 GUANGDONG DONE POWER TECHNOLOGY CO.,LTD <small>Service hotline: 400 0760 585 Website: www.donepower.com.cn</small>	Application	DONE LED INTEGRATED SPECIAL DRIVER		
	Product Line	DL-120W-MPA	REV	1.5

Guangdong Done Power Technology Co.,Ltd.

SPECIFICATION FOR APPROVAL

CUSTOMER:	
MODEL NO. :	DL-120W-MPA
Rev. :	V1.5
SAMPLE DATE:	

CUSTOMER

TEST	CHECK	APPROVE
CUSTOMER REMARKS		


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

MANUFACTRUE

EDIT	CHECK	APPROVE
吕晓凤		


Guangdong Done Power Technology Co.,Ltd.

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■ CHANGE HISTORY

DATE	CONTENT OF CHANGE	REV.	CHECK
2018.06.30	Initial version	V1.0	
2019.01.04	<ol style="list-style-type: none"> The minimum working temperature is changed from -40°C to -30°C. The storage temperature and humidity were changed from -40 ~ +80°C and 10 ~ 95% RH to -30 ~ +80°C and 10 ~ 95% RH. Increase the packing method and packing size L475*W350*H205mm. 	V1.1	
2019.04.18	<ol style="list-style-type: none"> Overvoltage changed from 44-47V to 44-53V. Update DL-120W3A3-MPA label. DC line changed from 2x0.75mm²x337mm to 2x1.0mm²x337mm AC power cord changed from 3x0.75mm²x437mm to 3x1.0mm²x437mm 	V1.2	
2019.08.15	Add BIS certification and update the label.	V1.3	
2020.01.14	<ol style="list-style-type: none"> DL-120W2A1-MPA changed from overvoltage 65-68V to no-load voltage 75V. DL-120W3A3-MPA changed from overvoltage 44-53V to no-load voltage 53V. 	V1.4	
2022.3.11	<ol style="list-style-type: none"> modify dimension drawing: input and output skinning length changed from 5mm to 10mm update the company LOGO and company name. 	V1.5	

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■ FEATURES

- ◇ Class I Driver
- ◇ Input voltage:100~277V~ 50/60Hz
- ◇ PF>0.95 @230Vac full load
- ◇ Efficiency >89% min @230Vac full load
- ◇ THD<10% @ 230Vac full load
- ◇ Metal shell structure, waterproof level can reach IP67.
- ◇ Double 85 test pass (15 days) @230Vac full load
- ◇ Lightning Surge : Differential Mode+/- 4KV (2 ohm) ,Common Mode +/- 6 KV (12 ohm) (IEC61000-4-5 2014)
- ◇ The LED DRIVER shall be applied 1500Vac for 60 seconds (HI – POT)
- ◇ Long life design warranty for 3years
- ◇ LED Driver is constant current output control mode. the output current is external adjustable.
- ◇ Applied in: Street lamp, project-light lamp, wash wall lamp or other outdoor lamps and lanterns
- ◇ Certification qualification
BIS



■ MODEL LIST


Model NO.	Input Voltage	Output Voltage	Output Current	Efficiency		THD		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

Note: The above parameters are measured within 15 minutes of power-on.

■ ELECTRICAL SPECIFICATION

◇Input Characteristics

INPUT VOLTAGE RANGE	90- 305Vac
FREQUENCY RANGE	47-63Hz
POWER FACTOR	>0.95 230Vac full load
THD	<10% 230Vac full load
AC CURRENT	<1.8A 100Vac full load
INRUSH CURRENT (max.)	Cold Start 100A @230Vac

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◇Output Characteristics


Model NO.型号	DL-120W3A3-MPA	DL-120W2A1-MPA
RATED CURRENT (mA)	3.3A	2.1A
CONSTANT CURRENT REGION	2.7~3.3A	1.9~2.4A
VOLTAGE RANGE(Vdc)	20~38Vdc	32~58Vdc
RATED POWER	125.4W	121.8W
NO LOAD VOLTAGE	53Vdc	75Vdc
EFFICIENCY	>89%@230Vac full load	>89%@230Vac full load
RIPPLE OF THE OUTPUT CURRENT	<50%(LED Load)&<120%(DC Electronic Load)	
CURRENT TOLERANCE	±5%	
LINE REGULATION	±5%	
LOAD REGULATION	±5%	
SETUP TIME	<1000ms @115Vac full load <500ms @230Vac full load	

◇Protection

OVER CURRENT (Typ.)	95 ~ 105% 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 mode: the product is in hiccup state, protect the product from damage, when the fault is ruled out, the power supply is normal

NOTE :

- 1) All parameters NOT specially mentioned are measured at 230Vac (50Hz) 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.

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◇ Environment

WORKING TEMP.	-30 ~ +55°C(Refer to "Derating Curve")
WORKING HUMIDITY	20 ~ 95% RH non-condensing
STORAGE TEMP, HUMIDITY	-30~ +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 : 0.5KVAC
ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
MTBF	150K hrs min. MIL-HDBK-217F (ta=25°C)

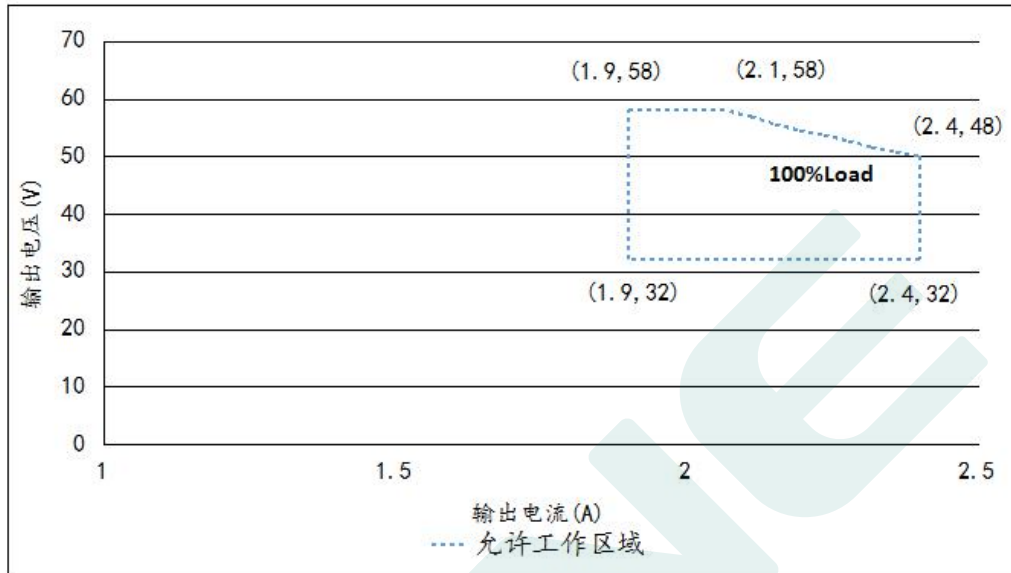
■ SAFETY & EMC

Safety	IS15885(Part2/Sec13)
EMC	/
LIGHTNING SUGER	Differential Mode+/- 4 KV,Common Mode+/- 6 KV (12 ohm) . (IEC61000-4-5 2014)
LEAKAGE CURRENT	<0.7mA

■ I-V Working area


■ OUTPUT CURRENT VS OUTPUT VOLTAGE (DL-120W2A1-MPA)

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



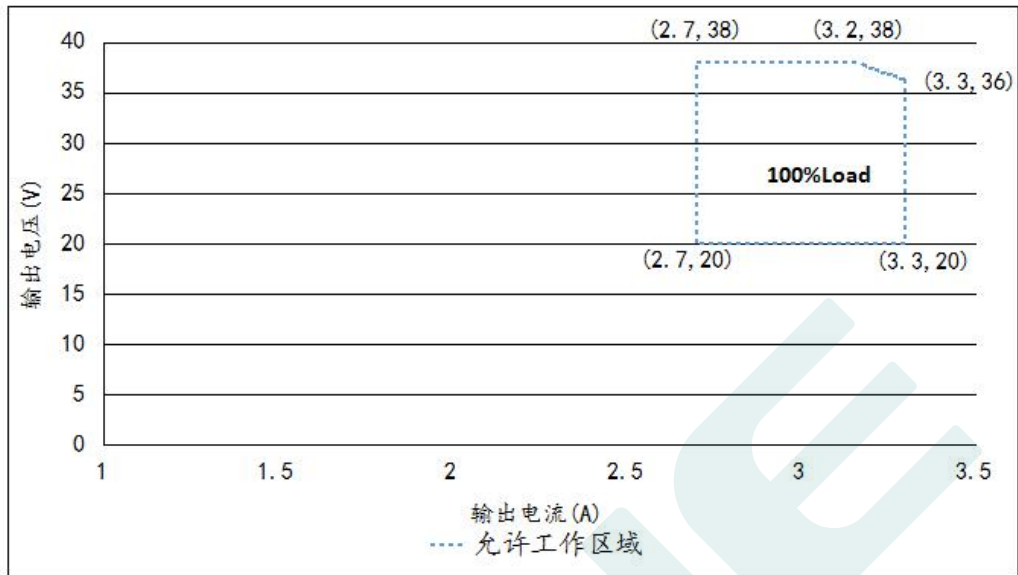
DL-120W2A1-MPA (Rated output current value and power corresponding to different load voltages when 100-277Vac is input)

Load voltage (V)	32V	36V	39V	42V	45V	48V	54V	58V
Current supply Io_MAX (A)	2.4A	2.4A	2.4A	2.4A	2.4A	2.4A	2.2A	2.1A
Power Po_MAX (W)	76W	86W	93W	100W	108W	120W	120W	120W

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■ OUTPUT CURRENT VS OUTPUT VOLTAGE (DL-120W3A3-MPA)

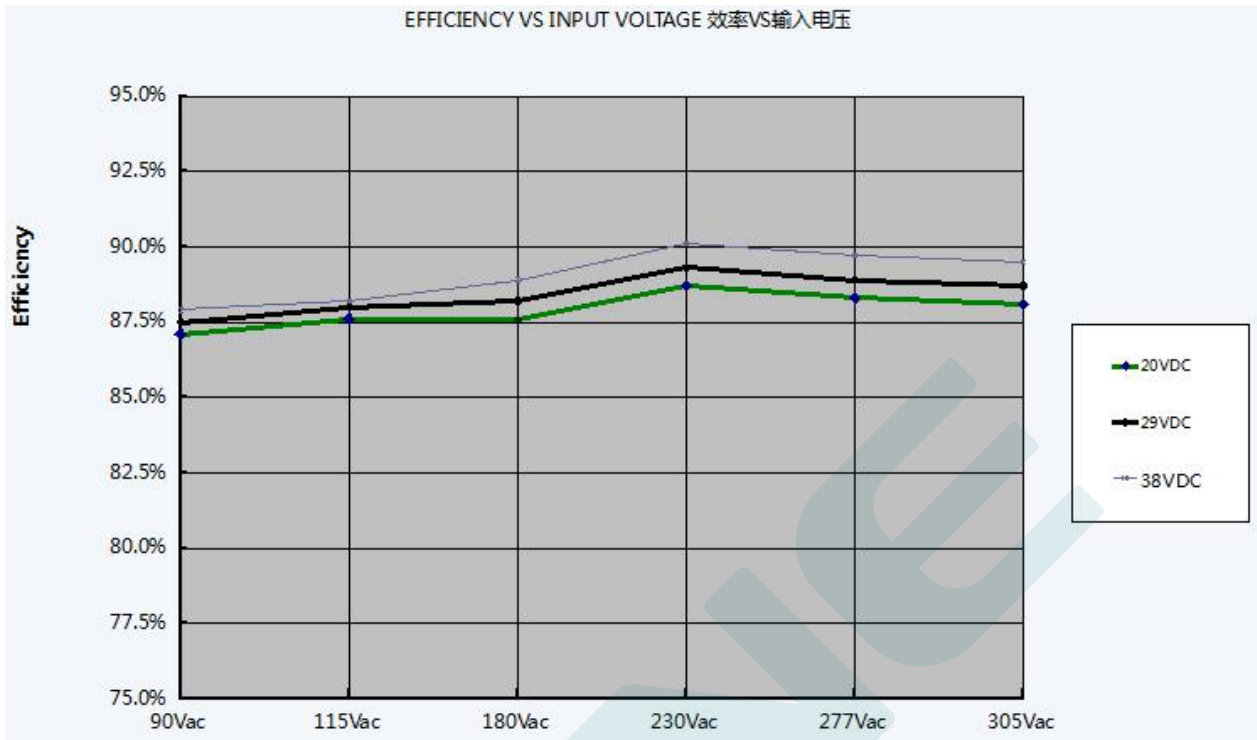
DL-120W3A3-MPA (输入100-277Vac时) 输出电流VS输出电压



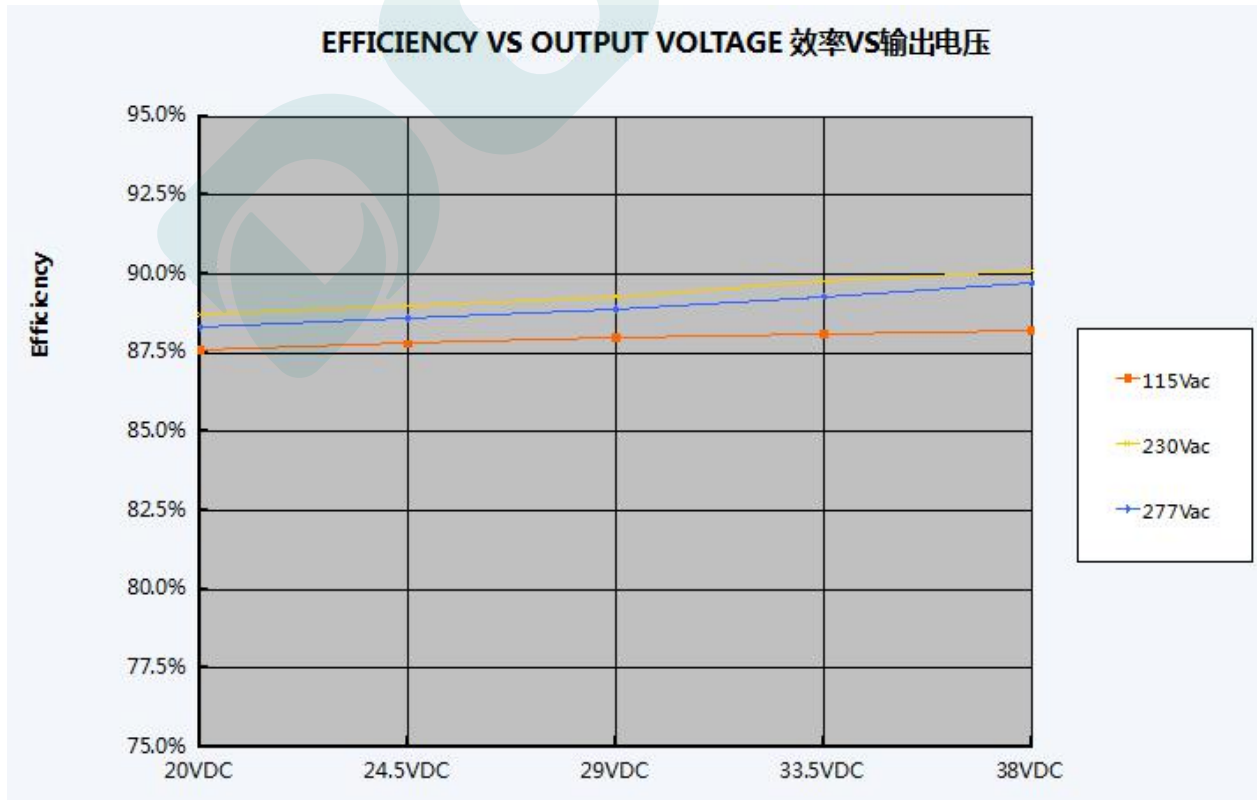
DL-120W3A3-MPA (Rated output current value and power corresponding to different load voltages when 100-277Vac is input)

Load voltage (V)	20V	22V	24V	27V	30V	33V	36V	38V
Current supply I _o _MAX (A)	3.3A	3.3A	3.3A	3.3A	3.3A	3.3A	3.3A	3.2A
Power P _o _MAX (W)	66W	72W	79W	89W	99W	108W	120W	120W

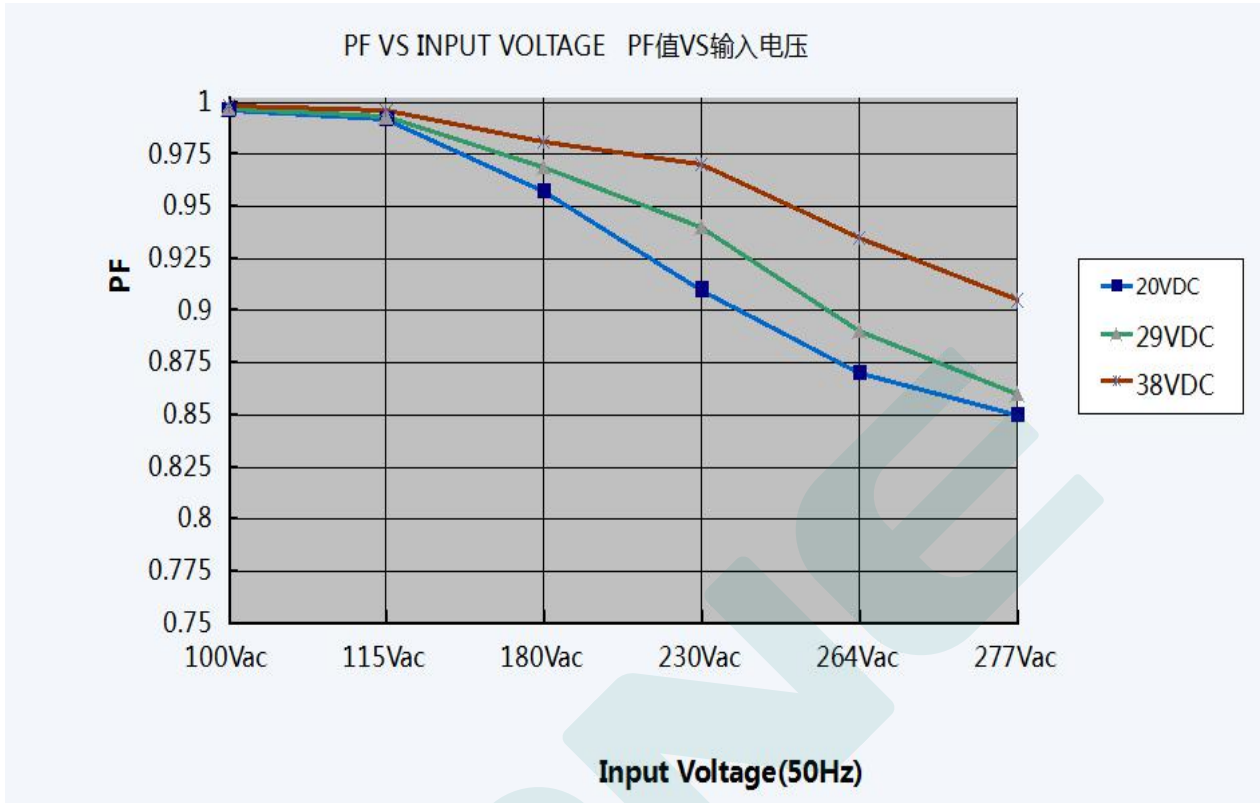
EFFICIENCY VS INPUT VOLTAGE (DL-120W3A3-MPA)



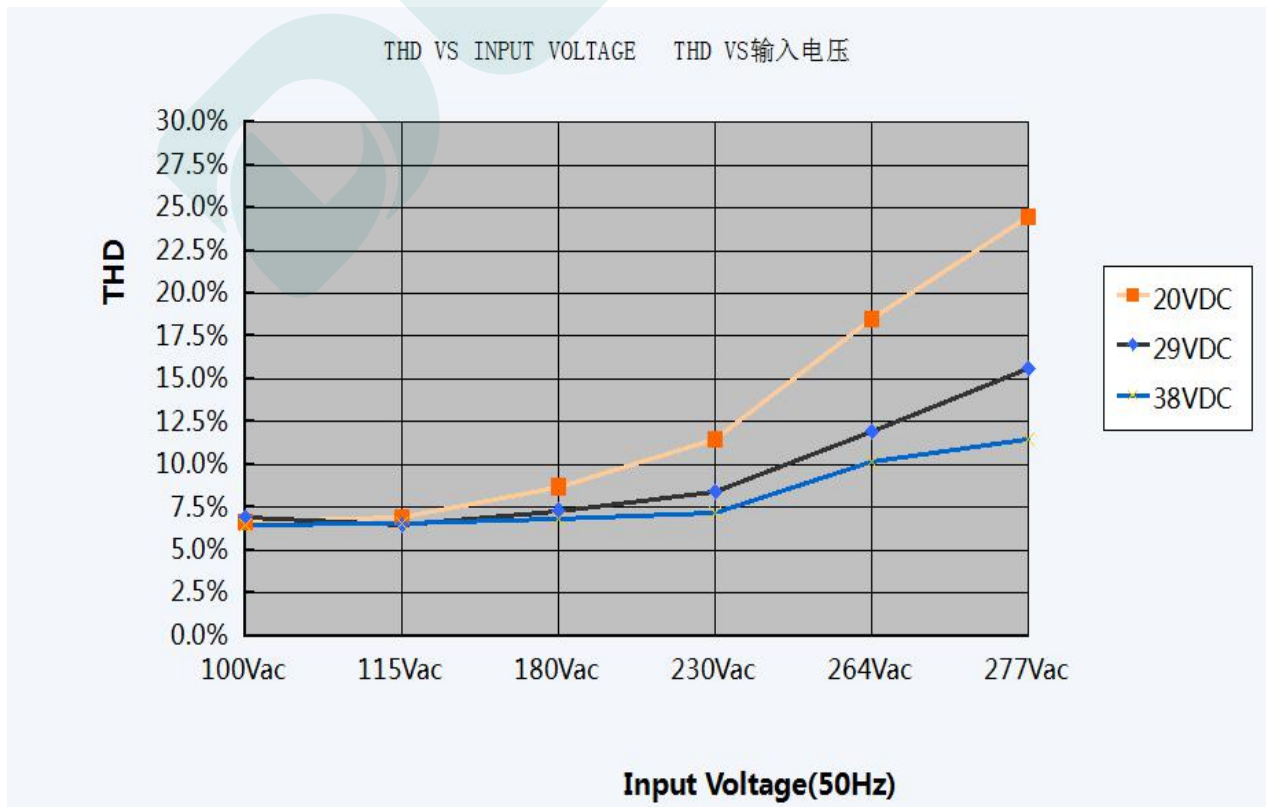
EFFICIENCY VS OUTPUT VOLTAGE (DL-120W3A3-MPA)




■ PF VS INPUT VOLTAGE (DL-120W3A3-MPA)

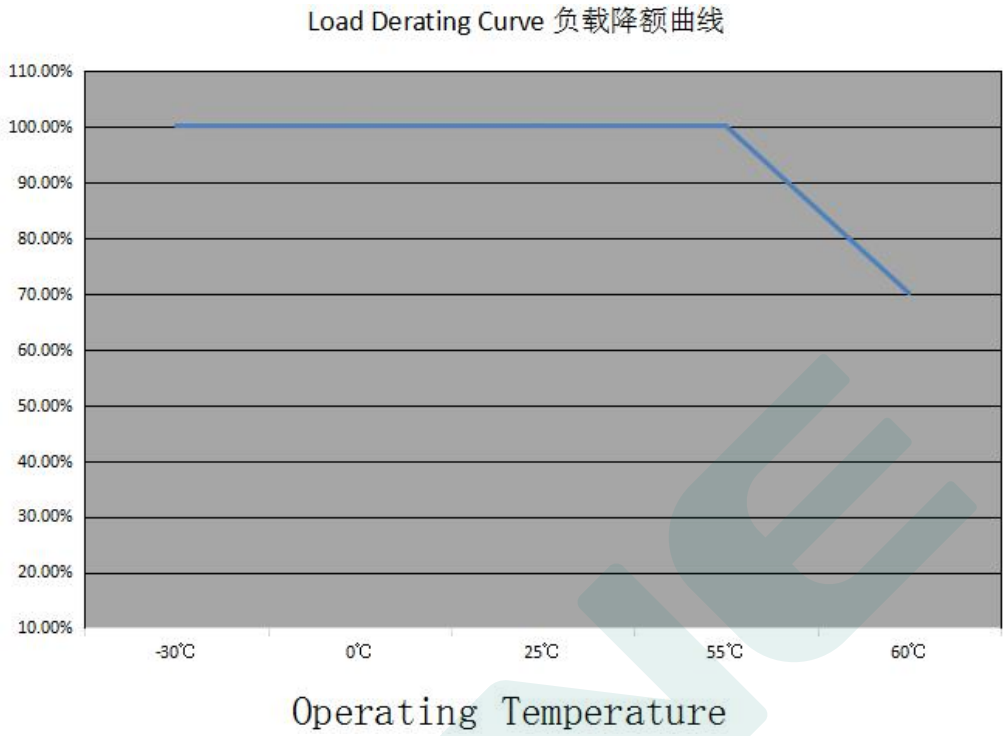


■ THD VS INPUT VOLTAGE (DL-120W3A3-MPA)

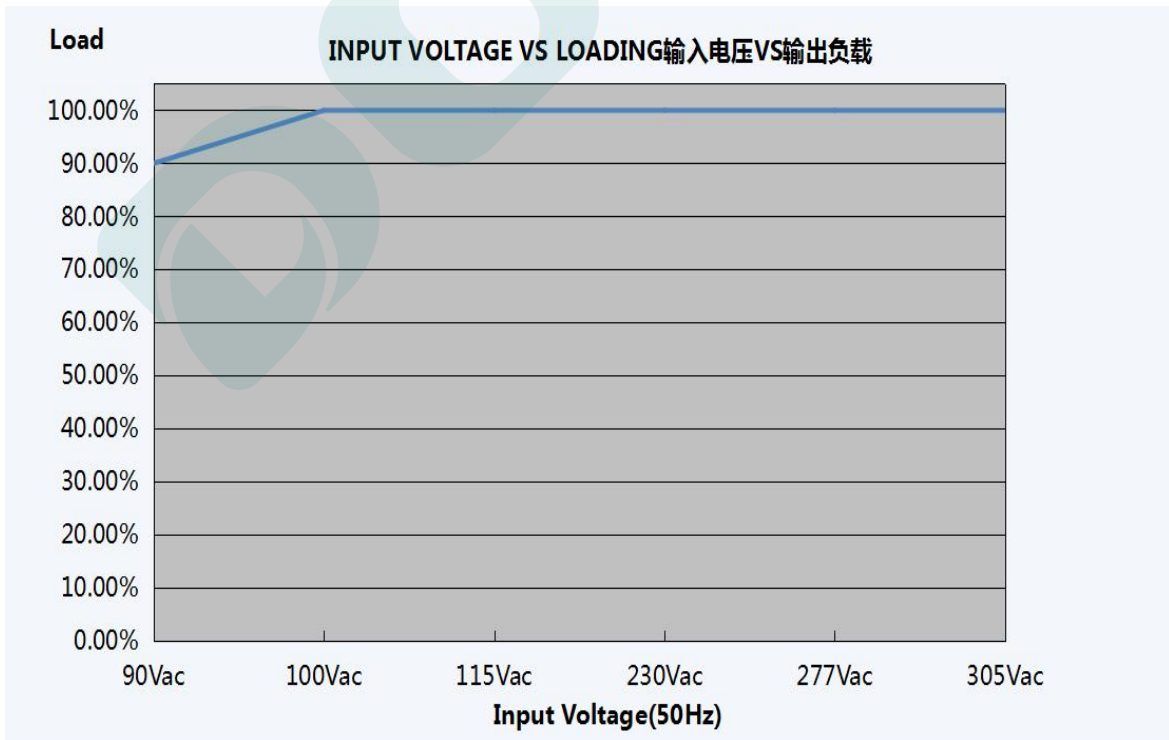


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■ **LOAD DERATING CURVE (DL-120W3A3-MPA)**

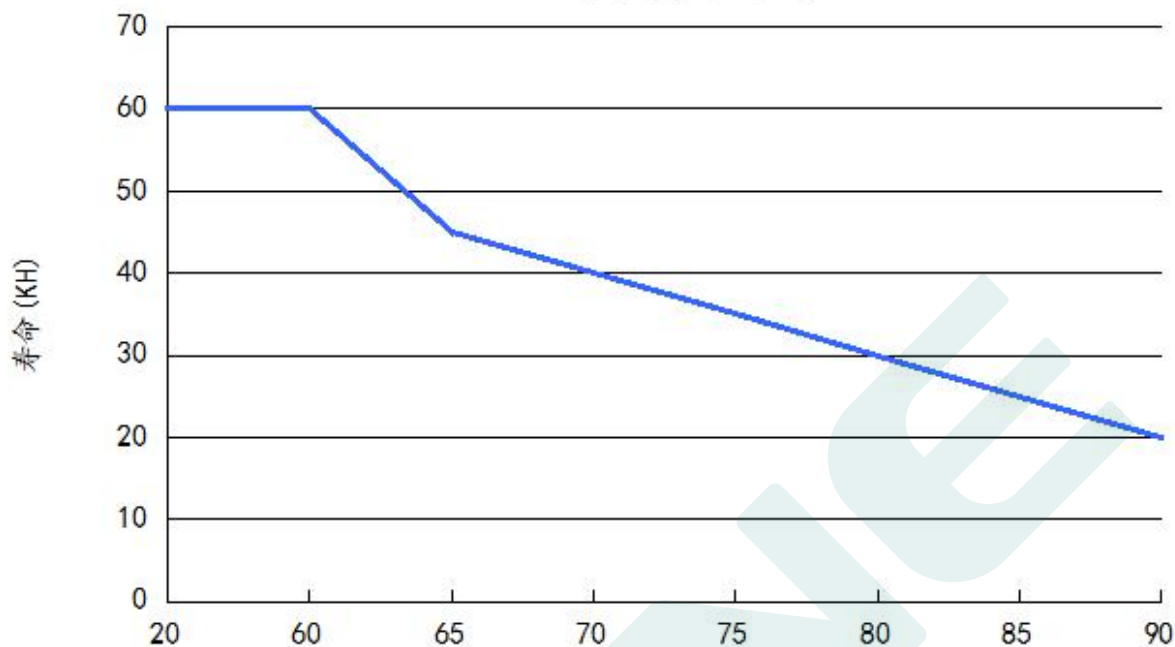


■ **INPUT VOLTAGE VS LOADING (DL-120W3A3-MPA)**



TYPICAL LIFETIME (DL-120W-MPA)

使用寿命曲线

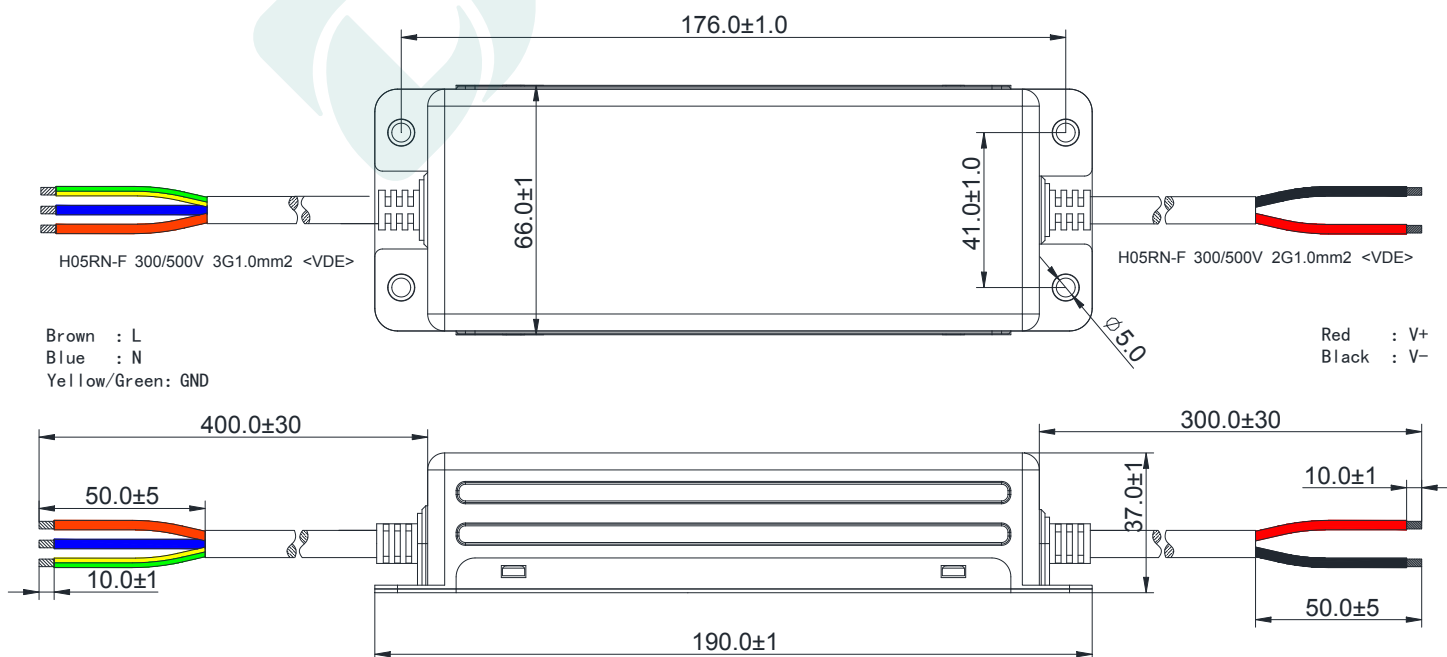



MECHANICAL SPECIFICATION

DIMENSION (mm)	L190*W66*H37
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Case No. : A150-006

Unit : mm




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■ MONOMER WEIGHT

MONOMER WEIGHT	760g
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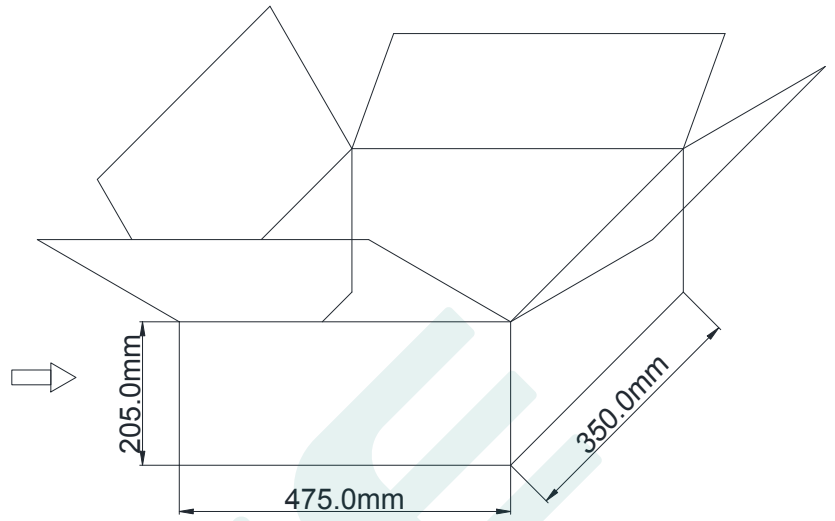
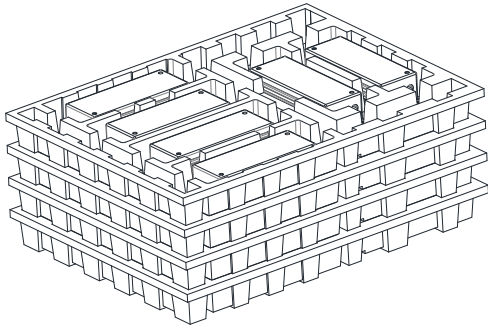
■ LABELLING

DL-120W3A3-MPA	 <p>DONE® MODEL:DL-120W3A3-MPA Constant Current LED Driver Power Factor ≥0.95 SELV</p> <p>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)</p> <p>INPUT: ACL...Brown (Red), ACN...Blue (Black), Yellow/Green OUTPUT: +V...Red, -V...Black</p> <p>MADE IN CHINA www.donepower.com.cn</p> <p>IP67 IS 15885(Part 2/Sec 13) R-41082295 ta:55°C tc:90°C</p>
DL-120W2A1-MPA	 <p>DONE® MODEL:DL-120W2A1-MPA Constant Current LED Driver Power Factor ≥0.95</p> <p>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)</p> <p>INPUT: ACL...Brown (Red), ACN...Blue (Black), Yellow/Green OUTPUT: +V...Red, -V...Black</p> <p>MADE IN CHINA www.donepower.com.cn</p> <p>IP67 IS 15885(Part 2/Sec 13) R-41082295 ta:55°C tc:90°C</p>

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■ THE PACKING WAY

PACKING (mm)	L475*W350*H205
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Note: One Carton 4 layers and 6 pcs each layer, total 24pcs/carton.