中山市东菱照明科技有限公司

客户承认书

PRODUCT SPECIFICATION

CUSTOMER/客户名:	
MODEL NO./产品型号:	DL-105W-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

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■ CHANGE HISTORY 变更履历

DATE 日期	CAUSES OF CHANGE 变更原因	REV. 版本	CHECKED BY 审核
2018.08.09	初始版本发行。	V1.0	
2019.05.16	1，更新公司地址； 2，更新中英文标签； 3，增加欠压保护功能描述； 4，增加产品包装信息；	V1.1	
2019.08.28	更新铭牌：中英文修改为英文版本。	V1.2	
2019.11.20	修改装配图（第 11 页），包装图（第 12 页），修改空载电压（第 4 页）(第十二页)	V1.3	
2019.11.28	修改铭牌(第十二页)	V1.4	

DONE®东菱电源

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	DL-105W-MPA 系列	REV	1.4

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

◇ Built-in active PFC function ,PF>0.95 ,THD<15% @230Vac Full load

内置有源功率因数校正电路，输入 230Vac，输出满负载时，PF>0.95 ,THD<15%

◇ Efficiency 88% min.@230Vac Full load

输入 230Vac，输出满负载，效率大于 88%

◇ Constant current mode output

驱动为恒流输出控制模式

◇ Metal shell structure, protection meet IP67

金属外壳结构，防护等级：IP67

◇ Surge immunity:Differential Mode(Line-Line):±4 KV,Common Mode (Line-Earth):±6KV(IEC61000-4-5 2014)

浪涌抗扰度：差模(线-线):±4 KV ,共模(线-地):±6 KV 参照 IEC61000-4-5 2014

◇ Typical lifetime > 50000 Hours @Tc=70℃

寿命>50000 小时 @Tc=70℃

◇ 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 Rated Current 输出额定电流	Output Current Range 输出电流范围	效率 Efficiency		谐波 THD		功率因数（PF）	
					115Vac	230Vac	115Vac	230Vac	115Vac	230Vac
DL-105W2A8-MPA	100~277Vac 50/60Hz	20~38Vdc	2.8A	2.4~3.0A	85%	88%	5%	15%	0.99	0.95
DL-105W1A8-MPA		32~58Vdc	1.8A	1.6~2.1A	86%	89%	5%	15%	0.99	0.95

注：（1）以上参数为上电 15 分钟内测得；

（2）输入 100-277Vac，额定功率 105W。

DONE® 东菱电源

■ ELECTRICAL SPECIFICATION 电气规格

◇Input Characteristics 输入特性

INPUT VOLTAGE RANGE 输入电压范围	90 - 305V～
FREQUENCY RANGE 频率范围	47-63Hz
POWER FACTOR 功率因数	PF>0.95 230Vac full load 230Vac 输入，满载时 PF>0.95
THD 总谐波失真	<15% 230Vac full load 230Vac 输入，满载时 THD<15%
AC CURRENT 交流电流	<1.4A 100Vac full load 100Vac 输入，满载时 Iin<1.40A
INRUSH CURRENT(max.) 浪涌电流(最大)	Cold Start (25℃) 100A @230Vac 冷启动 (25℃) 100A @230Vac

◇Output Characteristics 输出特性

Model NO. 型号	**DL-105W2A8-MPA**	**DL-105W1A8-MPA**
RATED CURRENT 额定电流	2.8A	1.8A
CURRENT ADJUSTMENT RANGE * 电流调整范围 (通过外部电位器) *	2.4~3.0A	1.6~2.1A
CONSTANT CURRENT RAMGE 恒电流范围	20~38Vdc	32~58Vdc
RATED POWER 额定功率(100-277Vac)	106.4W	104.4W
NO LOAD VOLTAGE 空载电压	55V Max	73V Max
EFFICIENCY (Typ.) 效率 (Typ.) **常温通电 15 分钟(230V 满载测试)**	88%@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 @115Vac full load <500ms @230Vac full load	

Output current must be carefully adjusted based on input voltage and output voltage, refer to Fig.1 、Fig.2

注：输出电流范围受限于输入输出电压，具体请参照 Fig.1 、Fig.2

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◇Protection 保护

OVER CURRENT 过载电流	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 过载电压	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
BELOW INPUT VOLTAGE 输入欠压	Protection type: When the input voltage is less than 180Vac, the output power is reduced by about half 保护模式: 当输入电压小于 100Vac 时，输出功率大约减少一半

NOTE:

1) All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25℃ 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℃ 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 LED 等相关产业

◇Environment 环境

WORKING TEMP. 工作温度	-40 ~ +55℃(Refer to "Derating Curve") -40 ~ +55℃（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~ +80℃, 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 : 1.5KVAC
ISOLATION RESISTANCE 绝缘阻抗	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH
MTBF	150K hrs min. MIL-HDBK-217F (ta=25℃)

■ SAFETY & EMC 安全与电磁兼容

Safety 安全	/
EMC 电磁兼容	/
SUGER 浪涌	Differential Mode+/- 4 KV,Common Mode+/- 6 KV (12 ohm) . (IEC61000-4-5 2014) 雷击浪涌 L-N +/- 4 KV L,N-地+/- 6 KV(12 ohm) (IEC61000-4-5 2014)
LEAKAGE CURRENT 漏电流	<1.1mA / 230Vac

■ I-V 工作区域

■ OUTPUT CURRENT VS OUTPUT VOLTAGE 输出电流 VS 输出电压(DL-105W1A8-MPA)

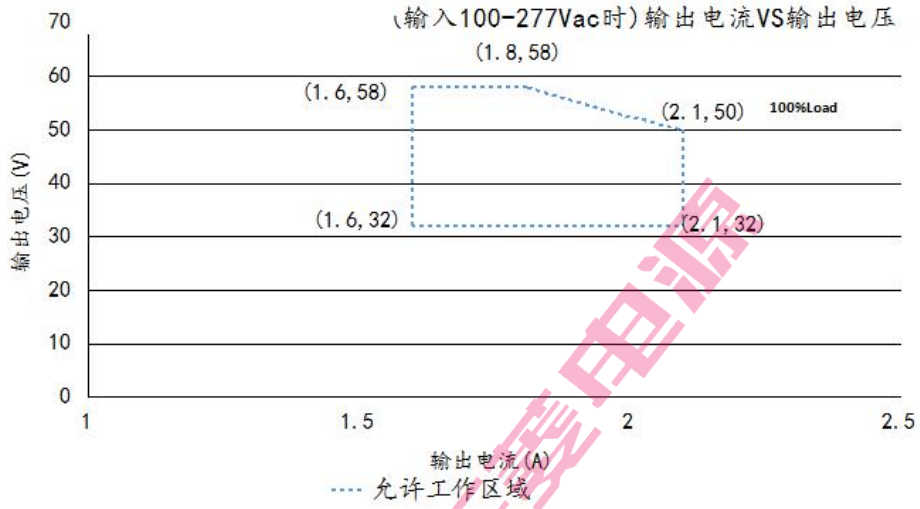


Fig.1

DL-105W1A8-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	35V	39V	42V	45V	49V	50V	55V	58V
电源电流 Io_MAX	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A	2.1A	1.9A	1.8A
电源功率 Po_MAX	67W	73W	82W	88W	96W	103W	105W	105W	104W

■ OUTPUT CURRENT VS OUTPUT VOLTAGE 输出电流 VS 输出电压(DL-105W2A8-MPA)

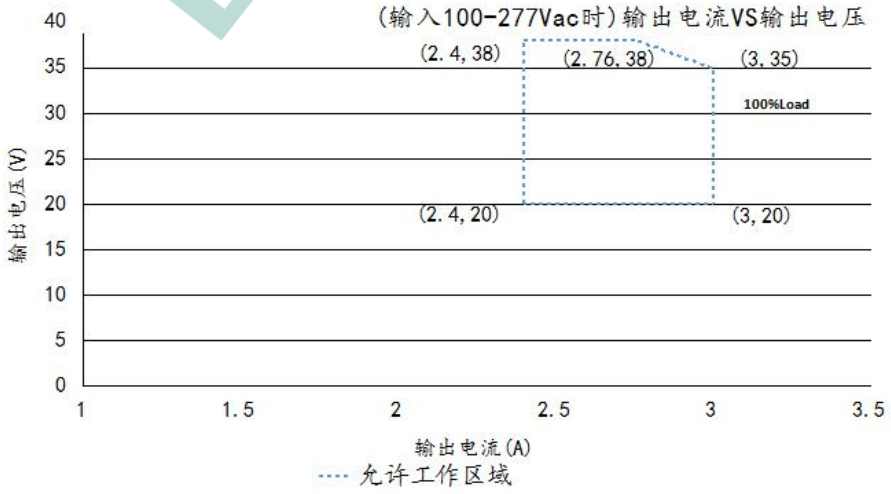
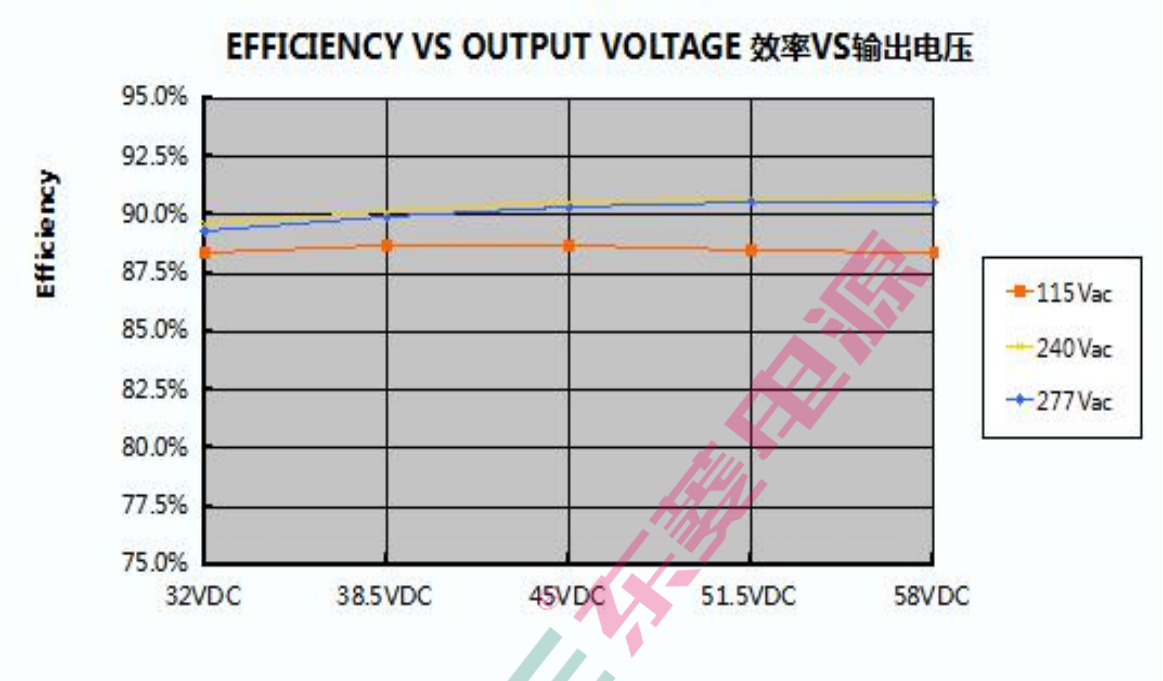


Fig.2

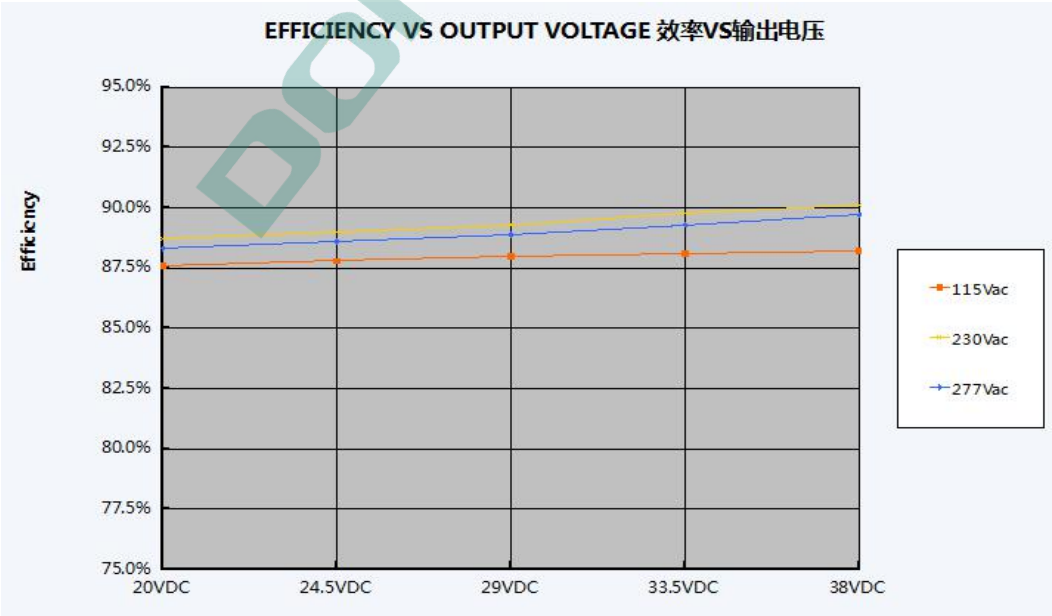
DL-105W2A8-MPA(输入 100-277Vac 时，不同负载电压对应的额定输出电流值和功率)									
负载工作电压	20V	22V	24V	26V	28V	32V	35V	36V	38V
电源电流 Io_MAX	3.0A	3.0A	3.0A	3.0A	3.0A	3.0A	3.0A	2.9A	2.8A
电源功率 Po_MAX	60W	66W	72W	78W	84W	96W	105W	105W	106W

■ 效率曲线

■ EFFICIENCY VS OUTPUT VOLTAGE 效率 VS 输出电压(DL-105W1A8-MPA 热测)



■ EFFICIENCY VS OUTPUT VOLTAGE 效率 VS 输出电压(DL-105W2A8-MPA 热测)



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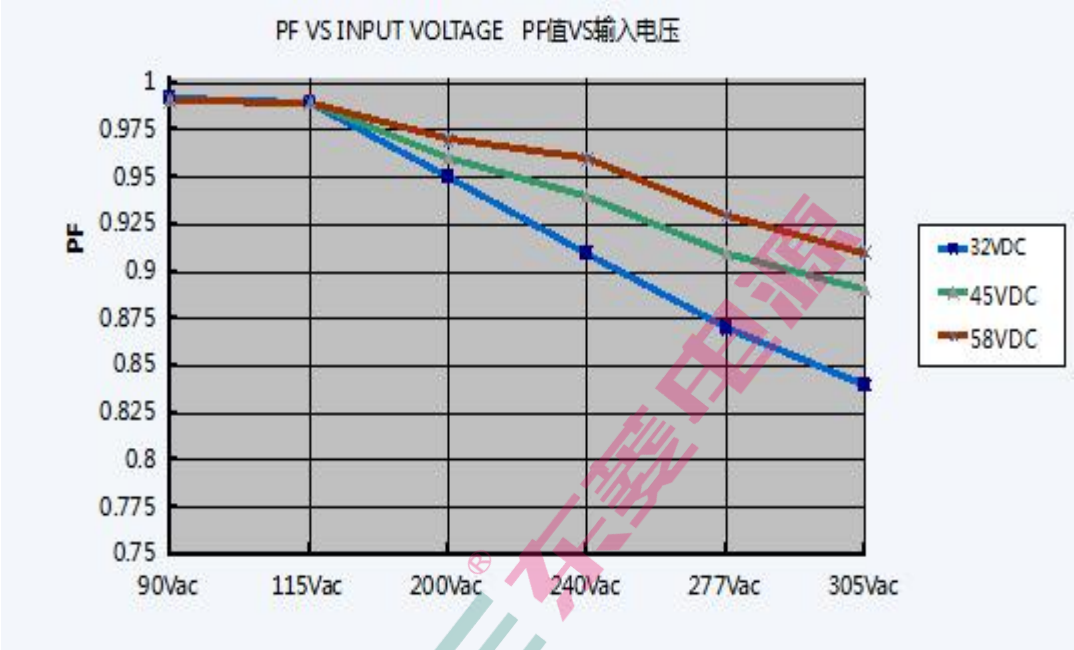
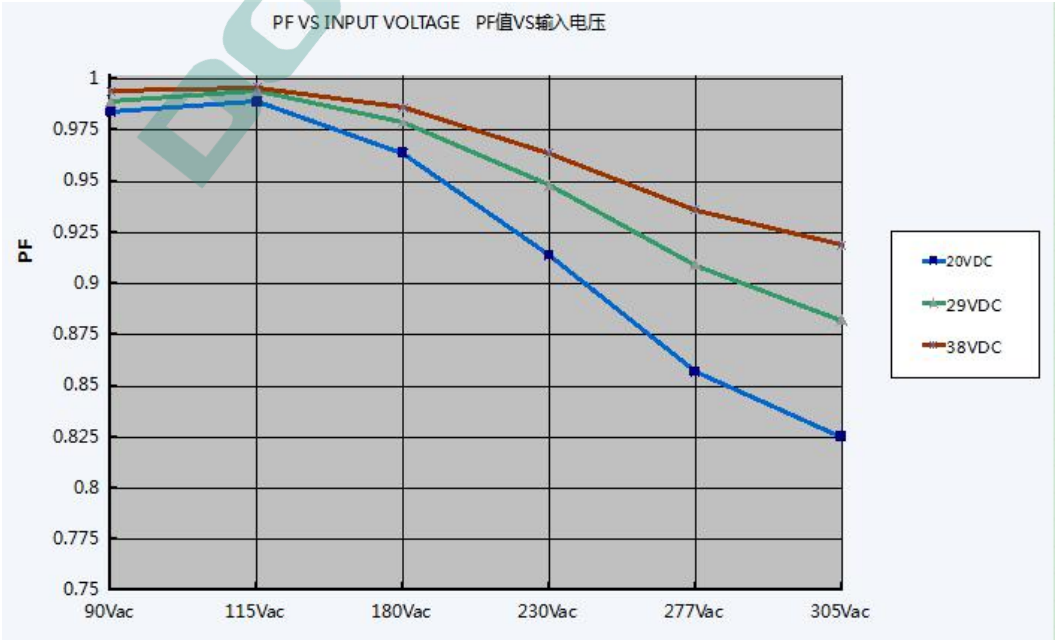
■ PF VS INPUT VOLTAGE PF 值 VS 输入电压(DL-105W1A8-MPA 热测)



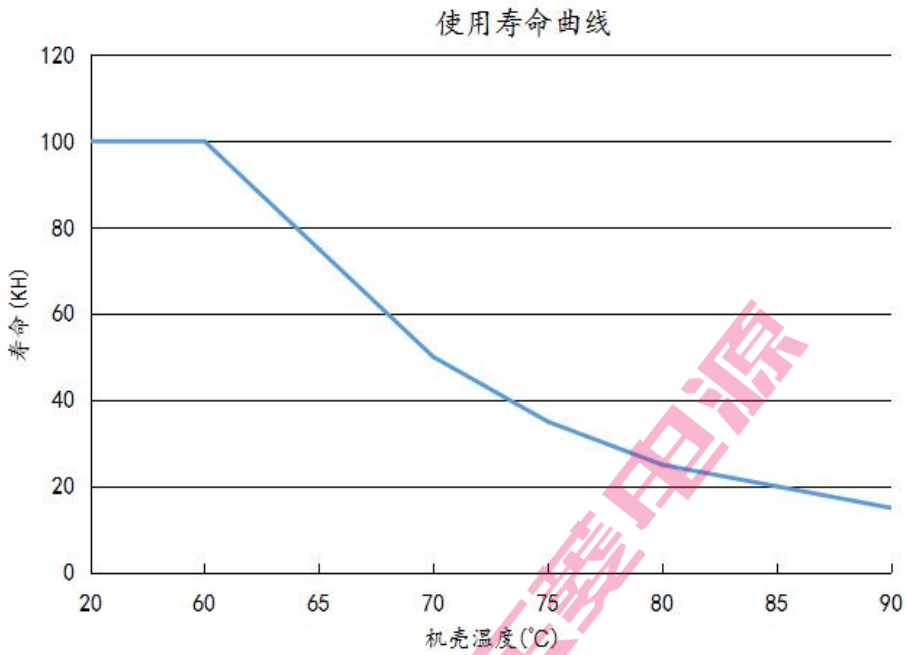
■ PF VS INPUT VOLTAGE PF 值 VS 输入电压(DL-105W2A8-MPA 热测)



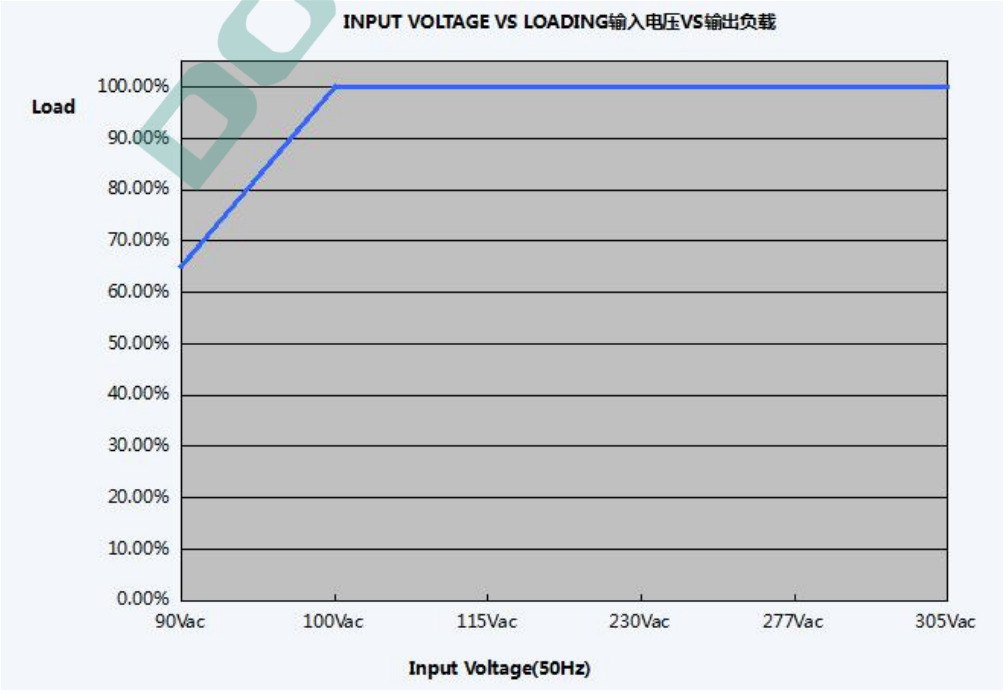
■ THD VS INPUT VOLTAGE 总谐波失真 VS 输入电压(DL-105W1A8-MPA 热测)

■ THD VS INPUT VOLTAGE 总谐波失真 VS 输入电压(DL-105W2A8-MPA 热测)

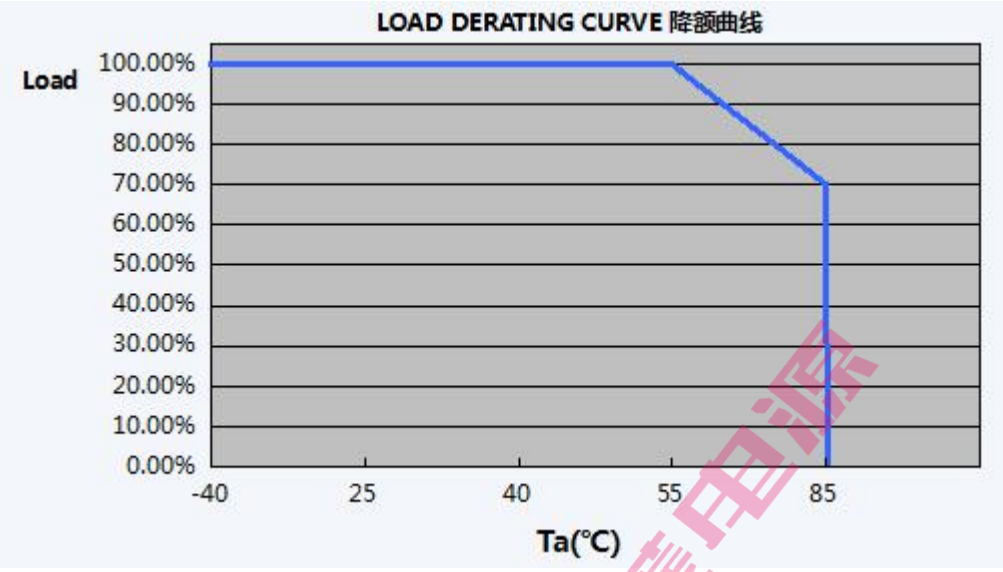
■ TYPICAL LIFETIME 使用寿命曲线(DL-105W-MPA)



■ INPUT VOLTAGE VS OUTPUT POWER 输入电压 VS 输出负载(DL-105W-MPA)



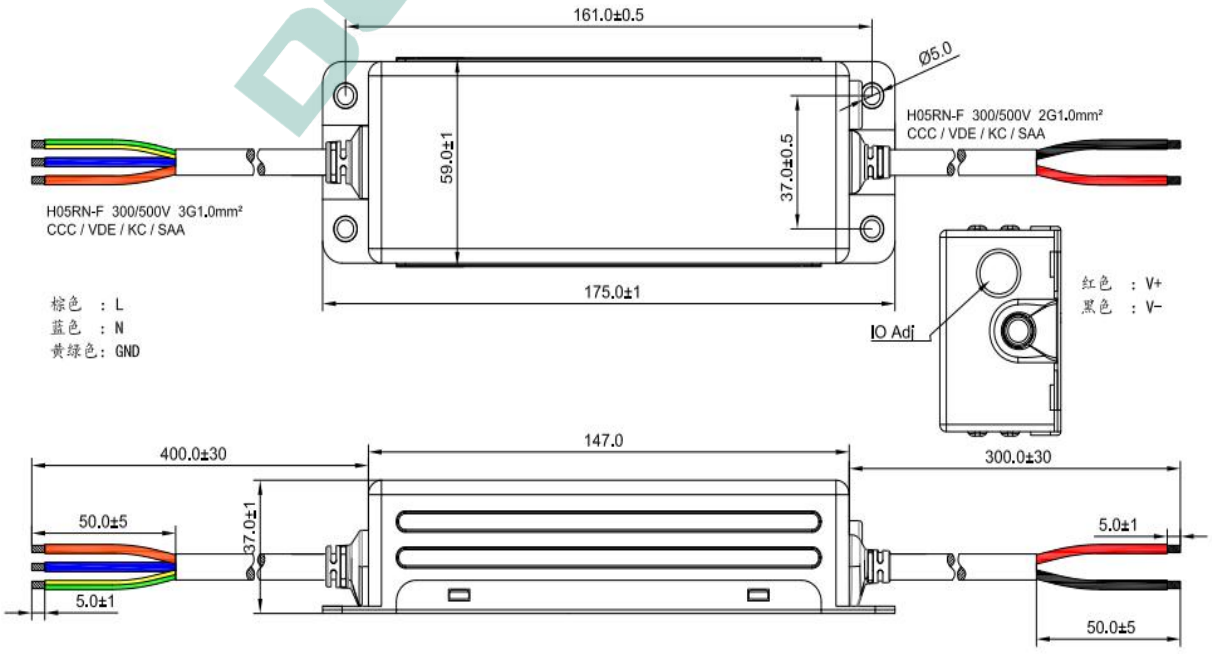
■ LOAD DERATING CURVE 降额曲线((DL-105W-MPA)



■ MECHANICAL SPECIFICATION & PACKING 机械尺寸图 & 包装:

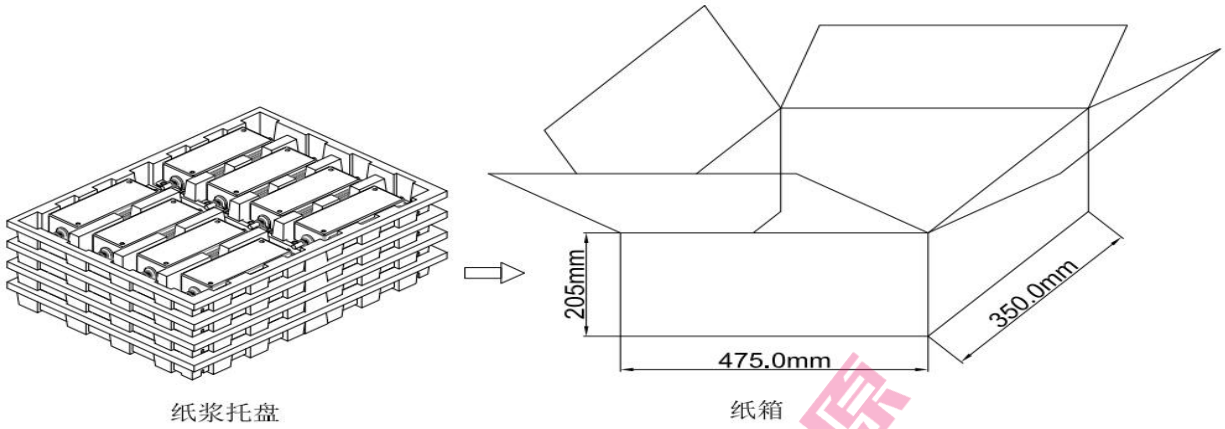
DIMENSION 尺寸 (mm)	175*58*37 见图一
PACKING 包装	见图二

Case No.机壳型号: A120-006　　Unit 单位:mm



图一

DONE 东菱电源



纸浆托盘　　纸箱

注：一箱4层，每层8PCS

图二

■ MONOMER WEIGHT 单体重量

MONOMER WEIGHT 单体重量	约 640g

■ NAMEPLATE 铭牌

产品型号	标签及规格
DL-105W1A8-MPA	
DL-105W2A8-MPA	

DONE® 东菱电源