Product Features：

- Universal input voltage : 110~305Vac;
- Constant power design, output current offline programming adjustable;
- 3-in-1 dimmable: 0~10Vdc, PWM, Timer dimming. Dim-to-off;
- Constant lumen output;
- Self adapting-midnight dimming;
- Output and Dimming Signal Isolating;
- Surge protection:5KV line-line, 10KV line-earth;
- Protections: Input OVP/Input UVP/SCP/OTP;
- IP67 design for indoor and outdoor applications;
- Suitable for dry / damp / wet locations;
- 5 years warranty.

Application

- Suitable for LED roadway lighting, plant lighting, industrial lighting, landscape lighting, etc.

DESCRIPTION

The X6-150 series is 150W outdoor offline programmable LED driver that operates in constant current with high PF value and universal input voltage range 110~305Vac model. A wide range of output current in a single driver, which delivers maximum flexibility with customized operating settings and intelligent control options for lighting manufacturers, as one driver can be adjusted for many different luminaire designs. X6 also helps clients to improve the management of logistics and stock.The compact metal case and high efficiency enables the driver to operating with high reliability, and extending product lifetime. Overall protection is provided against lightening surge, input over voltage, input under voltage, short circuit, and over temperature, to ensure low failure rate.

MODELS

Model Number [1]	Max Output Power (W)	Output Voltage Range (Vdc)	Output Current Adjustable Range (A)	Full Power Current Adjustable Range (A) [2]	Default Output Current Setting(A)	Typical Efficiency [3]	PF
X6I-150M062	150	38-62	0.36-3.6	2.42-3.60	3.15	91%	0.96

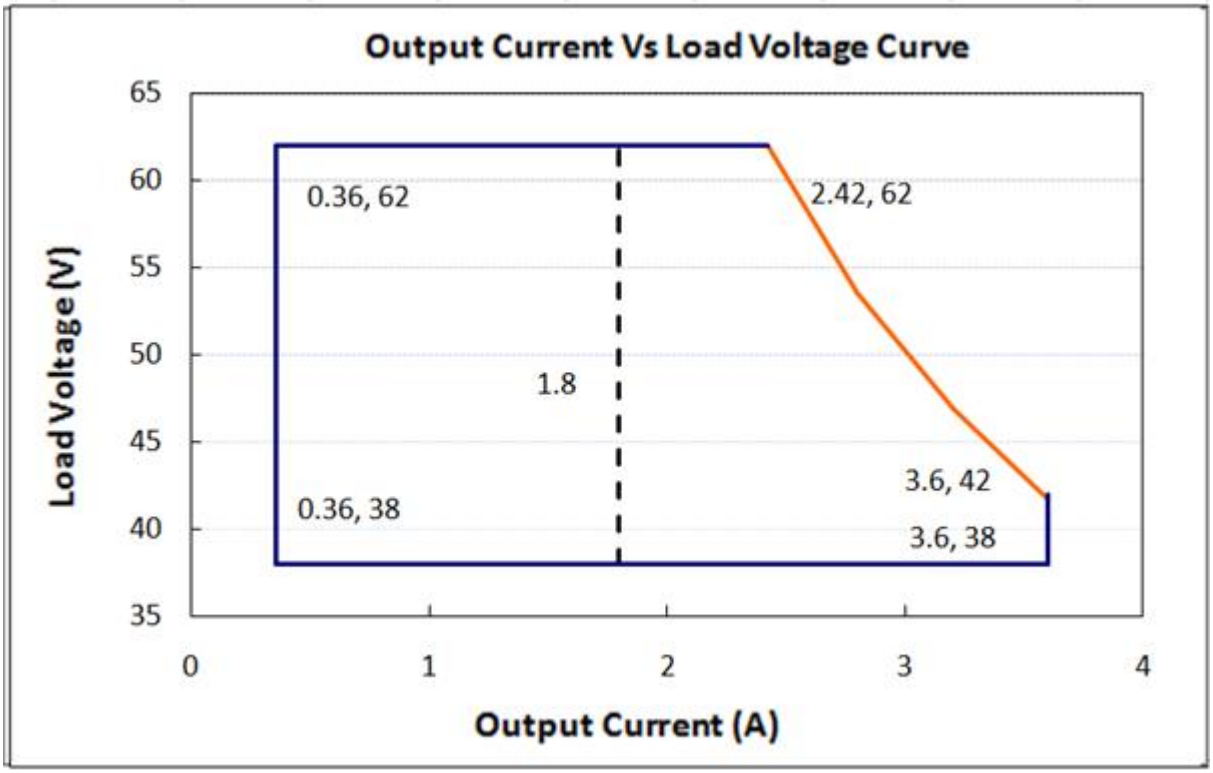
Notes:

[1]. M means dimmable and programmable.

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

[3]. All specifications are measured at 25℃ ambient temperature, input voltage 240Vac, and the typical value tested by full load, if no specific note.

OPERATING AREA



Notes：M type is suitable for the solid line contain area;
V is suitable for the right area of the dotted line.

INPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	110Vac	120-277Vac	305Vac	Rated Input Voltage is 240Vac
Input Frequency	47Hz	50/60	63Hz	
Leakage Current	-	-	0.70mA	277Vac/60Hz
Input AC Current	-	-	2A	120-277Vac &full load
Inrush Current	-	-	75A	240Vac & full load
Standby Power Consumption			2W	240Vac/50Hz
Power Factor	0.97	0.99	-	120Vac, 50-60Hz,full load
	0.95	0.97		240Vac, 50-60Hz, full load
	0.92	0.95		277Vac, 50-60Hz, full load
THD	-	5%	10%	120-240Vac,50-60Hz, 70%-100% load
	-	-	15%	277Vac, 50-60Hz, 70%-100% load

OUTPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Output Current Tolerance	-5%Iset	-	5%Iset	
Output Current SettingRange(A)	0.36	-	3.60	The 'M type' adjustable Iout range: 10%-100% Imax,
Output Current Setting Rangewith Constant Power	2.42	-	3.60	
Total Output Current Ripple(pk-pk)	-	5%	10%	20MHz BW, full load& LED load, the ripplewould be tiny different under differentLED load.
Startup Overshoot Current	-	-	10%	120~277Vac &100% Load, load is LED
No Load Output Voltage(V)	-	-	70	
Line Regulation	-1%	-	1%	25℃±10℃ ambient temperature, input voltage changes from 100Vac to277Vac.
Load Regulation	-3%	-	3%	25℃±10℃ambient temperature, Input Voltage 240Vac, load changes from 60% to 100%.
Turn-on Delay Time	-	1S	2S	120Vac,100% load
	-	-	0.5S	240Vac,100% load

GENERAL SPECIFICATIONS

Parameter		Min.	Typ.	Max.	Notes
Efficiency @120Vac Io=2.42 Io=3.6		87% 86%	89% 88%		Measured at full load and 25℃ambient temperature
Efficiency @240Vac I_O=2.42 I_O=3.6		89% 88%	91% 90%	-	Measured at full load and 25℃ambient temperature
Efficiency @277Vac I_O=2.42 I_O=3.6		89% 88%	91% 90%		Measured at full load and 25℃ambient temperature
Dielectric Strength	Input-Output	-	3750Vac	-	Max 5mA/60S
	Input-PE	-	1600Vac	-	
	Output-PE	-	1600Vac	-	
Grounding Resistance		-	-	0.1Ω	25A/60S, under 25℃±10℃ambient temperature
Insulation Resistance		10MΩ	-	-	Input-Output, Input-PE, Output-PE, 500Vdc/60S/25℃/70%RH
MTBF		-	200000Hrs	-	25℃±10℃ambient temperature, 240Vac,80% load (MIL-HDBK-217F)
Lifetime		-	50000Hrs	-	240Vac&100% load, 75℃ case temperature, refer to lifetime curve for details
Ambient Temperature		-40℃		+60℃	240Vac&100% load
Operating Case Temperature for Safety Tc_s		-40℃	-	+90℃	

Operating Case Temperature for Warranty Tc_s	-40℃	-	+75℃	5 years warranty case temperature Humidity: 10% to 95% RH
Storage Temperature	-40℃	-	+85℃	Humidity: 5% to 100% RH
Dimensions (L*W*H)mm	L173*W68*H37			
Net Weight	810±50g/PCS			
Package	L500mm*W370mm*H160mm; 15PCS/Ctn			

DIMMING

Parameter		Min.	Typ.	Max.	Notes
0~10VAbsolute Maximum Voltageon the Vdim (+) Pin		-	10V	-	
0~10VSource Current on Vdim(+)Pin		-	200uA	400uA	
DimmingOutput Range	X6I-150M062	10%Imax	-	100%Imax	Imax=3.6A
	X6I-150M062	0.36A	-	3.6A	
Recommended DimmingRange for 0-10V		0V	-	10V	Default 0-10V/ PWM Dimming(0-10V,0-9V,0-5V,0-3.3V Positive and Reverse Logic can be customized as request)
PWM_in High Level		9.7V	-	10.3V	
PWM_in Low Level		0V	-	0.3V	
PWM_in Frequency Range		300Hz		2KHz	
PWM_in Duty Cycle		1%	-	99%	

SAFETY 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	
BIS	India	IS 15885(PART 2/SEC 13)	√

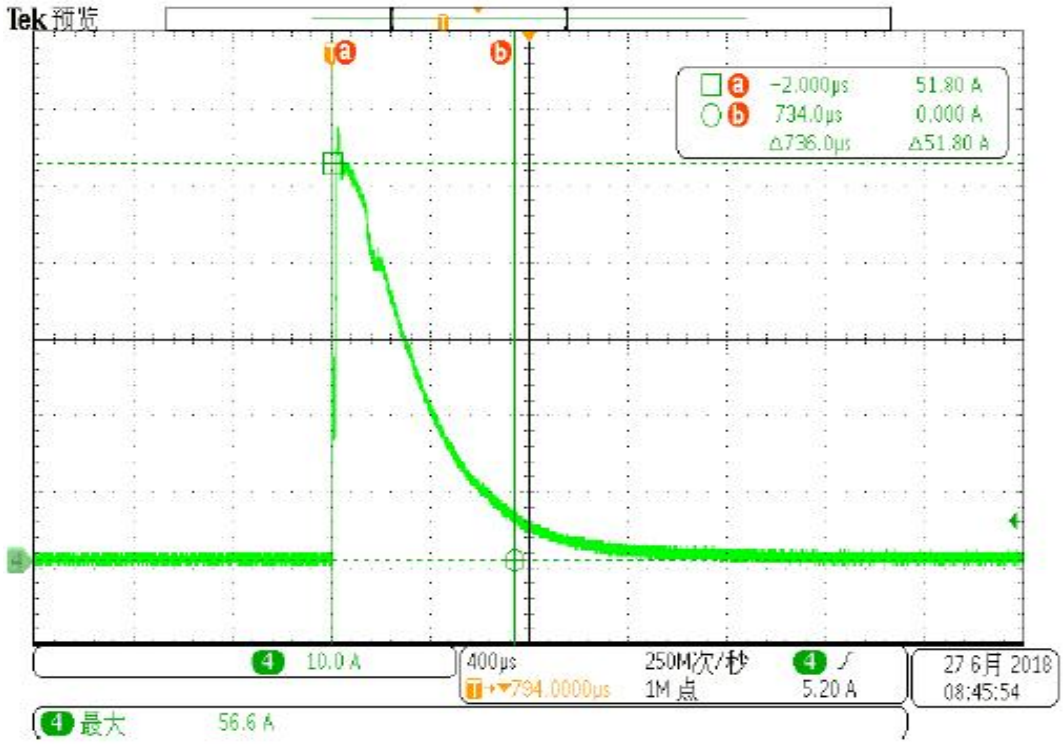
EMC COMPLIANCE

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

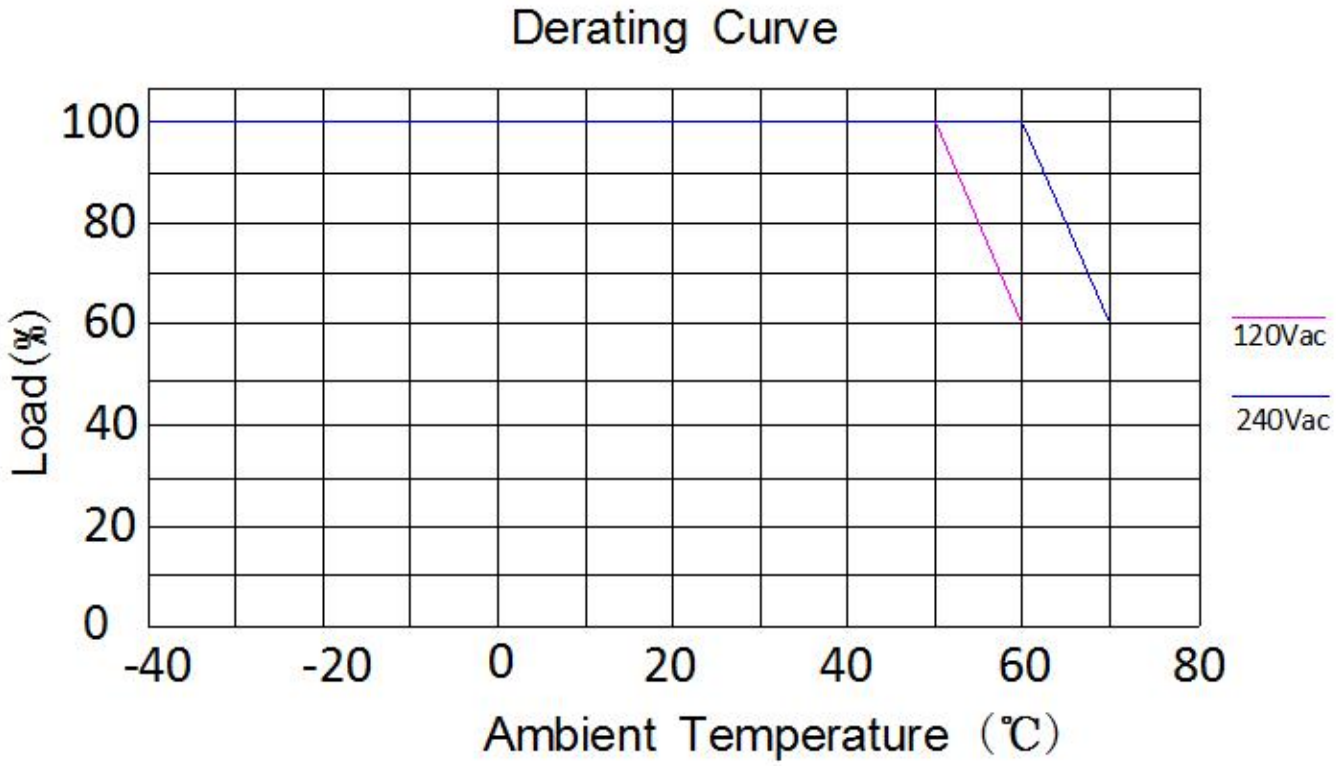
NOTE:

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.

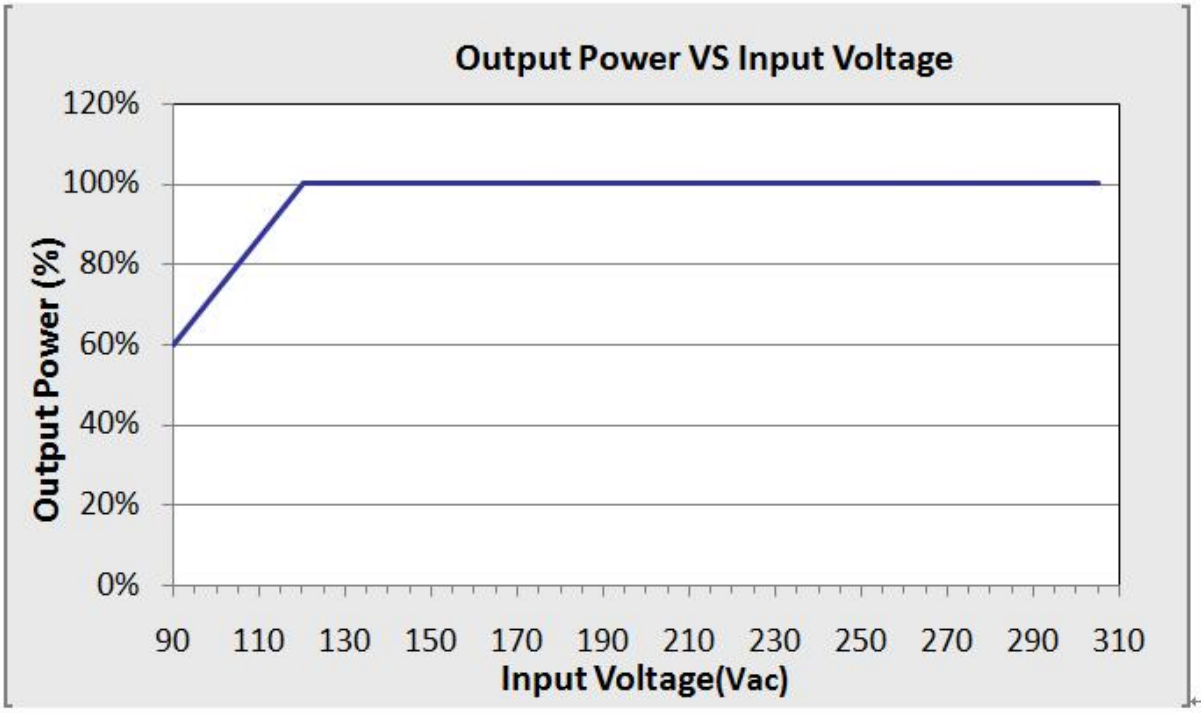
INRUSH CURRENT WAVEFORM



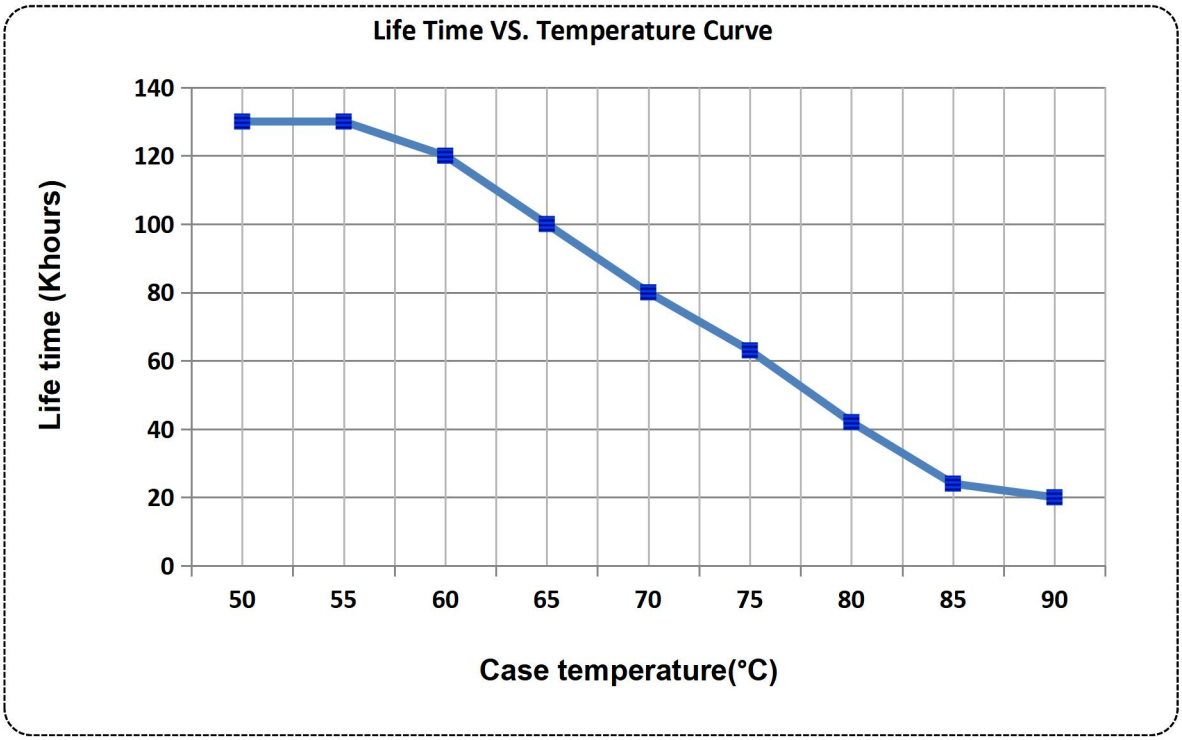
DERATING CURVE



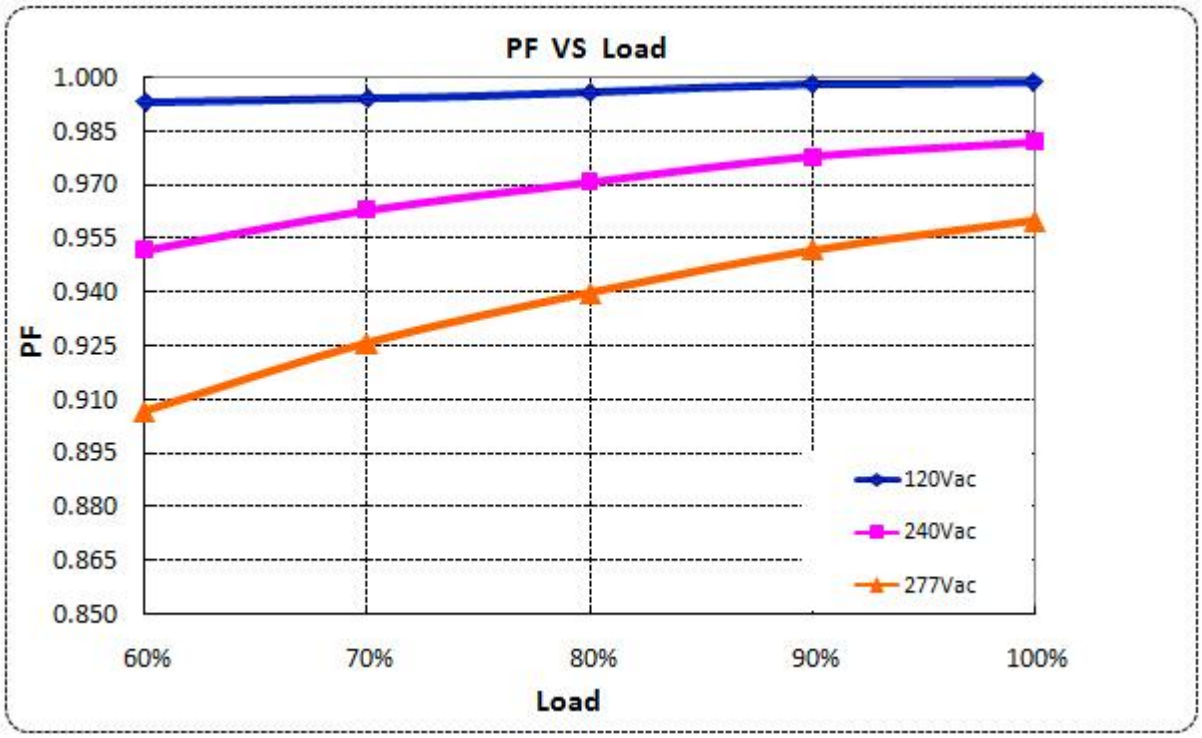
OUTPUT POWER VS INPUT VOLTAGE



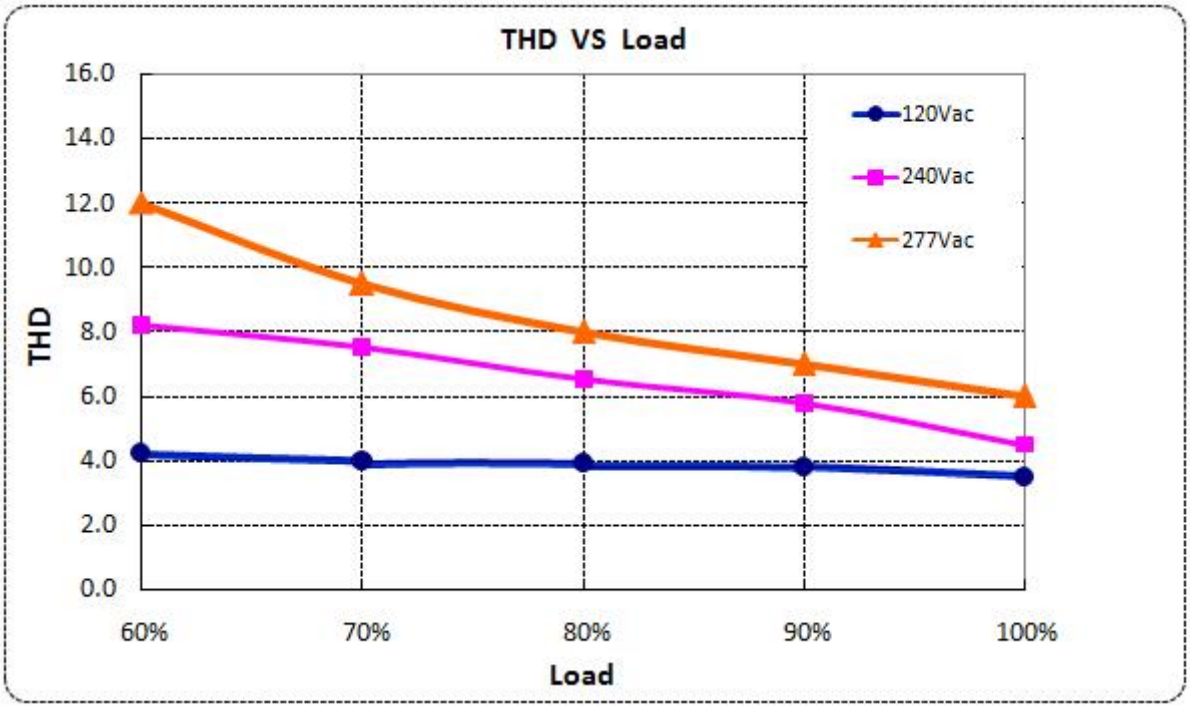
LIFETIME VS CASE TEMPERATURE



POWER FACTOR VS LOAD

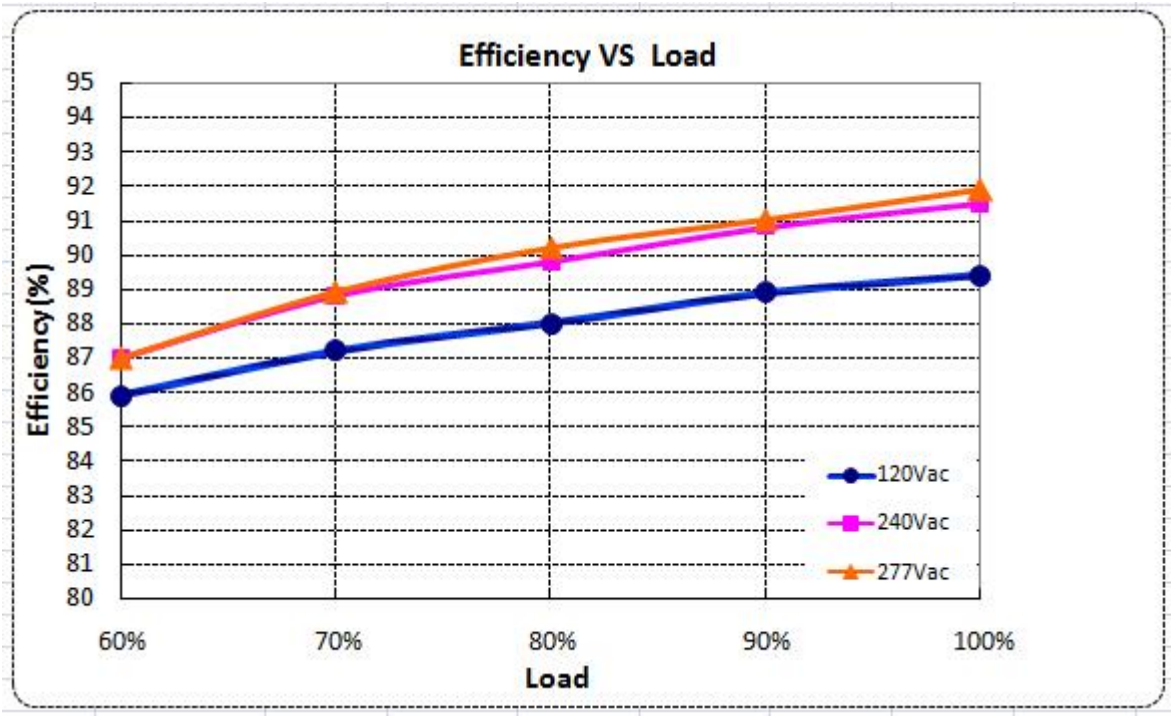


TOTAL HARMONIC DISTORTION

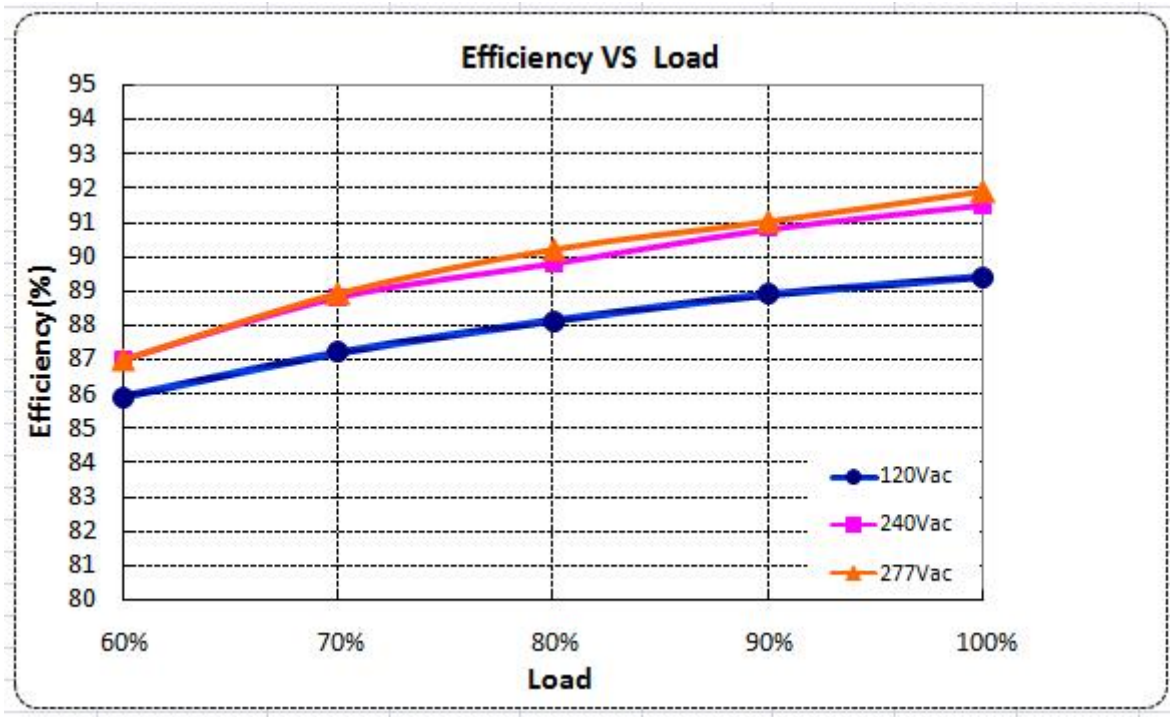


EFFICIENCY VS LOAD

Io=2.42A



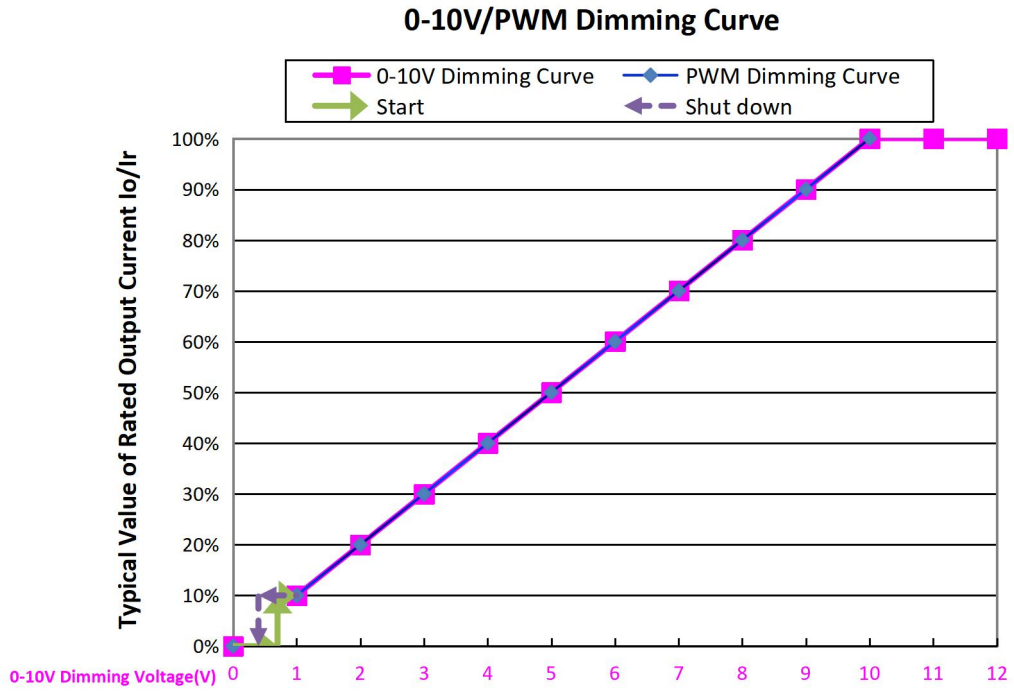
Io=3.6A



PROTECTIONS

Parameter		Min.	Typ.	Max.	Notes
Input Over Voltage Protection	Input ProtectionVoltage	315Vac	325Vac	335Vac	Turn off the output when the input voltage exceeds protection voltage.
	RecoveryVoltage	300Vac	-	315Vac	Auto Recovery. The driver will restart when the input voltage falls below recovery voltage.
	Max. of Input Over Voltage	-	-	440Vac	The driver can survive for 48 hours with input over-voltage of 440Vac.
Input Under Voltage Protection		90Vac	100Vac	110Vac	
Over Temperature Protection		Decreases output current, returning to normal after over temperature is removed.			
Short Circuit Protection		Hiccup 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.			
Output Over Voltage Protection		Limits output voltage at no load and in case the normal voltage limit fail			

0-10V/PWM DIMMING



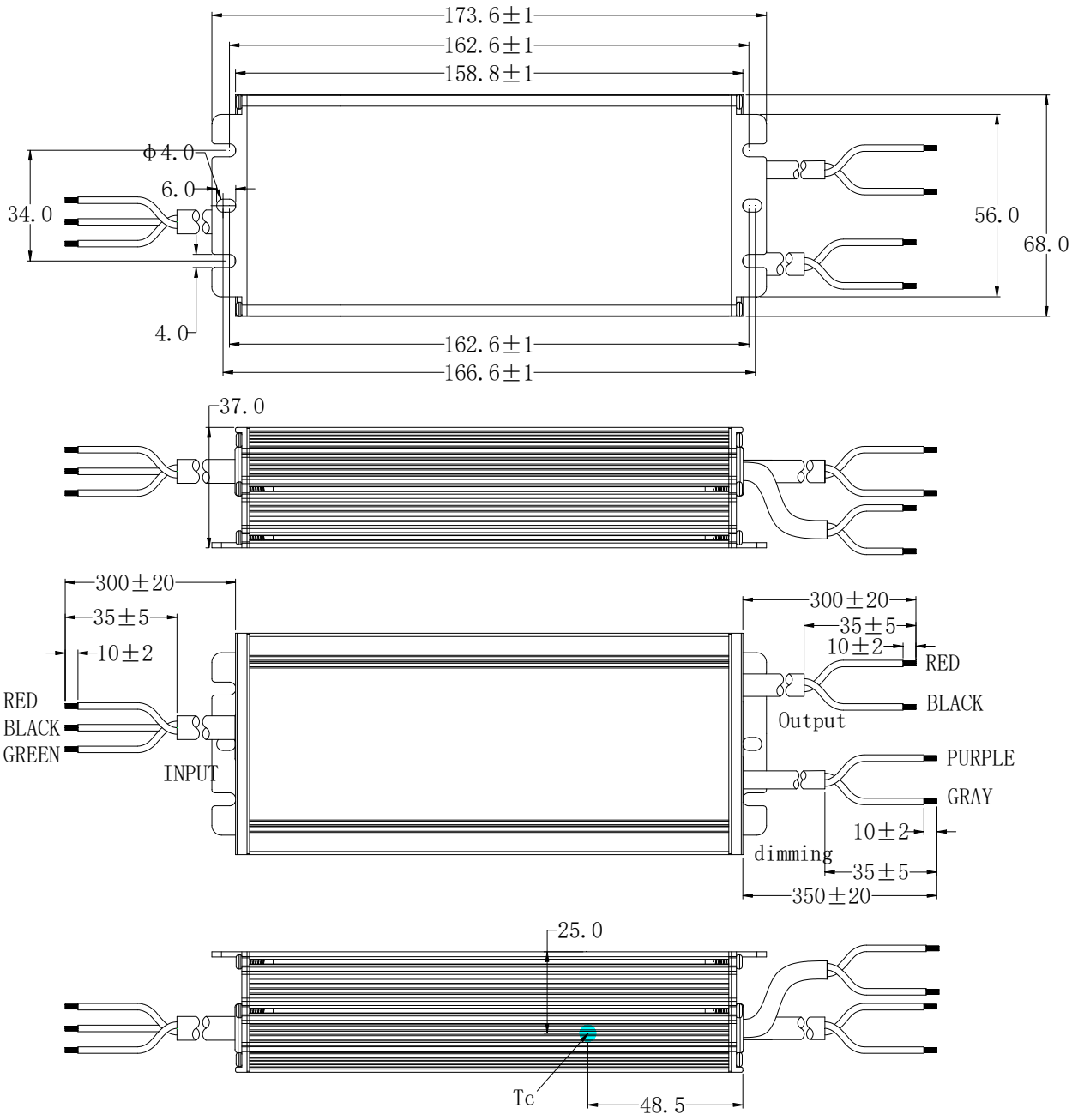
Note:

Dim to off model is realized by decreasing the output voltage, the power supply still has residual voltage when dim to off, so the

start up voltage of the lamp should be higher than residual voltage.

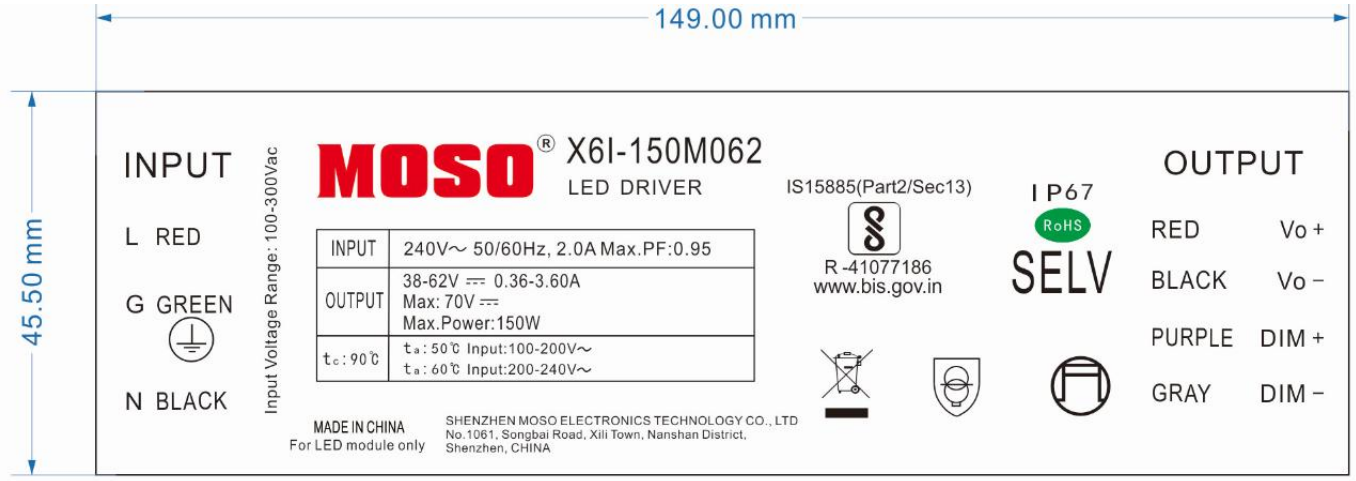
MECHANICAL OUTLINE

X6I-150M062 types



Wire	Specification	Note
Input	BIS-9968 3x1.0mm2 external diameter:7.3 L=300±20mm	BIS
Output	BIS-9968 2x1.0mm2 external diameter:6.9 L=300±20mm	BIS
Dimming	UL2733 22AWG*2C external diameter: 5.45mm L=350±20mm	Y=M

LABEL


149.00 mm
45.50 mm
INPUT
L RED
G GREEN
N BLACK
Input Voltage Range: 100-300Vac
MOSO® X6I-150M062
LED DRIVER
INPUT 240V~ 50/60Hz, 2.0A Max.PF:0.95
OUTPUT 38-62V ⎓ 0.36-3.60A
Max: 70V ⎓
Max.Power:150W
tc: 90℃ ta: 50℃ Input:100-200V~
ta: 60℃ Input:200-240V~
MADE IN CHINA
For LED module only
SHENZHEN MOSO ELECTRONICS TECHNOLOGY CO., LTD
No.1061, Songbai Road, Xili Town, Nanshan District,
Shenzhen, CHINA
IS15885(Part2/Sec13)
R-41077186
www.bis.gov.in
IP67
RoHS
SELV
OUTPUT
RED Vo+
BLACK Vo−
PURPLE DIM+
GRAY DIM−

REVISION HISTORY

Version	Description of Change		Date	Notes
	Before	Now		
A.1	Original Release		2022-10-19	Zhu long fu

Specification for Approval

Product Name: 150W IP67 programmable driver
Product Model: X6I-150M062
Rev. A.1

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

Address: XiLi Songbai Road 1061, Nanshan 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

Product Specification

Product Name:	150W IP67 programmabledriver
Product Model:	X6I-150M062
Rev.	A.1

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Prepared By	Checked By	Approved By