Numbering System

Quick

LED Driver - General Series - Outdoor Use

- LED Driver
 General Series
 Outdoor Use
- LED Driver
 General Serie
 Outdoor Use
- LED Driver
 General Serie
 Outdoor Use
 Other Series
- LED Driver
 Intelligent Series
 30W Intelligent Serie
- LED Driver
 Intelligent Series
 40W Intelligent Series
- LED Driver
- LED Driver
 Intelligent Series
 96W Intelligent Series
- LED Driver
 Intelligent Series
- General Power Supplion

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Appendix

40W Intelligent Series - MU040I180AQI2 (DALI,1ch)

Features

- · Compliant with Class 2 Power supply safety standards
- Constant current LED driver
- Support DALI type 6
- 1 LED channel, output current can be changed from 200mA to 1800mA
- Mode of wiring: From the side to wiring.
- Constant power maximum is 40W
- Dimming range 0.1%~100%
- Protection compliant with IP20
- CUL/CE
- 5-year warranty



126 × 76 × 30mm

Electrical Specifications

Input voltage range	100 - 277 V	
Frequency	50 / 60 Hz	
Input current	0.6A	
Inrush current	<15A	
Rated power	40W	
Power factor	>0.95 (230V,50Hz,full loaded)	
Effiency	86 - 88 % (230V,50Hz,full loaded)	
Output voltage range	8 - 50 V	
Output current range	200-1800mA	
Protections	Thermal protection, short-circuit protection, no-load protection, over-power protection	

Environmental Specifications

Operating temperature	-25℃ - +63℃
Storage temperature	-40℃ - +85℃
Maximum case temperature	86℃
Cooling method	Convection
Life time	50,000 hours at tc 75℃
Reference dimension(LxWxH)	126 × 76 × 30 mm

Safety & EMC Compliance

CUL	UL8750,UL1310,CAN/CSA-C22.2 NO.223-M91
CE	EN61347-1,EN61347-2-13
Conducted Emissions	FCC Part15 Class B /EN55015
Radiated Emissions	FCC Part15 Class B /EN55015
Harmonic Current Emissions	EN 61000-3-2
Voltage Fluctuations and Flicker	EN 61000-3-3
Electrostatic Discharge	EN 61000-4-2
RFE Field Susceptibility	EN 61000-4-3
Electrical Fast Transient	EN 61000-4-4
Surge immunity test	EN61000-4-5 (Surge: L-N 1KV ,L/N-Earth 2KV)
Conducted Radio Frequency	EN 61000-4-6
Power Frequency Magnetic Field Test	EN 61000-4-8
Voltage Dips	EN 61000-4-11
Electromagnetic Immunity	EN61547

Function Description

• DALI type 6

DA+ and DA- are both the interfaces of DALI.

· SwitchDIM (with memory function)---push dimming

SwitchDIM means that you can use two lines to connect L and N to DA+ and DA- respectively, and add a switch in series to either of the two lines to complete the function of ON/OFF and dimming. Short press(<0.6s) can turn on/off the driver, and long press can adjust the dimming level. When several drivers are connected together and controlled by one switch, press the switch for 10s, all the drivers are dimmed to 50% at the same time.

MCS technology

Connect Smartkey to the driver through MCS(Multifunctional Configuration Settings) ports. With MOONS' Configurator software, you can set the MAX current of the driver(each step is 1 mA), dimming curve type,tc.Please refer to specification of Smartkey to get specific information.

• Temperature Detection

In order to protect the LED, the temperature of LED is detected by a NTC. When the temperature exceeds the point which can be set by Smartkey, the output current can be decreased automatically, but not less than 25%.

Constant Output Power

The driver can satisfy the curve of constant output power within a large range of output current and voltage.

Protection

Thermal Protection

When the temperature of the inside PCB exceeds 110 $^{\circ}$ C , output current will be decreased to 50%. And it can not recover until the temperature drops to 70 $^{\circ}$ C .

Short-circuit Protection

Once the output short-circuits, the output will be cut off automatically. Then the driver will try to restart every 4s. No-load Protection

The driver operating with no load will not be damaged, and it will try to restart every 4s. So the driver supports hot plug in.

Over-Power Protection

If the total power exceeds 50W, the output current of each channel will decrease to 50%, and then the maximum output power is increased to 40W gradually.

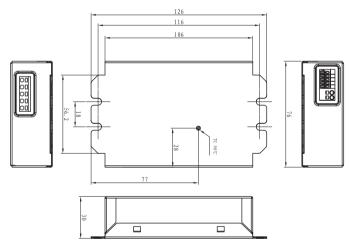
DALI Signal Abnormality

If the signal of DALI is abnormal, including open-circuit and short-circuit, the output will recover to the preset maxium value.

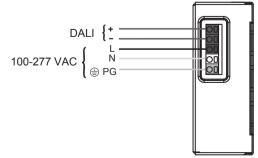
Online Update

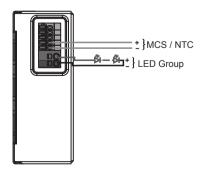
Connect Smartkey to PC through a USB port, then connect Smartkey to the driver correctly to update. Please refer to the specification of Smartkey.

Mechanical Outline (unit: mm)



Schematic Diagram





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General Power Supplie MF Series

SP

Append