

	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
	产品系列	DL-120W-MPA 系列	REV	1.4

中山市东菱照明科技有限公司

客户承认书

SPECIFICATION FOR APPROVAL

CUSTOMER/客户名:			
MODEL NO. /产品型号:	DL-120W-MPA		
Rev./版本号:	V1.4		
SAMPLE DATE/送样日期:			
客户确认栏			
TESTED BY 检查	CHECKED BY 审核	APPROVED BY 批准	
客户备注			
Please return to us one copy of "SPECIFICATION FOR APPROVAL" with you approved signature. /客户确认签章后请回传一份承认书给我公司.			
东菱确认栏			
MADE BY 制作	CHECKED BY 审核	APPROVED BY 批准	
Zhongshan Done Lighting Technology Co., Ltd. 中山市东菱照明科技有限公司 No. 3-1&3-2, Kanglong 3rd Road, XinMao Industry Zone, Henglan Town, Zhongshan City, Guangdong Province, P. R. China Post code: 528478 地址: 广东省中山市横栏镇新茂工业区康龙三路3号之一之二 邮编: 528478 TEL: 0760-89838399 89838379 FAX: 0760-89831157 89838396			

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DONE® 东菱电源	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
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FEATURES 产品特点

- ◇ Class I Driver
Class I 结构驱动
- ◇ Input voltage:100-277V~ 50/60Hz
输入:100-277V ~50/60Hz
- ◇ PF>0.95 @230Vac full load
输入为 230Vac , 输出满负载 PF 值大于 0.95
- ◇ Efficiency >89% min @230Vac full load
输入为 230Vac , 输出满负载, 效率大于 89%
- ◇ THD<10% @ 230Vac full load
输入为 230Vac , 输出满负载, 谐波小于 10%
- ◇ Metal shell structure, waterproof level can reach IP67.
金属外壳结构、防水级别可以达到 IP67
- ◇ Double 85 test pass (15 days) @230Vac full load
在 230Vac 满载时可过双 85 测试 (15 天)
- ◇ Lightning Surge : Differential Mode+/- 4KV (2 ohm) ,Common Mode +/- 6 KV (12 ohm)
(IEC61000-4-5 2014)
雷击浪涌等级: 差模 L-N +/- 4KV (2 ohm),共模 L , N-地+/- 6 KV (12 ohm)
参照 IEC61000-4-5 2014
- ◇ The LED DRIVER shall be applied 1500Vac for 60 seconds (HI – POT)
该 LED 驱动耐压可达 1500Vac 持续 60S
- ◇ Long life design warranty for 3years
超长寿命设计, 质保 3 年
- ◇ LED Driver is constant current output control mode. the output current is external adjustable.
驱动为恒流输出控制模式。输出电流外部可调
- ◇ Applied in: Street lamp, project-light lamp, wash wall lamp or other outdoor lamps and lanterns
应用于: 路灯、投光灯、洗墙灯、等户外照明灯具
- ◇ Certification qualification
BIS
- ◇ 本产品适用于印度市场



MODEL LIST 型号列表

型号 (Model NO.)	Input Voltage 输入电压	Output Voltage 输出电压	Output Current 输出电流	效率 Efficiency		谐波 THD		功率因数 (PF)	
				115Vac	230Vac	115Vac	230Vac	115Vac	230Vac
DL-120W3A3-MPA	100~277 Vac 50-60Hz	20~38Vdc	3.3A	>88%	>89%	<6%	<10%	>0.98	>0.95
DL-120W2A1-MPA		32~58Vdc	2.1A	>88%	>89%	<6%	<10%	>0.98	>0.95

注：以上参数为上电 15 分钟内测得

 东菱电源	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
	产品系列	DL-120W-MPA 系列	REV	1. 4

■ ELECTRICAL SPECIFICATION 电气规格

◇Input Characteristics 输入特性

INPUT VOLTAGE RANGE 输入电压范围	90- 305Vac		
FREQUENCY RANGE 频率范围	47-63Hz		
POWER FACTOR 功率因数	>0.95	230Vac full load	230Vac 输入，满负载时 PF>0.95
THD 总谐波失真	<10%	230Vac full load	230Vac 输入，满负载时 THD<10%
INPUT MAX CURRENT 输入最大电流	<1.8A	100Vac full load	100Vac 输入，满负载时 I _{in} <1.8A
INRUSH CURRENT 突入电流	Cold Start 100A @230Vac 冷启动 (25°C) 100A /230Vac		

◇Output Characteristics 输出特性

Model NO.型号	DL-120W3A3-MPA	DL-120W2A1-MPA
RATED CURRENT 额定电流 (mA)	3.3A	2.1A
CONSTANT CURRENT REGION 电流范围	2.7~3.3A	1.9~2.4A
VOLTAGE RANGE 电压范围 (Vdc)	20~38Vdc	32~58Vdc
RATED POWER 额定功率	125.4W	121.8W
NO LOAD VOLTAGE 空载电压	53Vdc	75Vdc
EFFICIENCY 效率	>89%@230Vac full load	>89%@230Vac full load
RIPPLE OF THE OUTPUT CURRENT 输出电流纹波	<50%(LED Load)&<120%(DC Electronic Load)	
CURRENT TOLERANCE 电流精度	±5%	
LINE REGULATION 线性调整率	±5%	
LOAD REGULATION 负载调整率	±5%	
SETUP TIME 启动时间	<1000ms @115Vac full load <500ms @230Vac full load	

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◇Protection 保护

OVER CURRENT (Typ.) 过载	95 ~ 105% Protection type : Constant current limiting, recovers automatically after fault condition is removed 保护模式:恒电流限制模式, 负载异常条件移除后可自动恢复
SHORT CIRCUIT 短路	Hiccup mode, recovers automatically after fault condition is removed 打嗝模式,异常条件移除后可自动恢复
OVER VOLTAGE 过电压	Protection mode: the product is in hiccup state, protect the product from damage, when the fault is ruled out, the power supply is normal 保护模式:产品处于打嗝状态,保护产品不受损伤,当故障排除,电源工作正常

NOTE :

- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) input, rated load and 25°C of ambient temperature.
如未特别说明,所有规格参数均在 230Vac (50Hz) 输入, 额定负载, 环境温度 25°C 的条件下进行测量。
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.
误差: 包含设定误差、线性调整率和负载调整率。
- 3) Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications.
恒流模式在额定输出电压 50%~100%情况下运行, 适用 LED 等相关产业。

◇Environment 环境

WORKING TEMP. 工作温度	-30 ~ +55°C(Refer to "Derating Curve") -30 ~ +55°C (参考 减额曲线)
WORKING HUMIDITY 工作湿度	20 ~ 95% RH non-condensing 20 ~ 95% RH,无冷凝
STORAGE TEMP, HUMIDITY 储存温度、湿度	-30~ +80°C, 10 ~ 95% RH
VIBRATION 耐振动	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes 10 ~ 500Hz, 5G 12 分钟/周期, X、Y、Z 轴各 72 分钟
WITHSTAND VOLTAGE 耐压	I/P-O/P:1.5KVAC I/P-PE :1.5KVAC O/P-PE : 0.5KVAC
ISOLATION RESISTANCE 绝缘阻抗	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
MTBF	150K hrs min. MIL-HDBK-217F (ta=25°C)

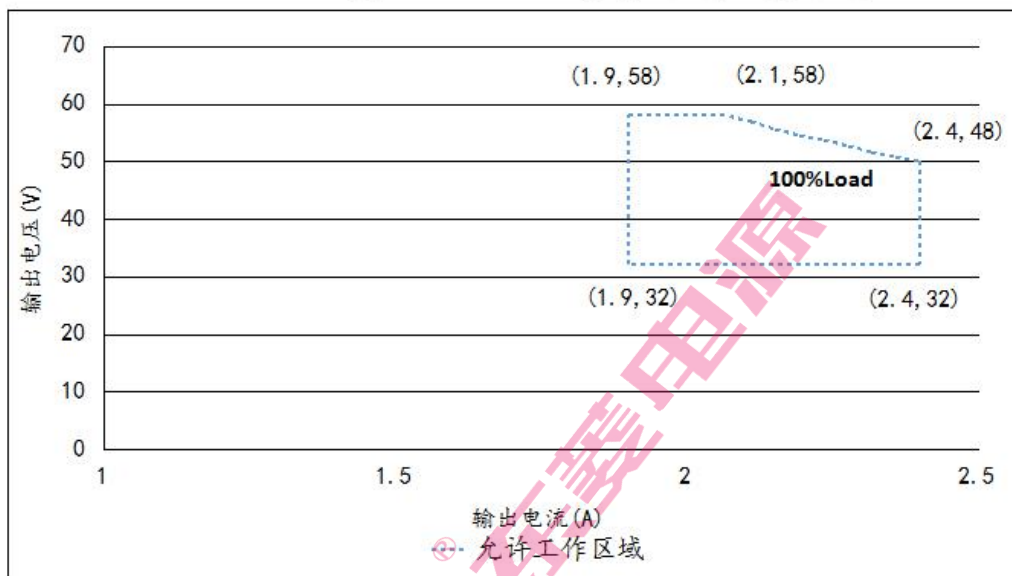
■ SAFETY & EMC 安全与电磁兼容

Safety 安全	IS15885(Part2/Sec13)
EMC 电磁兼容	/
LIGHTNING SUGER 雷击浪涌	Differential Mode+/- 4 KV,Common Mode+/- 6 KV (12 ohm) . (IEC61000-4-5 2014) 雷击浪涌 L-N +/- 4KV L,N-地+/- 6 KV(12 ohm) (IEC61000-4-5 2014)
LEAKAGE CURRENT 漏电流	<0.7mA

I-V 工作区域

OUTPUT CURRENT VS OUTPUT VOLTAGE 输出电流 VS 输出电压 (DL-120W2A1-MPA)

DL-120W2A1-MPA (输入100-277Vac时) 输出电流VS输出电压

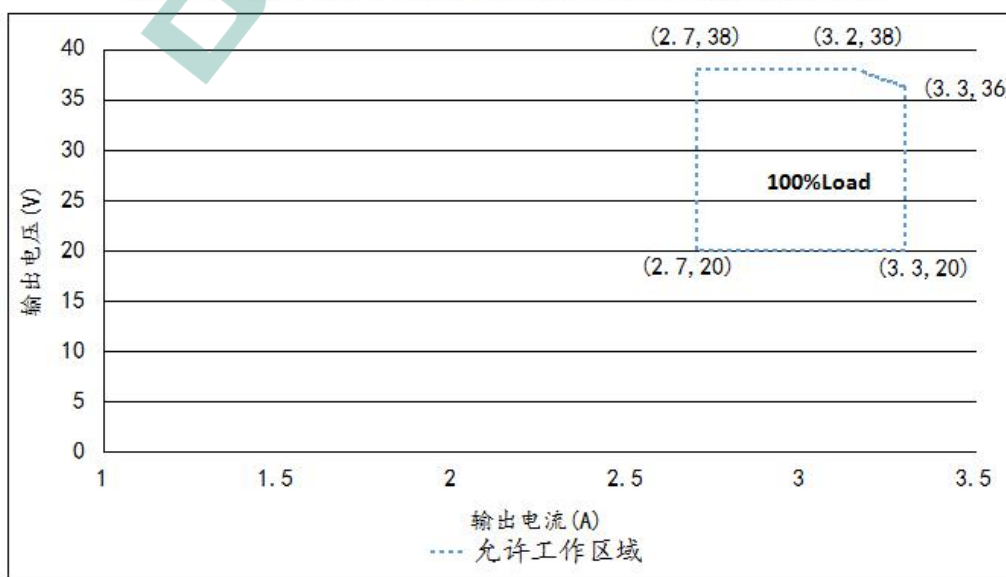


DL-120W2A1-MPA (输入 100-277Vac 时, 不同负载电压对应的额定输出电流值和功率)

负载工作电压	32V	36V	39V	42V	45V	48V	54V	58V
电源电流 I _o _MAX	2.4A	2.4A	2.4A	2.4A	2.4A	2.4A	2.2A	2.1A
电源功率 P _o _MAX	76W	86W	93W	100W	108W	120W	120W	120W

OUTPUT CURRENT VS OUTPUT VOLTAGE 输出电流 VS 输出电压 (DL-120W3A3-MPA)

DL-120W3A3-MPA (输入100-277Vac时) 输出电流VS输出电压



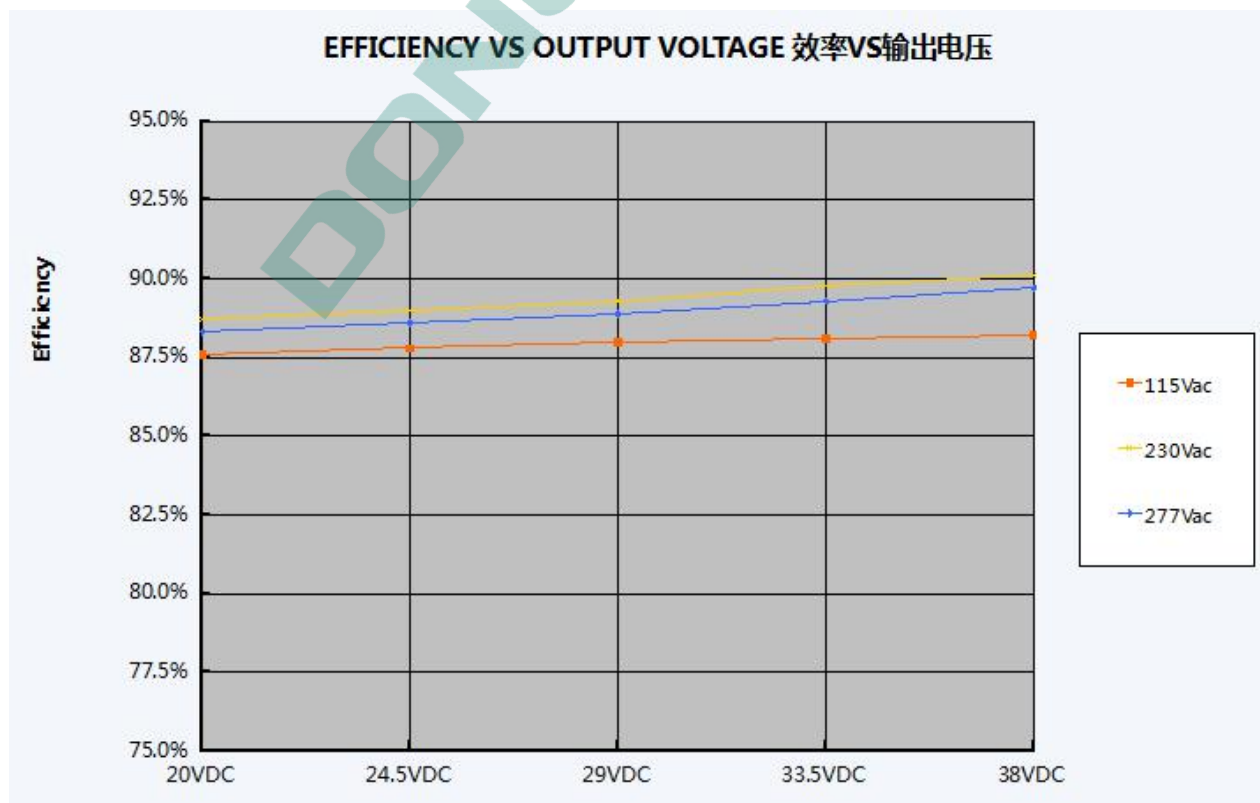
DL-120W3A3-MPA (输入 100-277Vac 时, 不同负载电压对应的额定输出电流值和功率)

负载工作电压	20V	22V	24V	27V	30V	33V	36V	38V
电源电流 I _o _MAX	3.3A	3.3A	3.3A	3.3A	3.3A	3.3A	3.3A	3.2A
电源功率 P _o _MAX	66W	72W	79W	89W	99W	108W	120W	120W

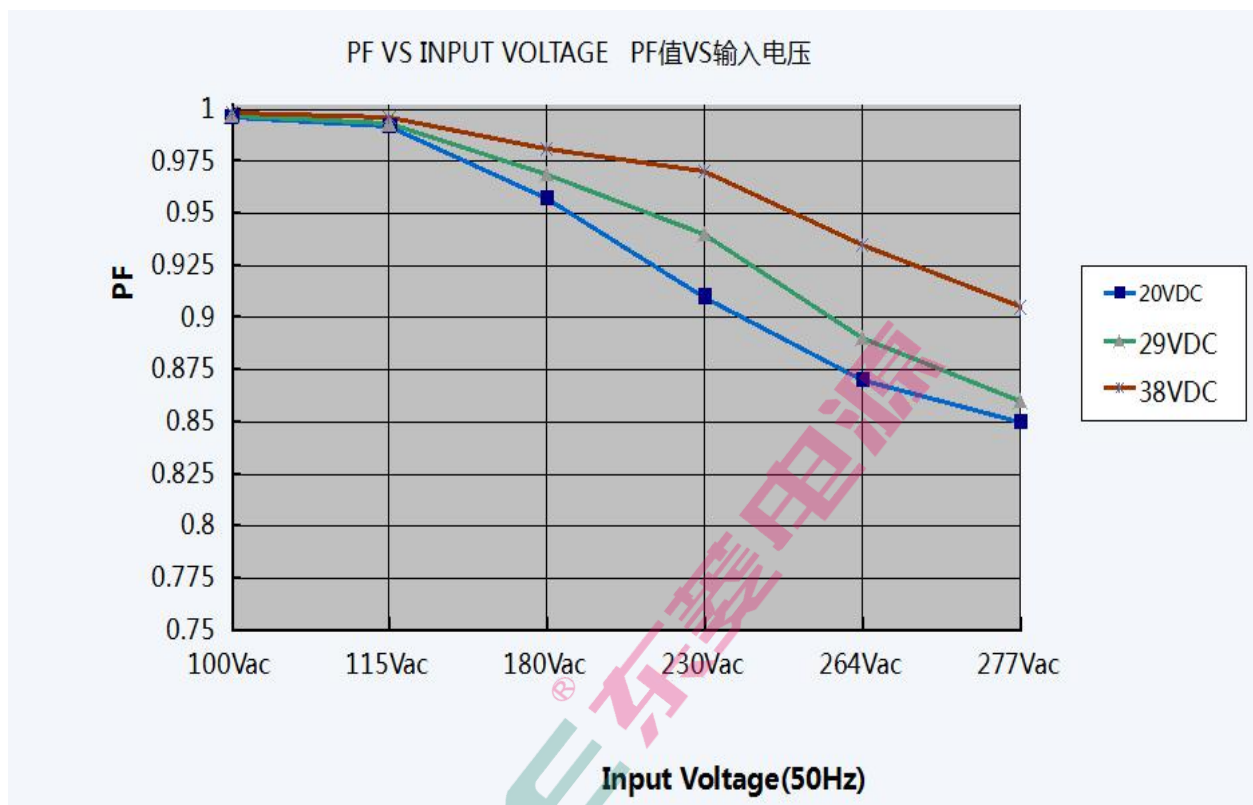
■ EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压 (DL-120W3A3-MPA)



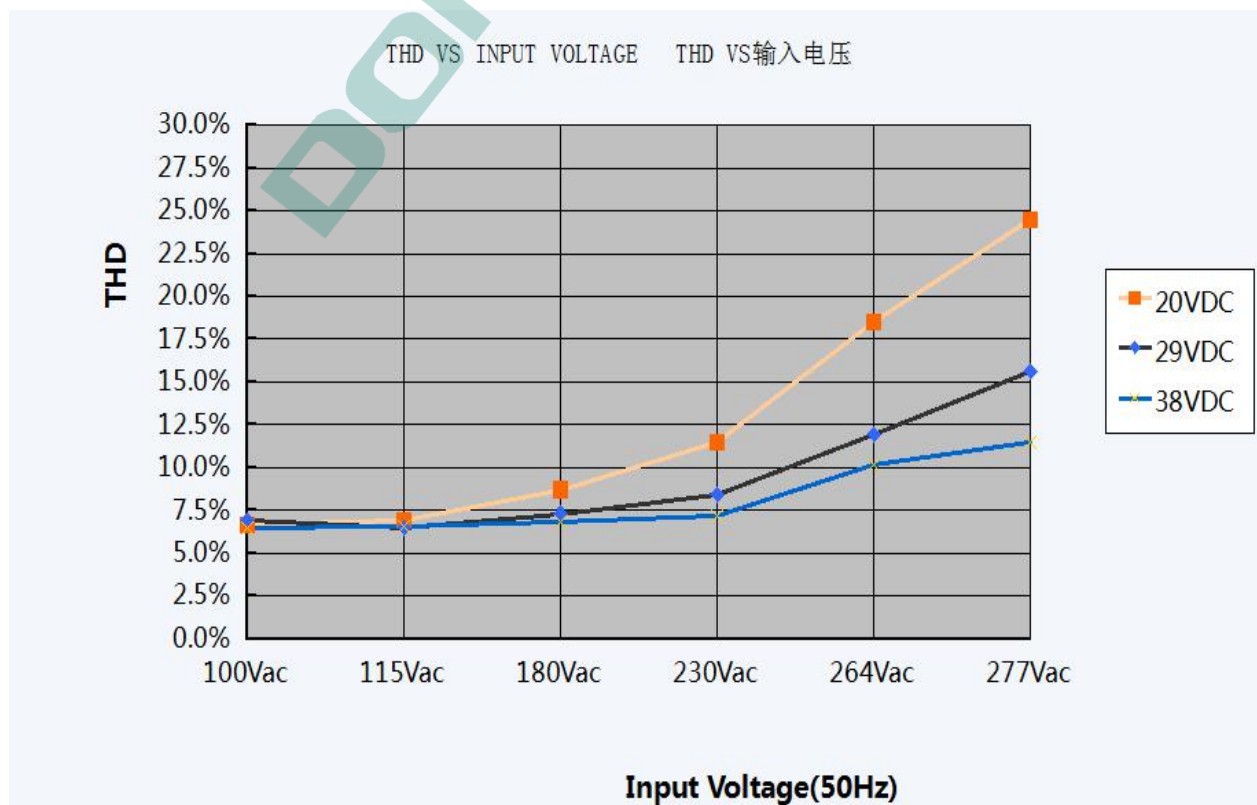
■ EFFICIENCY VS OUTPUT VOLTAGE 效率 VS 输出电压 (DL-120W3A3-MPA)



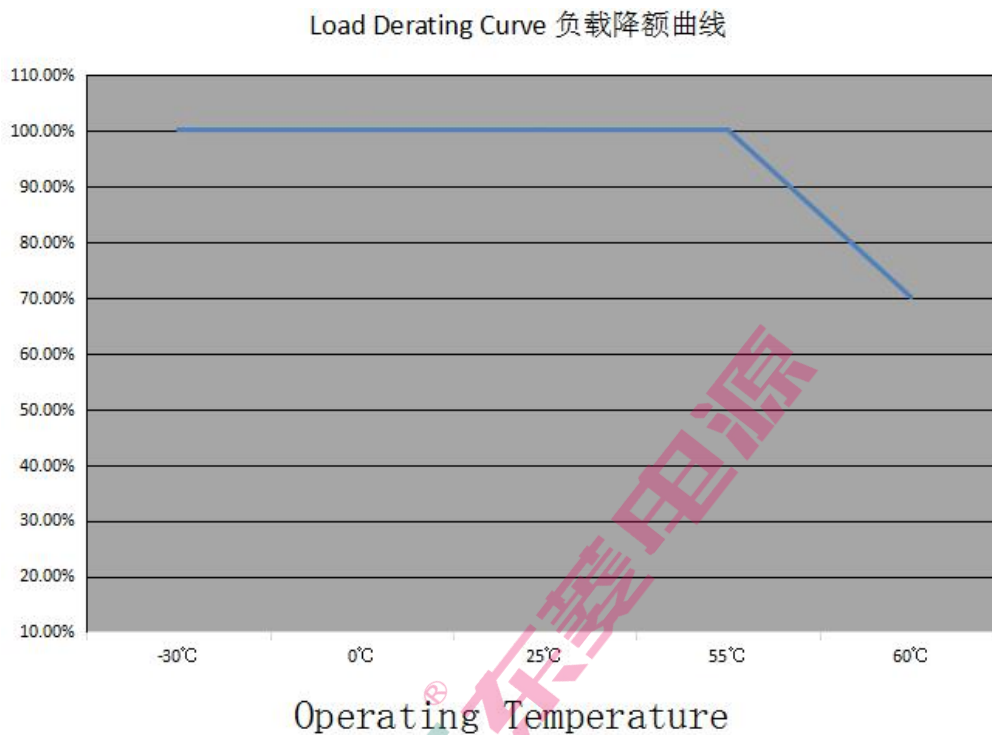
PF VS INPUT VOLTAGE PF 值 VS 输入电压 (DL-120W3A3-MPA)



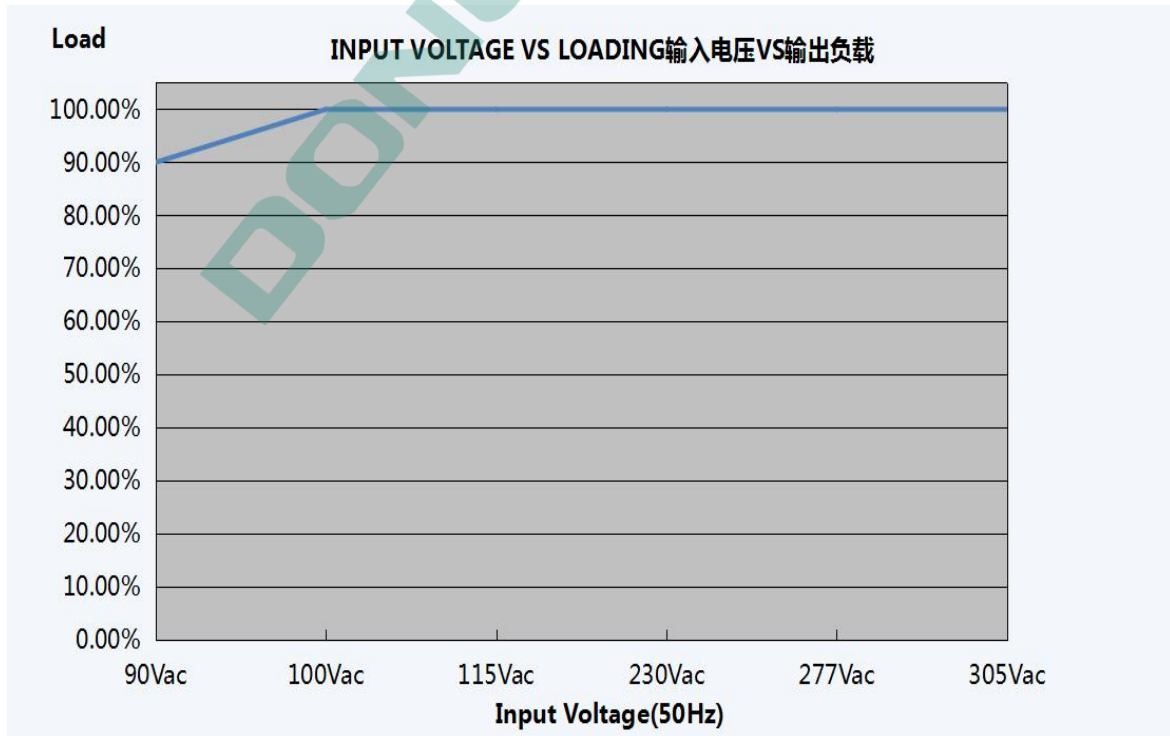
THD VS INPUT VOLTAGE THD VS 输入电压 (DL-120W3A3-MPA)



LOAD DERATING CURVE 降额曲线 (DL-120W3A3-MPA)

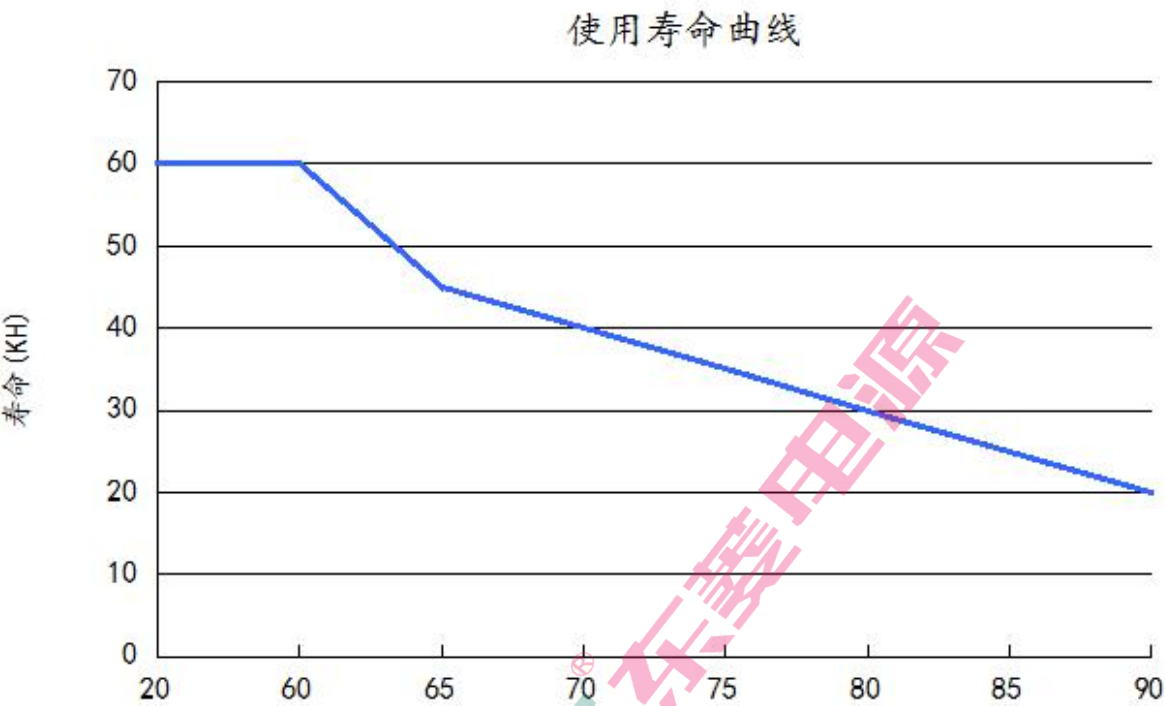


INPUT VOLTAGE VS LOADING 输入电压 VS 输出负载 (DL-120W3A3-MPA)



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■ TYPICAL LIFETIME 使用寿命曲线 (DL-120W-MPA)



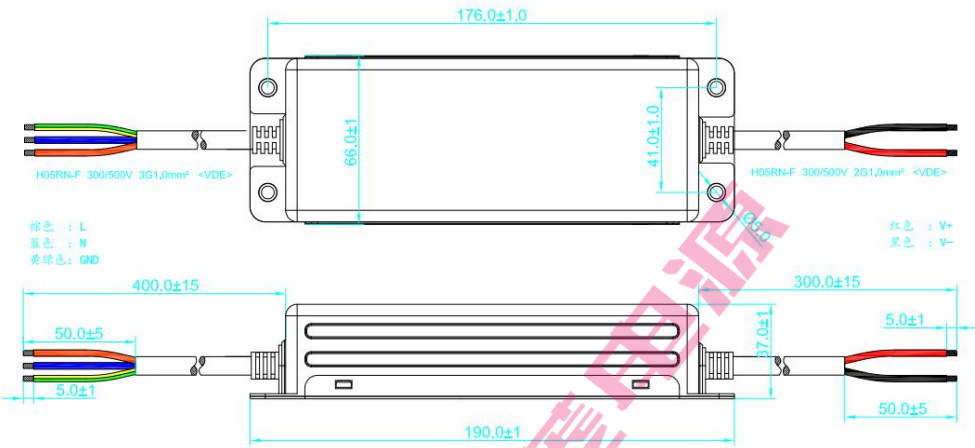
DONE® 东菱电源	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
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MECHANICAL SPECIFICATION 机械尺寸图

DIMENSION 尺寸 (mm)	L190*W66*H37
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Case No.机壳型号 : A150-006

Unit 单位:mm



LABELLING 标签

DL-120W3A3-MPA	The label for the DL-120W3A3-MPA model features the DONE logo and the following specifications: MODEL: DL-120W3A3-MPA, Constant Current LED Driver, Power Factor ≥0.95, SELV. Input: 100-277V ~ 1.8A 50/60Hz. Output: 20-38V = 3.3A (2.7~3.3A Adj.) P rated: Max. 125.4W. MAX. VOLTAGE: 53V = (NO LOAD). Input wires: Brown (Red), Blue (Black), Yellow/Green. Output wires: Red (+V), Black (-V). IP67 rating. IS 15885 (Part 2/Sec 13) and R-41082295. Temperature range: ta: 55°C, tc: 90°C.
DL-120W2A1-MPA	The label for the DL-120W2A1-MPA model features the DONE logo and the following specifications: MODEL: DL-120W2A1-MPA, Constant Current LED Driver, Power Factor ≥0.95. Input: 100-277V ~ 1.8A 50/60Hz. Output: 32-58V = 2.1A (1.9~2.4A Adj.) P rated: Max. 121.8W. MAX. VOLTAGE: 75V = (NO LOAD). Input wires: Brown (Red), Blue (Black), Yellow/Green. Output wires: Red (+V), Black (-V). IP67 rating. IS 15885 (Part 2/Sec 13) and R-41082295. Temperature range: ta: 55°C, tc: 90°C.

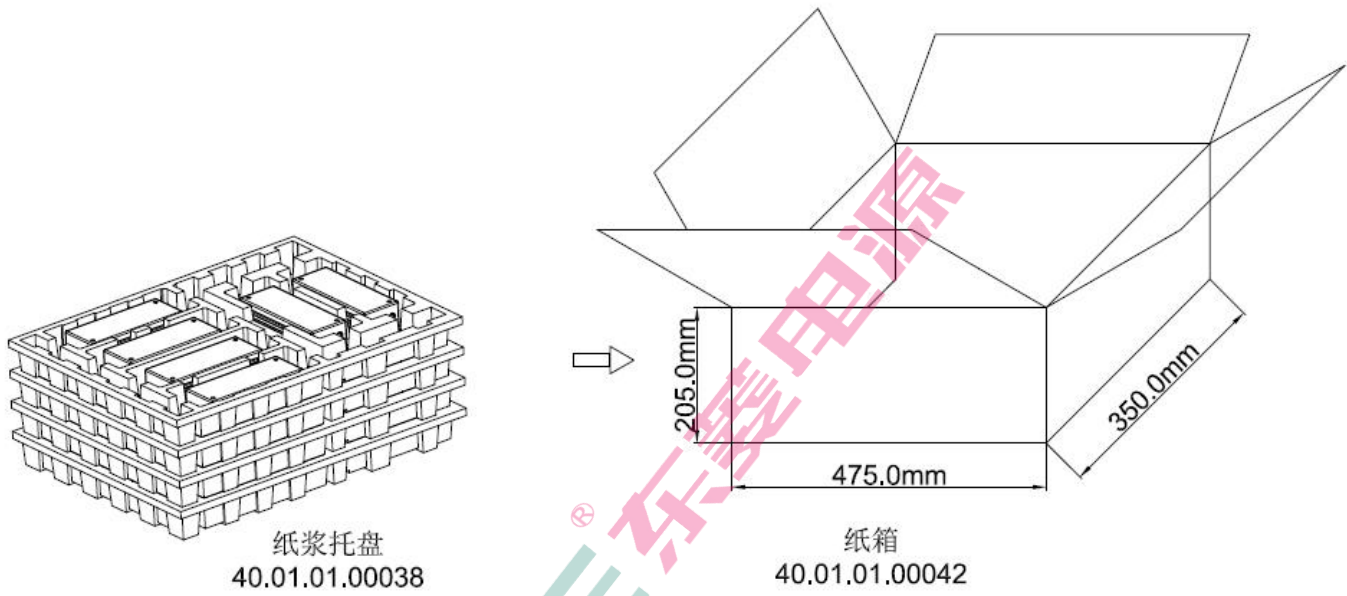
MONOMER WEIGHT 单体重量

MONOMER WEIGHT 单体重量	760g
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THE PACKING WAY 包装方式

PACKING 包装 (mm)	L475*W350*H205
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注：一箱4层，每层6PCS
每箱净重：18.2KG
每箱毛重：19.8KG