

中山市东菱照明科技有限公司

客户承认书

SPECIFICATION FOR APPROVAL

CUSTOMER	
MODEL NO.	DL-105W-MPA-H (I)
VERSION	V1.0
SAMPLE DATE	

CUSTOMER

EDIT	CHECK	APPROVE
CUSTOMER REMARKS		

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with you approved signature..

MANUFACTRUE

EDIT	CHECK	APPROVE

Zhongshan Done Lighting Technology Co., Ltd.

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FEATURES

- ◇ Class I Driver
- ◇ Input voltage:200-277V ~ 50/60Hz
- ◇ Built-in active PFC function ,PF>0.95 ,THD<10% @230Vac Full lo
- ◇ Efficiency 90% min.@230Vac Full load
- ◇ Constant current mode output
- ◇ Metal shell structure, protection meet IP67
- ◇ Surge immunity:Differential Mode(Line-Line): ± 4 KV, Common Mode (Line-Earth): ± 15 KV(IEC61000-4-5 2014)
- ◇ Typical lifetime > 50000 Hours @Tc=70°C
- ◇ Double 75 test pass (15 days)
- ◇ Applied in: Street lamp, project-light lamp, wash wall lamp or other outdoor lamps and lanterns.



MODEL LIST

Model NO.	Input Voltage	Output Voltage	Output Rated Current	Output Current Range	Efficiency	THD	(PF)
					230Vac	230Vac	230Vac
DL-105W2A8-MPA-H(I)	200~277Vac 50/60Hz	20~38Vdc	2.8A	2.4~3.5A	>88%	<10%	>0.95
DL-105W1A8-MPA-H(I)		32~58Vdc	1.8A	1.6~2.5A	>89%	<10%	>0.95

Remark :

1. Default tested at 230Vac,full load with 30 minutes,Ta:25°C.
- 2 .The input 200-277Vac ,rated power 105W.

■ ELECTRICAL SPECIFICATION

◇ Input Characteristics

INPUT VOLTAGE RANGE	200 - 277Vac
FREQUENCY RANGE	47-63Hz
POWER FACTOR	PF>0.95@230Vac full load
THD	THD<10%@230Vac full load
AC CURRENT	<0.7A 200Vac full load
INRUSH CURRENT(max.)	Cold Start (25°C) 100A @230Vac

◇ Output Characteristics

Model NO.	DL-105W2A8-MPA-H(I)	DL-105W1A8-MPA-H(I)
RATED CURRENT	2.8A	1.8A
CURRENT ADJUSTMENT RANGE	2.4~3.5A	1.6~2.5A
CONSTANT CURRENT RANGE	20~38Vdc	32~58Vdc
RATED POWER	105W	105W
NO LOAD VOLTAGE	< 50V	< 69V
EFFICIENCY(Typ.)	> 88%@230Vac Full Load	> 89%@230Vac Full Load
CURRENT TOLERANCE	±5%	
LINE REGULATION	±5%	
LOAD REGULATION	±5%	
SETUP TIME	<500ms @230Vac full load	

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

◇Protection

OVER CURRENT	Protection type: Constant current limiting, recovers automatically after fault condition is removed.
SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.
OVER VOLTAGE	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.
OVER TEMPERATURE	Protection type: When the transformer temperature exceeds the set value, the output power is reduced by about half.
BELOW INPUT VOLTAGE	Protection type: When the input voltage is less than the set value, the output power is reduced by about half.

NOTE :

- 1) All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature.
- 2) Tolerance : includes set up tolerance, line regulation and load regulation.
- 3) Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications.

◇Environment

WORKING TEMP.	-40 ~ +55°C(Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP. HUMIDITY	-40~ +80°C, 10 ~ 95% RH
VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-PE :1.5KVAC O/P-PE : 1.5KVAC
ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
MTBF	150K hrs min. MIL-HDBK-217F (ta=25°C)

■ SAFETY & EMC

Safety	/
EMC	/
SUGER	Differential Mode+/- 4 KV,Common Mode+/- 15 KV (12 ohm) . (IEC61000-4-5 2014)
LEAKAGE CURRENT	<10mA

I-V Permitted Work area

OUTPUT CURRENT VS OUTPUT VOLTAGE (DL-105W1A8-MPA-H (I))

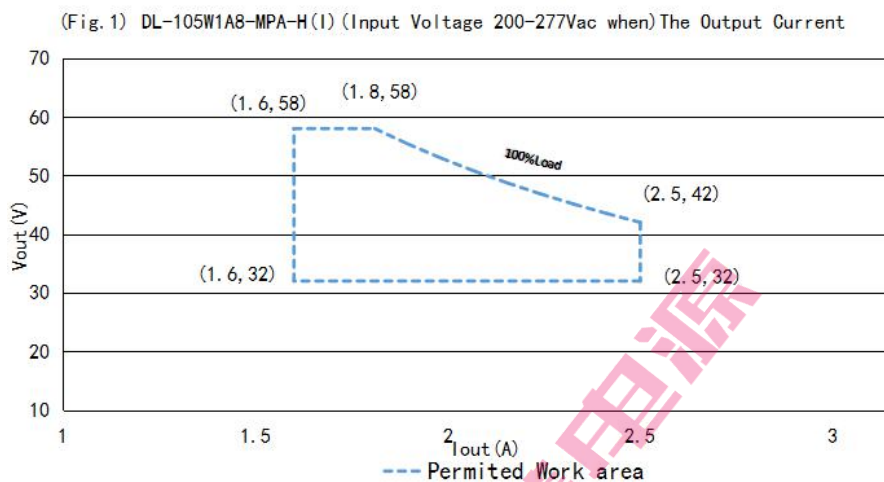


Fig. 1

DL-105W1A8-MPA-H (I) Rated output current and output power corresponding to different load									
Load working Voltage(V)	32V	35V	38V	42V	45V	48V	51V	54V	58V
Io_MAX (A)	2.50A	2.50A	2.50A	2.50A	2.34A	2.18A	2.06A	1.94A	1.81A
Po_MAX (W)	80W	88W	95W	105W	105W	105W	105W	105W	105W

OUTPUT CURRENT VS OUTPUT VOLTAGE (DL-105W2A8-MPA-H (I))

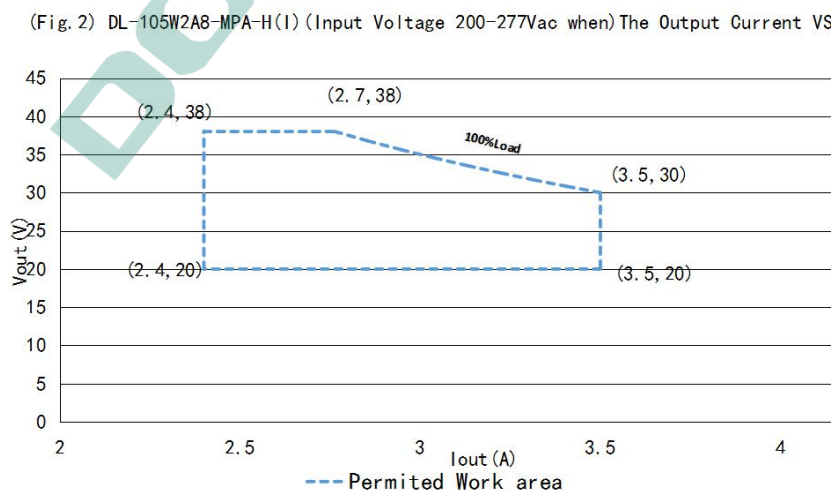
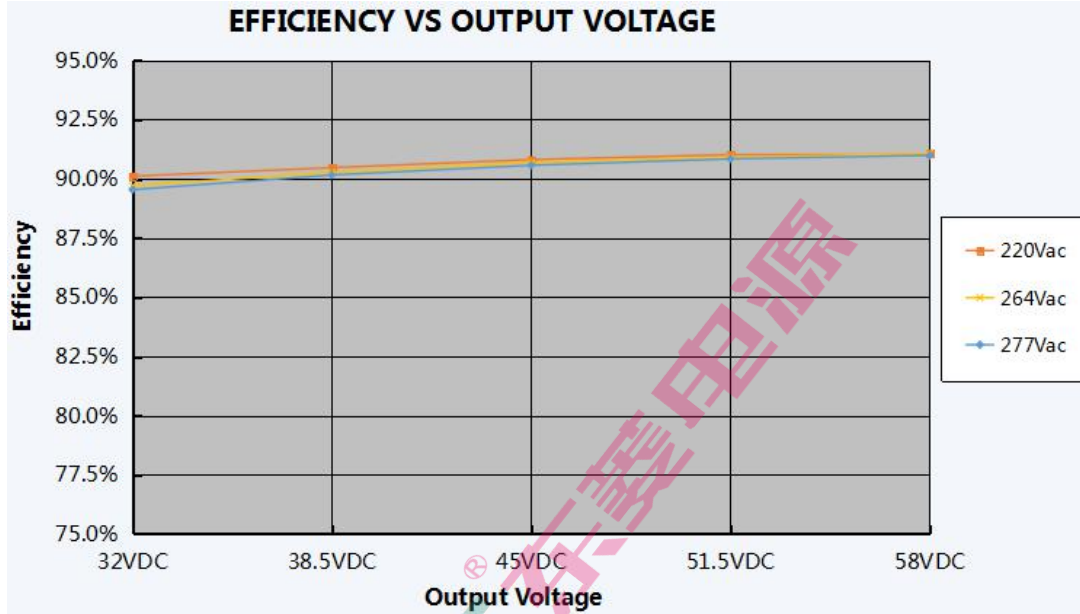


Fig. 2

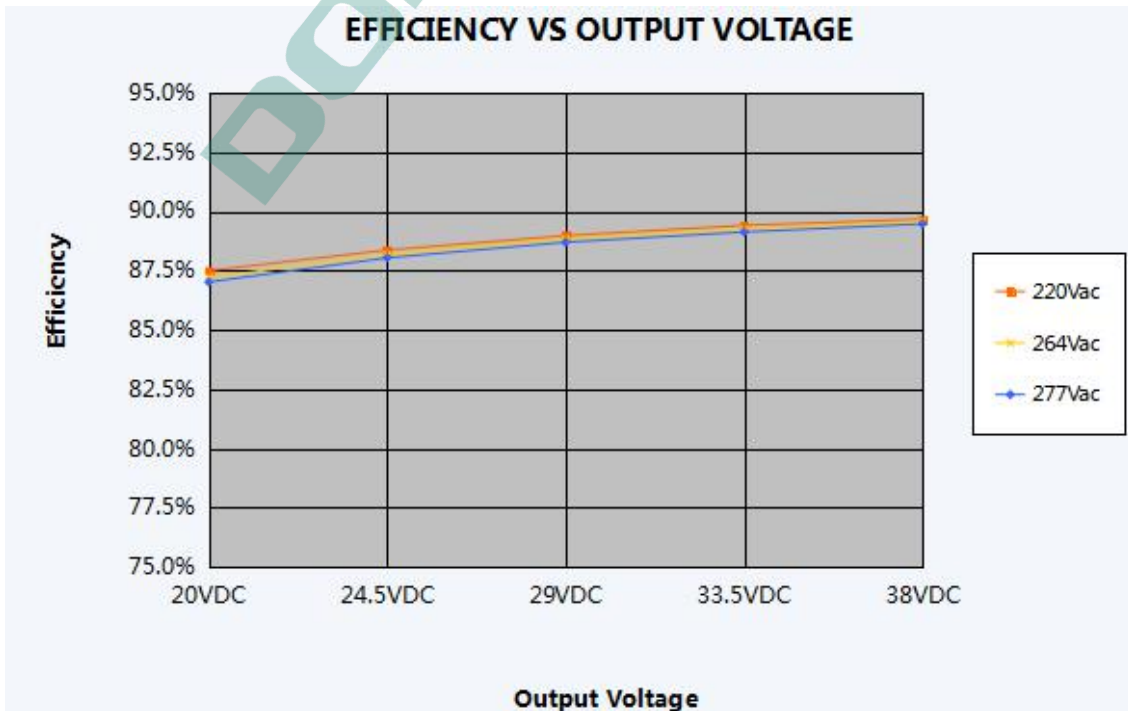
DL-105W2A8-MPA-H (I) Rated output current and output power corresponding to different load									
Load working Voltage(V)	20V	22V	24V	28V	30V	32V	34V	36V	38V
Io_MAX (A)	3.50A	3.50A	3.50A	3.50A	3.50A	3.28A	3.09A	2.92A	2.76A
Po_MAX (W)	70W	77W	84W	98W	105W	105W	105W	105W	105W

■ EFFICIENCY CURVE

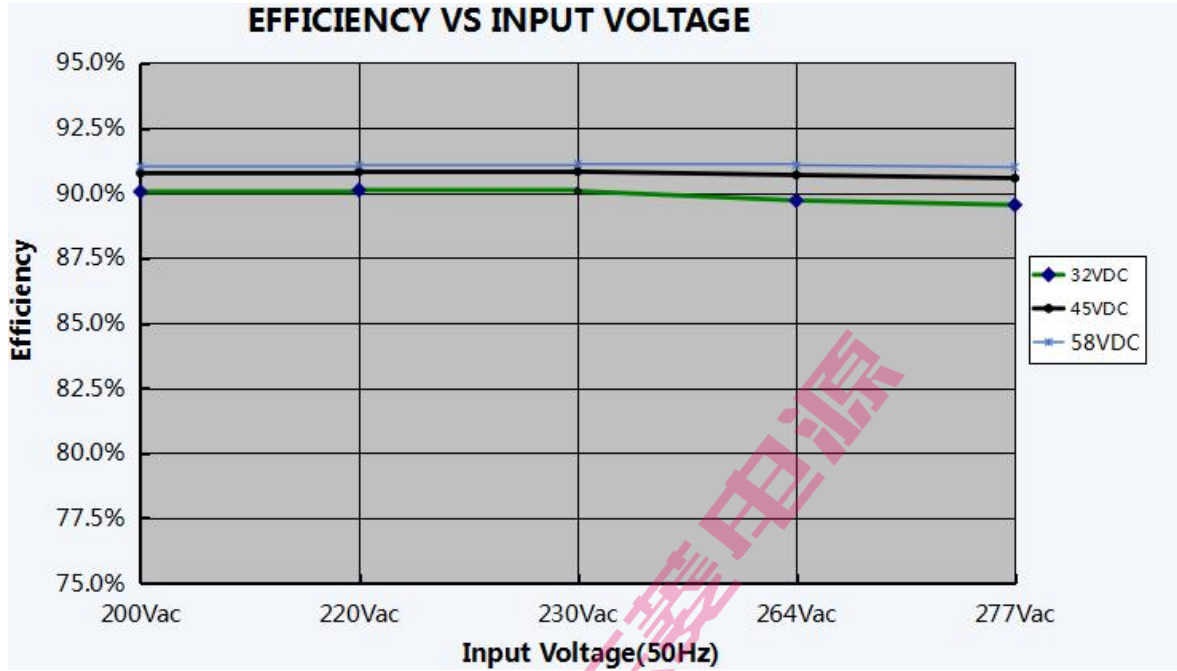
■ EFFICIENCY VS OUTPUT VOLTAGE (DL-105W1A8-MPA-H (I) Measurement



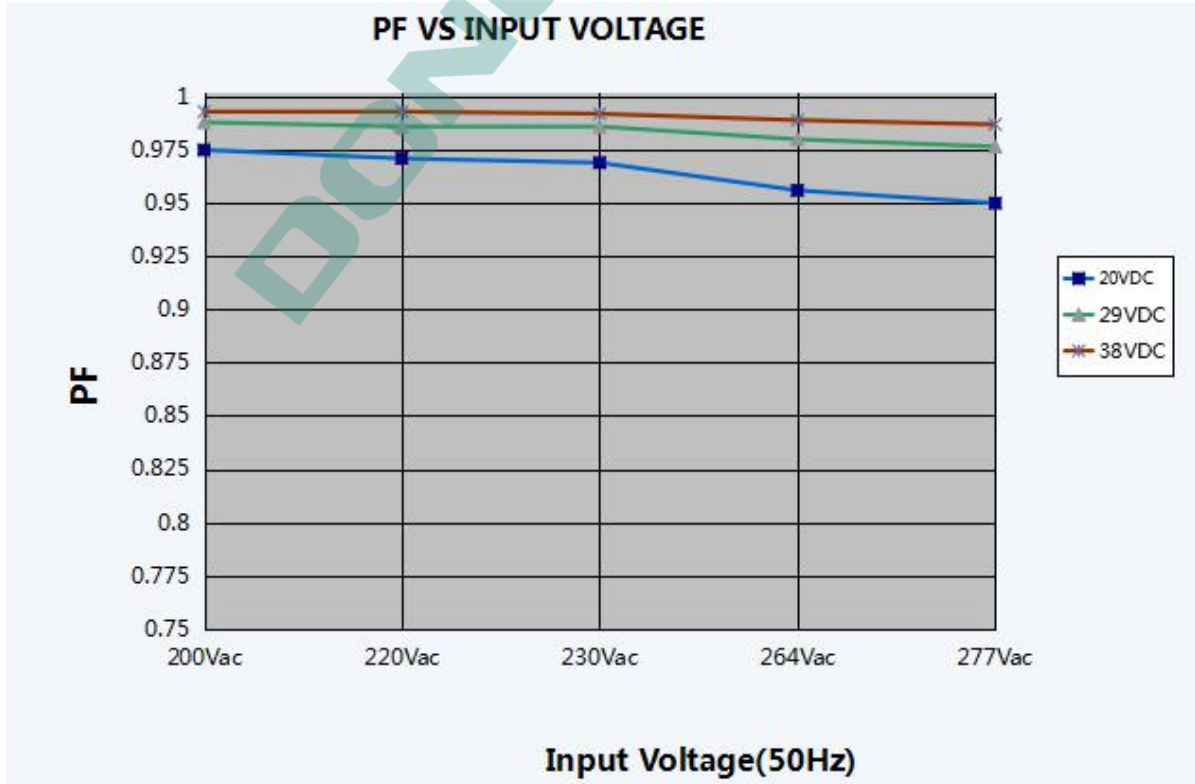
■ EFFICIENCY VS OUTPUT VOLTAGE (DL-105W2A8-MPA-H (I) Measurement



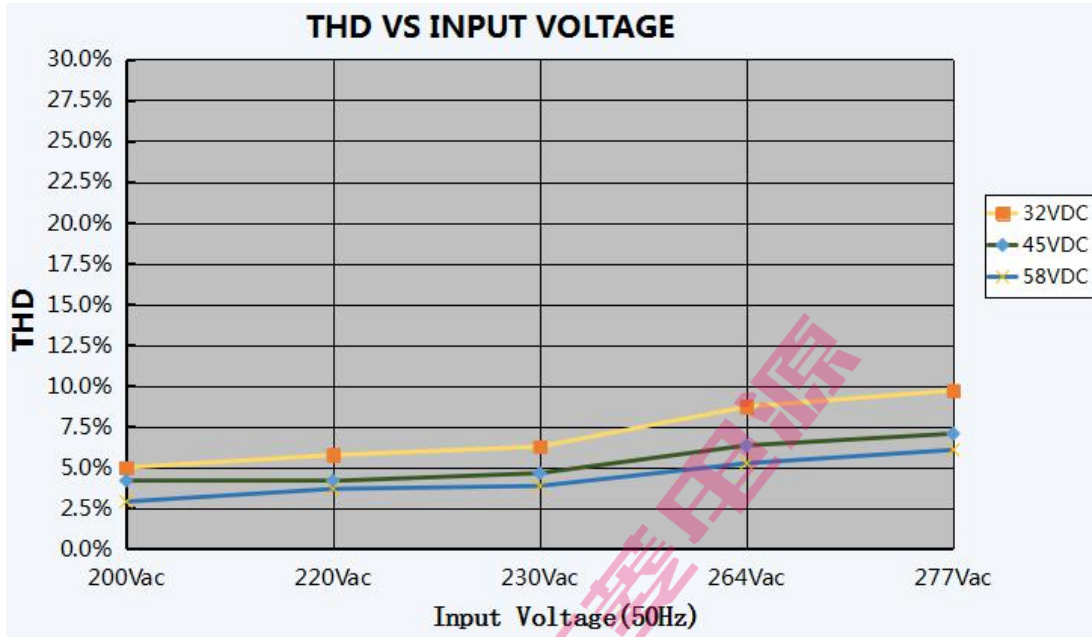
■ PF VS INPUT VOLTAGE (DL-105W1A8-MPA-H (I) Measurement



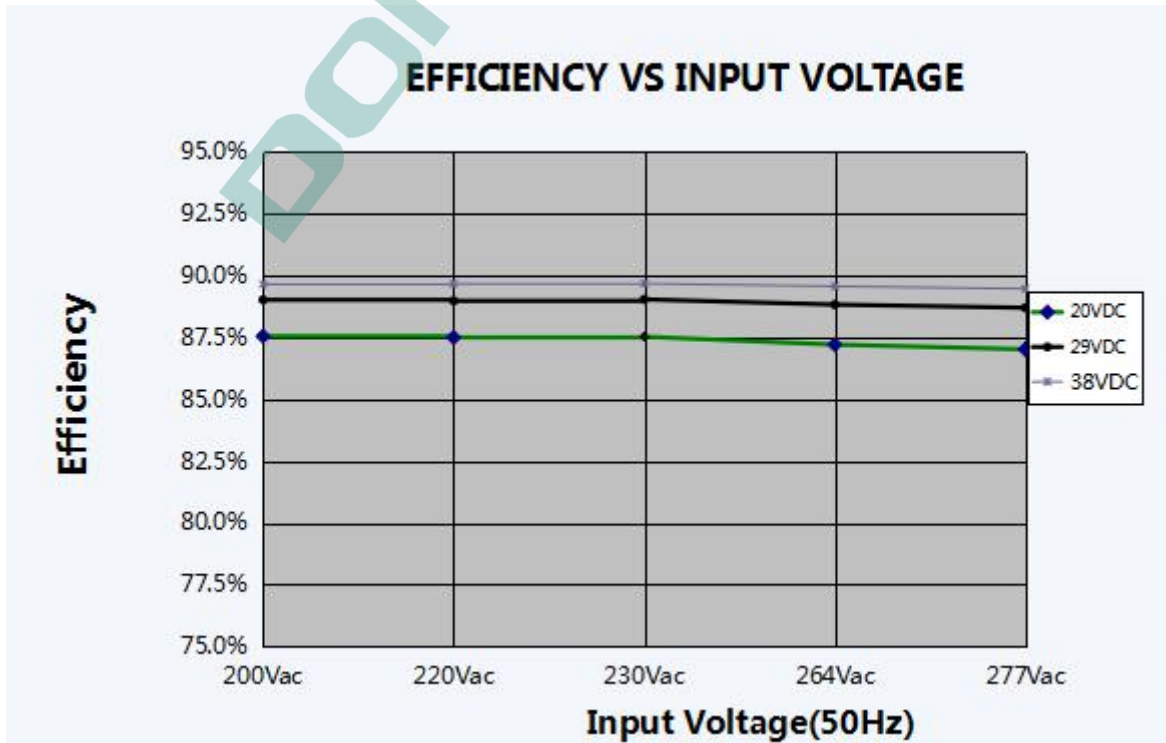
■ PF VS INPUT VOLTAGE (DL-105W2A8-MPA-H (I) Measurement



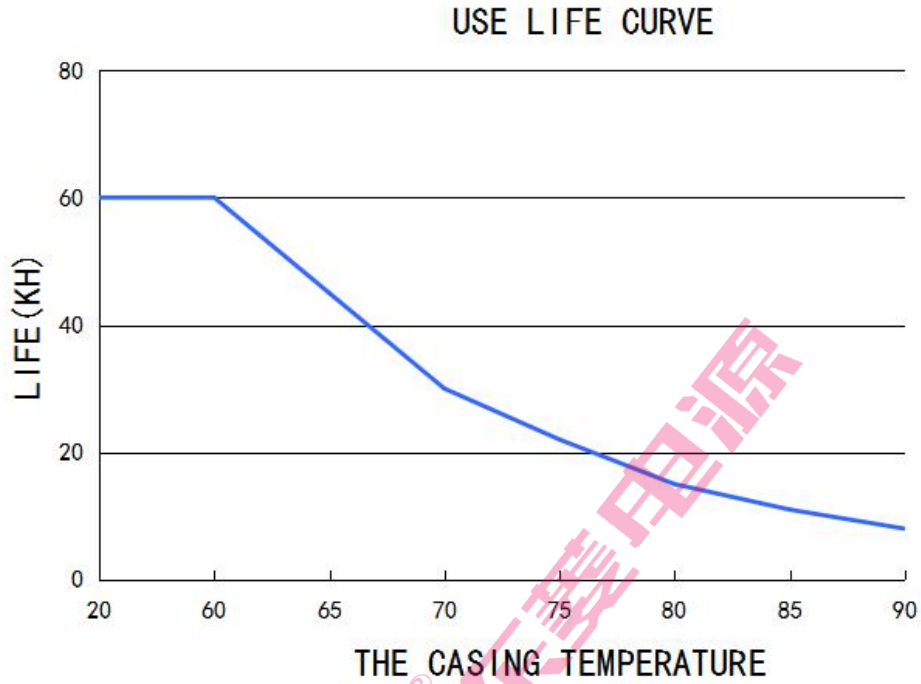
■ THD VS INPUT VOLTAGE (DL-105W1A8-MPA-H (I) Measurement)



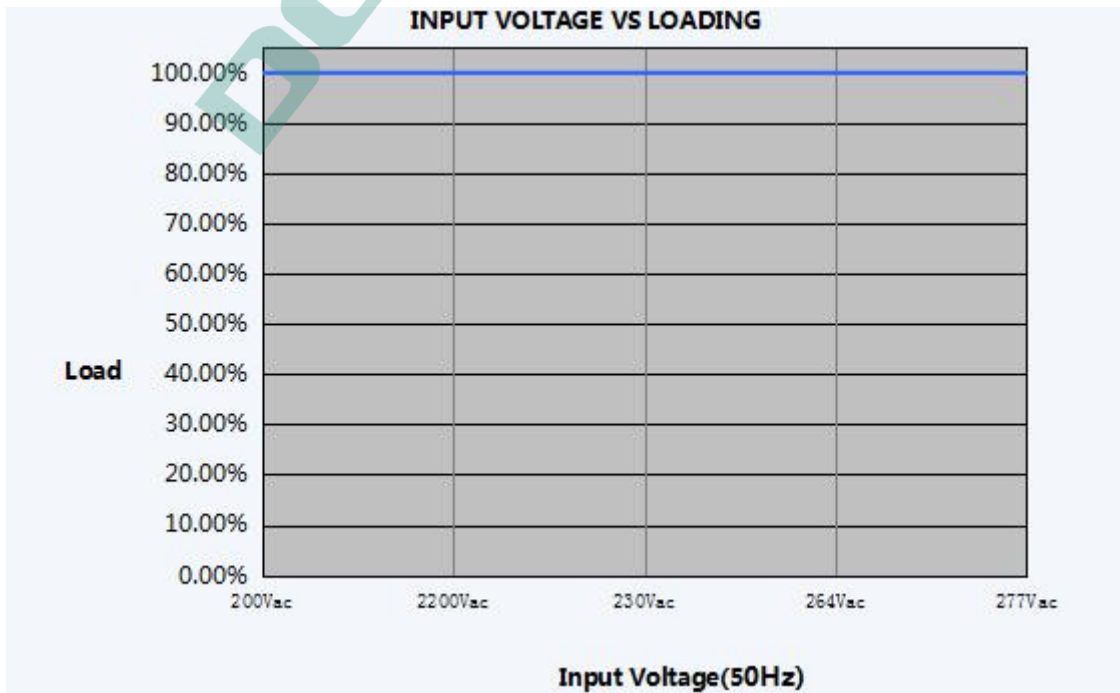
■ THD VS INPUT VOLTAGE (DL-105W2A8-MPA-H (I) Measurement)



■ TYPICAL LIFETIME (DL-105W-MPA-H (I))



■ INPUT VOLTAGE VS OUTPUT POWER (DL-105W-MPA-H (I))

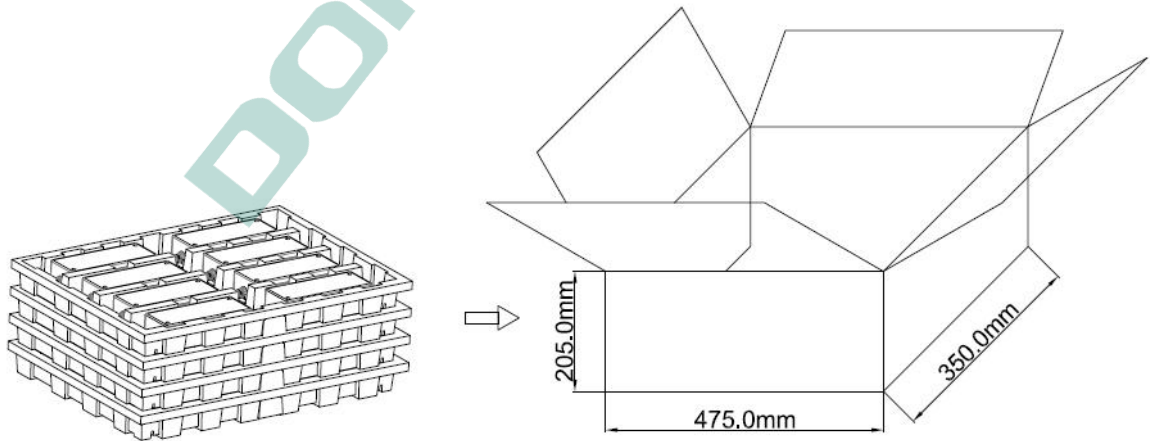
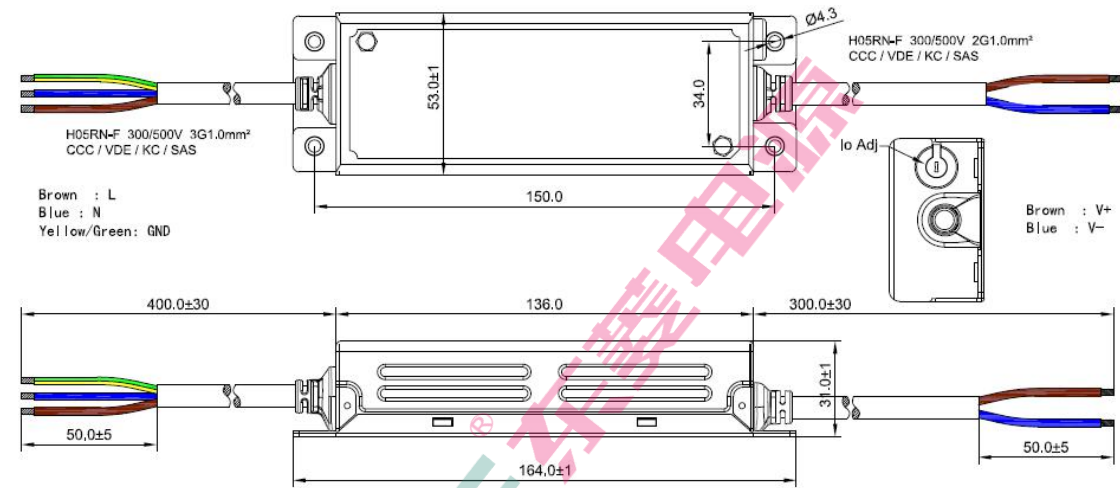


MECHANICAL SPECIFICATION & PACKING

DIMENSION (mm)	164*53*31
PACKING	/

Case No. : B70-004

Unit:mm



Remarks: A case of 4 layers ,
Each layer of 8 PCS

MONOMER WEIGHT

MONOMER WEIGHT	490g
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NAMEPLATE

<p>DL-105W2A8-MPA-H(I)</p>	<p>DONE® MODEL:DL-105W2A8-MPA-H(I) Power Factor ≥ 0.95 Constant Current LED Driver SELV</p> <p>INPUT: 200-277V ~ 0.7A 50/60Hz OUTPUT: 20-38V \equiv CURRENT ADJ: 2.4~3.5A CONSTANT POWER RANGE: 30-38V \equiv P rated: Max. 105.0W MAX. VOLTAGE: 50V \equiv (NO LOAD)</p> <p>INPUT: ○ ACL...Brown ○ ACN...Blue ○ \oplus...Yellow/Green</p> <p>OUTPUT: +V...Red -V...Black</p> <p>MADE IN CHINA Ci www.donpower.com.cn</p> <p>IP67</p> <p>ta: 55°C tc: 90°C</p>
<p>DL-105W1A8-MPA-H(I)</p>	<p>DONE® MODEL:DL-105W1A8-MPA-H(I) Power Factor ≥ 0.95 Constant Current LED Driver SELV</p> <p>INPUT: 200-277V ~ 0.7A 50/60Hz OUTPUT: 32-58V \equiv CURRENT ADJ: 1.6~2.5A CONSTANT POWER RANGE: 42-58V \equiv P rated: Max. 105.0W MAX. VOLTAGE: 69V \equiv (NO LOAD)</p> <p>INPUT: ○ ACL...Brown ○ ACN...Blue ○ \oplus...Yellow/Green</p> <p>OUTPUT: +V...Red -V...Black</p> <p>MADE IN CHINA Ci www.donpower.com.cn</p> <p>IP67</p> <p>ta: 55°C tc: 90°C</p>