Specification for Approval

Product Name:	26W Constant Current Driver
Product Model:	X6-026M052 ☑
	X6-026V052 ☐
Rev:	A.2

Address: XiLiSongbai Road 1061, Nanshan District, Shenzhen City, Guangdong Province, P.R.China
Post Code: 518108
TEL: 0755-27657000
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E-mail: wcx@mosopower.com
Web site: http://www.mosopower.com

Prepared By	Checked By	Approved By

Specification for Approval

Produce Name： 26W Constant Current Driver

Product Model： X6-026M052 ☑
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CUSTOMER AUTHORIZED SIGNATURE		
Tested By	**Checked By**	**Approved By**
(Company seal)Return one copy to MOSO with approved signature and company seal.		

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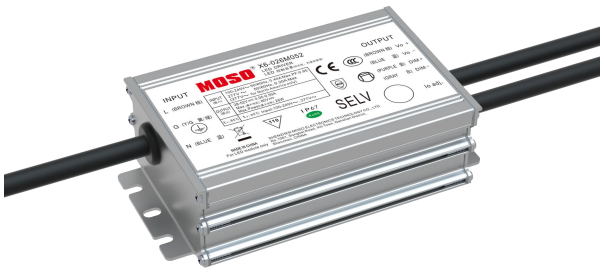
REVISON HISTORY

Version	Description Of Change		Date	Notes
	Before	After		
A.2	—	Original Release	2024-01-09	



Product Feature:

- Input voltage range: 90~305Vac;
- Constant current design;
- Output current adjustable by Built-in potentiometer;
- (M Model)3-in-1 dimmable: 0~10Vdc, PWM, Resistor;
- (M Model)Output and Dimming Signal Isolating, Dim to off;
- THD<10%;
- Surge protection:4KV line-line, 6KV line-earth;
- Protections: OVP, SCP,OTP;
- IP67 design for indoor and outdoor applications;
- Suitable for dry / damp / wet locations;
- 5 years warranty.

Application

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

DESCRIPTION

The X6-26W is a 26W, constant-current, IP67 LED driver that operates from 90-305Vac input with excellent power factor and low THD. It is created for industrial lights, tunnel and street lights. The high efficiency of these drivers and compact metal case enable them to run cooler, significantly improving reliability and extending product life. To ensure trouble-free operation, protection is provided against input surge, output over voltage, over temperature and short circuit protection.

Models

Model Number	Input voltage range(Vac)	Max Output Power（W）	Output Voltage Range (Vdc)	Output current range(A)	Default output current (A)	Typical Efficiency	Typical THD	Typical PF
								230Vac
X6-026Y052	90-305	26	28-52	0.25-0.50	0.50	88%	6%	0.97

Notes:

[1]Y=M means 0-10V/PWM dimming； Y=V means non-dimmable. Model -A means forward dimming, and model -B means reverse dimming.

[2]Remark: All specifications are measured at 25℃ ambient temperature, input voltage 230Vac, and the typical value tested by full load, if no specific note.

INPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	90Vac	100-277Vac	305Vac	
Input Frequency	47Hz	50/60	63Hz	
Leakage Current	-	-	0.70mA	277Vac/60Hz
Input AC Current	-	-	0.40A	100-277Vac with full load
Inrush Current	-	-	0.25A²S	230Vac input，100% Load
Power Factor	0.97	0.99	-	120Vac, 60Hz,100% load
	0.95	0.97	-	230Vac, 50Hz, 100%l load (Ps: Input 220Vac，50Hz Output 41.8V&0.24A , PF>0.9)
	0.94	0.96	-	277Vac, 50Hz,100%load
THD	-	6%	15%	100-277Vac,50-60Hz, with 70%-100% load
Max. NO. of PSUs on CIRCUIT BREAKER	B10 10 / C10 16	B16 16 / C16 26	B25 25 / C25 41	230Vac, 100%load

OUTPUT SPECIFICATIONS

Parameter	Min.	Typ.	Max.	Notes
Output Current Tolerance	-8%	-	+8%	
Output Current Set Range(A)	0.25	-	0.50	
Total Output Current Ripple(pk-pk)	-	5%	10%	20MHz BW, full load & LED Load, ripple is different with difference LED load.
Startup Overshoot Current	-	-	10%	100~277Vac & full load, LED Load
No Load Output Voltage(V)	-	-	80	
Line Regulation	-3%	-	+3%	25℃±10℃ ambient temperature, input voltage changes from 100Vac to 277Vac.
Load Regulation	-5%	-	+5%	25℃±10℃ambient temperature, 230Vacinput, load changes from 60% to 100%.
Turn-on Delay Time	-	-	1S	120Vac,100% load
	-	-	0.5S	230Vac,100% load
Standby Power	-	-	0.5W	230Vac

GENERAL SPECIFICATIONS

Parameter		Min.	Typ.	Max.	Notes
Efficiency @120Vac		86%	88%	-	Measured at 100% load and 25℃ambient temperature
Efficiency @230Vac		86%	88%	-	Measured at 100%load and 25℃ambient temperature
Efficiency @277Vac		85%	87%	-	Measured at 100% load and 25℃ambient temperature
Dielectric Strength	Input-Output	-	3750Vac	-	5mA/60S
	Input-PE	-	1875Vac	-	
	Output- PE	-	1600Vac	-	
Grounding Resistance		-	-	0.1Ω	25A/60S
Insulation Resistance		10MΩ	-	-	Input-Output, Input-PE, Output-PE, 500Vdc/60s/25℃/70%RH
MTBF		-	200KHours	-	230Vac,80% load (MIL-HDBK-217F)
Lifetime		-	50KHours	-	230Vac&100% load,75℃case temperature, refer to lifetime VS Tc curve for details
Ambient Temperature		-40℃	-	+60℃	
Operating Case Temperature for Safety Tc_s		-40℃	-	+85℃	
Operating Case Temperature for Warranty Tc_w		-40℃	-	+75℃	5 Years Warranty Humidity：10% to 95% RH
Storage Temperature		-40℃	-	+85℃	Humidity：5% to 100% RH
Dimensions (L×W×H)mm		119*65*34mm			
Net Weight		470±50g/PCS			
Package		L488xW298xH200; 15PCS/Ctn, Gross Weight: 8.5Kg			

DIMMING

Parameter	Min.	Typ.	Max.	Notes
0~10VAbsolute Maximum Voltage on the Vdim (+) Pin	-	18V	-	
1~10V Source Current on Vdim(+)Pin	-	100uA	200uA	
Dimming Output Range X6-036M052	10% I_{max}	-	100% I_{max}	I_{max}=0.50A
Recommended Dimming Range for 0-10V	0V	-	10V	Default 0-10V/ PWM Dimming
Turn-on Voltage	0.8V	-	1.3V	
Turn-off Voltage	0.4V	-	0.8V	
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%	-	100%	

Turn-on Duty Cycle	4%	-	10%	
Turn-off Duty Cycle	1%	-	4%	

SAFETY STANDARDS

Safety Category	Country / Territory	Standards	Whether have Certification
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)	
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	

EMC COMPLIANCE

EMC Category	Country / Territory	Standards	Whether have Certification
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	

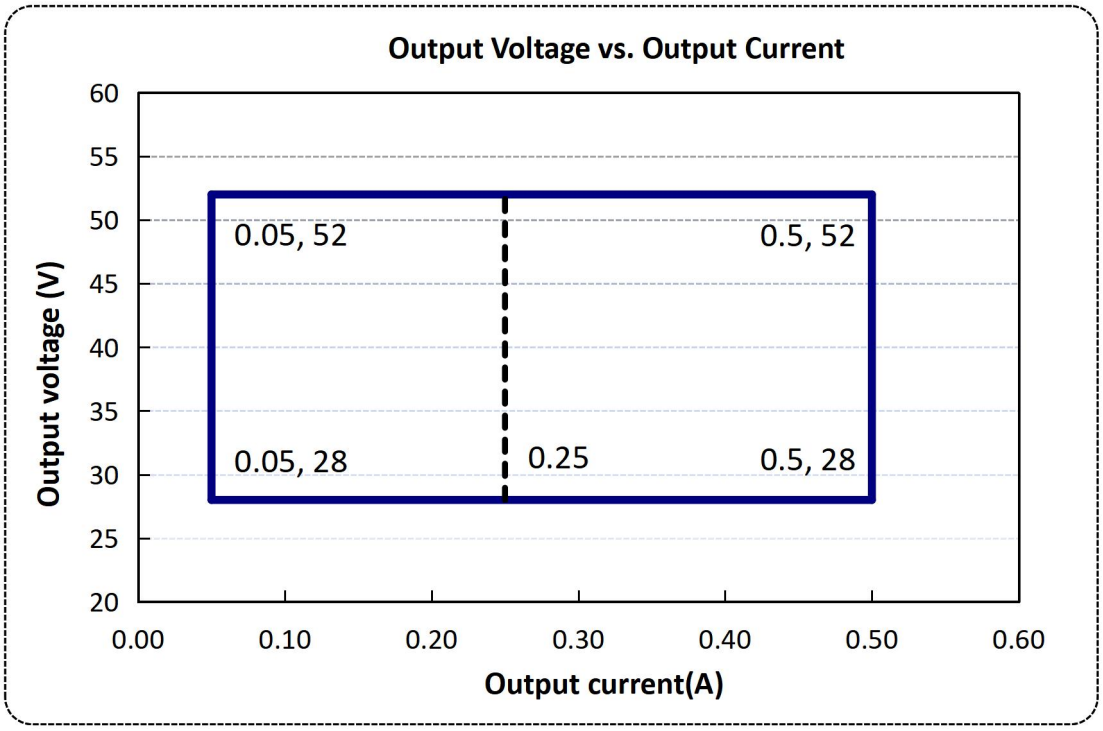
NOTE:

This LED driver meets the EMI specifications above, but EMI performance of a luminaire that contains it depends also on the other devices connected to the driver and on the fixture itself.

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.
Output over Voltage Protection	Run into protection mode when output voltage exceeds limit, and return to normal when the fault is eliminated and restart the power supply.

OPERATING AREA I-V

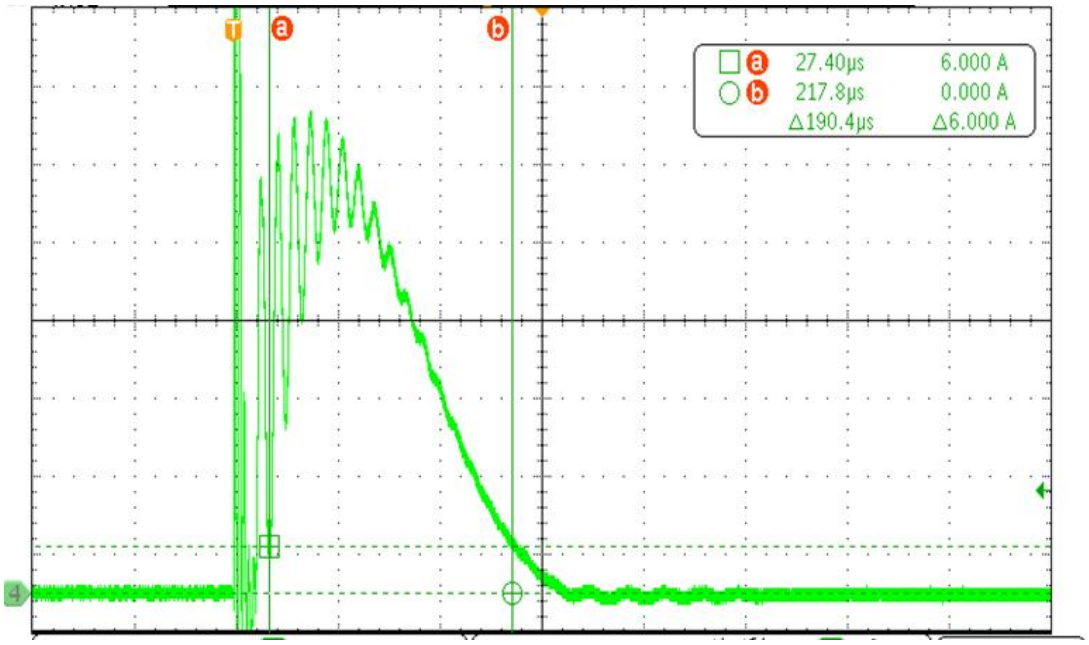


Notes:

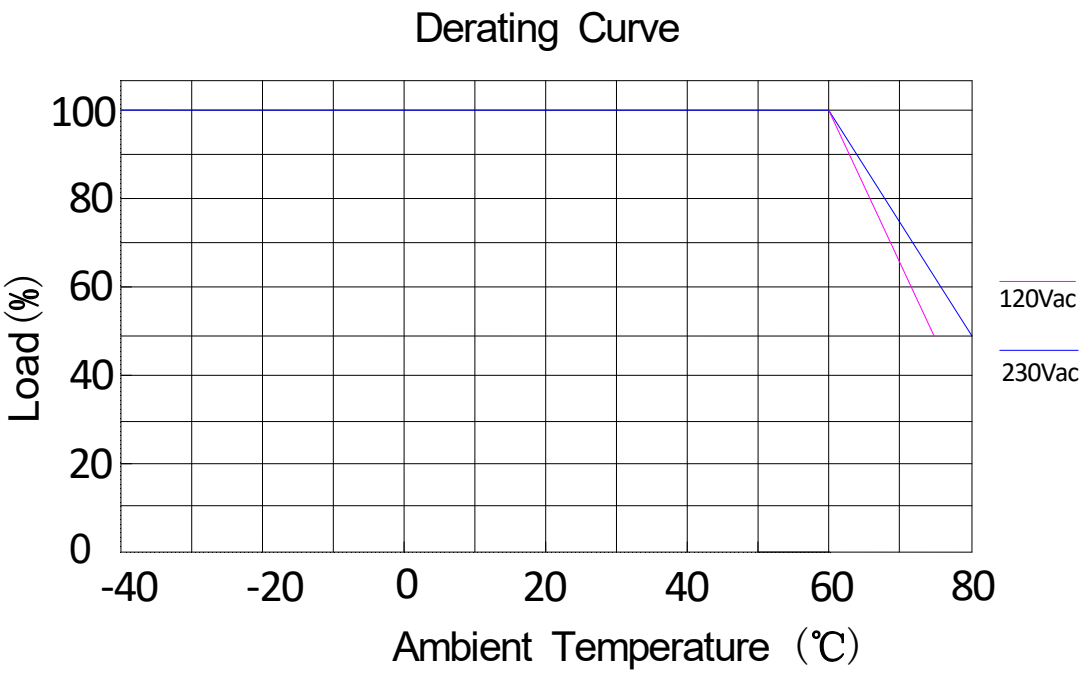
1.The drivers are not allowed to work in over-load condition, otherwise warranty will expire.

2. Y = V for the region to the right of the dotted line , Y = M for the region containing the solid line.

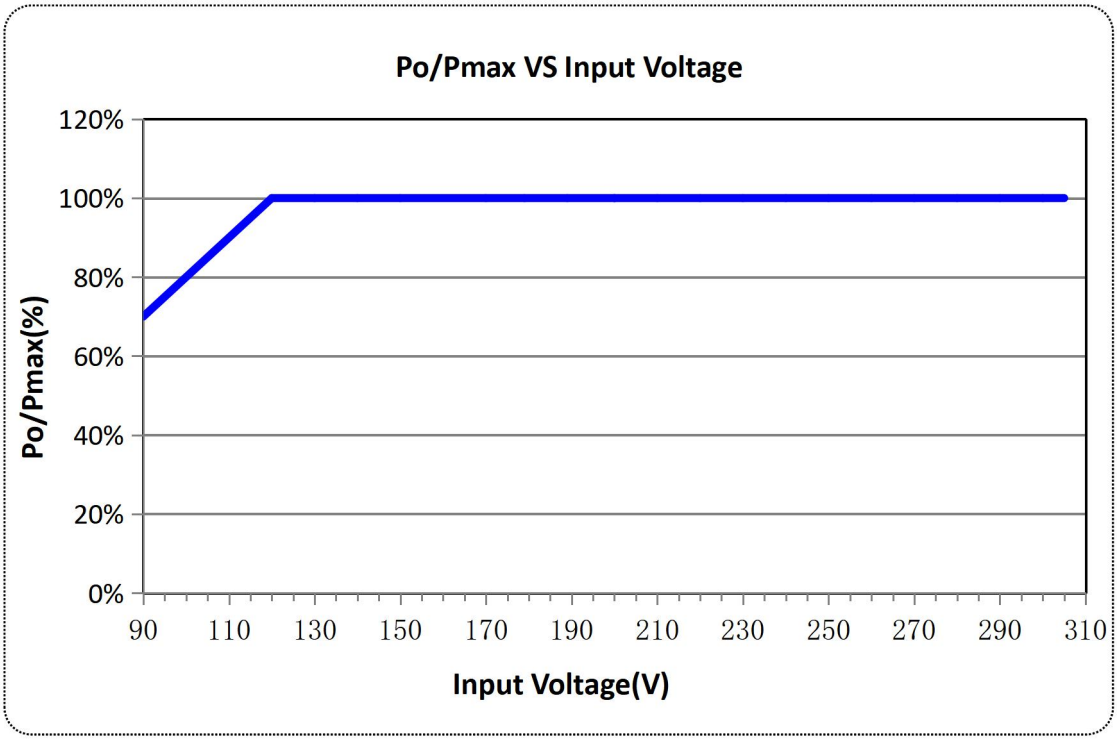
INRUSH CURRENT WAVEFORM



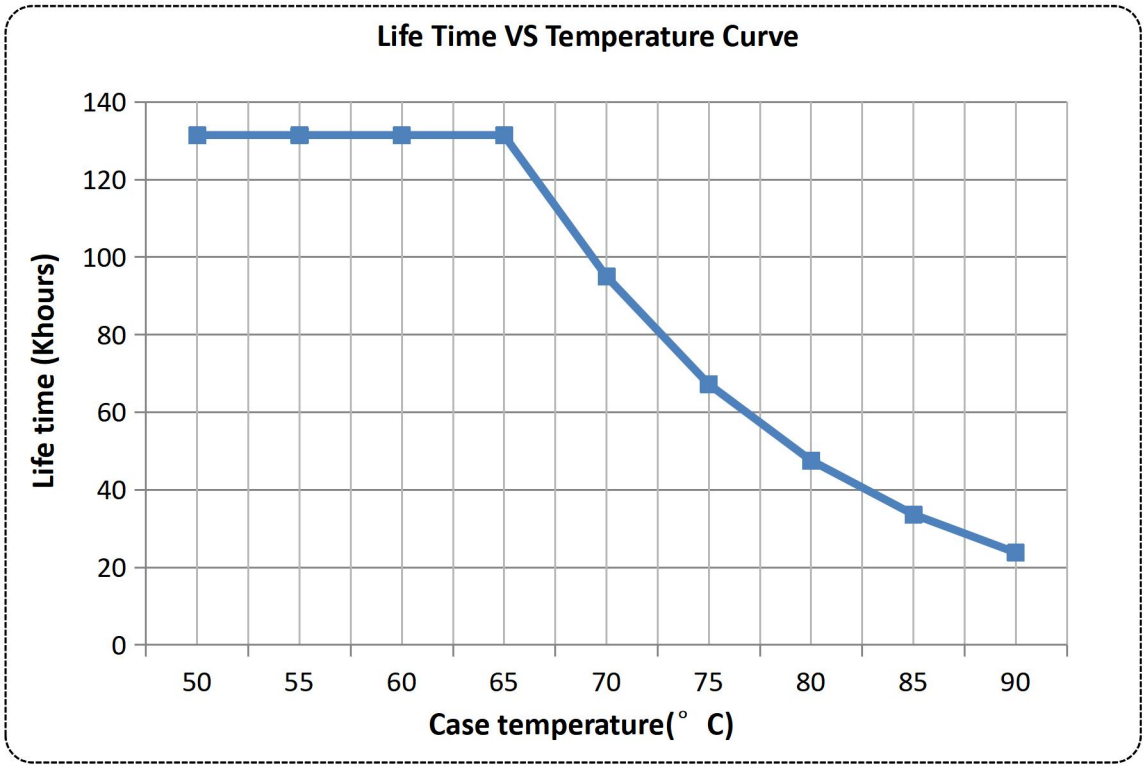
DERATING CURVE



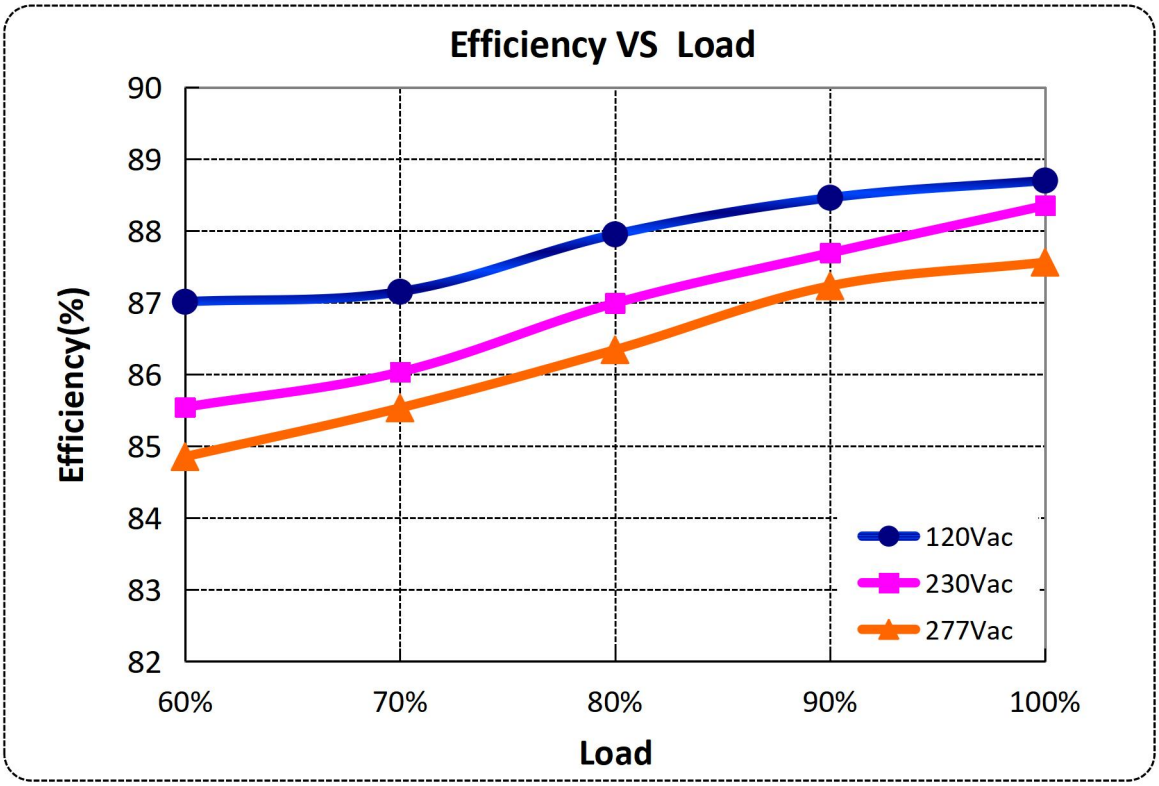
OUTPUT POWER VS INPUT VOLTAGE



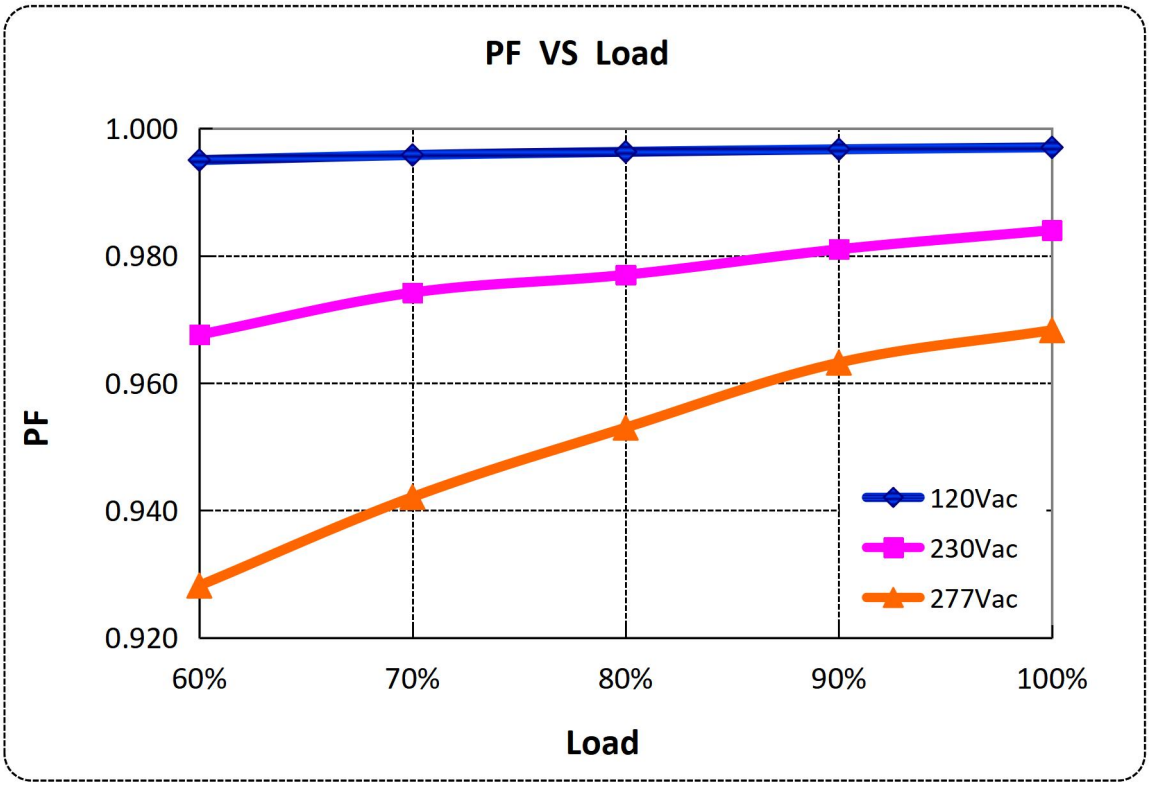
LIFETIME VS CASE TEMPERATURE



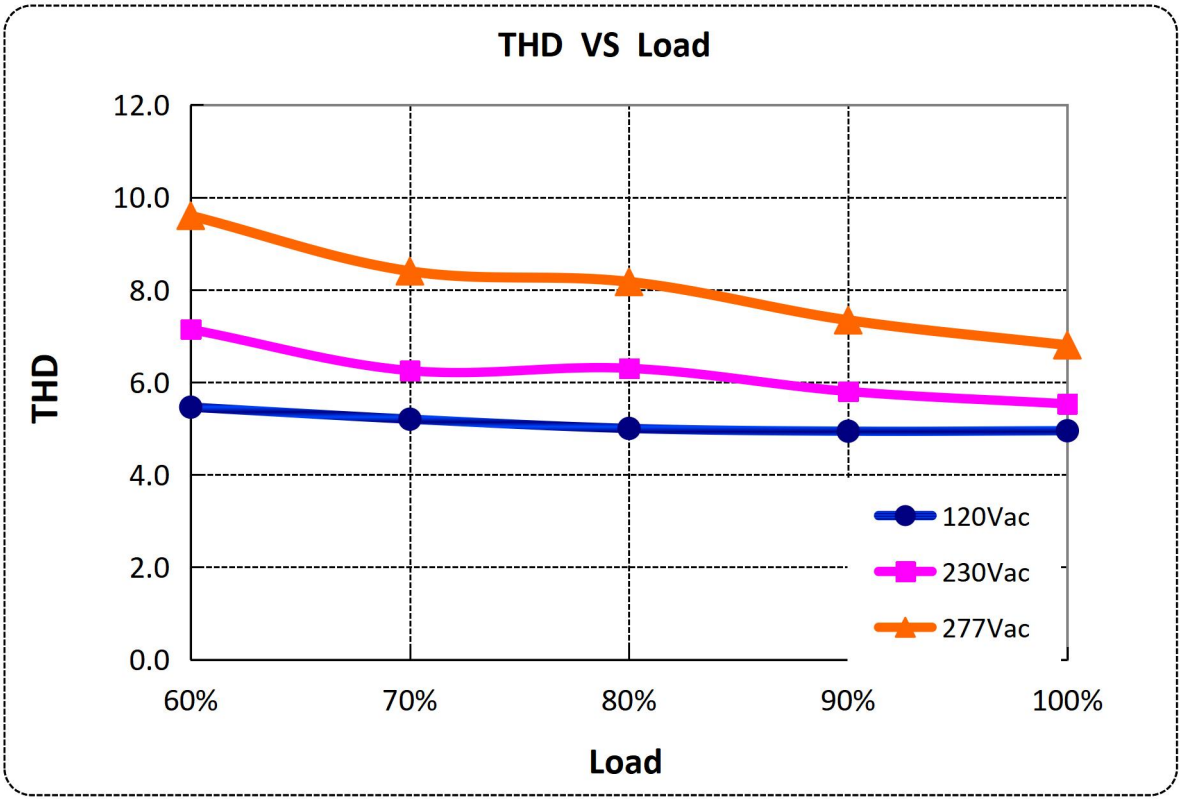
EFFICIENCY VS LOAD



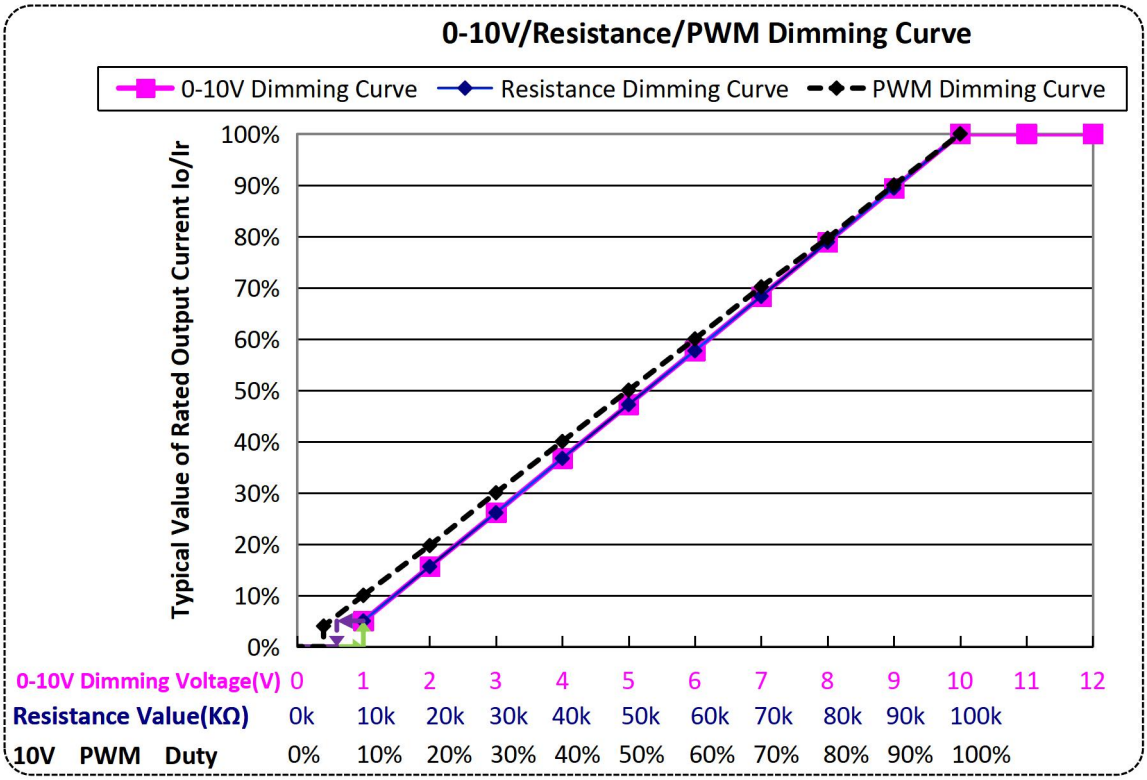
POWER FACTOR VS LOAD



TOTAL HARMONIC DISTORTION



0-10V/Resistance/PWM DIMMING CURVE

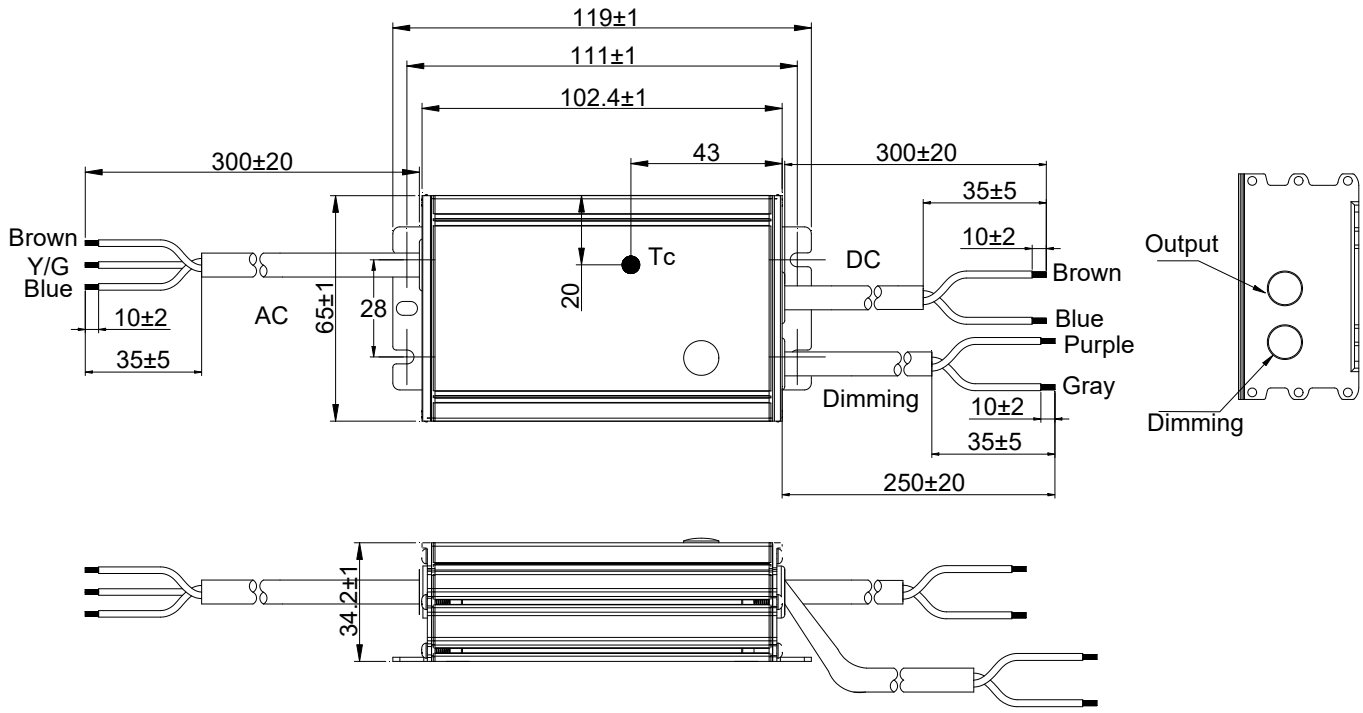


Notes:

1.Y=M,The minimum dimming current is about 5%Imax. When the output current is less than 5%Imax, the output current accuracy is not required;

2. Y=M,When the dimming input signal reaches 0V or 10VPWM duty cycle to 0% or the resistance value reaches 0kΩ, the output can be turned off.

MECHANICAL OUTLIN



Wire	Specification	Note
Input	CCC+VDE H05RN-F *3C L=300±20mm	CCC/CE
Output	CCC+VDE H05RN-F *2C L=300±20mm	CCC/CE
Dimming	UL 2733 22AWG *2C L=250±20mm	Y=M

LABEL


92.00 mm
45.00 mm
INPUT
MOSO®
X6-026M052
LED DRIVER
LED 控制装置(恒流型，内置防雷管)
OUTPUT
L (BROWN 棕)
G (Y/G 黄/绿)
N (BLUE 蓝)
INPUT (输入)
100-240V～ 50/60Hz, 0.40A Max.PF:0.95
277V ～ 50/60Hz, 0.20A Max
(277V～ for North America only)
OUTPUT (输出)
28-52V⎓ 0.05-0.50A
Max.(最大电压): 80V⎓
Max.Power(最大功率): 26W
tc: 85°C
ta: 60°C Input:100-240V～, 277V～
(BROWN 棕) Vo +
(BLUE 蓝) Vo −
(PURPLE 紫) DIM +
(GRAY 灰) DIM −
110
IP67
RoHS
SELV
Io adj.
MADE IN CHINA
For LED module only
SHENZHEN MOSO ELECTRONICS TECHNOLOGY CO., LTD
No.1061, Songbai Road, Xili Town, Nanshan District,
Shenzhen, CHINA