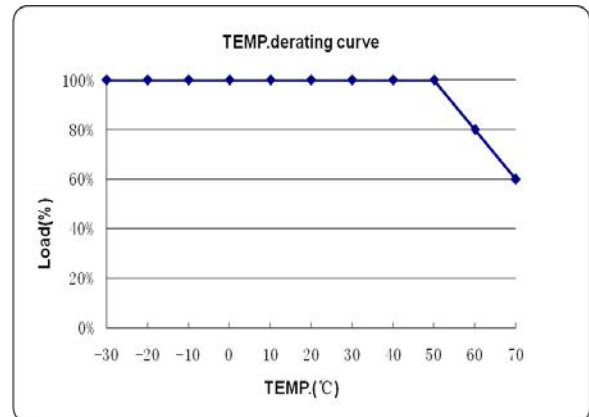
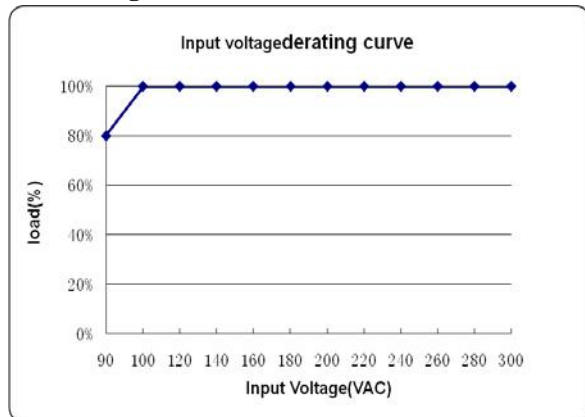
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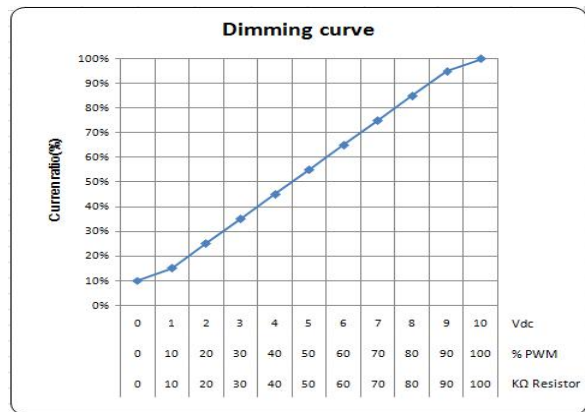
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Curve Feature:

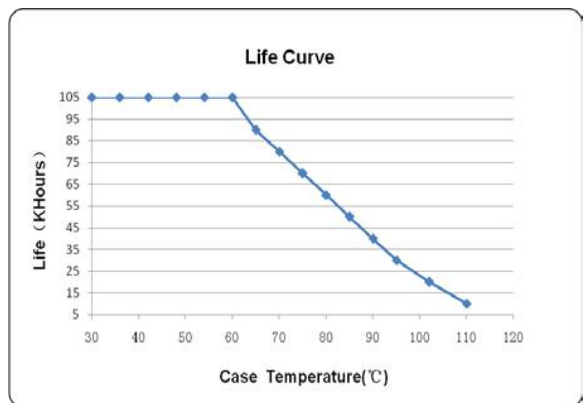
1, Derating curve



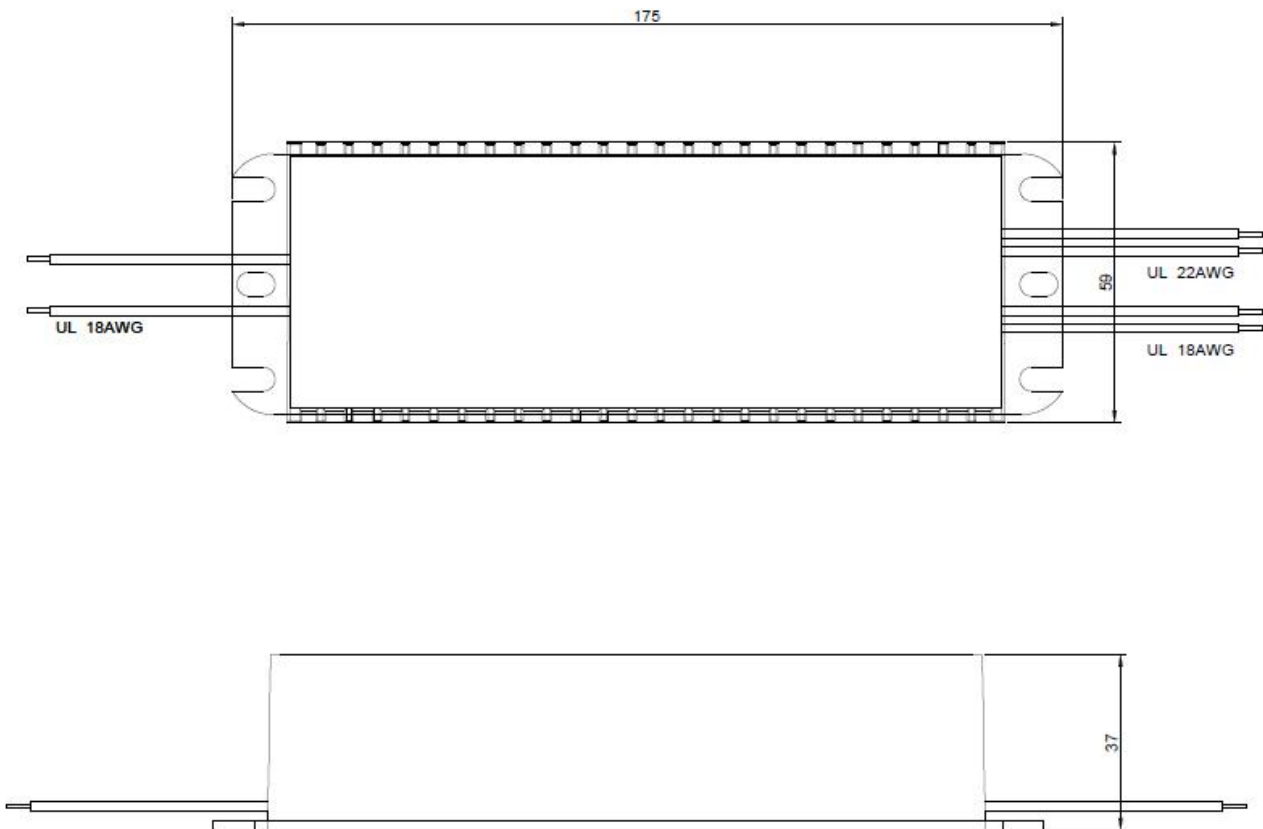
2, Dimming curve



3, Life curve



Mechanical:



Parameter	Cable Specifications	Standard length	Remark
AC cable	UL1015 18AWG Black=L ,White=N	L=200mm	Length can be customized
DC cable	UL1569 18AWG Red=LED+, Black=LED-	L=200mm	
Dimming cable	UL 1430 22AWG Gray=DIM+,Purple=DIM-	L=200mm	