

LED DRIVER SPECIFICATIONS

Customer's Part Number:

MOONS' Part Number:

4696350003752

Model:

MU100H105AQ_CP/DALI

P/N:

CUSTOMER'S APPROVAL STAMP

 Jack Crowch Product Manager Venture Lighting Europe
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Please sign back after your approval. The specifications will come into force when we receive purchase order.

DWG.	CHK.	STANDARD	APPD.

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■ **Features**

- Input voltage: 90-305Vac
- Built-in active PFC function: 0.99 Typ.
- High efficiency: up to 91% Typ.
- DALI dimming/Dim to off
- High surge immunity, Line to Neutral: $\pm 10\text{kV}$; Line to Ground: $\pm 10\text{kV}$
- All-around protection OVP SCP OTP
- IP67 design for indoor or outdoor installations

■ **Specification**

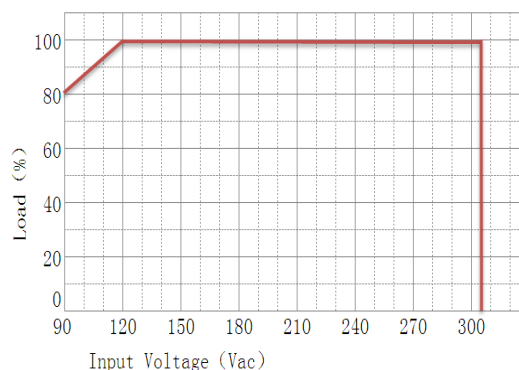
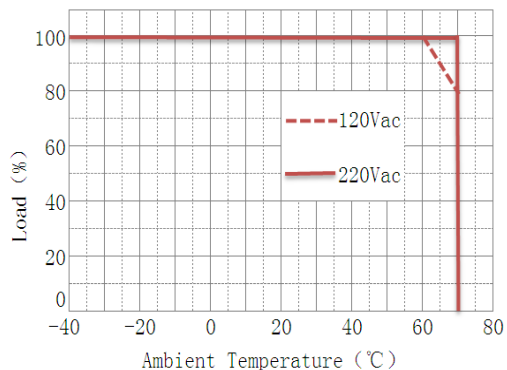
Model		MU100H105AQ_CP/DALI
Input	Efficiency (120Vac)(Typ.) _{Note.1}	88.0%
	Efficiency (230Vac)(Typ.) _{Note.1}	91.0%
	Voltage Range (V) _{Note.2}	90 ~ 305Vac, or 127-430Vdc
	Voltage Rated (V) _{Note.2}	100 ~ 277Vac
	Frequency Range (Hz)	47~63
	Power Factor	0.95 (Min.) at 100~277Vac, with 100% load; 0.90 (Min.) at 100~277Vac, with 70%~100% load
	THD	15% (Max.) at 100~277Vac, with 80%~100% load; 20% (Max.) at 100Vac~277Vac, with 70%~100% load
	AC Current (Max.)	1.3A at 100Vac input, 0.6A at 230Vac
	Inrush Current (Max.)	65A at 230Vac input, 25°C, Cold Start (time wide=500uS, measured at 50% Ipeak,Not applicable for the inrush current to Noise Filter for less than 0.2ms)
	Leakage Current (Max.)	0.75mA at 277Vac/60Hz
Output	Rated Output Voltage (V)	108-95
	Output Voltage Range (V)	108-43
	Rated Current (mA)	700-1050
	Rated Power (W)	100 (Max.)
	Ripple Current (Typ.)	10% of Io_max. ((PK-AV) /AV) with LED default mode and full load)
	Current Tolerance	5%
	Line Regulation	1%
	Load Regulation	3%
	Turn on delay Time	<1s, at 120Vac; <0.5s, at 230Vac
	Over Voltage (V)(Typ.)	200
Protection	Short Circuit	Protection type: Voltage limiting. Recovers automatically after fault condition is removed.
	Over temperature	Protection type: Constant current limiting. Recovers automatically after the short circuit is removed.
	Over temperature	Protection type: Decrease output current. When tc reaches 100°C $\pm$ 10°C, the output current decrease to approximate 50% of rated value until tc drops below 90°C.
Environment	Operating Temp.	-40~+70°C(Refer to 'Derating Curve')
	Tc	90°C max
	Operating Humidity	20~95%RH
	Storage Temp., Humidity	-40~+85°C, 10-95%RH
	Temp. Coefficient	0.03%/°C (0~50°C)
	Vibration	10-500Hz, 5G 12min/cycle, period for 72min each along X、Y、Z axes
Safety & EMC	Safety Standard	UL8750, UL1012, CSA C22.2 NO.107.1, IEC61347-1, IEC61347-2-13
	Withstand Voltage	I/P-O/P:3.75kVac, I/P-FG:1.875kVac, O/P-FG:1.5kVac
	Isolation Resistance	I/P-O/P:100M Ohms (500VDC/25°C/70%RH)
	EMC Emission	FCC Part 15 Class B/ EN55015, EN61000-3-2 Class C, EN61000-3-3
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61000-4-5: Line to Neutral: $\pm 10\text{kV}$; Line to Ground: $\pm 10\text{kV}$; Neutral to Ground: $\pm 10\text{kV}$.
Others	MTBF	300,000 Hours, measured at full load, 25°C ambient temperature
	Lifetime	50,000 Hours at Tc 75°C(Refer to"Life Time VS. Tcase (Ref.)")
	Dimension	240 x 67.5 x 40 (mm) (LxWxH)
	Weight (Typ.)	1.2kg

Note.1: Measured at full load and steady-state temperature in 25°C ambient(Efficiency will be about 2% lower if measured immediately after startup);

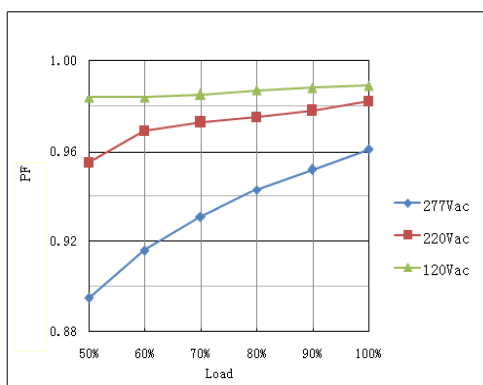
Note. 2: Derating may be needed under low input voltage, Please Refer to 'Derating Curve' ;

Note. 3: All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature;

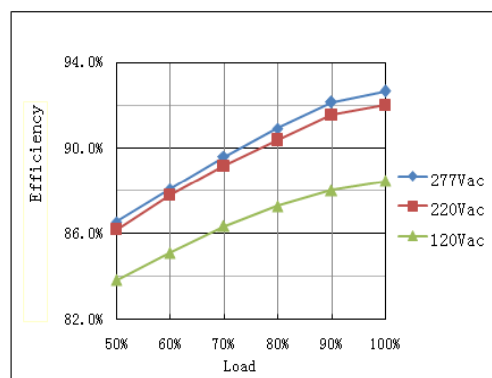
Derating Curve



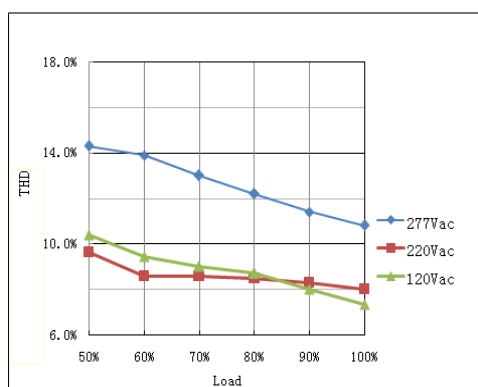
Power Factor VS. Load Curve



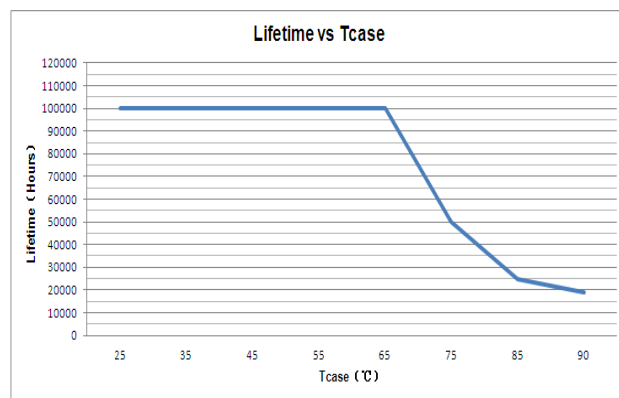
Efficiency VS. Load Curve



THD VS. Load Curve

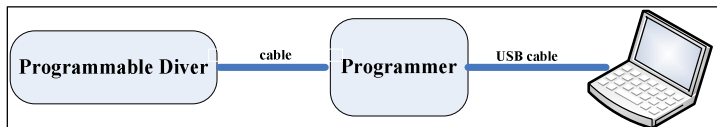


Life Time VS. Tcase (Ref.)



■ Instruction

1.Field Programmable Topology



The programmable driver can be programmed by using special PC software and the programmer module.

2.DALI Interface Description

Pin description

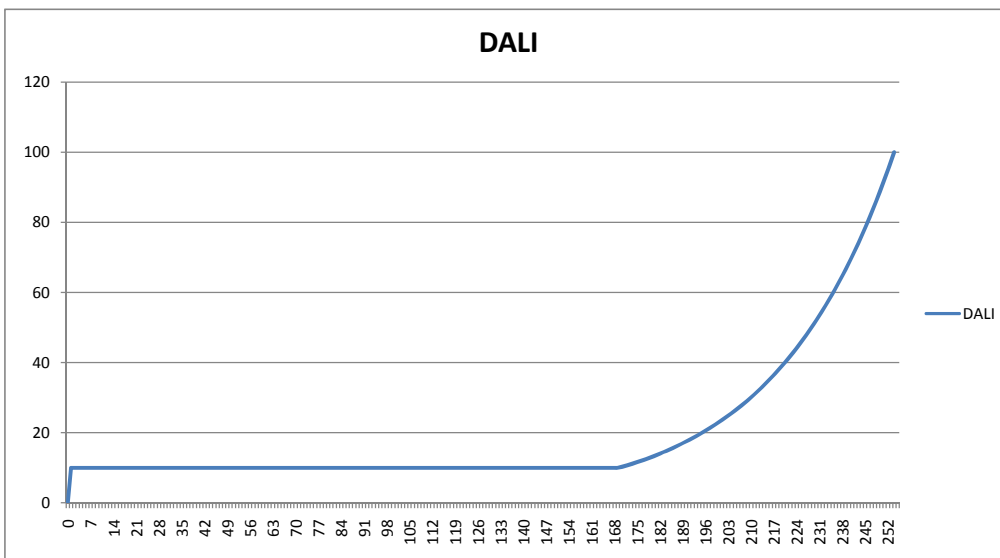
NO.	Name	FEATURES
P	DALI+	DALI BUS Positive pole
N	DALI-	DALI BUS Negative pole

Note:DALI bus wire is differential input line,which support reverse connection.

3.DALI Standards

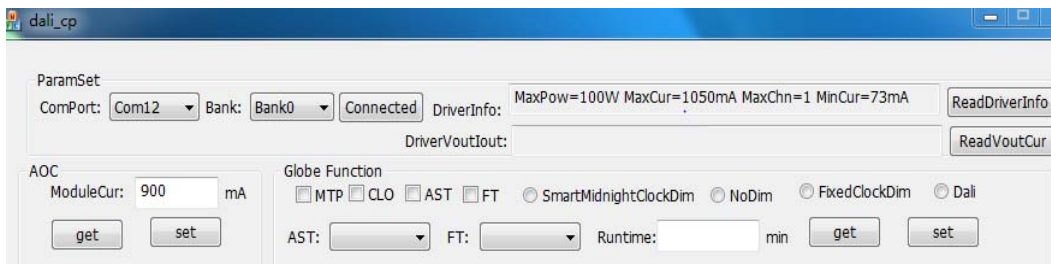
Comply with IEC62386-102.

4.DALI Curve



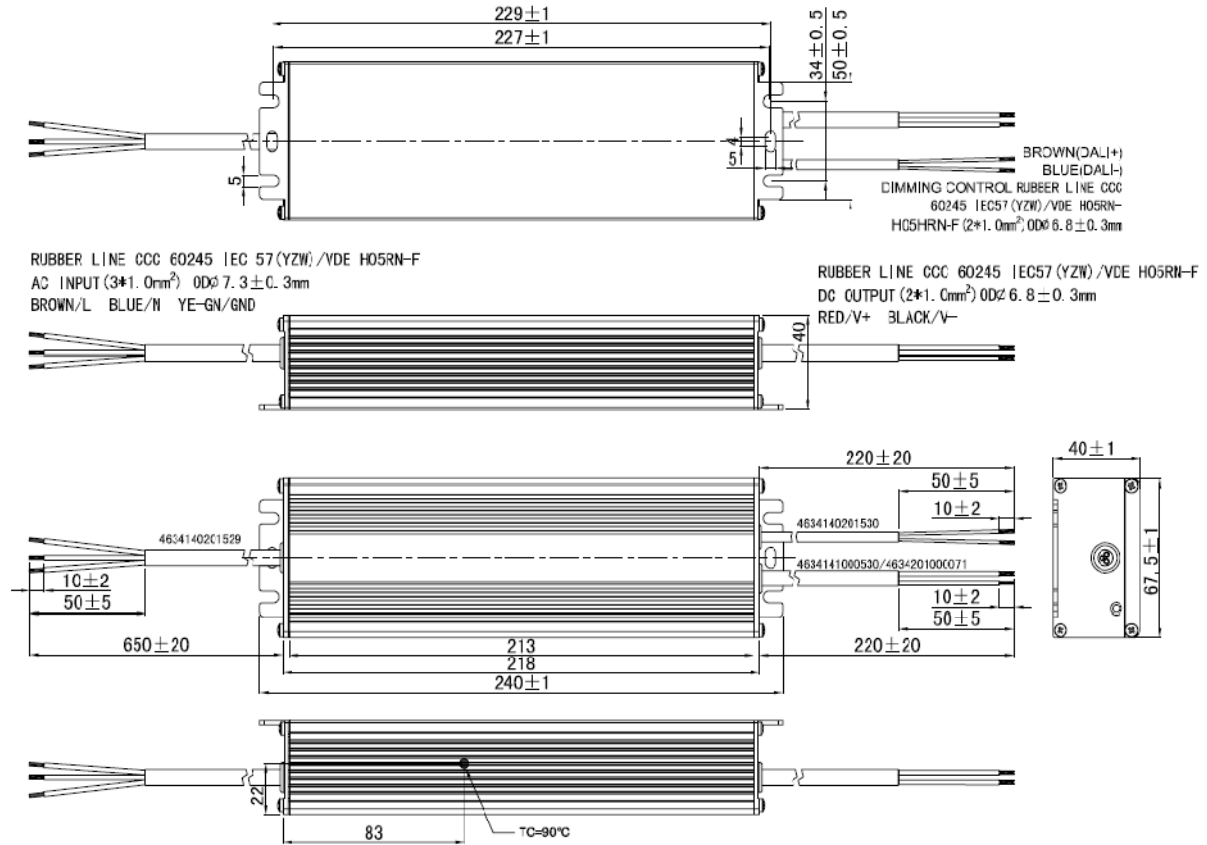
■Programmable Plan

Adjustable Output Current(AOC)



■ Mechanical Specification

Dimensions (Unit: mm)



RoHS Compliance:

Our products comply with the European Directive 2002/95/EC, calling for the elimination of lead and other hazardous substances from electronic products.

subject to change without notice

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