

The logo for DONE, featuring the word "DONE" in a bold, teal, sans-serif font. The letter "D" is stylized with a white circular element on its left side. The logo is contained within a white rounded square with a thin teal border.

**DONE**

# MPC SERIES LED DRIVERS

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DL-60H-MPC SPEC V1.0

## Features

- Class I structure
- Input voltage: 200-277 V ~ 50/60 Hz
- Efficiency :90%(Typ.)
- Metal shell structure, protection grade: IP67
- Lightning protection level: differential mode 6kV
- Can pass the double 85 test (15 days) @ 230Vac full load
- The LED drives I/P-O/P to withstand voltage up to 1500Vac for 60s
- Lifetime design: 3 years



## Applications

Outdoor lighting lamps such as street lamps, spotlights, wall washing lamps, etc.

## Model list

Model NO.	Input voltage	Output power	Output voltage	The default current	Eff.	T.H.D	PF
DL-60H-C1050-MPC	200-277Vac 50/60Hz	58.8W	25-56Vdc	1050mA	>90.5%	<7%	>0.97
DL-60H-C1200-MPC		60W	25-50Vdc	1200mA	>90%		
DL-60H-C1500-MPC		57W	20-38Vdc	1500mA	>89%		
DL-60H-C1800-MPC		59.4W	20-33Vdc	1800mA	>89.5%		

**Note :**

1. Test conditions of the above parameters: Ta=25 °C, 230Vac input, working at full load for 30 minutes.

## Input characteristics

Parameter	Min	Typ.	Max	Note
Rated input voltage	200Vac	230Vac	277Vac	
Input voltage range	180Vac	230Vac	305Vac	
Rated frequency	47Hz	50/60Hz	63Hz	
Power factor	0.95	0.97	-	@230Vac full load
T.H.D.	-	7%	10%	@230Vac full load
Input current	-	-	0.5A	@100Vac full load
Inrush current	-	-	70A	230Vac, cold start (25°C)

## Output characteristic

Parameter	Min	Typ.	Max	Note
Rated current				
DL-60H-C1050-MPC	0.976A	1.05A	1.124A	
DL-60H-C1200-MPC	1.116A	1.2A	1.284A	
DL-60H-C1500-MPC	1.395A	1.5A	1.605A	
DL-60H-C1800-MPC	1.674A	1.8A	1.926A	
Output current range				
DL-60H-C1050-MPC	25V	-	56V	
DL-60H-C1200-MPC	25V	-	50V	
DL-60H-C1500-MPC	20V	-	38V	
DL-60H-C1800-MPC	20V	-	33V	

## Output characteristic

Parameter	Min	Typ.	Max	Note
Rated power(200-277Vac)				
DL-60H-C1050-MPC	26.25W	-	58.8W	
DL-60H-C1200-MPC	30W	-	60W	
DL-60H-C1500-MPC	30W	-	57W	
DL-60H-C1800-MPC	36W	-	59.4W	
No-load voltage				
DL-60H-C1050-MPC	-	-	68V	
DL-60H-C1200-MPC	-	-	68V	
DL-60H-C1500-MPC	-	-	53V	
DL-60H-C1800-MPC	-	-	53V	
Efficiency@230Vac				
DL-60H-C1050-MPC	90%	90.5%		full load
DL-60H-C1200-MPC	89.5%	90%	-	
DL-60H-C1500-MPC	88.5%	89%		
DL-60H-C1800-MPC	89%	89.5%		
Accuracy of output current	-7%	-	+7%	
Line regulation	-5%	-	+5%	
Load regulation	-5%	-	+5%	
Starting time	500ms	-	1000ms	Full load @200-277Vac

## Protection

Function	Function instructions
Output overload protection	Protection mode:hiccup mode,recovers automatically after fault condition is removed.
Output short circuit protection	Hiccup mode:recovers automatically after fault condition is removed.
Output over-voltage protection	Protection mode: Hiccup mode or clamped in output highest voltage , the product is not damaged, LED driver works normally after fault condition is removed.

**Note:**

1. Unless otherwise specified, all specifications and parameters shall be measured at the conditions of 230Vac (50Hz), rated load and 25°C of ambient temperature;
2. Including setting error, line regualtion and load regualtion.

## Environmental

Environmental categories	Parameter
Working temperature	-40 ~ +60°C @200-277Vac (refer to "Life Curve ")
Working humidity	20 ~ 95% RH, non condensing
Storage temperature, humidity	-30~+85°C, 10 ~ 90% RH
Resistant to vibration	10 ~ 500Hz, 5G 12 min/cycle, X, Y, Z axis 72 min each
MTBF	100Khrs min. MIL-HDBK-217F (Ta=25°C)

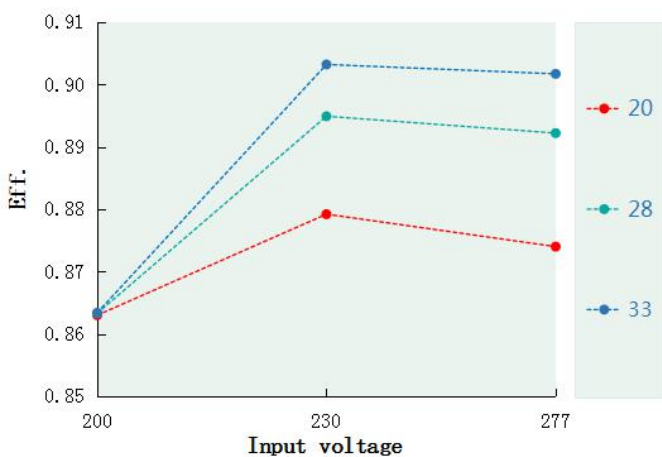
## Safety and EMC

Safety categories	Standard
Safety	/
EMC	/
Surge protection	Differential mode L-N ±6KV (2 ohm) ; Refer to IEC61000-4-5 2014 Criterion B
High-pot test	I/P-O/P:1.5KVac
Insulation impedance	I/P-O/P:100MΩ / 500VDC / 25°C / 70% RH
Leakage current	<0.7mA@230Vac

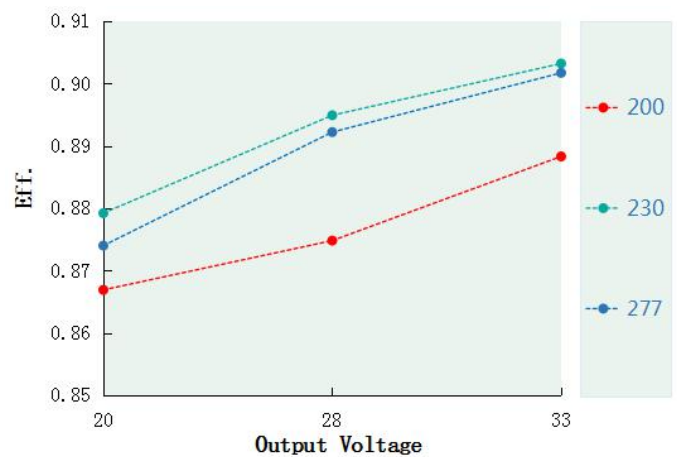
**Note:**

- The driver is considered as a component that will be operated in combination with the 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.

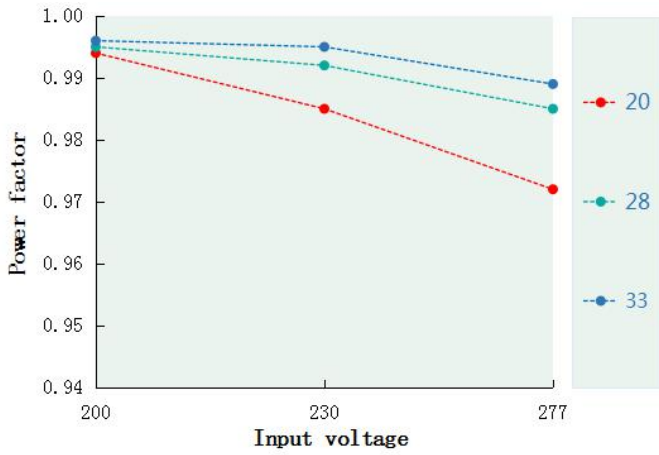
**Eff. VS Input voltage(DL-60H-C1800-MPC)**



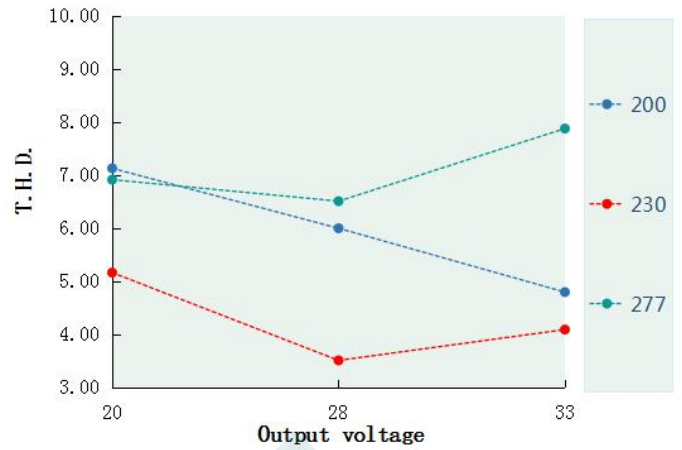
**Eff. VS Output voltage(DL-60H-C1800-MPC)**



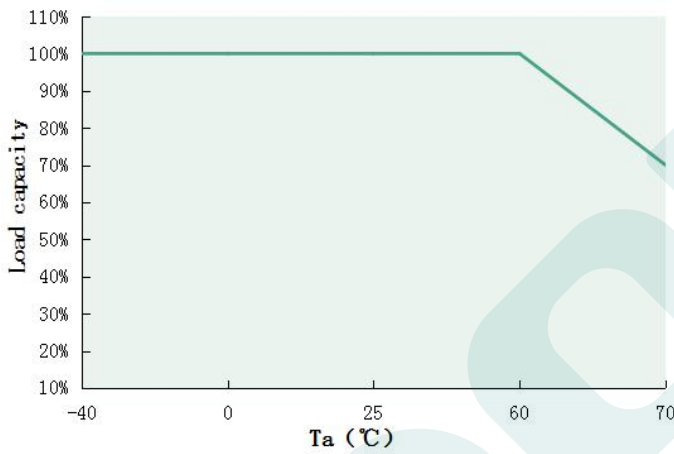
**Power factor VS Input voltage(DL-60H-C1800-MPC)**



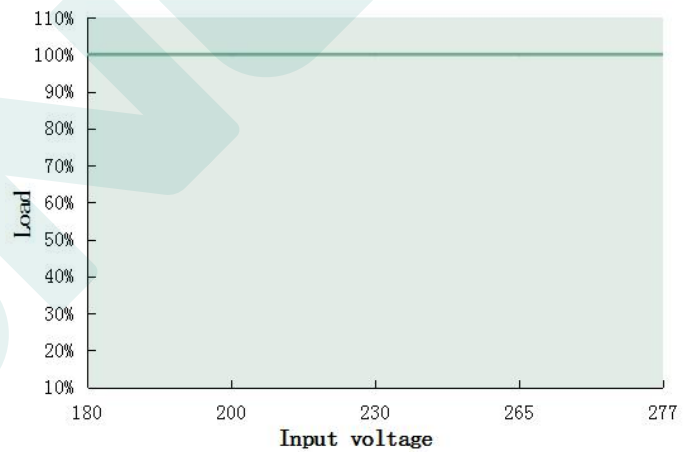
**T.H.D. VS Output voltage(DL-60H-C1800-MPC)**



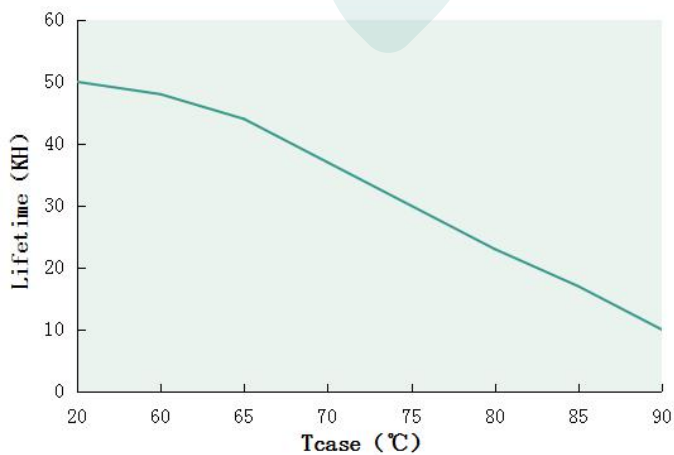
**Load reduction curve**



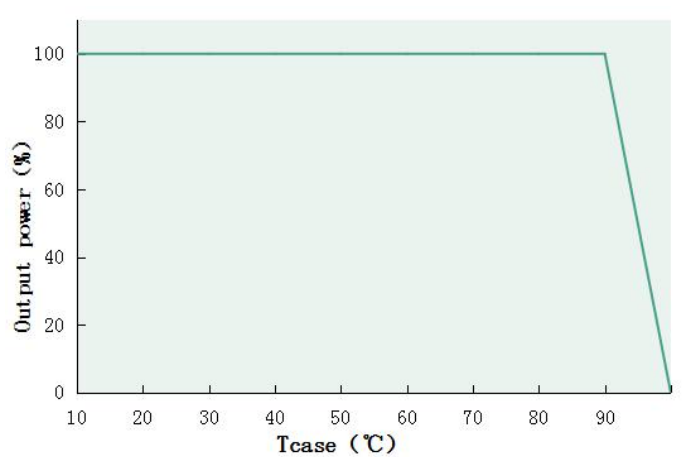
**Input voltage VS Load**



**Tcase VS Lifetime**



**Output power VS Tcase**

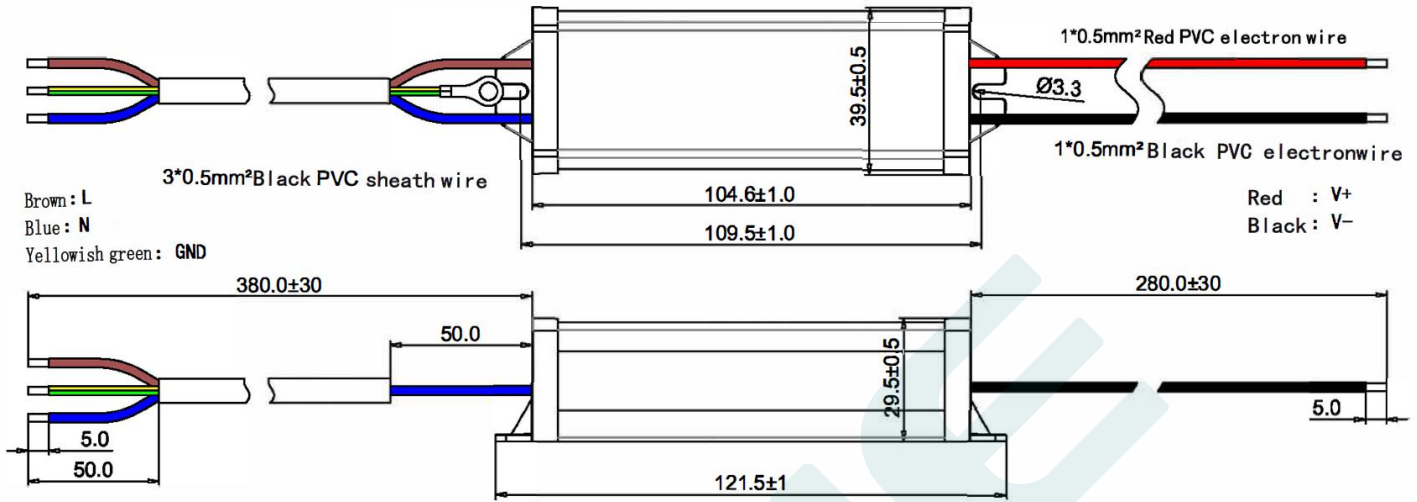


## Mechanical specification

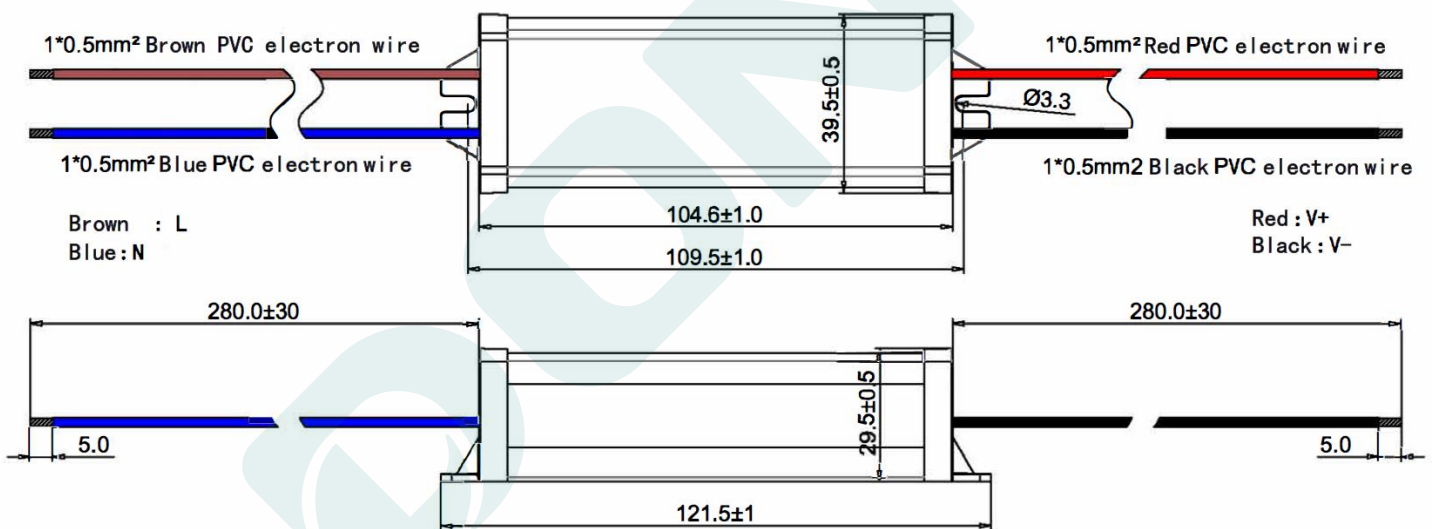
Size (mm)	L121.5*W39.5*H29.5
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Housing model: 2M11A (unit: mm)

### Standard wire rod 1:



### Standard wire rod 2:



## Weight

Weight	217 g
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**Version**

DATE	DESCRIPTION	REV.	CHECK
2022.6.17	Initial version.	V1.0	

**MANUFACTRUER**

EDIT

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