

	产品类型	东菱 LED 室外驱动电源 DONE WATERPROOF LED DRIVER		
	产品系列	DL-20W-MCC	REV.	1.0

中山市东菱照明科技有限公司

Zhongshan Done Lighting Technology Co.,Ltd.

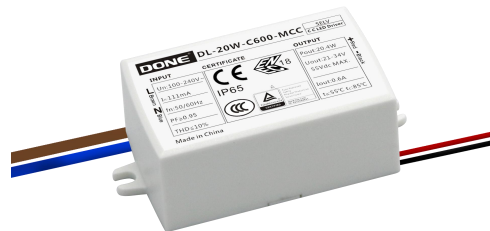
SPECIFICATION

CUSTOMER			
MODEL NO.	DL-20W-MCC		
VERSION	V1.0		
CUSTOMER			
TEST	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. 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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FEATURES

- ◇ Class II structure
- ◇ Input Voltage:100-240V ~ 50/60Hz
- ◇ Input 230Vac, full load output, maximum efficiency up to 88%
- ◇ PF > 0.95 & THD < 10%
- ◇ Lightning surge : differential mode L-N Class II +/- 2 KV (2 ohm) 2kV
refer to IEC61000-4-5 2014
- ◇ With CCC, TUV, CE, SAA certification
- ◇ Long life design , 5 years warranty
- ◇ Internal glue , level of protection : IP65



TYPICAL APPLICATIONS

Indoor household lighting. Indoor commercial lighting.

Outdoor commercial lighting

MODEL LIST

Model	AC Input	Output power	Output voltage	Output current	Efficiency (Typ.)	THD	PF
DL-20W-C300-MCC	100-240V 50/60Hz	20.4W	36-68Vdc	0.3A	>86%	<10%	>0.95
DL-20W-C350-MCC	100-240V 50/60Hz	20.3W	36-58Vdc	0.35A	>86%	<10%	>0.95
DL-20W-C400-MCC	100-240V 50/60Hz	16.8W	21-42Vdc	0.4A	>86%	<10%	>0.95
DL-20W-C450-MCC	100-240V 50/60Hz	18.9W	21-42Vdc	0.45A	>86%	<10%	>0.95
DL-20W-C500-MCC	100-240V 50/60Hz	20.5W	21-41Vdc	0.5A	>86%	<10%	>0.95
DL-20W-C600-MCC	100-240V 50/60Hz	20.4W	21-34Vdc	0.6A	>86%	<10%	>0.95

Remark :

1. Default tested at 230Vac,full load with 30 minutes,Ta:25°C.

■ SPECIFICATION

◇ INPUT

Rated voltage	100 - 240Vac
Rated frequency	50/60Hz
Power factor(PF)	PF>0.95 @230Vac full load
Total harmonic distortion(THD)	THD<10% @230Vac full load
Input current	I _{in} <0.28A @100Vac full load
Inrush current (Typ.)	Cold start (25°C)<70A @230Vac

◇ OUTPUT

Model	DL-20W-C300-MCC	DL-20W-C350-MCC	DL-20W-C400-MCC	DL-20W-C450-MCC	DL-20W-C500-MCC	DL-20W-C600-MCC
Rated current	300mA	450mA	400mA	450mA	500mA	600mA
Output voltage range	36~68Vdc	36~58Vdc	21~42Vdc	21~42Vdc	21~41Vdc	21~34Vdc
Rated output power	20.4W	20.3W	16.8W	18.9W	20.5W	20.4W
No load voltage	85V MAX.	85V MAX.	60V MAX.	60V MAX.	60V MAX.	55V MAX.
Efficiency (Typ.)	>86%@230Vac full load					
Accuracy off output current	±5%					
Line regulation	±5%					
Load regulation	±5%					
Setup time	<500ms @230Vac					

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◇ Protection

Over Load protection	Protection mode: hiccup restart mode, automatic recovery after removal of abnormal load conditions.
Short Circuit Protection	Doze mode, can automatically recover after abnormal conditions are removed.
Over Voltage protection	Protection mode: hiccuping or clamping in output maximum voltage ,Production undamaged,When troubleshooting,Normal operation of power supply.

Remarks:

1. All specifications are tested at 230Vac (50Hz) , rated load, and Ta:25°C.
2. Including setting error, linear adjustment rate and load adjustment rate.
- 3.Constant current mode operates under rated output voltage of 50%~100%, suitable for LED and other related industries

■ ENVIRONMENT

Working temperature	-40 ~ +55°C (Refer to "Derating Curve")
Working humidity	20 ~ 95% RH,non-condensing
Storage temperature/humidity	-30~+85°C, 10 ~ 95% RH
Resistant to vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
High-pot test	I/P-O/P:3.75KVAC
Insulation resistance	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
MTBF	470K hrs min. MIL-HDBK-217F (Ta=25°C)

■ SAFETY & EMC

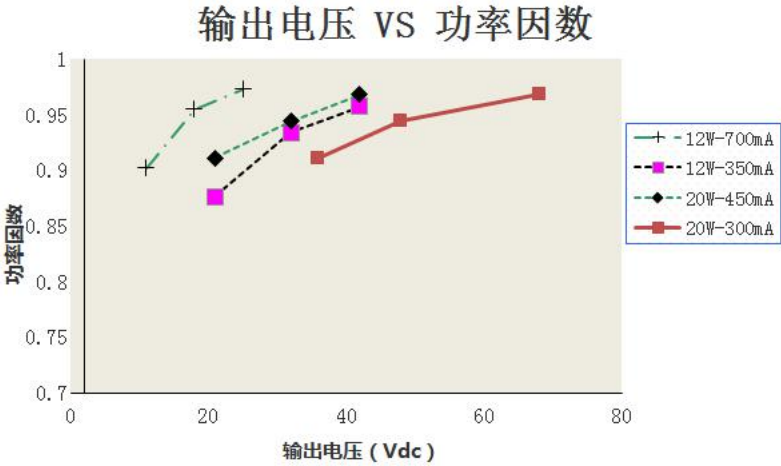
Safety	GB19510.1、GB19510.14、EN61347-1、EN61347-2-13、IEC61347-1、IEC61347-2-13、AS/NZS61347.1、AS/NZS61347.2.13 ; GB19510.1、GB19510.14、EN61347-1、EN61347-2-13、IEC61347-1、IEC61347-2-13、AS/NZS61347.1、AS/NZS61347.2.13 ;
EMC	EN 55015、EN 61000-3-2 、GB/T 17743、GB17625.1、 EN 61000-3-3
Surge level	difference module L-N Class II +/- 2 KV (2 ohm) (IEC61000-4-5 2014)
Leakage current	<0.7mA / 230Vac

Remarks:

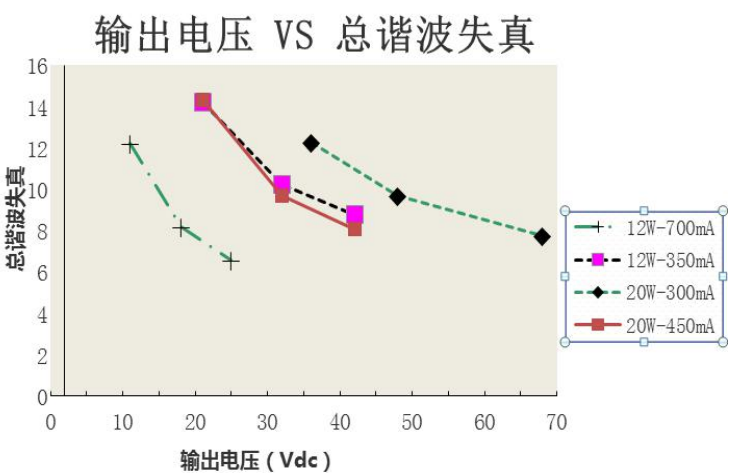
The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

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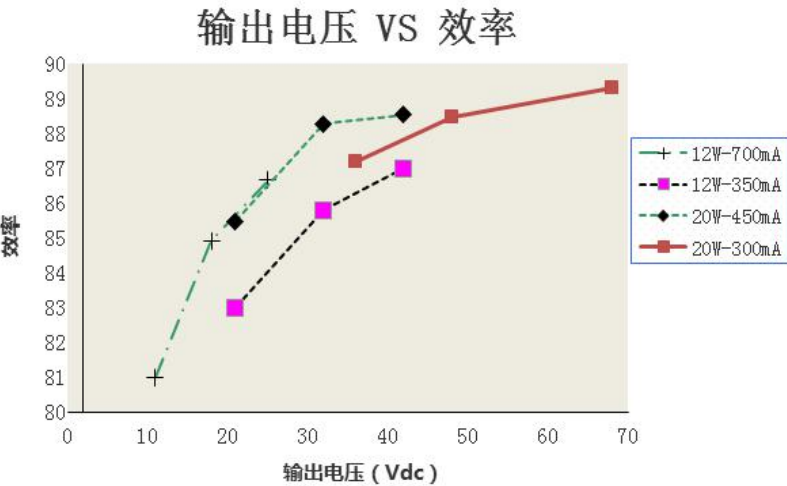
Vout VS PF



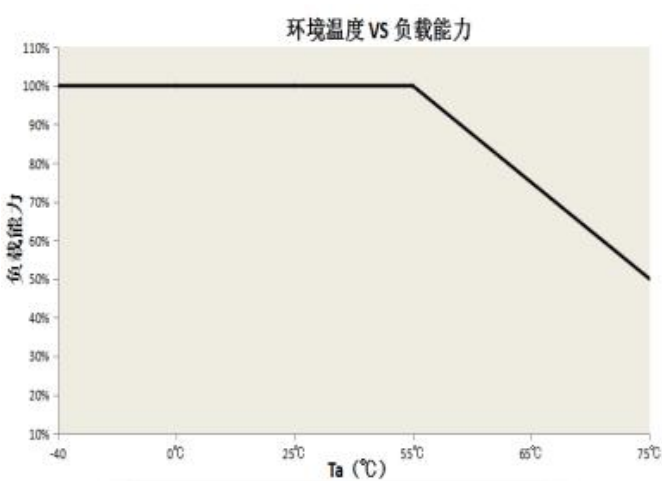
Vout VS THD



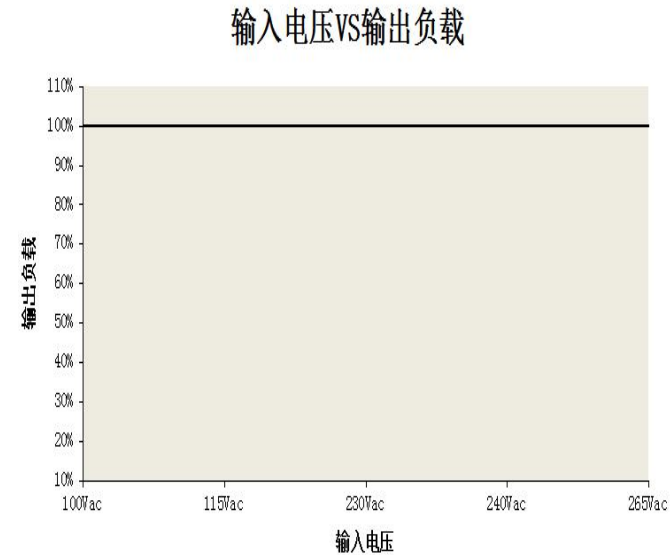
Vout VS Efficiency



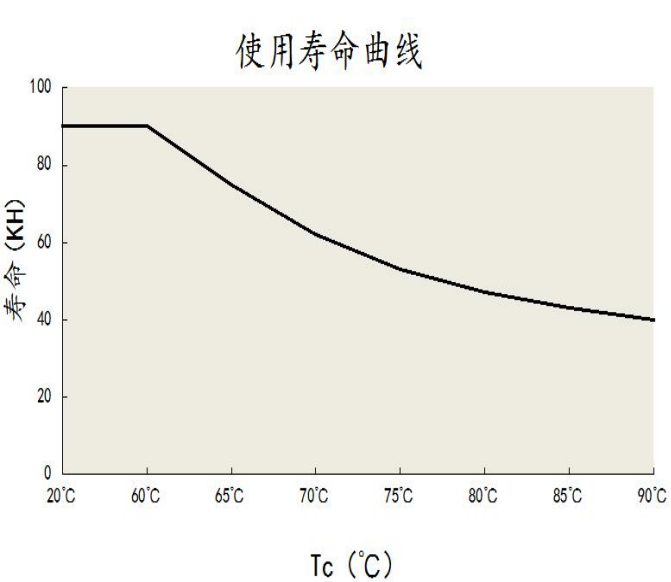
Load reduction curve



Pout VS Vin



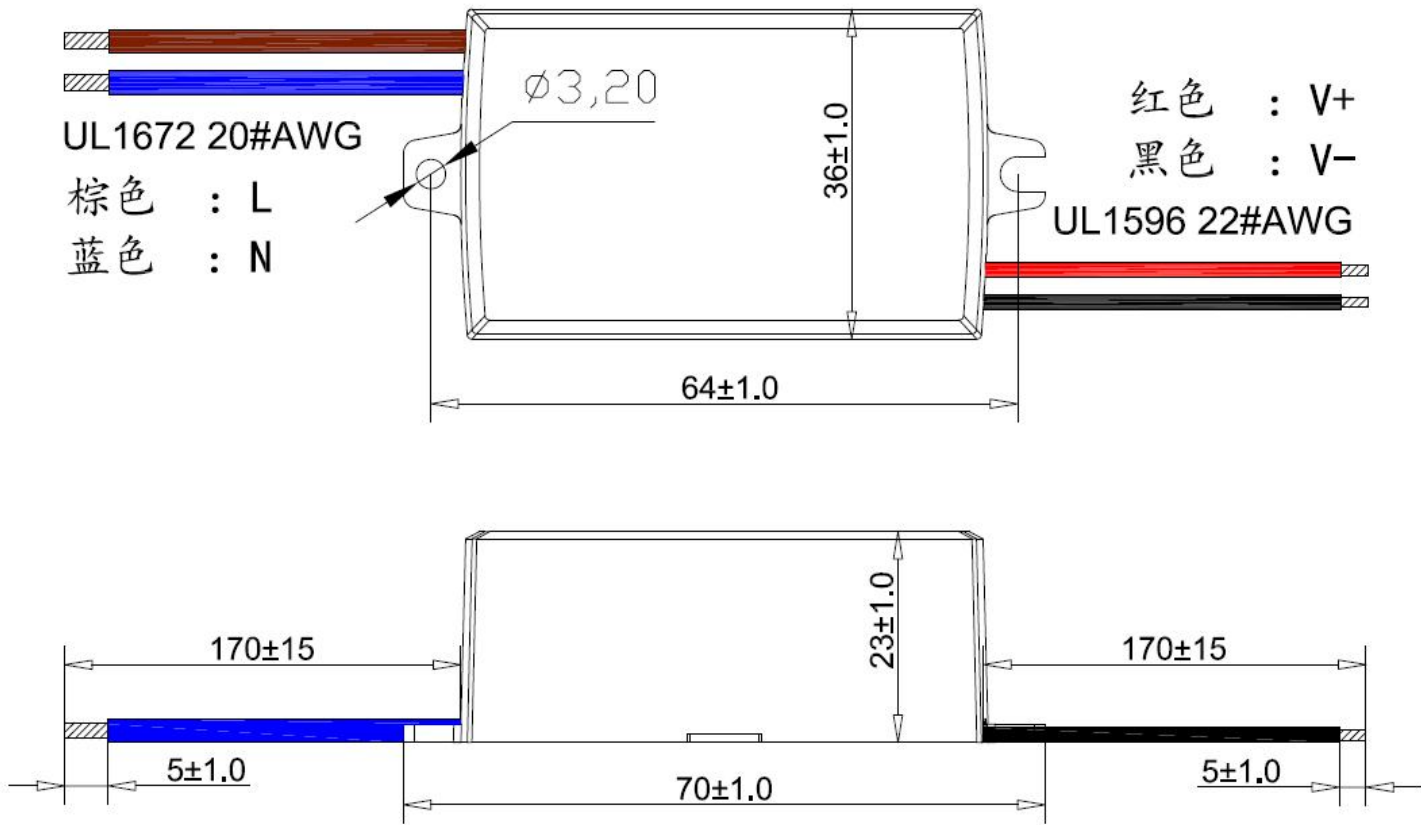
Tc VS Life



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MACHINE SIZE MAP:

Size (mm)	L70xW36xH23mm
Pack	/



WEIGHT

Weight	82g
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Warn:

1. According to the certificate obtained by the power supply, the LED DRIVER with English label is applicable to luminaires sold in Europe, America and India;
2. The LED DRIVER with Chinese label is only used for luminaires sold to China.