

SPECIFICATIONS

Product Features:

- ◆ Input Voltage Range:100~277VAC;
- ◆ High Power Factor;
- ◆ Efficiency Up to 87%;
- ◆ Meet UL8750 CB CE FCC SAA;
- ◆ International Protection:IP66;
- ◆ Dimming With 0-10V/PWM/VR;
- ◆ For Outdoor LED lights;
- ◆ Two-stage PFC, No flicker;
- ◆ 5 Years Warranty;



SELV

CE CB IP66



Model List:

Model	Certification	Output Voltage	Output Current(Max)	Output Power(Max)	Efficiency
DF150W-34C4400B	UL/CUL/CB/CE/SAA/FCC	21-34V	4400mA	150W	87%
<p>DFxxxW-34Cyyyyz</p> <p>XXX are 3 digits ranging from 100 to 150, which indicates output power in Wattage; For example, 150 represent output wattage 150W;</p> <p>YYYY are 4 digits from 2900 to 4400, which indicates output current in mA. For example, 4400 represents output current 4400mA;</p> <p>Z maybe A or B, where A indicates no dimming function, B indicates dimming function.</p>					
DF150W-40C3800B-a	UL/CUL/CB/CE/SAA/FCC	24-40V	3800mA	152W	87%
<p>DFxxxW-40Cyyyyz-a</p> <p>XXX are 3 digits ranging from 100 to 150, which indicates output power in Wattage; For example, 150 represent output wattage 150W;</p> <p>YYYY are 4 digits from 2500 to 3800, which indicates output current in mA. For example, 3800 represents output current 3800mA;</p> <p>Z maybe A or B, where A indicates no dimming function, B indicates dimming function.</p> <p>a Difference code</p>					

Revision History:

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

DongGuan Towin Optoelectronic Co., Ltd

Address: Liuxing Rd 1 Liujia Industry Hengli Town, Dongguan, Guangdong 523473 P.R. CHINA

Tel: +86-769-89175055; Fax: +86-769-89175066;

E-mail: cathy@towin-driver.com; sales@towin-driver.com

Website: <http://www.towin-driver.com/>



DF150W 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		295	Vac
Input Frequency Range		47		63	HZ
Input AC Current	100%Load at 115V Input			1.8	A
Inrush Current	100%Load at 230V Input Cold start			40	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	-1%		+1%	
Load Regulation	60%-100%Load at100-277V Input	-1%		+1%	
Current deviation	60%-100%Load at100-277V Input	-5%		+5%	
Output frequency	100%Load at120V 60HZ Input		60		KHZ
Output current modulation	100%Load at120V 60HZ Input			5%	
Starup Overshoot Current	100%Load at LED load			10%	
Efficiency	100%Load at 230V Input		87%		
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			90	°C

Notes:

1. Test sample model:DF150W-34C4400B
2. Refer to mechanical

DongGuan Towin Optoelectronic Co., Ltd

Address: Liuxing Rd 1 Liujia Industry Hengli Town, Dongguan, Guangdong 523473 P.R. CHINA

Tel: +86-769-89175055; **Fax:**+86-769-89175066;

E-mail: cathy@towin-driver.com; sales@towin-driver.com

Website: <http://www.towin-driver.com/>



DF150W Series LED Driver

Input: 100-277VAC High Power Factor High efficiency For high bay light IP66 UL CB CE

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 Continuity	GND Line To Case at 25A 25°C 70%RH			100	mΩ
Insulation Resistance	Input 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	Total power is reduced
Over Load Protection	When the load power exceeds 1.2 times the rated power	Total power is reduced
Short Circuit Protection	When the output is shorted	Hiccup Mode
Over Temperature Protection	When the case temperature is over 120°C	Shutdown

7. Product Specifications

Parameter	Notes	Protection Performance
Size	201*67*38mm	
Weight	810g	
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

DongGuan Towin Optoelectronic Co., Ltd

Address: Liuxing Rd 1 Liujia Industry Hengli Town, Dongguan, Guangdong 523473 P.R. CHINA

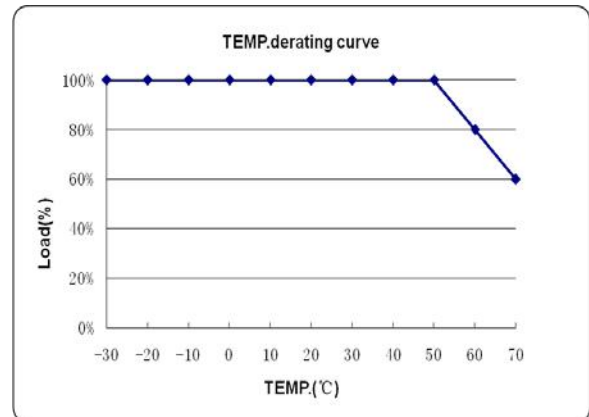
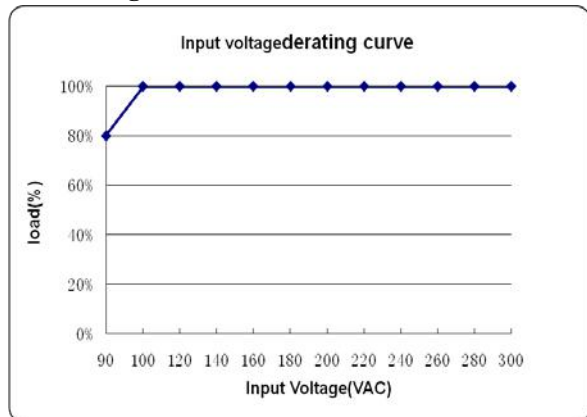
Tel: +86-769-89175055; Fax: +86-769-89175066;

E-mail: cathy@towin-driver.com; sales@towin-driver.com

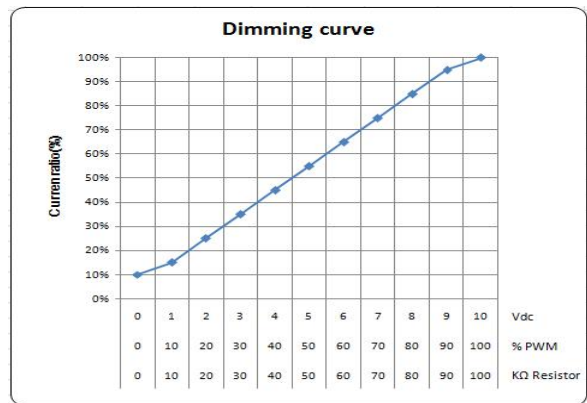
Website: <http://www.towin-driver.com/>

Curve Feature:

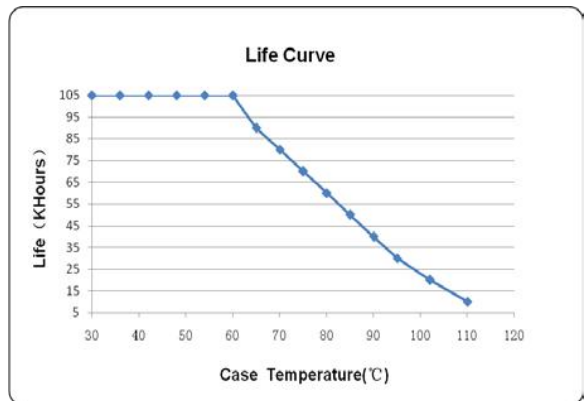
1, Derating curve



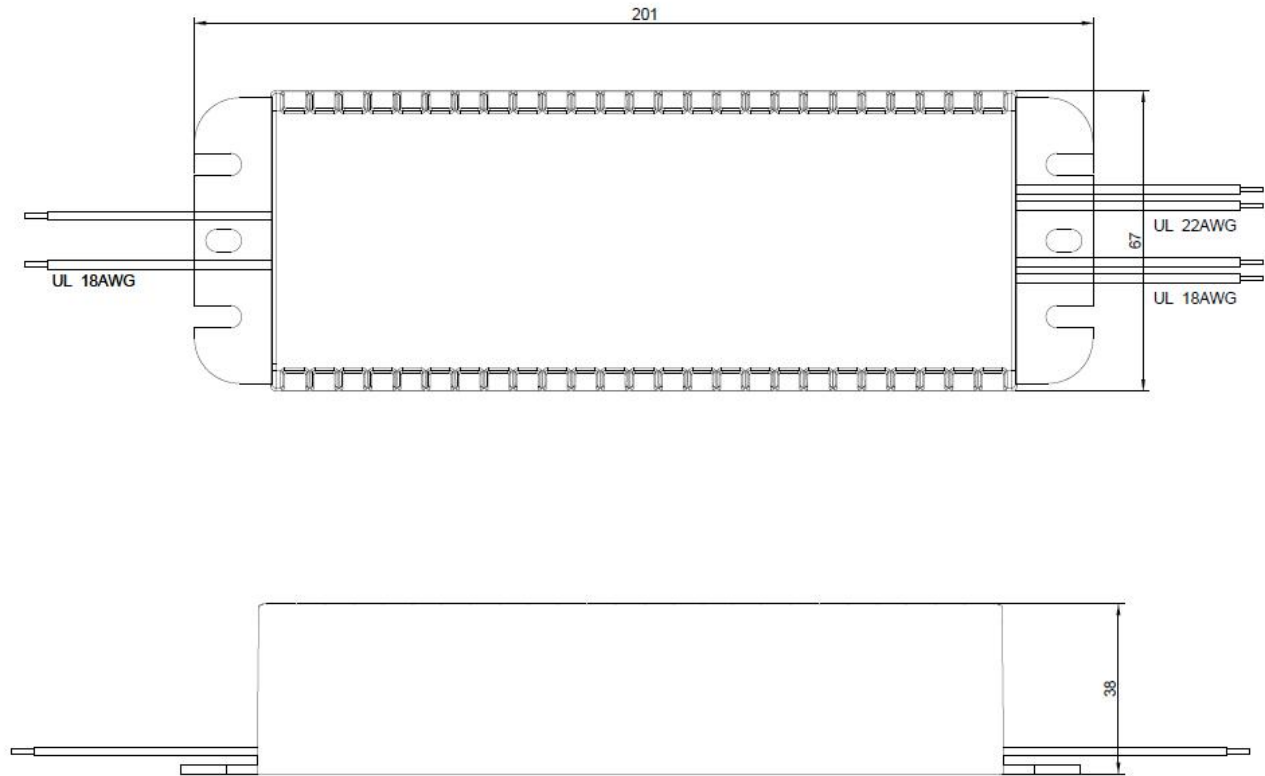
2, Dimming curve



3, Life curve



Mechanical:



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