

 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	DLC-50W-MP&DLC-60W-MP 系列	REV.	2.4

中山市东菱照明科技有限公司

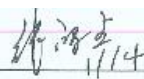
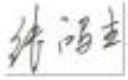
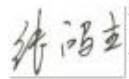
客户承认书

SPECIFICATION FOR APPROVAL

CUSTOMER/客户名			
MODEL NO. /产品型号	DLC-50W-MP DLC-60W-MP		
Rev. /版本号	V2.4		
SAMPLE DATE/送样日期			
客户确认栏			
TEST 检查	CHECK 审核	APPROVE 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			
EDIT 编辑	CHECK 审核	APPROVE 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 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			

	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
	产品系列	DLC-50W-MP&DLC-60W-MP 系列	REV.	2.4

CHANGE HISTORY 变更履历表

DATE 日期	CONTENT OF CHANGE 变更原因	REV. 版本	CHECK 审核
2018/1/8	初次发行。	V1.0	
2018/6/5	在 3/10 页面调整规范所有产品输出特性中的过电压要求。	V1.1	
2019/1/8	在 3/10、6/10 页面调整雷击浪涌等级为 4KV。	V2.0	
2019/01/08	调整产品类型：改为室外驱动电源；修改 THD 为 10%。	V2.1	
2019/08/03	调整产品电流范围：修改 100Vac 输入时输出电流范围。	V2.2	 2019.08.05 09:51:28 +08'00'
2020/04/16	更新第 3 页产品展示图；调整第 9 页机械尺寸图；调整第 10 页标签图；更新第 3、4 页 THD 参数、修正第 4 页频率范围描述。	V2.3	 2020.04. 17 11:55:52 +08'00'
2020/06/22	更新产品机械图。	V2.4	

	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
	产品系列	DLC-50W-MP&DLC-60W-MP 系列	REV.	2.4

FEATURES 产品特点

- ◇ Class I Driver
Class I 结构驱动。
- ◇ Input voltage:100-277V ~ 50/60Hz
输入电压：100-277V~ 50/60Hz。
- ◇ Eff.>89% @230Vac Full load
输入为 230Vac，输出满负载，效率可达 89%。
- ◇ Lightning Surge Differential Mode+/- 4KV (2 ohm) .
Class II (line to neutral) (IEC61000-4-5 2014)
雷击浪涌等级为差模 L-N Class II +/- 4KV (2 ohm)
参照 IEC61000-4-5 2014。
- ◇ Double 85 test pass (15 days) @230Vac Full load
可通过双 85 测试 (15 天) @230Vac 满载。
- ◇ The LED DRIVER shall be applied 1500Vac for 60 seconds (HI – POT)
该 LED 驱动 I/P-O/P 耐压可达 1500Vac 持续 60S。
- ◇ Long life design warranty for 2 years
超长寿命设计，质保 2 年。
- ◇ 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。



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		THD	PF
				115Vac	230Vac		
DLC-60W1A8-MP	100-277V~ 50/60Hz	18~33Vdc	1800mA	86%	88%	15%	0.95
DLC-50W1A5-MP		18~36Vdc	1500mA	86%	88%	15%	0.95
DLC-50W1A35-MP		18~36Vdc	1350mA	86%	88%	15%	0.95
DLC-50W1A2-MP		18~36Vdc	1200mA	86%	88%	15%	0.95

	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
	产品系列	DLC-50W-MP&DLC-60W-MP 系列	REV.	2.4

■ ELECTRICAL SPECIFICATION 电气规格

◇Input Characteristics 输入特性

AC INPUT VOLTAGE RANGE AC 输入电压范围	90 ~ 305Vac
FREQUENCY RANGE 频率范围	47Hz~63Hz
POWER FACTOR 功率因数	≥0.95@230Vac Full Load
THD 总谐波失真	≤15%@230Vac Full Load
AC INPUT CURRENT AC 输入电流	0.8A Max.
INRUSH CURRENT(max.) 浪涌电流(最大)	Cold Start 70A @230Vac 冷启动 (25℃) 70A /230Vac

◇Output Characteristics 输出特性

Model NO.型号	DLC-60W1A8-MP	DLC-50W1A5-MP	DLC-50W1A35-MP	DLC-50W1A2-MP
RATED CURRENT 额定电流 (m A)	1800mA	1500mA	1350mA	1200mA
CONSTANT CURRENT REGION(180Vac~277Vac) 电流范围(180Vac~277Vac)	1600~1890mA	1390~1575mA	1242~1417mA	1104~1260mA
CONSTANT CURRENT REGION(100Vac~180Vac) 电流范围(100Vac~180Vac)	1580~1890mA	1350~1575mA	1200~1417mA	1060~1260mA
VOLTAGE RANGE 电压范围 (V dc)	18~33Vdc	18~36Vdc	18~36Vdc	18~36Vdc
RATED POWER 额定功率	59.4W	54W	48.6W	43.2W
NO LOAD VOLTAGE 空载电压(V dc)	< 50V	< 50V	< 50V	< 50V
EFFICIENCY(Typ.) 效率(Typ.)	89%@230Vac Full Load	89%@230Vac Full Load	89%@230Vac Full Load	89%@230Vac Full Load
CURRENT TOLERANCE 电流精度	±5%			
LINE REGULATION 线性调整率	±3%			
LOAD REGULATION 负载调整率	±3%			
SETUP TIME 启动时间	1000ms Max.			

◇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 type : hiccup or when it is at the highest point of output voltage the product would not be hurt when the fault is excluded or is start working again the power supply is working normally. 保护模式：打嗝或钳在某输出最高电压状态,产品不受损伤,当故障排除或重新起机时,电源工作正常。

NOTE :

- 1) All parameters NOT specially mentioned are measured at 230VAC 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.
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，适用行 LED 等相关产业。

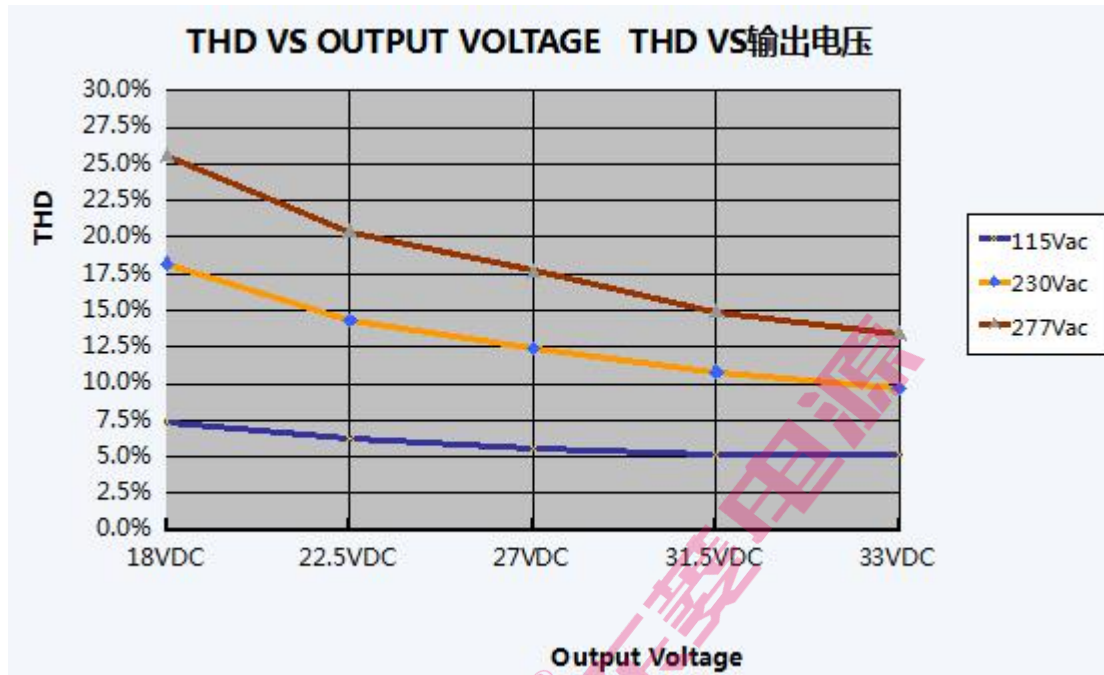
■ ENVIRONMENT 环境

WORKING TEMP. 工作温度	-40 ~ +55°C(Refer to "Derating Curve") -40 ~ +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	-40 ~ +85°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
ISOLATION RESISTANCE 绝缘阻抗	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
MTBF	100K hrs min. MIL-HDBK-217F (25°C)

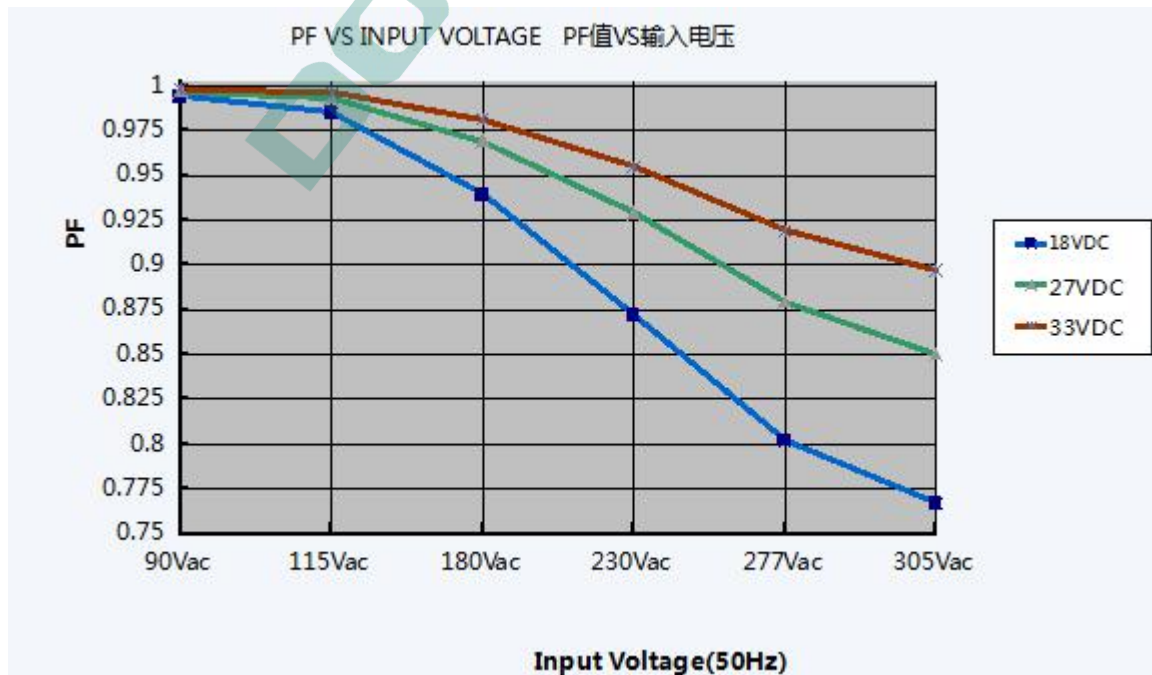
■ SAFETY & EMC 安全与电磁兼容

Safety 安全	/
EMC 电磁兼容	/
LIGHTNING SUGER 雷击浪涌	Differential Mode+/- 4KV (2 ohm) . Class II (line to neutral) (IEC61000-4-5 2014) 雷击浪涌等级为差模 L-N Class II +/- 4KV (2 ohm) (IEC61000-4-5 2014)
LEAKAGE CURRENT 漏电流	<0.7mA / 230Vac

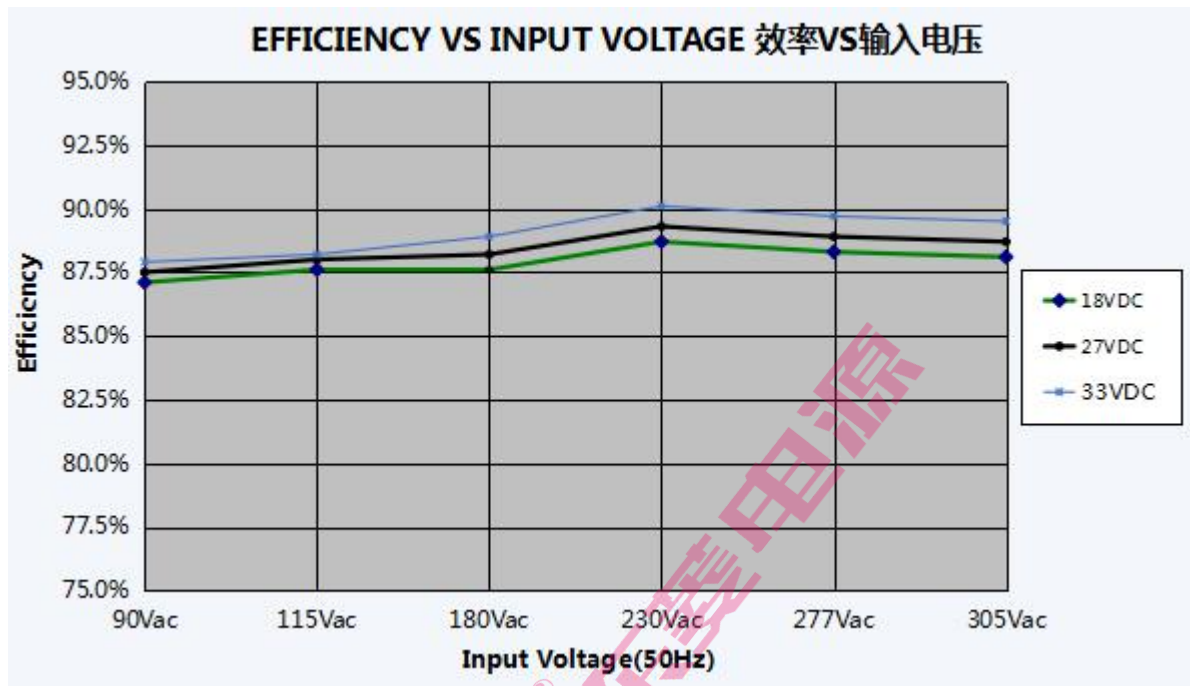
THD VS INPUT VOLTAGE THD VS 输出电压 (DLC-60W1A8-MP)



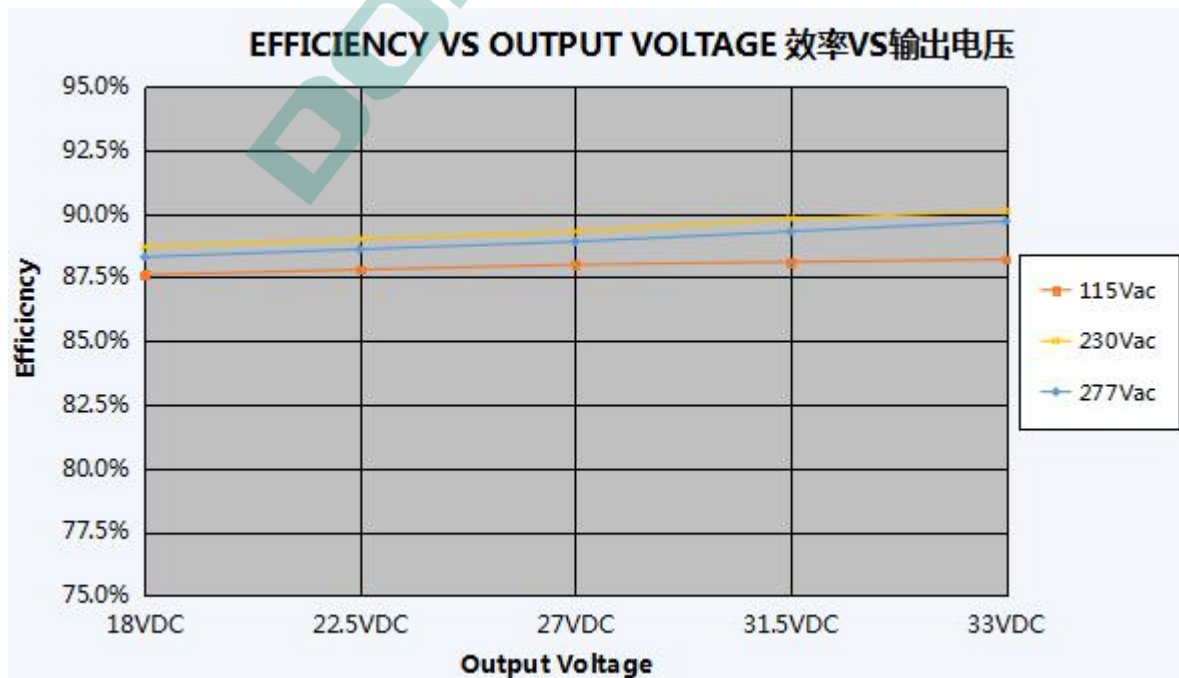
PF VS INPUT VOLTAGE PF 值 VS 输入电压 (DLC-60W1A8-MP)



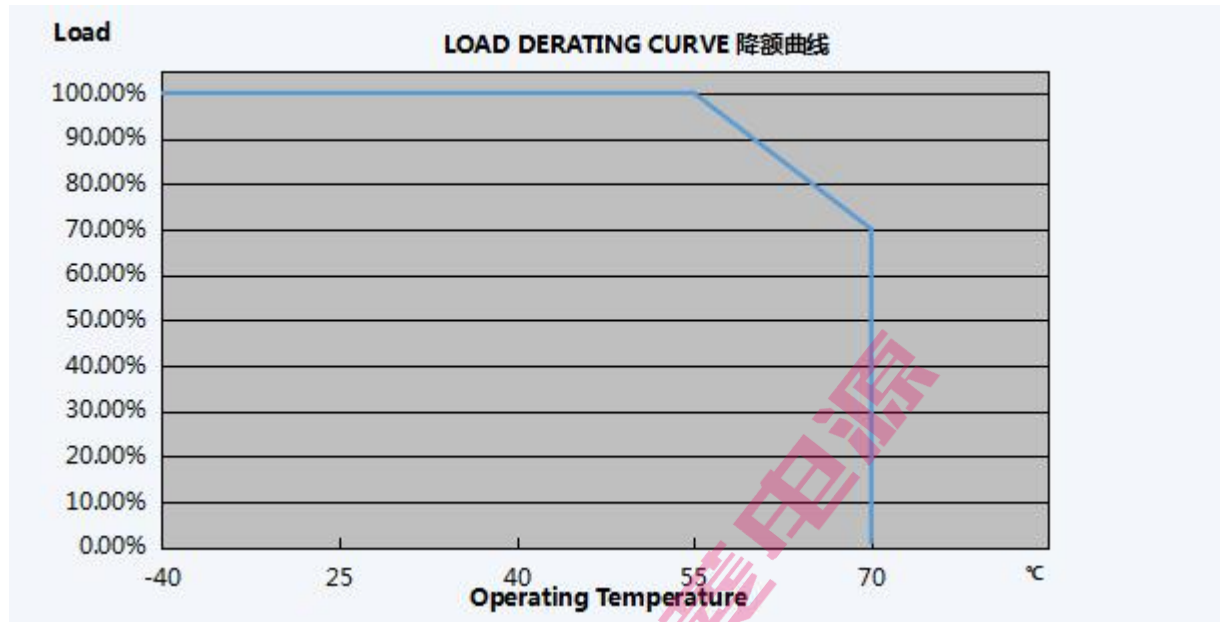
■ EFFICIENCY VS INPUT VOLTAGE 效率 VS 输入电压 (DLC-60W1A8-MP)



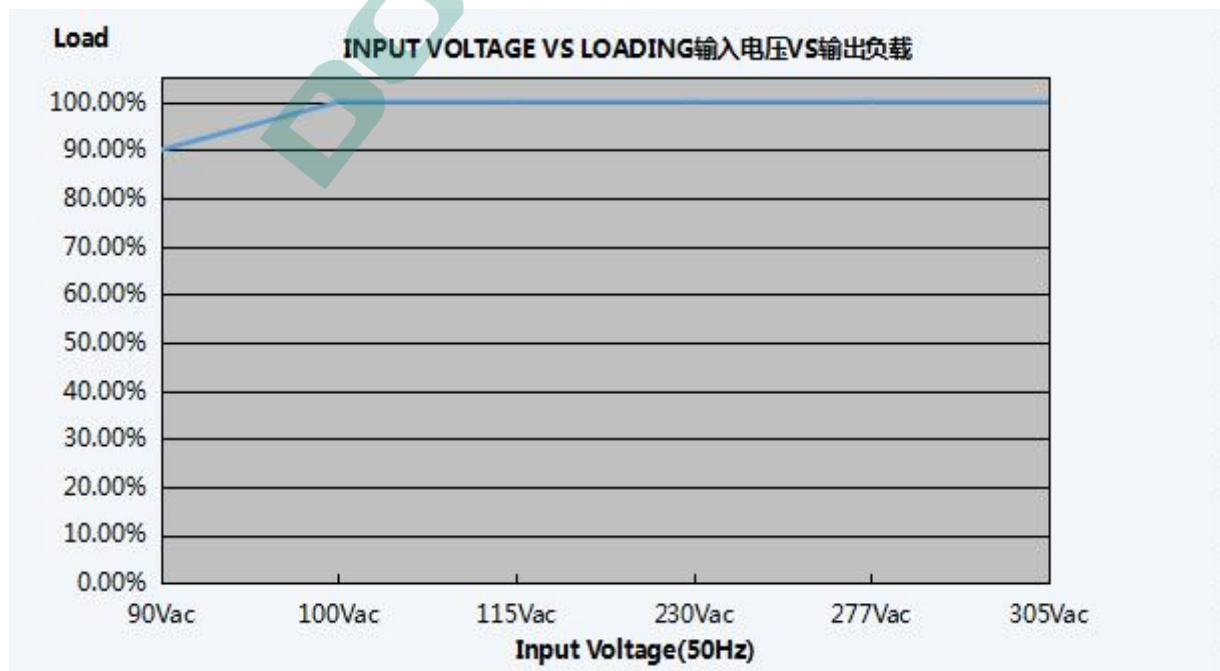
■ EFFICIENCY VS OUTPUT VOLTAGE 效率 VS 输出电压 (DLC-60W1A8-MP)



■ LOAD DERATING CURVE 降额曲线 (DLC-60W1A8-MP)



■ INPUT VOLTAGE VS LOADING 输入电压 VS 输出负载 (DLC-60W1A8-MP)

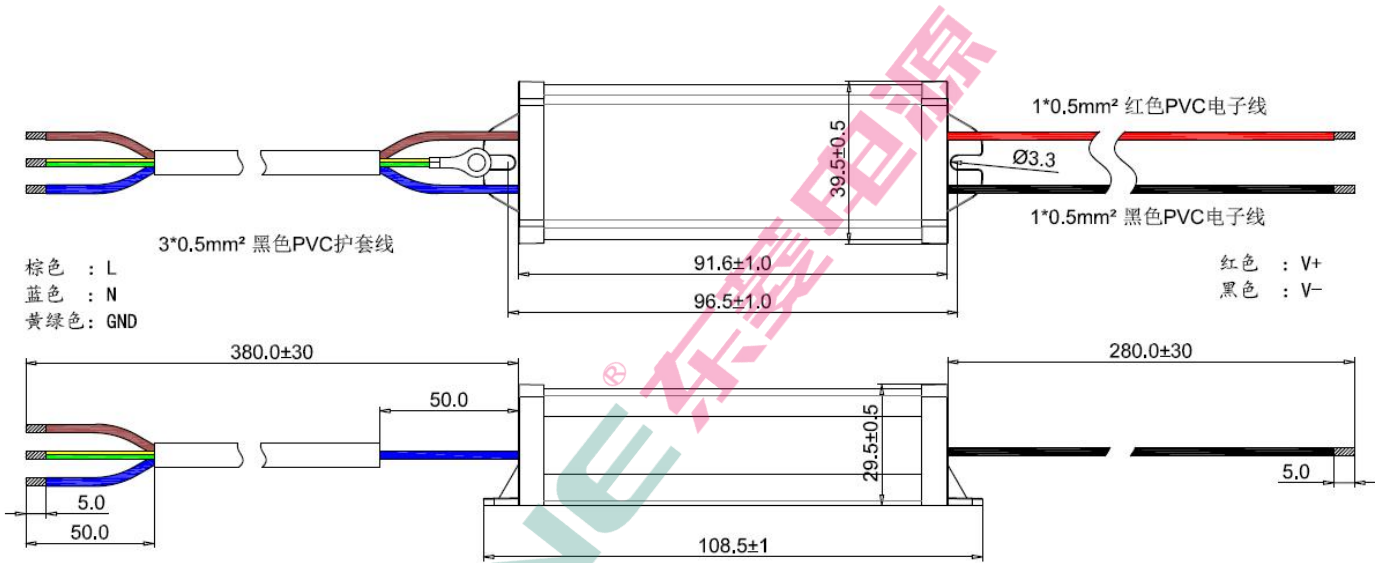


	产品类型	东菱 LED 室外驱动电源 DONE LED INTEGRATED SPECIAL DRIVER		
	产品系列	DLC-50W-MP&DLC-60W-MP 系列	REV.	2.4

MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:

DIMENSION 尺寸 (mm)	108.5*39.5*29.5
PACKING 包装	/

Case No.机壳型号 : 2M11A Unit 单位:mm



MONOMER WEIGHT 单体重量

MONOMER WEIGHT 单体重量	177g
---------------------	------

DONE® 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	DLC-50W-MP&DLC-60W-MP 系列	REV.	2.4

■ LABELLING 标签

DLC-50W1A2-MP	DONE® MODEL:DLC-50W1A2-MP Constant Current LED Driver Power Factor ≥ 0.95 SELV ☐ ACL...Brown (Red) ☐ ACN...Blue (Black) INPUT INPUT:100-277V ~ 0.6A 50/60Hz OUTPUT:18-36V ---1.2A P rated:Max. 43.2W MAX.VOLTAGE:45V --- (NO LOAD)^{tc} OUTPUT +V...Red -V...Black MADE IN CHINA Dd www.donepower.com.cn IP67 IS 15885(Part 2/Sec 13) R-41082295 $t_a:55^{\circ}\text{C}$ $t_c:90^{\circ}\text{C}$
DLC-50W1A35-MP	DONE® MODEL:DLC-50W1A35-MP Constant Current LED Driver Power Factor ≥ 0.95 SELV ☐ ACL...Brown (Red) ☐ ACN...Blue (Black) INPUT INPUT:100-277V ~ 0.6A 50/60Hz OUTPUT:18-36V ---1.35A P rated:Max. 48.6W MAX.VOLTAGE:45V --- (NO LOAD)^{tc} OUTPUT +V...Red -V...Black MADE IN CHINA Dd www.donepower.com.cn IP67 IS 15885(Part 2/Sec 13) R-41082295 $t_a:55^{\circ}\text{C}$ $t_c:90^{\circ}\text{C}$
DLC-50W1A5-MP	DONE® MODEL:DLC-50W1A5-MP Constant Current LED Driver Power Factor ≥ 0.95 SELV ☐ ACL...Brown (Red) ☐ ACN...Blue (Black) INPUT INPUT:100-277V ~ 0.6A 50/60Hz OUTPUT:18-36V ---1.5A P rated:Max. 54.0W MAX.VOLTAGE:45V --- (NO LOAD)^{tc} OUTPUT +V...Red -V...Black MADE IN CHINA Dd www.donepower.com.cn IP67 IS 15885(Part 2/Sec 13) R-41082295 $t_a:55^{\circ}\text{C}$ $t_c:90^{\circ}\text{C}$
DLC-60W1A8-MP	DONE® MODEL:DLC-60W1A8-MP Constant Current LED Driver Power Factor ≥ 0.95 SELV ☐ ACL...Brown (Red) ☐ ACN...Blue (Black) INPUT INPUT:100-277V ~ 0.8A 50/60Hz OUTPUT:18-33V ---1.8A P rated:Max. 59.4W MAX.VOLTAGE:45V --- (NO LOAD)^{tc} OUTPUT +V...Red -V...Black MADE IN CHINA Dd www.donepower.com.cn IP67 IS 15885(Part 2/Sec 13) R-41082295 $t_a:55^{\circ}\text{C}$ $t_c:90^{\circ}\text{C}$