



CE CB

### Product Features

- Input voltage range: 230~480Vac;
- Constant power design, output current programming adjustable;
- 3-in-1 dimmable: 0~10Vdc, PWM, Timer dimming. Dim-to-off;
- Constant lumen output;
- Auxiliary power supply: 12V/200mA;
- Surge protection: line-line 6KV, line-ground 10KV;
- All-around Protections: IUVP, SCP, OVP, OTP;
- IP67 design for indoor and outdoor applications;
- 5 years warranty.

### Application

- Suitable for horticulture lighting, high power lighting.

### DESCRIPTION

The X6H-800W series is 800W outdoor offline programmable LED driver that operates in constant current with high PF value and universal input voltage range 230~480Vac. Offline monitored by dimming cable connected with a USB kit programming device, the fully programmed drivers offer all dimming, dim-to-off, constant lumen output options and a wide range of output current in a single driver, which deliver maximum flexibility with customized operating settings and intelligent control options for lighting manufacturers, as one driver can be programmed for many different luminaire designs. The X6H-800W series provides built-in timer dimming schedules, further increasing the energy savings and CO<sub>2</sub> reductions achieved with LED lighting. It also helps clients to improve the management of logistics and stock. The compact metal case and high efficiency enable the driver to operate with high reliability and extend product lifetime. Overall protection is provided against lightning surge, output over-voltage, short circuit, and over-temperature to ensure low failure rate.

### MODELS

Model Number [1]	Max Output Power (W)	Output Voltage Range (Vdc)	Full Power Output Voltage Range (Vdc)	Full Power Current Adjustable Range (A) [2]	Default Output Current Setting(A)	Typical Efficiency [3]	Typical PF
X6H-800M268A12	800	114~268	180~268	2.99~4.45	2.99	95.5%	0.92

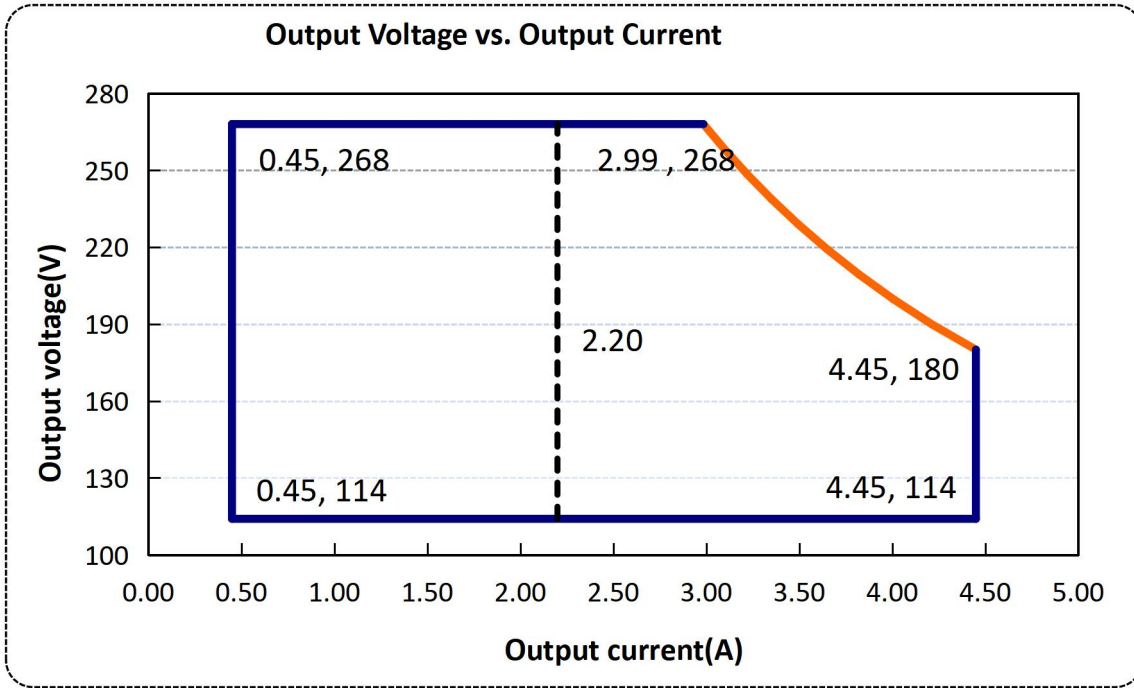
### Notes:

[1].A12 means the driver with 12V/200mA auxiliary power supply.

[2]. Output current adjustable range with constant power at max output power.

[3]. All specifications were measured at 25°C ambient temperature, input voltage 480Vac, and under full load, if there is no specific note.

### OPERATING AREA I-V



### INPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	207Vac	230-480Vac	528Vac	
Input Frequency	47Hz	50/60	63Hz	
Leakage Current	-	-	0.7mA	480Vac/60Hz
Input AC Current	-	-	4.5A	100% load
Inrush Current	-	-	30A	30A peak, 3.2ms duration, <math><0.80A^2s</math>@480Vac, Cold Start
Standby Power Consumption			2.5W	Dim to off, AUX.
Power Factor	0.92	0.94	-	@80%-100%load, 230-400Vac, /50/60HZ . Refer to PF vs. Load curve
	0.90	0.92	-	@80%-100% load, 480Vac, 50/60HZ. Refer to PF vs. Load curve
THD	-	-	20%	@80%-100%load, 230-400Vac, /50/60HZ . Refer to THD vs. Load curve
	-	-	20%	@100% load, 480Vac, 50/60HZ. Refer to THD vs. Load curve

**OUTPUT SPECIFICATIONS**

Parameter	Min.	Typ.	Max.	Notes
Output Current Setting Range(A)	10% I <sub>max</sub>	-	100%I <sub>max</sub>	
Output Current Tolerance(%)	-5	-	+5	
Output Current Setting Range(A)	0.45	-	4.45	
No Load Output Voltage (V)	-	-	300	
Total Output Current Ripple(pk-pk)	-	±5%	±10%	20MHz BW, full load& LED load, the ripple would be tiny different under different LED load.
Startup Overshoot Current (%)	-	-	10	230~480Vac &100% Load, load is LED
Line Regulation (%)	-1	-	+1	25°C±10°C ambient temperature, input voltage changes from 230Vac to 480Vac.
Load Regulation (%)	-3	-	+3	25°C±10°C ambient temperature, Input Voltage 230Vac, load changes from 60% to 100%.
AUX. Power output voltage (V)	11.4	12	13.2	
AUX. Power output current(mA)	-	200	-	
Turn-on Delay Time (S)	-	-	1	230-480Vac, 100%load, 10-90% Vo

**GENERAL SPECIFICATIONS**

Parameter	Min.	Typ.	Max.	Notes	
Efficiency @230Vac I <sub>o</sub> =4.45A I <sub>o</sub> =2.99A	92.0% 92.5%	93.0% 93.5%	-	Measured at full load and 25°C ambient temperature	
Efficiency @400Vac I <sub>o</sub> =4.45A I <sub>o</sub> =2.99A	93.0% 93.5%	94.0% 94.5%	-		
Efficiency @480Vac I <sub>o</sub> =4.45A I <sub>o</sub> =2.99A	93.5% 94.5%	94.5% 95.5%	-		
Dielectric Strength	Input-Output	-	3750Vac	-	Max 5mA/60S
	Input-PE	-	1700Vac	-	
	Output-PE	-	1600Vac	-	
Grounding Resistance (Ω)	-	-	0.1	25A/60S, under 25°C±10°C ambient temperature	
Insulation Resistance (MΩ)	10	-	-	Input-Output, Input-PE, Output-PE, 500Vdc/60S/25°C/70%RH	
MTBF (Hr)	-	200000	-	25°C±10°C ambient temperature, 230Vac ,80% load (MIL-HDBK-217F/SR-332)	
Lifetime (Hr)	-	50000	-	230Vac&100% load, 75°C case temperature, refer to lifetime curve for details	
Ambient Temperature (°C)	-40	-	+45		
Operating Case Temperature for Safety T <sub>c_s</sub> (°C)	-40	-	+90		
Operating Case Temperature for Warranty T <sub>c_s</sub> (°C)	-40	-	+75	5 years warranty case temperature Humidity: 10% to 95% RH	
Storage Temperature (°C)	-40	-	+85	Humidity: 10% to 95% RH	
Working elevation	-50m	-	4000m		
Dimensions(L*W*H)mm	L258*W160*H50mm;				

Net Weight	3.8±0.2kg/pcs	
Package	L385xW360xH220 5PCS/Ctn, Gross Weight:20kg	

### DIMMING

Parameter	Min.	Typ.	Max.	Notes
0~10V Absolute Maximum Voltage on the Vdim (+) Pin (Vdc)	-	10	-	
0~10V Source Current on Vdim(+)Pin (uA)	-	200	400	
Dimming Output Range	10% I <sub>max</sub>	-	100% I <sub>max</sub>	I <sub>max</sub> =4.45A
Recommended Dimming Range for 0-10V (V)	0	-	10	
PWM_in High Level (V)	9.7	-	10.5	
PWM_in Low Level (V)	0	-	0.3	
PWM_in Frequency Range	300Hz		2KHz	
PWM_in Duty Cycle	1%	-	100%	

### SAFTY STANDARDS

Safety Category	Country / Territory	Standards	Approved
CCC	China	GB19510.1, GB19510.14	
CE	Europe	EN61347-1, EN61347-2-13	√
		EN62493	√
ENEC		EN62384	√
CB	CB Countries	IEC61347-1, IEC61347-2-13	√
UL	USA	UL 8750	√
CUL	Canada	CSA C22.2 No.250.13	√

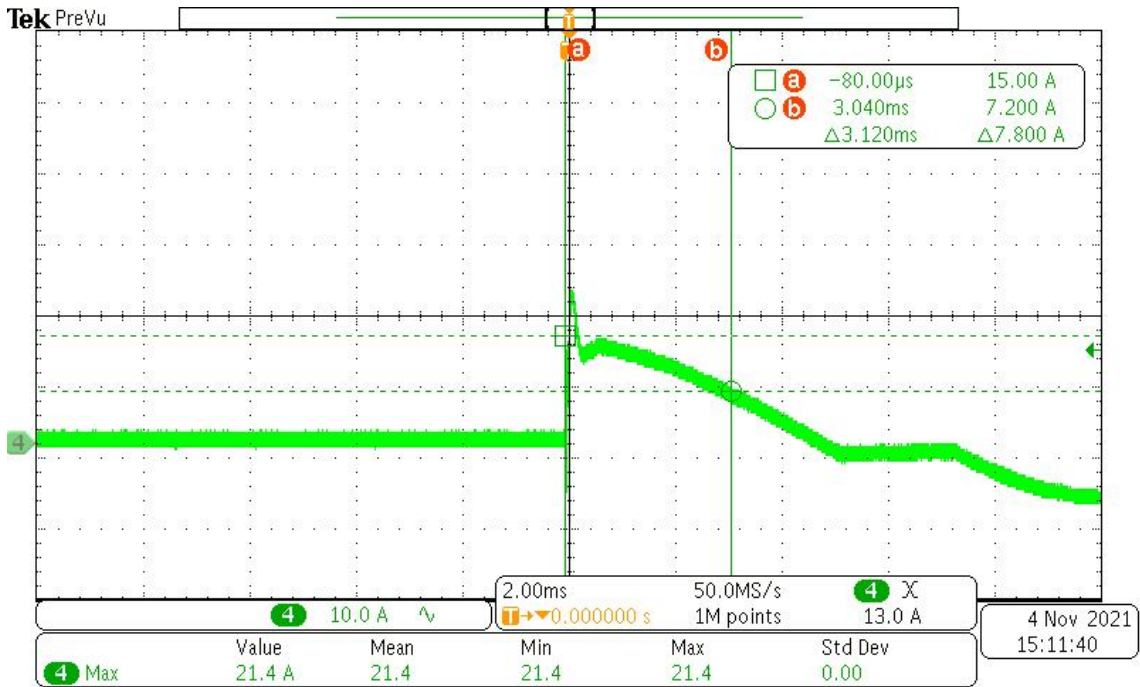
### SAFTY STANDARDS

Safety Category	Country / Territory	Standards	Approved
CCC	China	GB/T 17743, GB 17625.1	
CE	Europe	EN 55015	Class B
		EN 61000-3-2, EN 61000-3-3	Class C
		EN61000-4-2,3,4,5,6,11	Class B
		EN 61547	

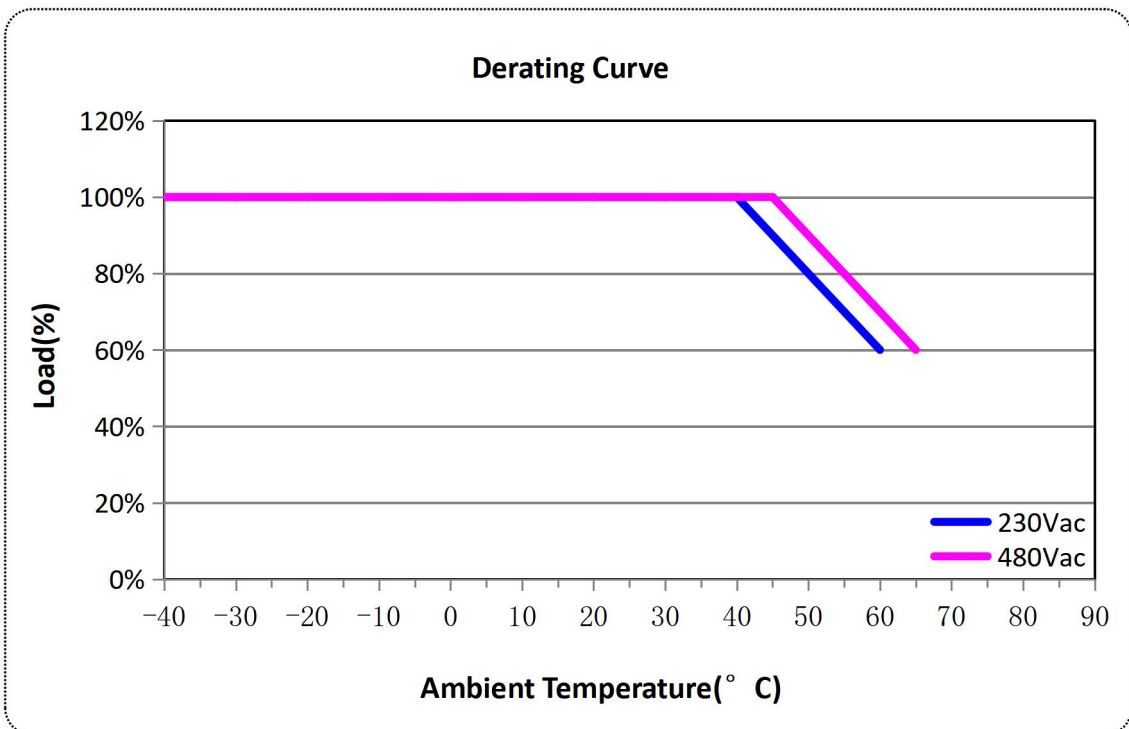
### NOTE:

This LED driver meets the EMI specifications above, but as a component of a luminaire, end customer need to identify the EMI performance of a luminaire including LED driver, other devices connected to the driver and on the luminaire itself.

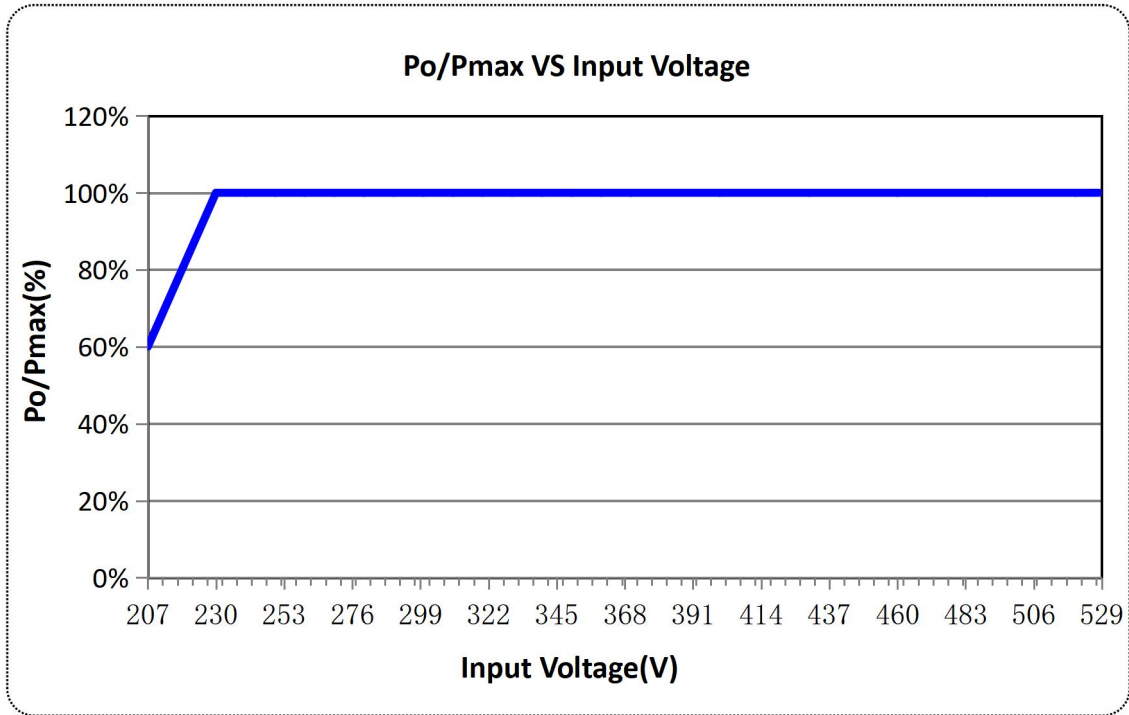
### INRUSH CURRENT WAVEFORM



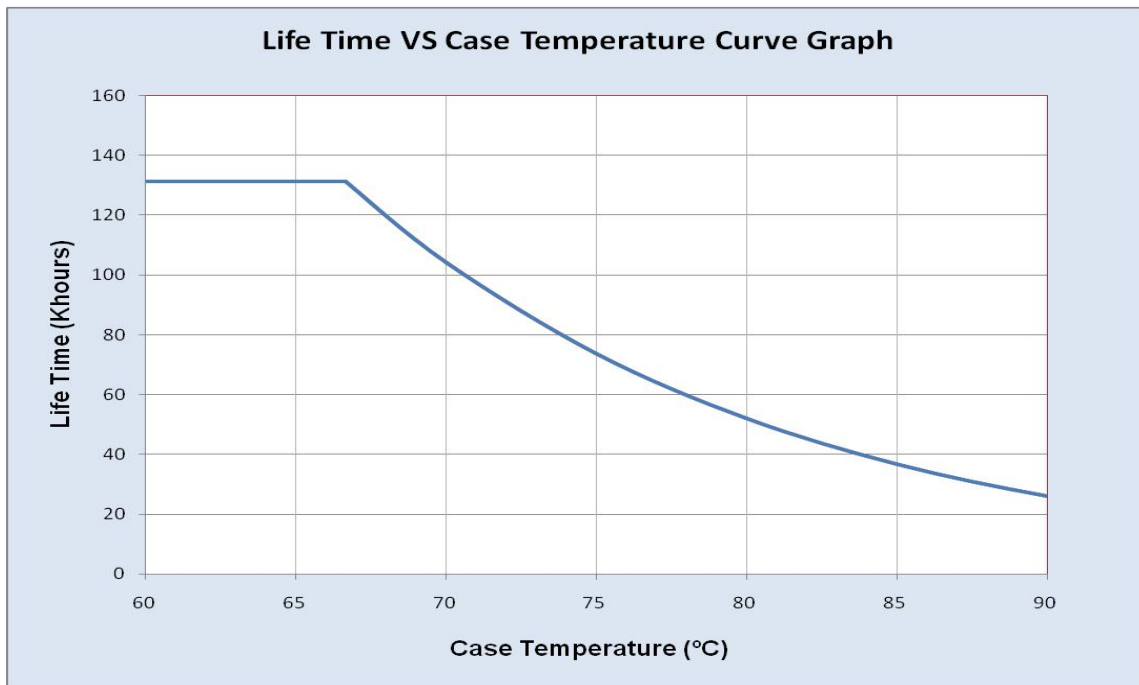
### DERATING CURVE



### OUTPUT POWER VS INPUT VOLTAGE

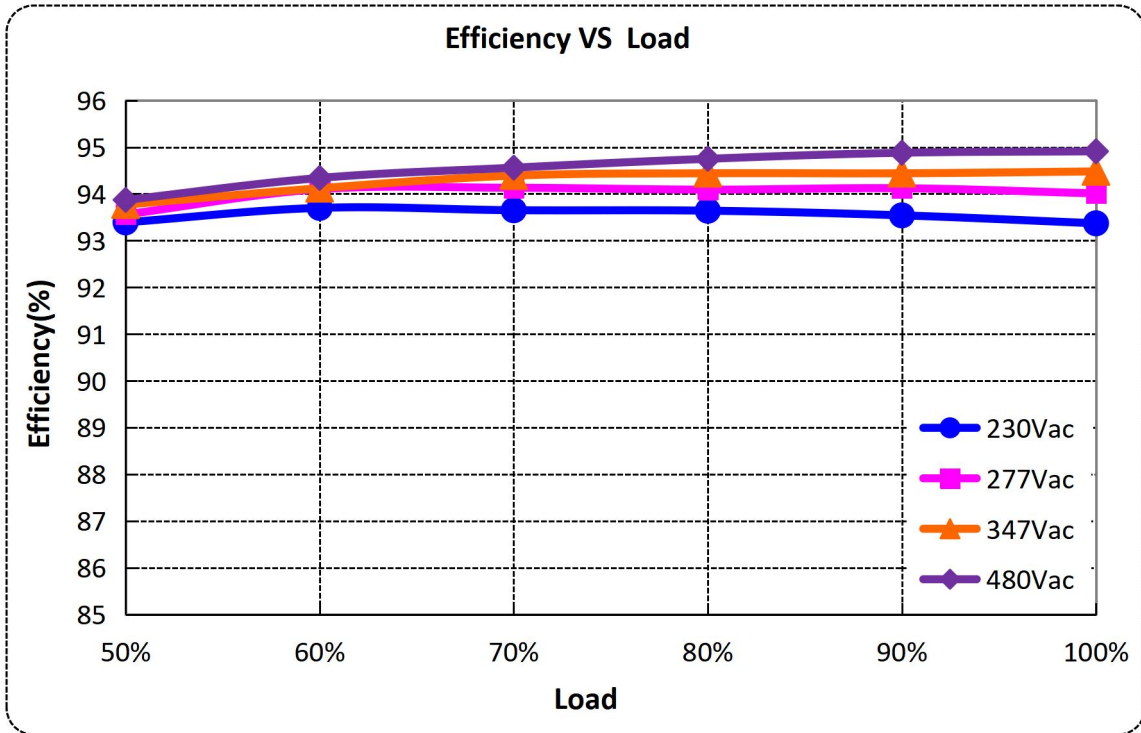


### LIFETIME VS CASE TEMPERATURE

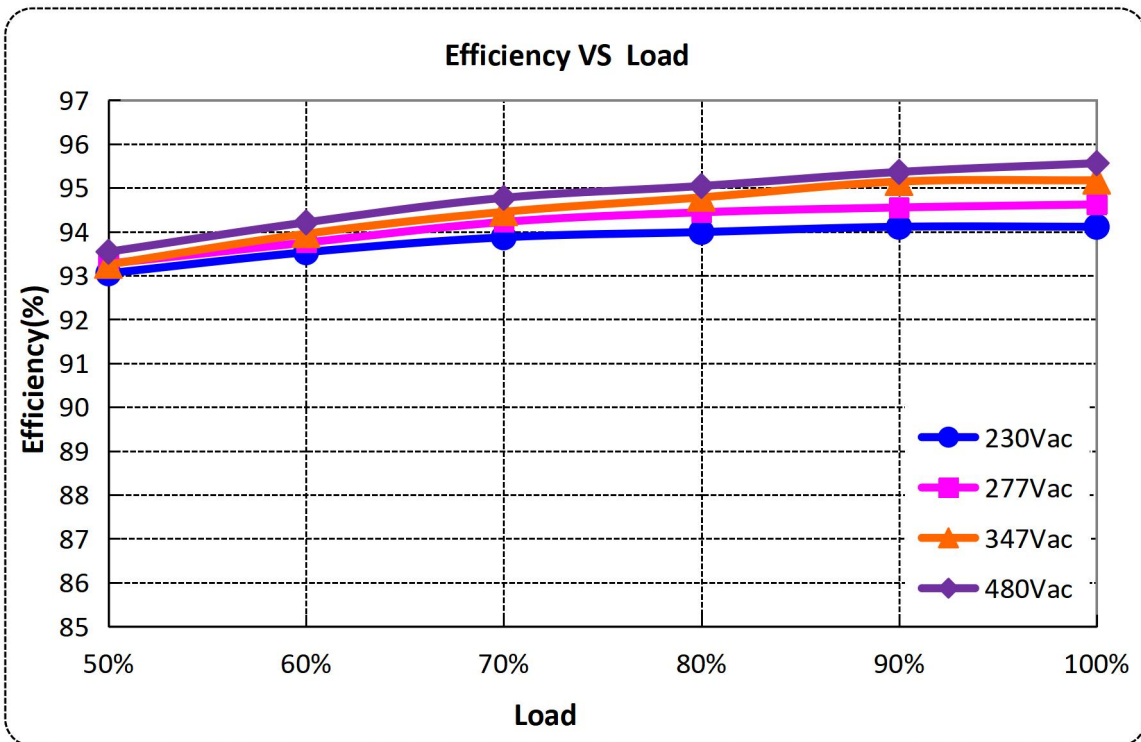


### EFFICIENCY VS LOAD

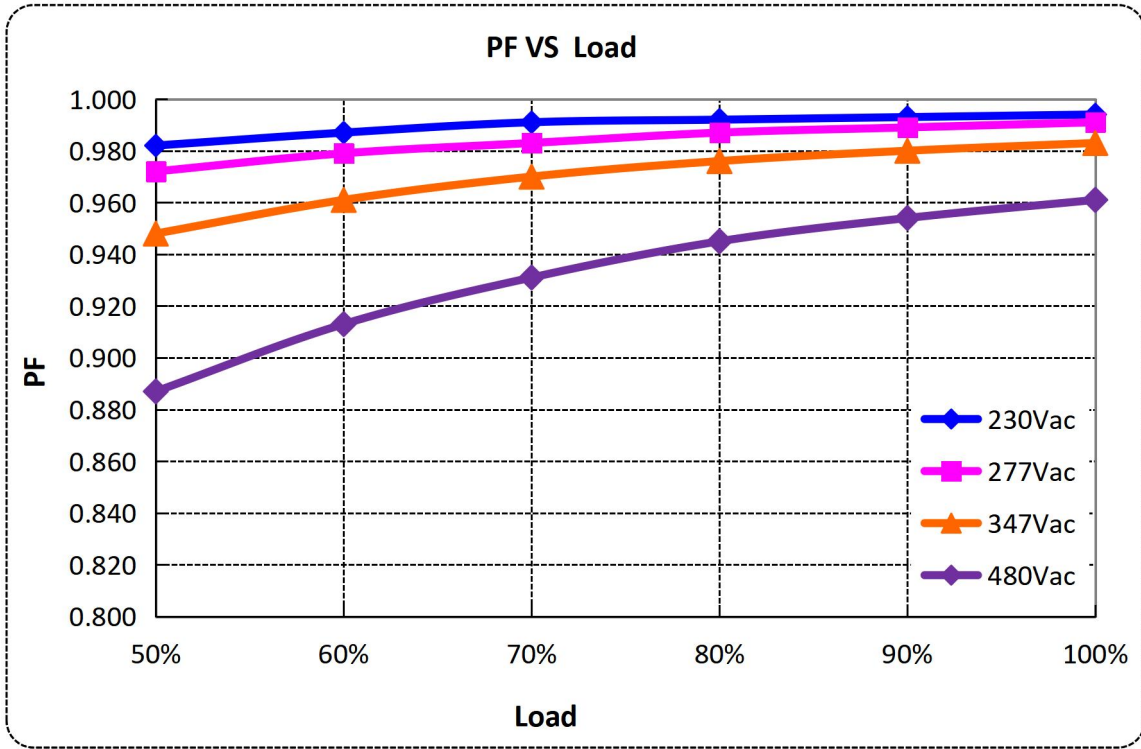
$I_o=4.45A$



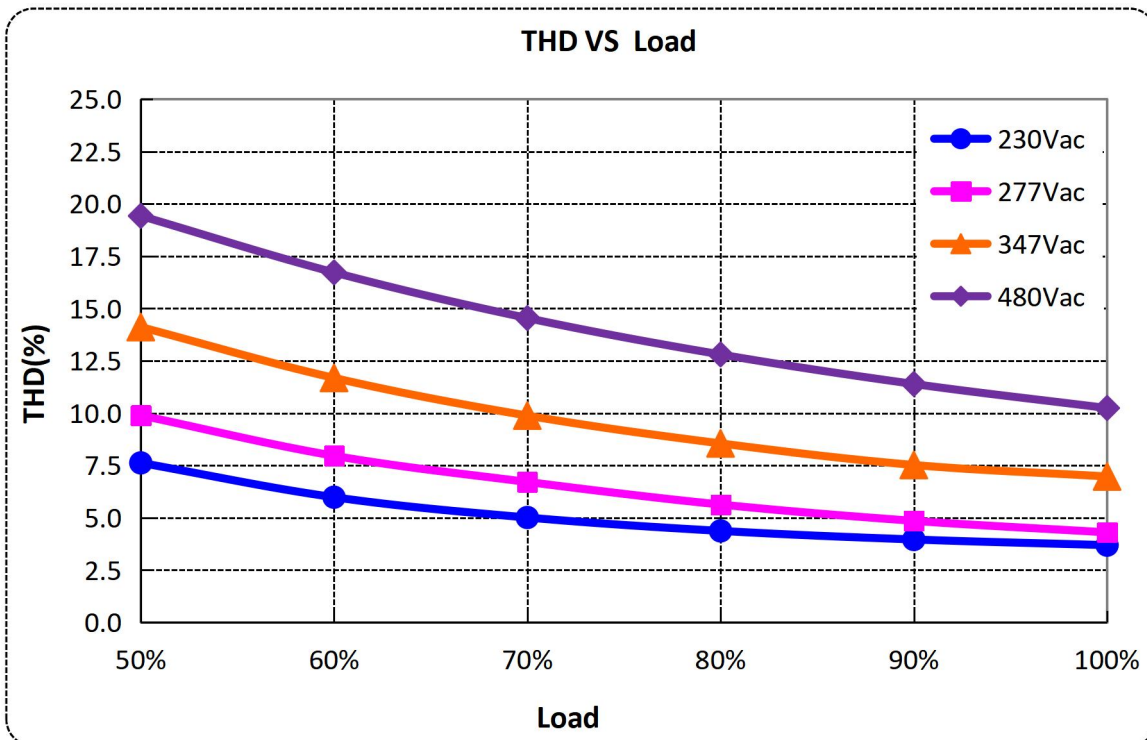
$I_o=2.99A$



### POWER FACTOR VS LOAD

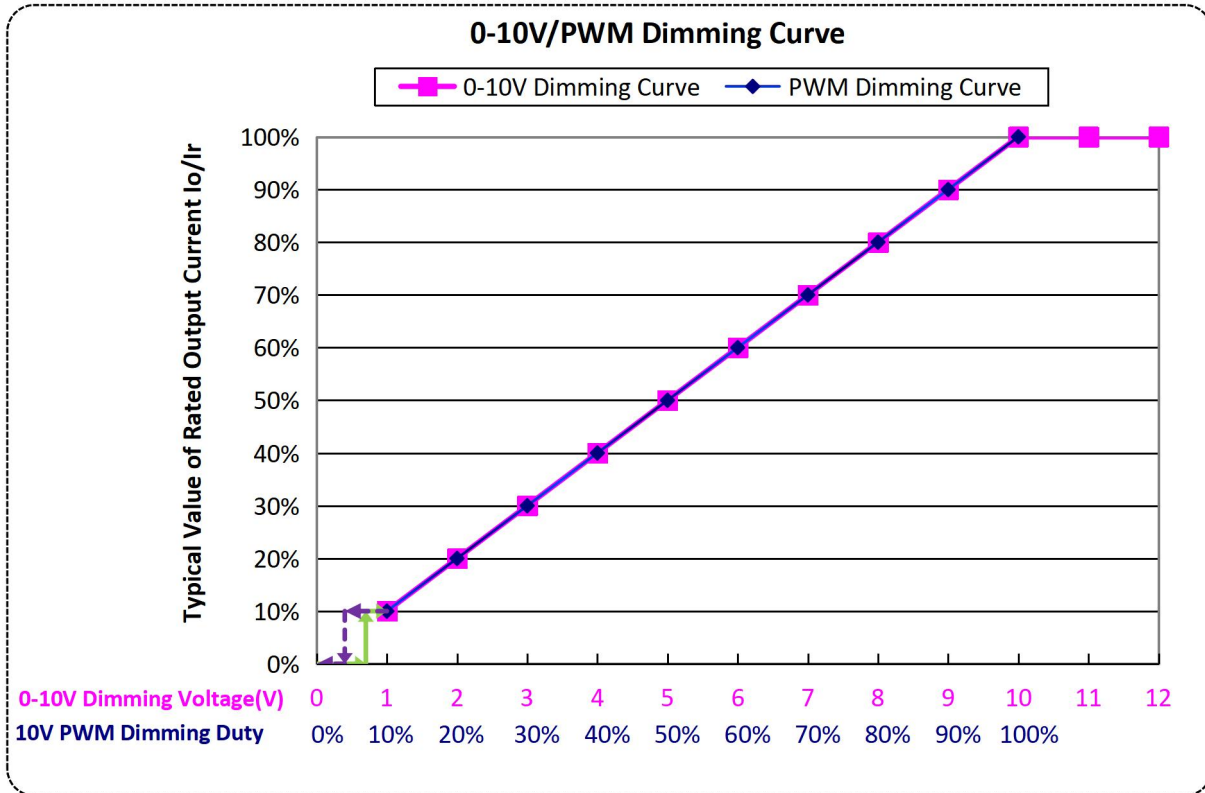


### TOTAL HARMONIC DISTORTION





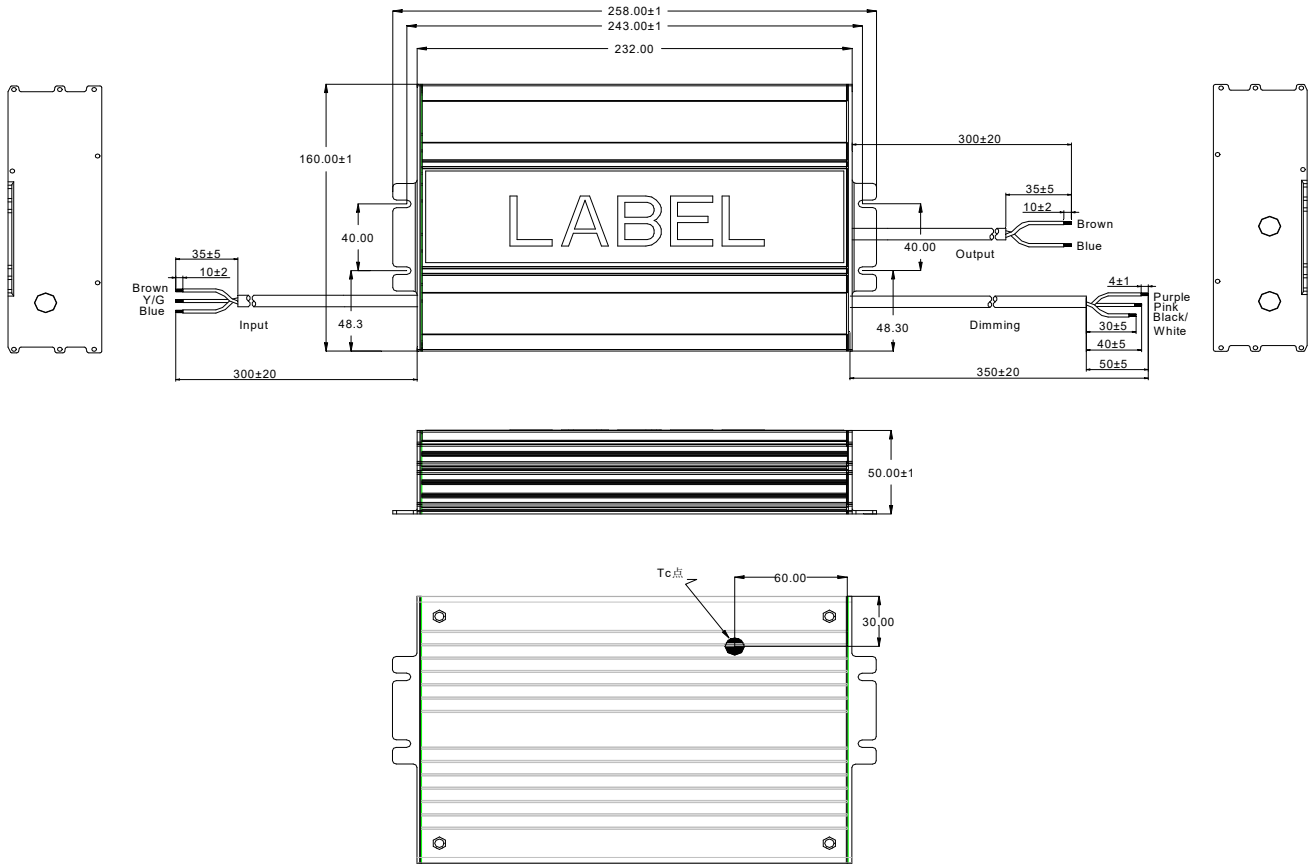
### 0-10V/PWM DIMMING



### PROTECTIONS

Parameter	Notes
Over Temperature Protection	Decreases output current, returning to normal after over temperature is removed.
Short Circuit Protection	Constant current mode and auto recovery. No damage will occur when any output is short circuited. The output shall return to normal when the fault condition is removed.
Over Voltage Protection	Run into protection model when output voltage exceeds limit, and return to normal when the fault condition is removed.

### MECHANICAL OUTLINE



Wire	Specification	Note
Input	SJOW 17AWG *3C external diameter: 9.5mm L=300±20mm;	CCC+CE
Output	SJOW 17AWG *2C external diameter: 7.7mm L=300±20mm	CCC+CE
Dimming	UL 21996 22AWG*3C external diameter: 5.0mm L=350±20mm	A12

### LABEL

56.00 mm
220.00 mm

PRI  
■ L  
Brown

■ (Ground)  
Y/G

■ N  
Blue

# MOSO<sup>®</sup>

## X6H-800M268A12

LED Driver, CC mode  
Integrated SPD  
SHENZHEN MOSO ELECTRONICS TECHNOLOGY CO., LTD  
No.1061, Songbai Road, Xili, Nanshan, Shenzhen, CHINA

**MADE IN CHINA**  
For LED module only

PRI  
U<sub>N</sub> = 230-400V~  
I<sub>Nmax</sub> = 4.50A  
P<sub>Nmax</sub> = 870W  
f<sub>N</sub> = 50/60Hz  
λ = 0.95

SEC  
I<sub>rated</sub> = 0.445-4.450A  
U<sub>rated</sub> = 114-268V~  
P<sub>max</sub> = 800W  
U<sub>max</sub> = 290V~  
t<sub>a</sub> = 45C  
t<sub>c</sub> = 90C

+ ■  
Brown  
- ■  
Blue

+ ■  
Purple  
- ■  
Pink

PROG & DIM  
White/Black +12V  
(0.25A)



## Specification for approval

Product name: 800W Off-line Programmable Driver  
Product Model: X6H-800M268A12   
Rev: A.1  
Sample Date:

CUSTOMER AUTHORIZED SIGNATURE		
Tested By	Checked By	Approved By
(Company seal)Return one copy to MOSO with approved signature and company seal.		

XiLi Songbai Road 1061, Nanshan  
Address: District, Shenzhen City, Guangdong Province, P.R.China Post Code: 518108  
TEL: 0755-27657000 FAX: 0755-27657908  
E-mail: info@mosopower.com Web site: <http://www.mosopower.com>

Prepared by	Checked by	Approved by

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Product Model: X6H-800M268A12   
Rev: A.1

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Prepared By	Checked By	Approved By