

DONE ® 东菱电源	产品类型	东菱 LED 室外驱动电源 DONE WATERPROOF LED DRIVER		
	产品系列	DL-20W—MPC	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-MPC		
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	
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DOONE® 东源电源

FEATURES

- ◇ Class II structure
- ◇ Input Voltage:100-277V ~ 50/60Hz
- ◇ Input 230Vac, full load output, maximum efficiency up to 85%
- ◇ Lightning surge : differential mode L-N Class II +/- 2 KV (2 ohm)
refer to IEC61000-4-5 2014
- ◇ Hrough The double 85 Test (15 天) @230Vac Full load
- ◇ Derive the LED driver I/P-O/P pressure can reach 1500Vac last 60S
- ◇ Long life design , 3 years warranty
- ◇ Internal glue , level of protection : IP67
- ◇ A Applied in: Street lamp, project-light lamp, wash wall lamp or other outdoor lamps and lanterns
- ◇ Hasthis product suitable for the Indian marker



TYPICAL APPLICATIONS

Indoor household lighting. Indoor commercial lighting.

Outdoor commercial lighting

MODEL LIST

Model	AC Input	Output voltage	Output current	Efficiency	
				115Vac	230Vac
DL-20W-C300-MPC	100~277Vac 50/60Hz	36-72Vdc	300mA	85%	86%
DL-20W-C400-MPC		21-42Vdc	400mA	84%	86%
DL-20W-C450-MPC		21-42Vdc	450mA	84%	86%
DL-20W-C500-MPC		21-42Vdc	500mA	84%	86%
DL-20W-C550-MPC		21-36Vdc	550mA	83%	85%
DL-20W-C600-MPC		21-36Vdc	600mA	83%	85%

Remark :

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

	产品类型	东菱 LED 室外驱动电源 DONE WATERPROOF LED DRIVER			
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■ SPECIFICATION

◇ Input Characteristics

Rated voltage	100 - 277Vac
THD	<15%@230Vac Full load
Frequency	50/60Hz
Power factor(PF)	≥0.95@230Vac Full load
Input current	I _{in} <0.45A @100Vac full load
Inrush current (typ.)	Cold start (25°C)<70A @230Vac

◇ Output Characteristics

Model	DL-20W-C300-MPC	DL-20W-C400-MPC	DL-20W-C450-MPC	DL-20W-C500-MPC	DL-20W-C550-MPC	DL-20W-C600-MPC
Rated current	300mA	400mA	450mA	500mA	550mA	600mA
current range	279-315mA	370~420mA	418-472mA	465~525mA	510~578mA	558-630mA
Output voltage range	36~72Vdc	21~42Vdc	21~42Vdc	21~42Vdc	21~36Vdc	21~36Vdc
Rated output power	21.6W	16.8W	18.9W	21W	19.8W	21.6W
No load voltage	≤100Vdc	≤60Vdc	≤60Vdc	≤60Vdc	≤50Vdc	≤50Vdc
Efficiency(Typ.)	>86%@230Vac Full Load	>86%@230Vac Full Load	>86%@230Vac Full Load	>86%@230Vac Full Load	>85%@230Vac Full Load	>85%@230Vac Full Load
Output current ripple (LED)	<50% @230Vac Full Load					
Accuracy off output current	+5/-7%					
Line regulation	+5/-7%					
Load regulation	±5%					
Setup time	≤500ms @ 230Vac Full load& ≤1000ms @100Vac Full load					

◇ 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.
The input under voltage	/

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	-30 ~ +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:1.500KVAC
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

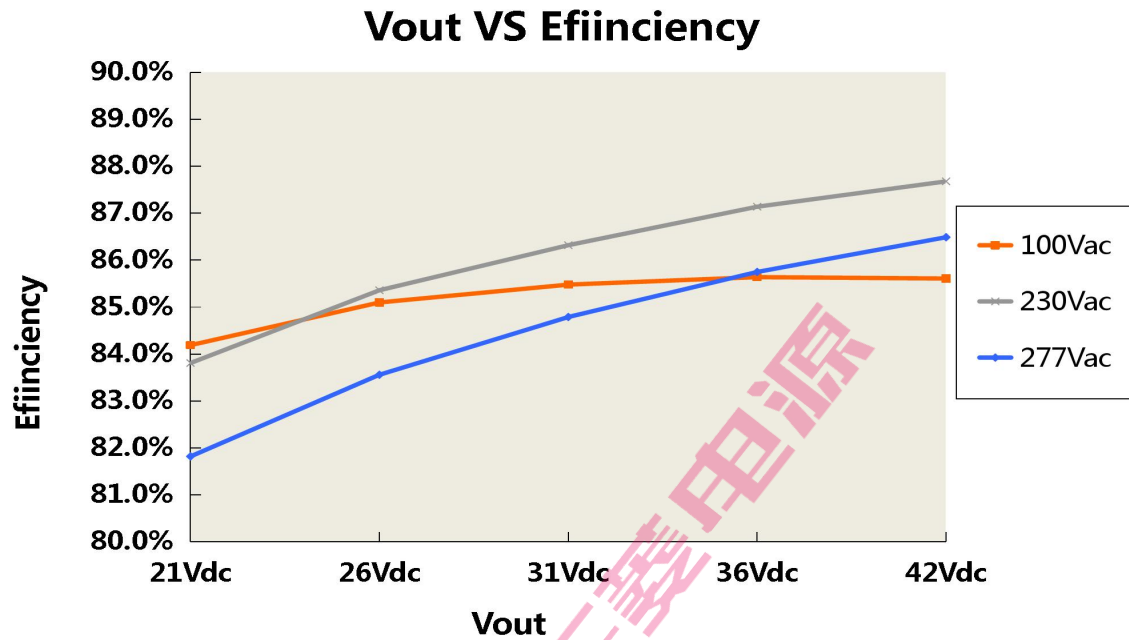
Safety	/
EMC	/
Lightning surge	difference module L-N Class II +/- 2 KV (2 ohm) (IEC61000-4-5 2014)
Leakage current	<0.7mA

Remarks:

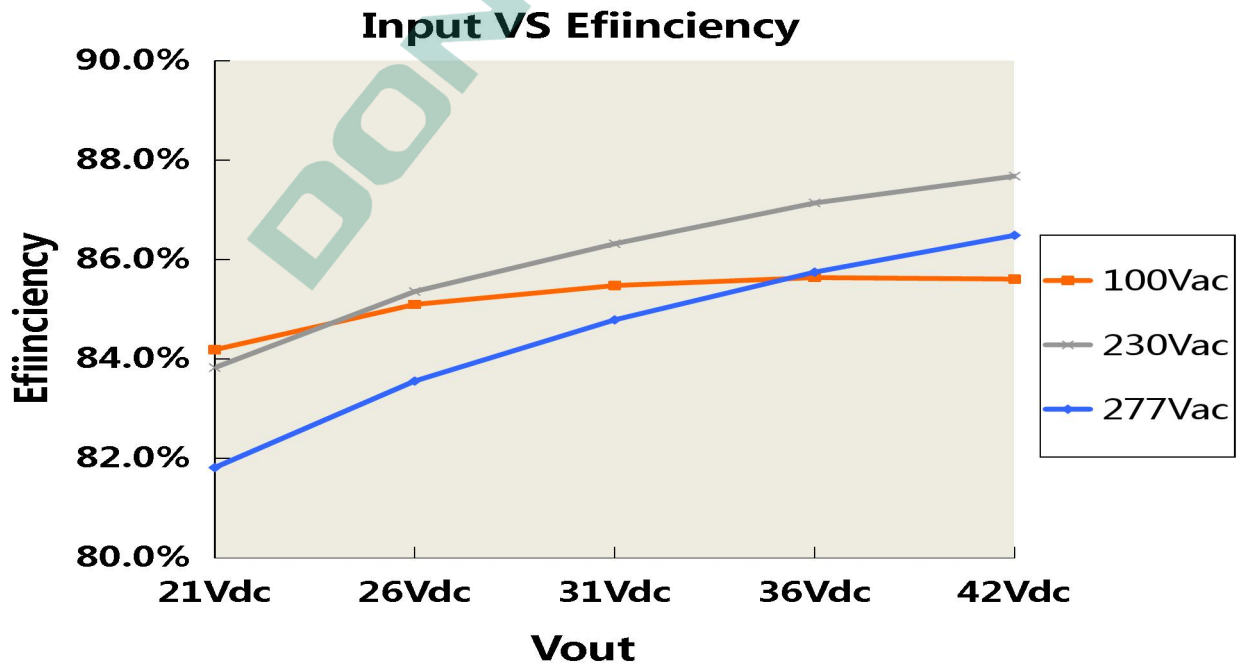
The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

on the complete installation again.

■ Vout VS Efficiency (DL-20W-C450-MPC)

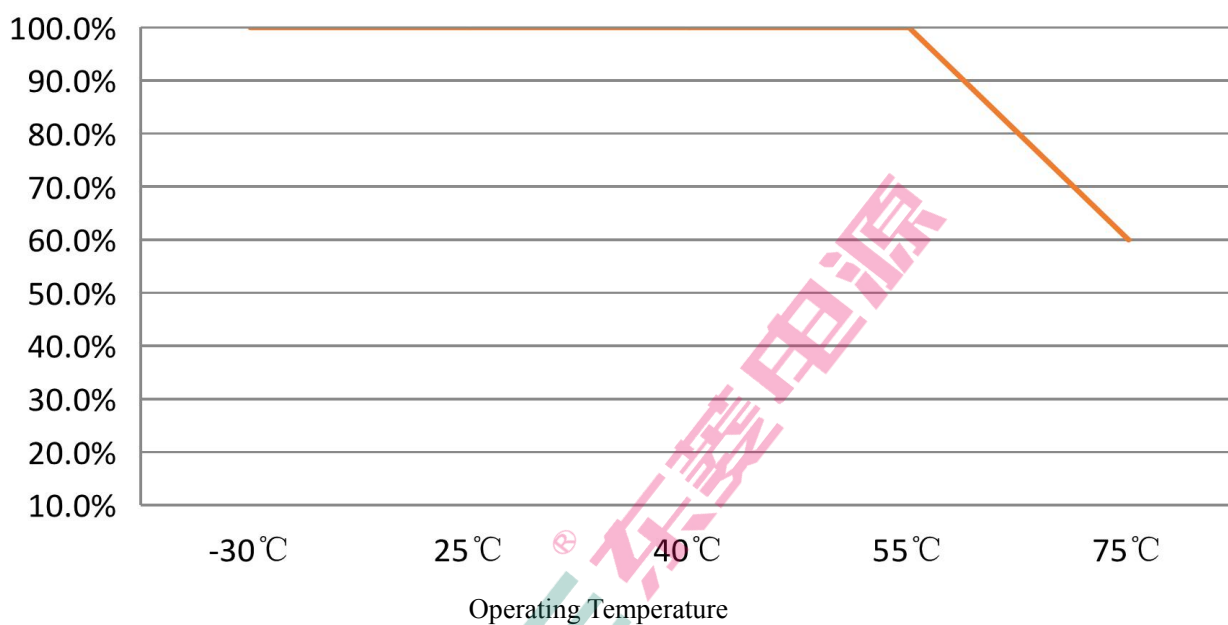


■ Input VS Efficiency (DL-20W-C450-MPC)



■ LOAD DERATING CURVE (DL-20W-MPC)

LOAD DERATING CURVE

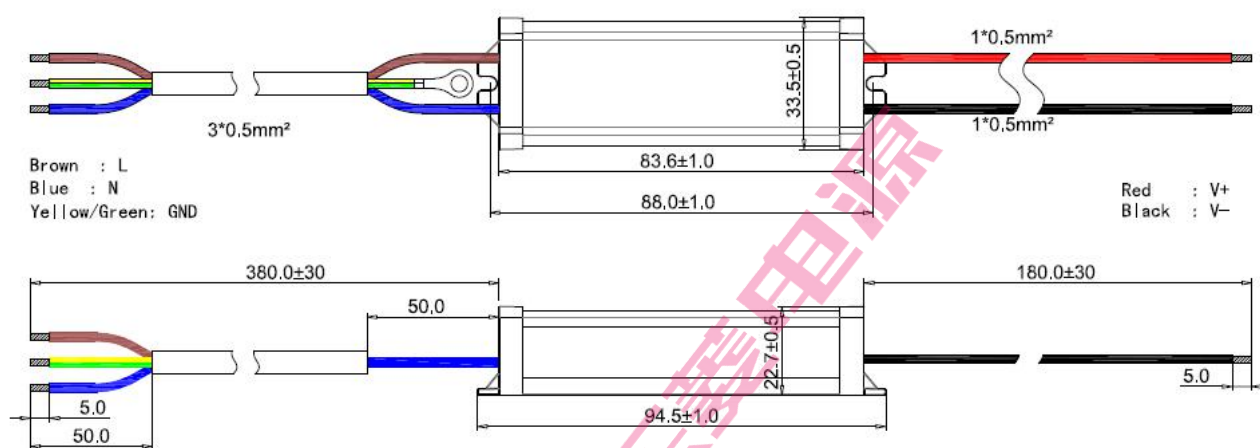


■ MACHINE SIZE MAP

Size (mm)	L94.5*W33.5*H22.7mm
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Case model : 2M10A

unit:mm



■ WEIGHT

Weight	115g
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