

## SPECIFICATIONS

### Product Features:

- ◆ Input Voltage Range:100~277VAC;
- ◆ High Power Factor;
- ◆ Efficiency Up to 86%;
- ◆ Meet UL8750 CB CE;
- ◆ International Protection:IP66;
- ◆ For Outdoor LED lights;
- ◆ 5 Years Warranty;



**SELV**



**CE CB IP66**



### Model List:

Model	Certification	Output Voltage	Output Current(Max)	Output Power(Max)	Efficiency
FS50W-18C2750	CB/CE	18V	2750mA	49.5W	84%
FS50W-24C2080	CB/CE	24V	2080 mA	49.92W	85%
FS50W-29C1750	CB/CE	29V	1750 mA	50.75W	85%
FS50W-36C1400	UL/CUL/CB/CE/FCC	36V	1400 mA	50.4W	86%
FS50W-42C1200	UL/CUL/CB/CE/FCC	42V	1200 mA	50.4W	86%
FS50W-48C1000	CB/CE	48V	1000 mA	48W	87%
FS50W-54C0920	CB/CE	54V	920 mA	49.68W	87%

### 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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## FS50W Series LED Driver

Input: 100-277VAC High Power Factor High efficiency For high bay light 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			0.52	A
Inrush Current	100%Load at 230V Input Cold start			20	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	60%		100%	
	No-load at 100-277V Input			120%	
Line Regulation	60%-100%Load at100-277V Input	-5%		+5%	
Load Regulation	60%-100%Load at100-277V Input	-5%		+5%	
Current deviation	60%-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 120V Input		86%		
Turn-on Delay Time	100%Load at120V Input(Oscilloscope)			1000	ms

#### 3. Environment Features

Parameter	Notes	Min.	Typ.	Max.	Unit
Operating TEMP. range		-30		70	°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:FS50W-36C1400
2. Refer to mechanical

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### 4. Safety Features

Parameter	Notes	Min.	Typ.	Max.	Unit
Leakage Current	L,N To OUTPUT 25°C 70%RH			0.5	mA
Withstand Voltage	L,N To OUTPUT 25°C 70%RH	3750			Vac
Insulation Resistance	Input To Output (500Vdc 25°C 70%RH)	10			MΩ

### 5. Protection Functions

Parameter	Notes	Protection Performance
Over Voltage Protection	When the load voltage exceeds 1.2 times the rated voltage	Shutdown and reboot
Over Load Protection	When the load power exceeds 1.2 times the rated power	Shutdown and reboot
Short Circuit Protection	When the output is shorted	Shutdown and reboot
Over Temperature Protection	When the case temperature is over 120°C	Shutdown

### 6. Product Specifications

Parameter	Notes	Protection Performance
Size	138.2*44*26mm	
Weight	254g	
Color	White	
MTBF	200000Hours	TA=25°C (MIL-HDBK-217F)
Life Time	When Tc<80°C Life Time>50000Hours	

### 7. Safety Certification

Safety Category	Standard
UL/CUL	UL8750,UL1310,CAN/CSA C22.2 No.223 M91,CAN/CSA-C22.2 No.250.13-12
CE	EN61347-1:2008+A1,EN61347-2-13:2006,EN62493:2010
CB	IEC61347-1:2007+A1,IEC61347-2-13:2006

### 8. 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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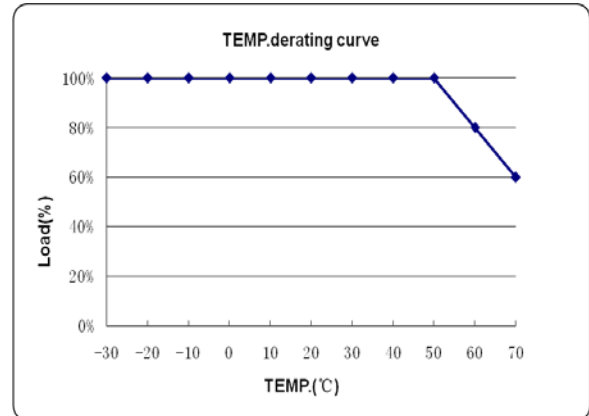
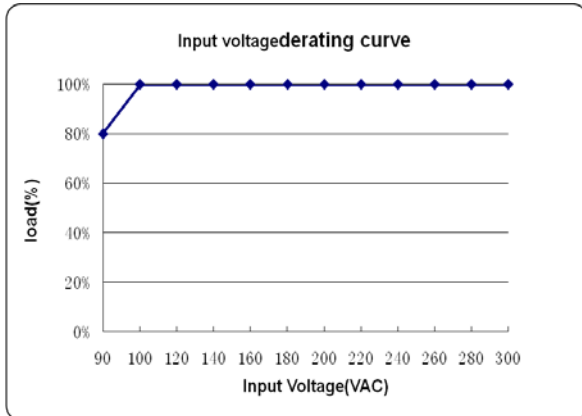
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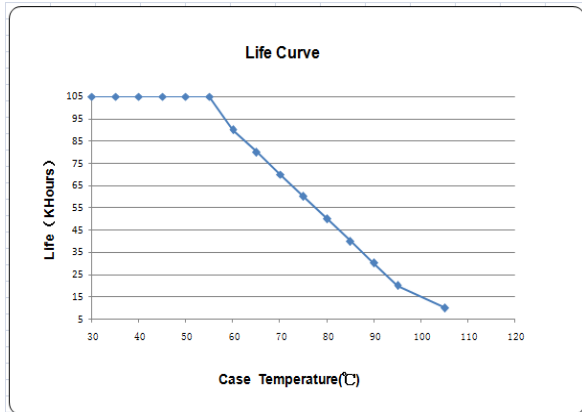
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## Curve Feature:

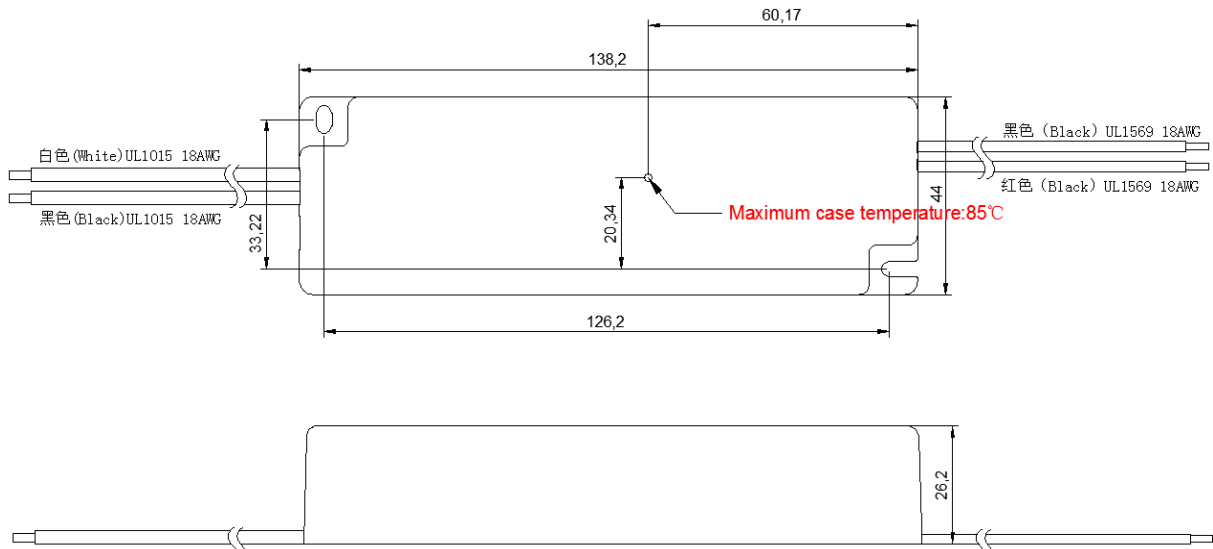
### 1, Derating curve



### 2, Life curve



**Mechanical:**



Parameter	Cable Specifications	Standard length	Remark
AC cable	UL1015 18AWG	L=150MM	Length can be customized
DC cable	UL1569 18AWG	L=150MM	