



Product Features

- Universal input voltage / Full range: 110~305Vac;
- Constant power design, output current programming adjustable;
- (M types) offline programmable, (V types) output current adjustable by built-in potentiometer;
- 3-in-1 dimmable: 0~10Vdc / PWM/ Timer dimming. Dim-to-off;
- Constant lumen output;
- 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 X6-75W series is 75W 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

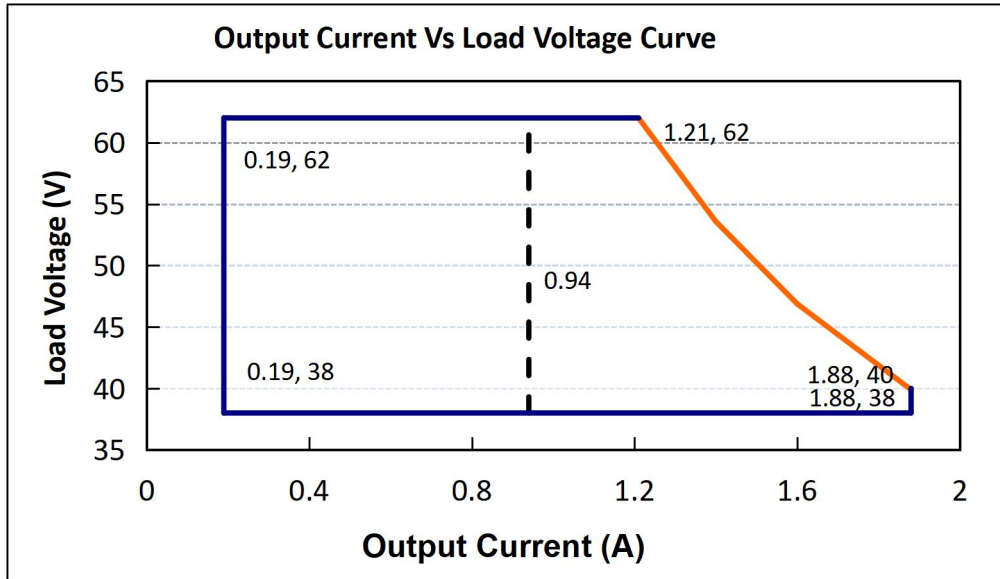
Model Number [1]	Max Output Power (W)	Output Voltage Range (Vdc)	Full Power Output Voltage Range(Vdc)	Full Power Current Adjustable Range (A) [2]	Default Output Current Setting(A)	Typical Efficiency [3]	Power Factor
							240Vac
X6-075Y062	75	38-62	40-62	1.21-1.88	1.4	89%	0.96

Notes:

- [1]. Y can be M or V. Y=M means dimmable and offline programmable, The adjustable lout range: 10%-100% I_{max};
Y=V means non-dimmable and output current adjusted by built-in potentiometer;
- [2]. Output current adjustable range with constant power at max output power;
- [3]. All specifications are measured at 25°C ambient temperature, input voltage 240Vac, and the typical value tested by full load, if no specific note.

OPERATING AREA I-V

X6-075Y062



Notes: The drivers are not allowed to work in over-load condition, otherwise warranty will expire. Y=V is suitable for the right area of the dotted line; Y=M is suitable for the solid line contain area.

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	-	-	0.7mA	277Vac/60Hz			
Input AC Current	-	-	1.1A	120-277Vac & full load			
Inrush Current	-	-	75A	240Vac & full load			
Standby Power Consumption			2W				
Power Factor	0.97	0.99	-	120Vac, 50-60Hz, full load			
	0.95	0.96	-	240Vac, 50-60Hz, full load			
	0.9	0.92	-	277Vac, 50-60Hz, full load			
THD	-	8%	15%	120-240Vac, 50-60Hz, 70%-100% load			
	-	-	20%	277Vac, 50-60Hz, 70%-100% load			
Max. NO. of PSUs on CIRCUIT BREAKER	B10	2	B16	4	B25	6	230Vac
	C10	4	C16	6	C25	10	

OUTPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Output Current Tolerance	-5%	-	5%	
Output Current Setting Range (A) X6-075Y062	0.94	-	1.88	The 'M type' adjustable lout range: 10%-100% I _{max} ,
Output Current Setting Range with Constant Power X6-075M062	1.21	-	1.88	
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%	120~277Vac &100% Load, load is LED
No Load Output Voltage X6-075Y62	-	-	70	
Line Regulation	-1%	-	+1%	25°C±10°C ambient temperature, input voltage changes from 110Vac to277Vac.
Load Regulation	-3%	-	+3%	25°C±10°C ambient temperature, Input Voltage 240Vac, load changes from 60% to 100%.
Turn-on Delay Time	-	1S	3S	120Vac,100% load
	-	0.5S	1S	240Vac,100% load

GENERAL SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Efficiency @120Vac I _o =1.21 I _o =1.88	85% 85%	87% 87%		Measured at full load and 25°C ambient temperature
Efficiency @240Vac I _o =1.21 I _o =1.88	87% 87%	88% 88%	-	Measured at full load and 25°C ambient temperature
Efficiency @270Vac I _o =1.21 I _o =1.88	87% 87%	88% 88%		Measured at full load and 25°C ambient temperature
Dielectric Strength	Input-Output	-	3750Vac	Max 5mA/60S
	Input-PE	-	1600Vac	
	Output-PE	-	1600Vac	
Grounding Resistance	-	-	0.1Ω	25A/60S, under 25°C±10°C ambient temperature
Insulation Resistance	10MΩ	-	-	Input-Output, Input-PE, Output-PE, 500Vdc/60S/25°C/70%RH
MTBF	-	200000Hrs	-	25°C±10°C ambient temperature, 240Vac,80% load (MIL-HDBK-217F)
Lifetime	-	50000Hrs	-	240Vac&100% load, 75°C case temperature, refer to lifetime curve for details

Ambient Temperature	-10°C		+60°C	240Vac&100% load
Operating Case Temperature for Safety Tc_s	-10°C	-	+90°C	
Operating Case Temperature for Warranty Tc_s	-10°C	-	+75°C	7 years warranty case temperature Humidity: 10% to 95% RH
Storage Temperature	-10°C	-	+85°C	Humidity: 5% to 100% RH
Dimensions (LxWxH)mm	L128.6*W68*H37			
Net Weight	570±100g/PCS			
Package	L488mm*W298mm*H200mm; 15PCS/Ctn, Gross Weight: 9.8Kg			

SAFETY STANDARDS

Safety Category	Country / Territory	Standards	Approved
CCC	China	GB19510.1, GB19510.14	√
CE	Europe	EN61347-1, EN61347-2-13	√
		EN62493	√
		EN62384	√
ENEC			√
CB	CB Countries	IEC61347-1, IEC61347-2-13	√
BIS	India	IS 15885(PART 2/SEC 13)	√
UL	USA	UL 8750	√
CUL	Canada	CSA C22.2 No.250.13	√
KC	South Korea	K61347-1, K61347-2-13	
PSE	Japan	J61347-1, J61347-2-13	
SAA	Australia	AS/NZS IEC 61347.2.13	√
		AS/NZS 61347.1	√
EAC	Russia	ГОСТ Р МЭК 61347-1-2011 ГОСТ IEC 61347-2-13-2013 ГОСТ IEC 62493-2014 СТБ EH 55015-2006 ГОСТ IEC 61547-2013 ГОСТ 30804.3.2-2013 (IEC 61000-3-2:2009) ГОСТ 30804.3.3-2013 (IEC 61000-3-3:2008)	√

Insulation

Insulation	Input/Mains	Dimming	LED Output	Case
Input/Mains	/	Double	Double	Basic
Dimming	Double	/	Basic	Basic
LED Output	Double	Basic	/	Basic
Case	Basic	Basic	Basic	/

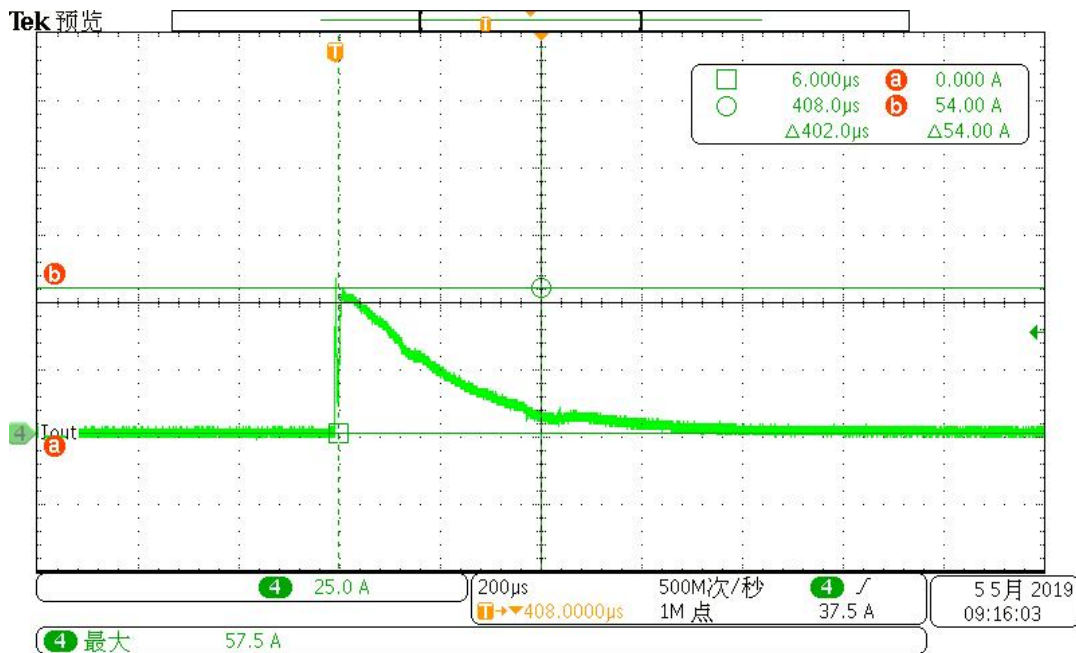
EMC COMPLIANCE

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	√
KC	South Korea	K61547	
		K00015	
PSE	Japan	J55015	
FCC	USA	FCC part 15	√

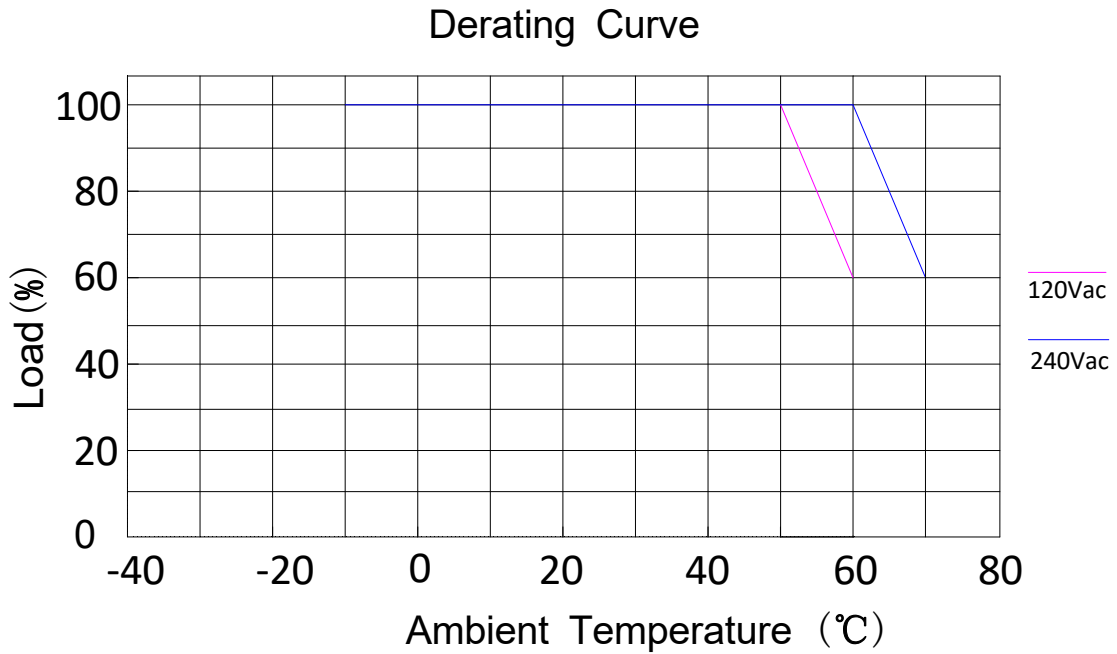
NOTE:

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.

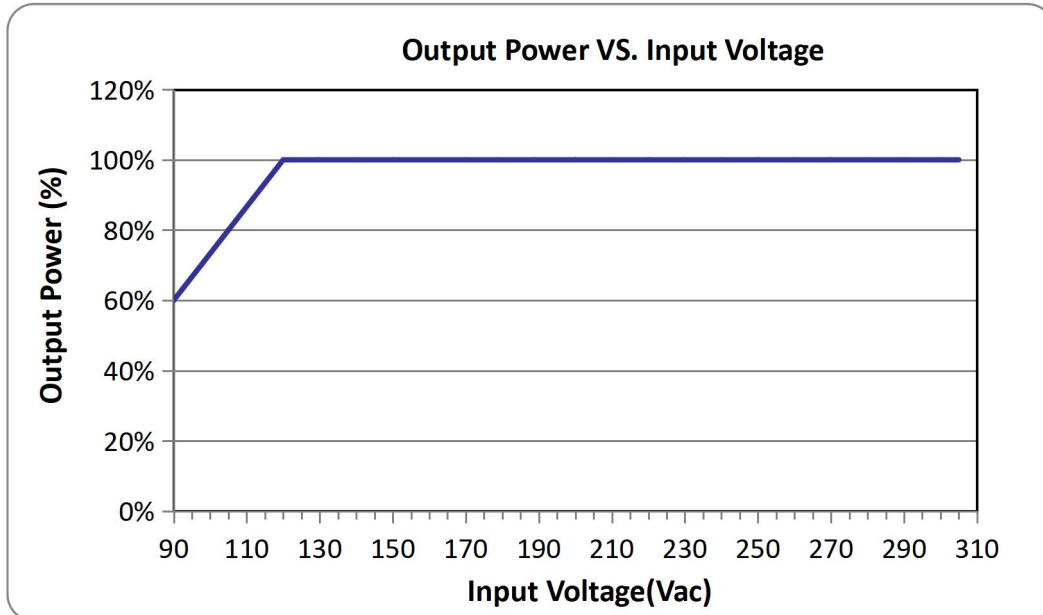
INRUSH CURRENT WAVEFORM



DERATING CURVE

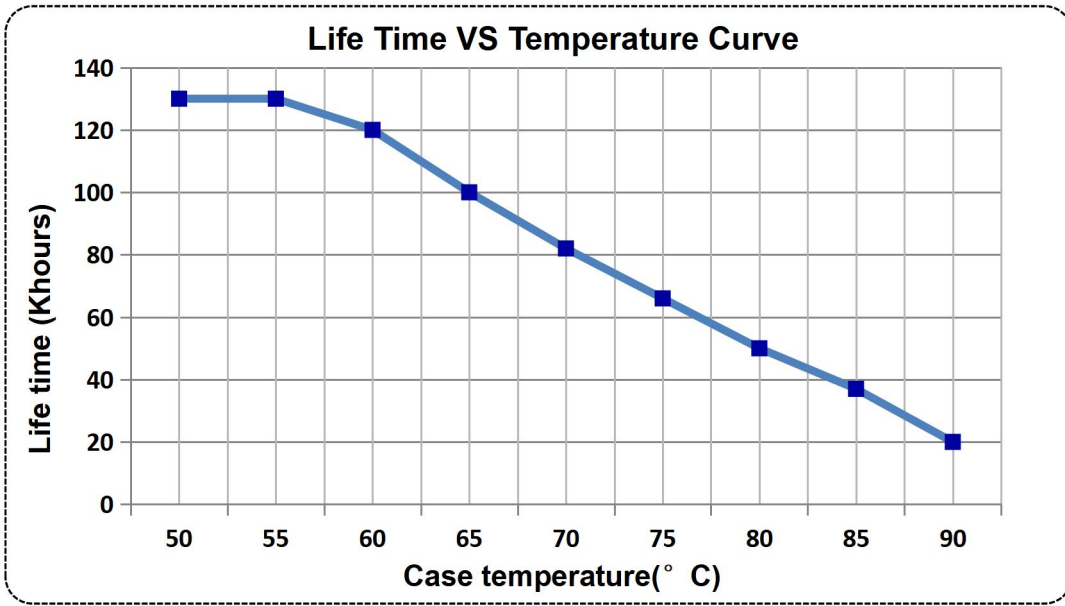


OUTPUT POWER VS INPUT VOLTAGE



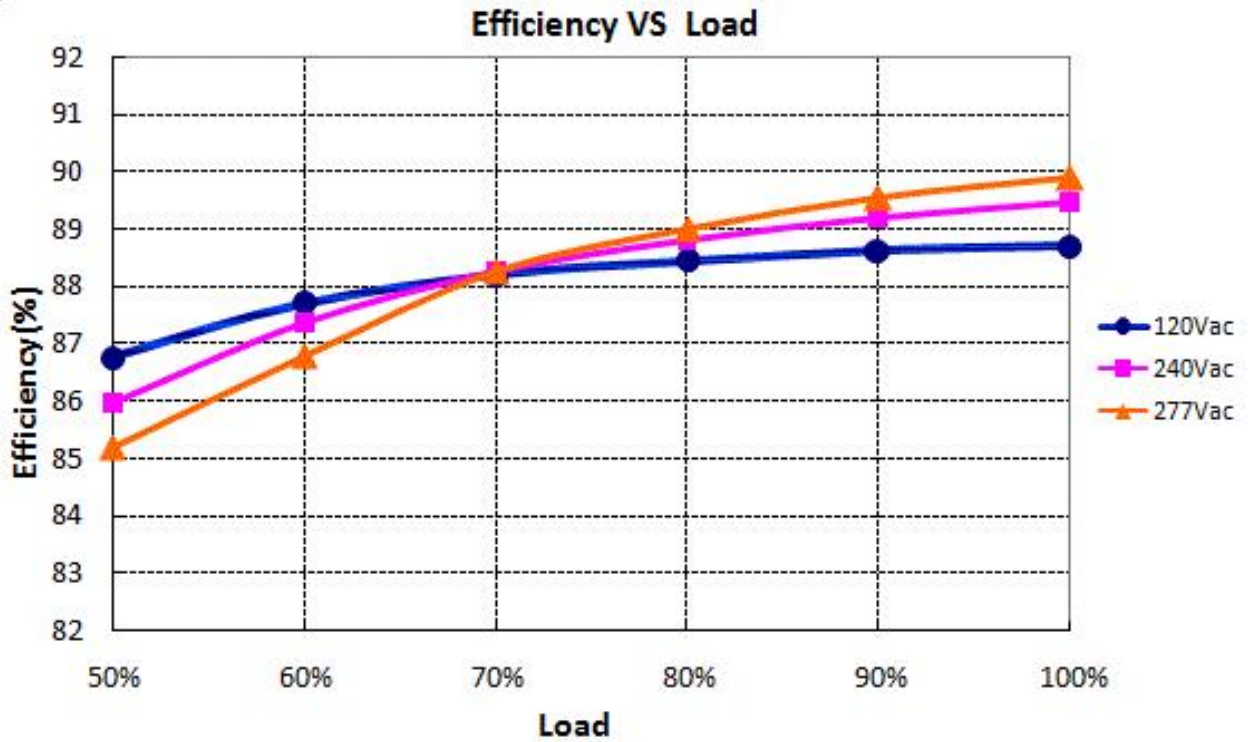
LIFETIME VS CASE

TEMPERATURE



EFFICIENCY VS LOAD

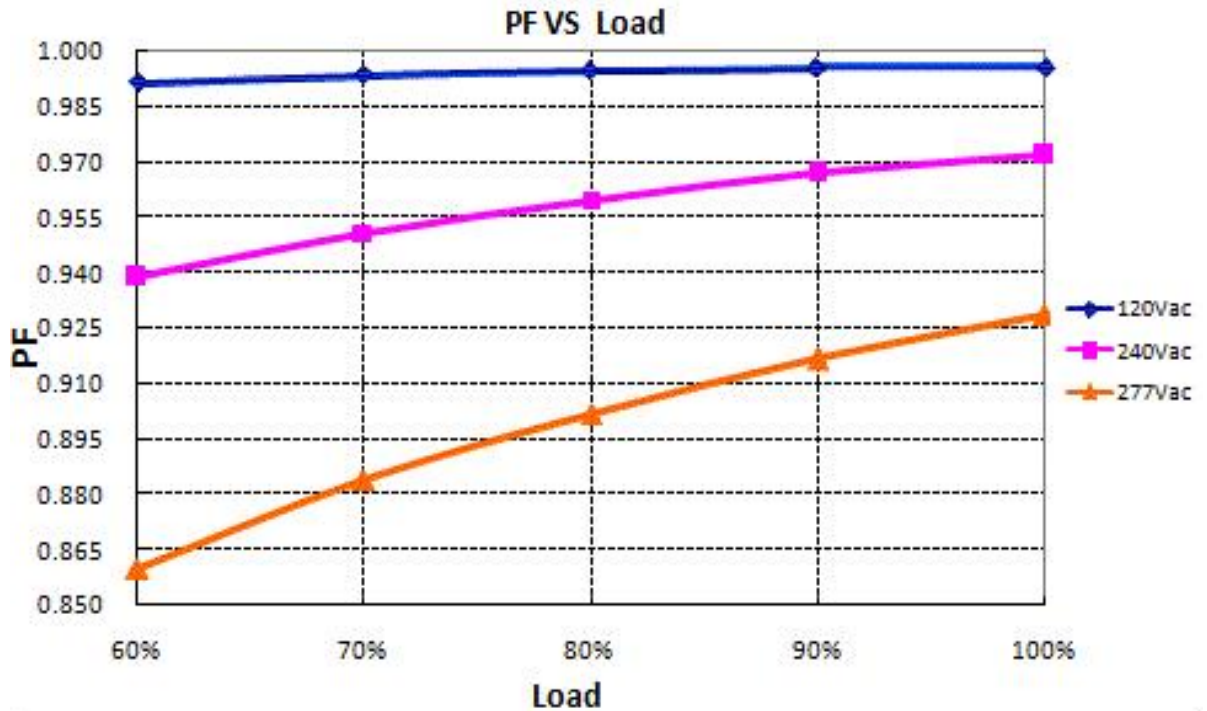
$I_o=1.21A$



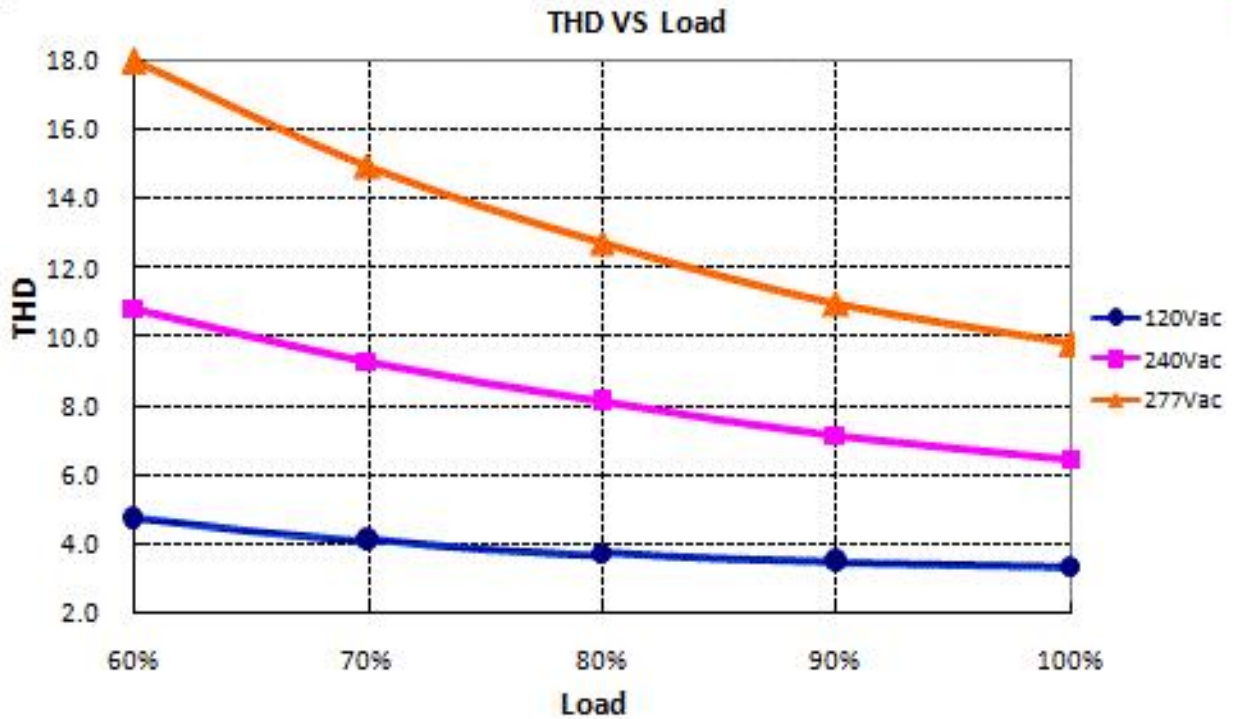
Io=1.88A



POWER FACTOR VS LOAD



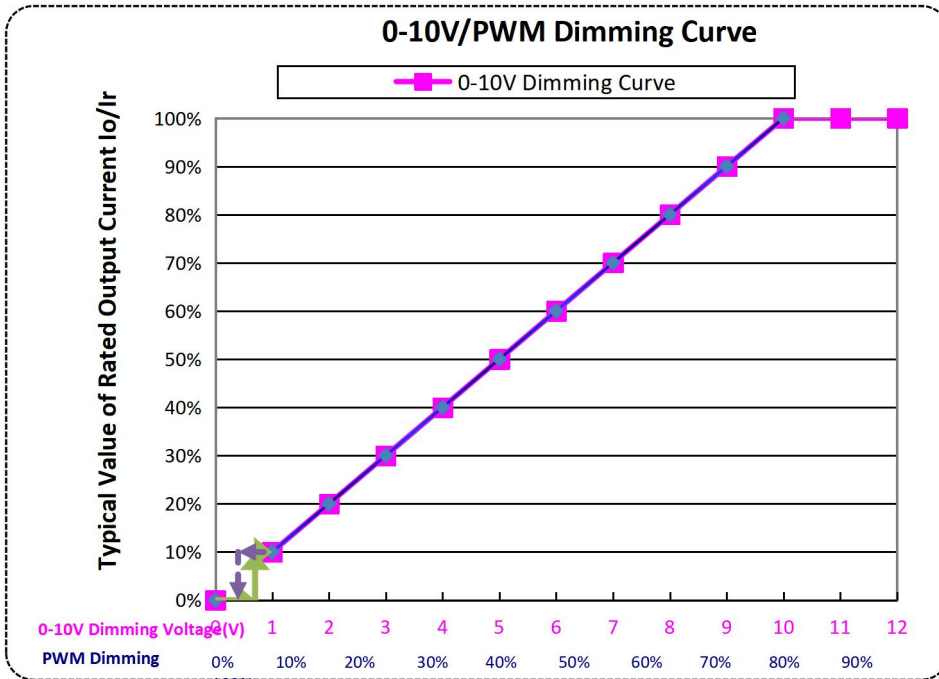
TOTAL HARMONIC DISTORTION



PROTECTIONS

Parameter		Min.	Typ.	Max.	Notes
Input Over Voltage Protection	Input Protection Voltage	315Vac	325Vac	335Vac	Turn off the output when the input voltage exceeds protection voltage.
	Recovery Voltage	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		The driver Can Survive input Voltage Stress of 100V for 48 hours			
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

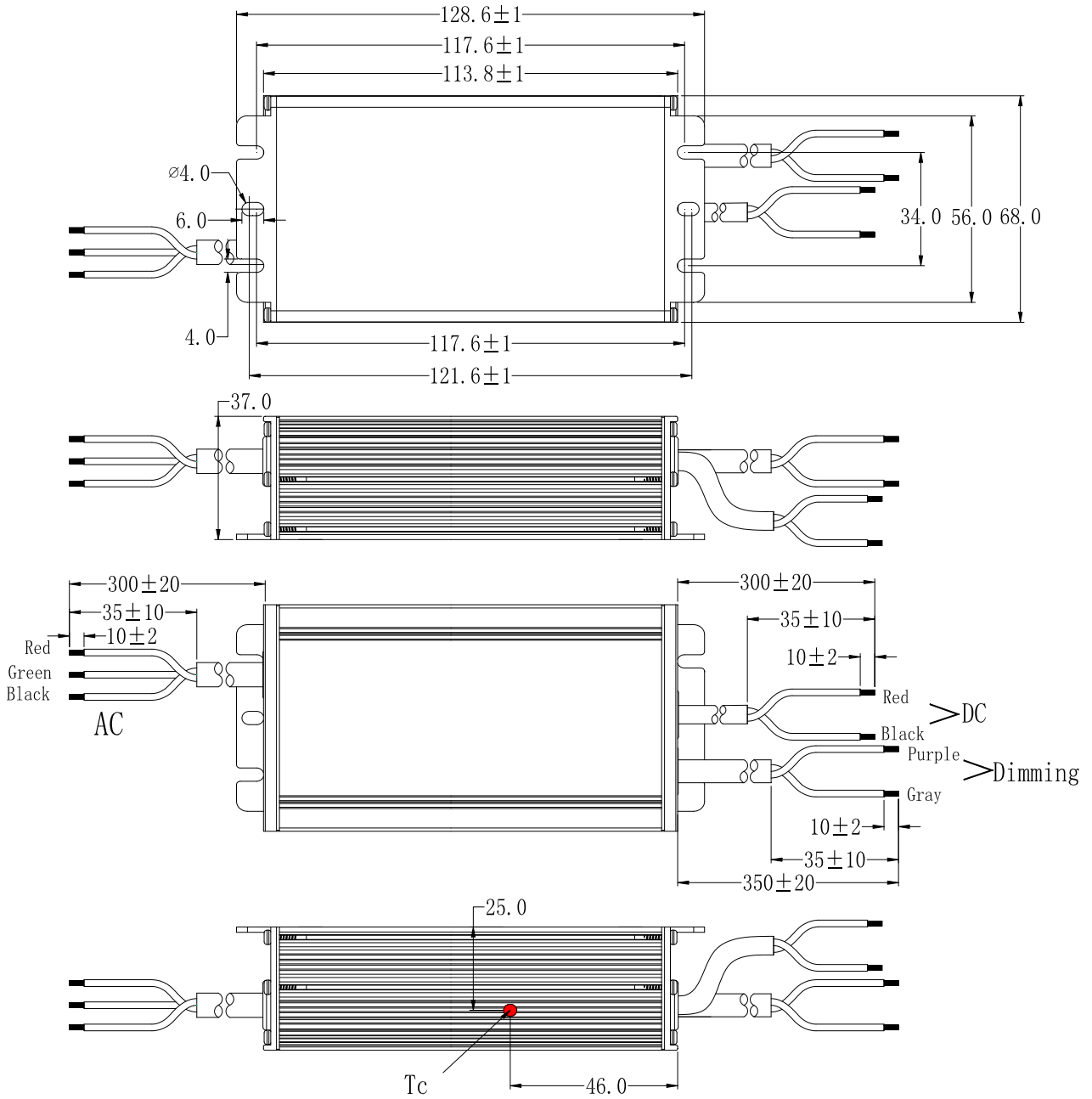


Note:

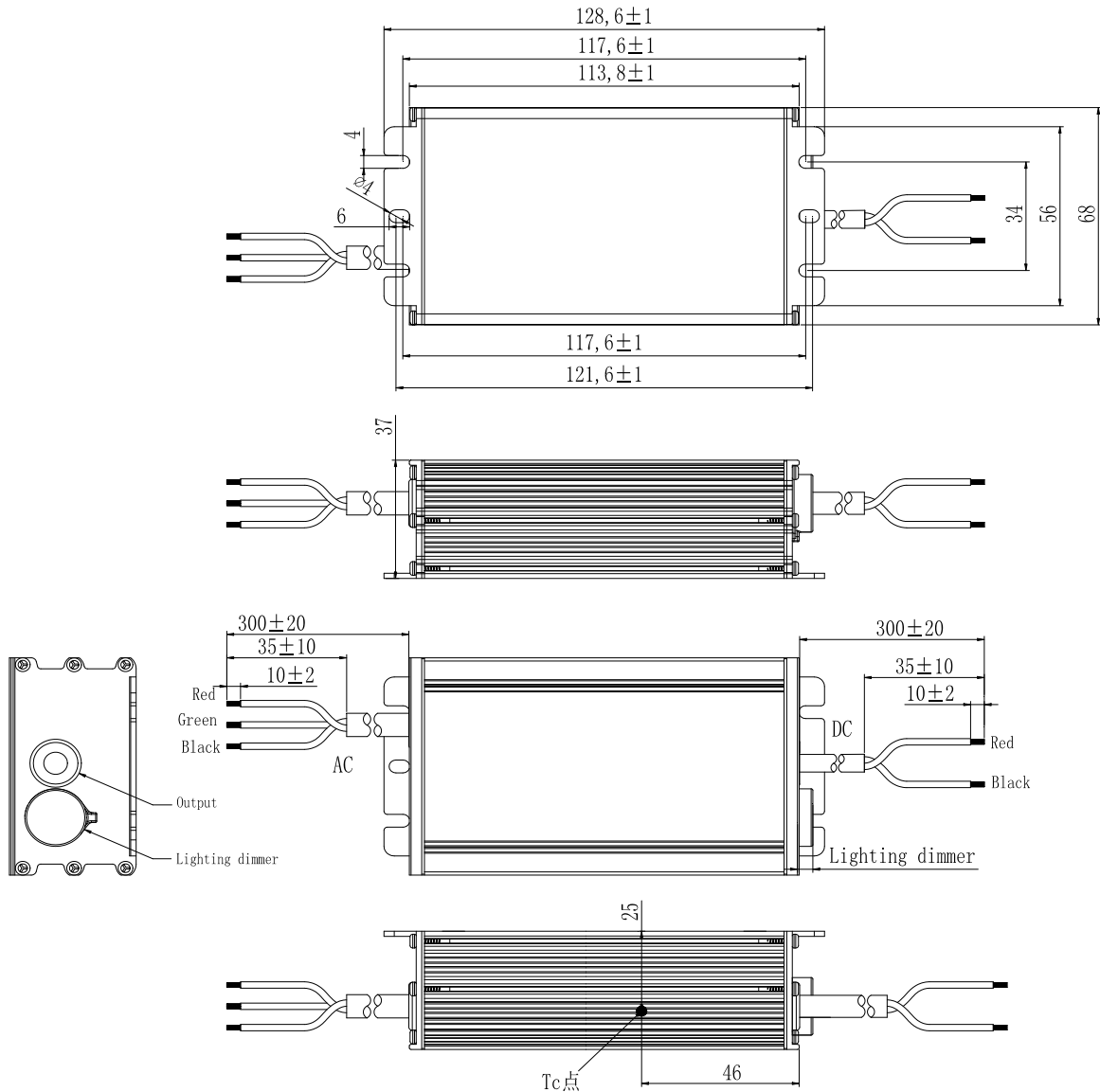
Dim to off model is realized by decreasing the output voltage, the power supply still has residual voltage when dim to off, so the start up voltage of the lamp should be higher than residual voltage.

MECHANICAL OUTLINE

X6-075M062 types



X6-075V062 types



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

LABEL

104.00 mm


45.50 mm

INPUT

L RED

G GREEN

N BLACK



MOSO[®]

X6-075M062

LED DRIVER

IS15885(Part2/Sec13)

OUTPUT


RED Vo +

BLACK Vo -


PURPLE DIM +

GRAY DIM -


INPUT		100-240V~ 50/60Hz, 1.1A Max.PF:0.95
OUTPUT		38-62V= 0.19-1.88A Max: 70V= Max.Power:75W
t _c : 90°C		t _a : 50°C Input:100-200V~ t _a : 60°C Input:200-240V~




SELV




IP67



RoHS





R-41077186
www.bis.gov.in

MADE IN CHINA
For LED module only

SHENZHEN MOSO ELECTRONICS TECHNOLOGY CO., LTD
No.1061, Songbai Road, Xili Town, Nanshan District,
Shenzhen, CHINA

104.00 mm


45.50 mm

INPUT

L RED

G GREEN

N BLACK



MOSO[®]

X6-075V062

LED DRIVER

IS15885(Part2/Sec13)


OUTPUT

RED Vo +


BLACK Vo -

Io ADJ (+)


INPUT		100-240V~ 50/60Hz, 1.1A Max.PF:0.95
OUTPUT		38-62V= 0.94-1.88A Max: 70V= Max.Power:75W
t _c : 90°C		t _a : 50°C Input:100-200V~ t _a : 60°C Input:200-240V~




SELV




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Page 13 of 13

Specification subject to change without notice

www.mosopower.com Tel: +86-755-27657000 Email: info@mosopower.com

Form No.: FP-10-017RevA/1.0

Specification for Approval

Product Name: 75W off-line programmable driver

Product Model: X6-075M062
X6-075V062

Rev. C.2

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

Product Specification

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Product Model: X6-075M062

X6-075V062

Rev. C.2

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Prepared By	Checked By	Approved By