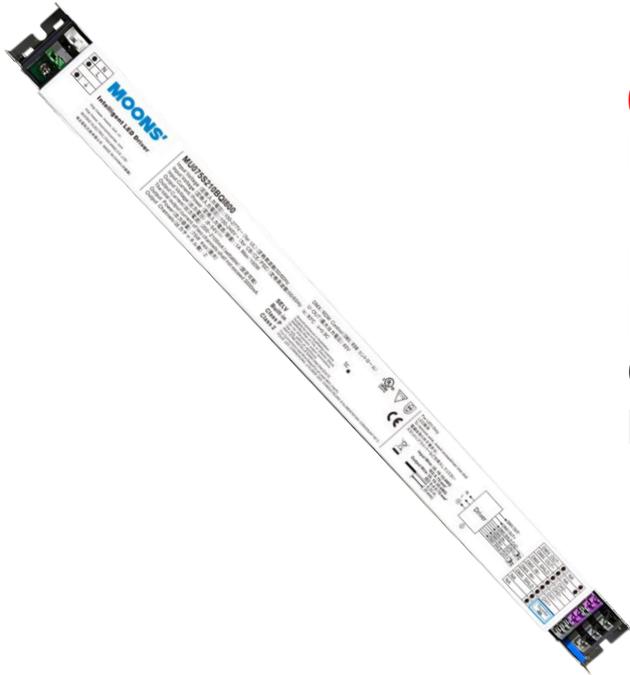


# S Series Intelligent Driver



**0.1% Deep Dimming**  
**Human Centric Lighting**

**Flicker Free**

**Meet :**  
**CEC title 24 JA8 & JA10**  
**IEEE PAR 1789-2015**

## ■ 75W S Series-2 Channels DMX Driver-MU075S210BQI800

MOONS' 75W S Series 2 Channels LED Drivers are designed for DMX dimming application, the DMX dimming mode can be set to Solo mode, Dual mode , tunable white mode.It is a wireless programmable LED driver with MOONS' Touch setting tool.

## ■ Main Characteristics

- 2 Channels, constant current driver
- Programmable operation window
- Standby power<0.5W.
- 0.1% Dimming
- Solo mode, Dual mode , tunable white mode
- 4 types of dimming curve(gamma(default),logarithmic,linear,square)
- 75W max each channel with total 75W load
- Flicker free for whole operation range

## ■ Benefits

- Application-oriented operating window for maximum compatibility
- Excellent dynamic response performance
- Exceptionally smooth fades

## ■ Applications

- Architecture, Art and Museum, Entertainment, Hospitality, Healthcare, Urban landscape

**■ Certification**

- Comply with UL Class2,ClassP
- Comply with Energy Star 2.2
- Certificated :



**■ Electrical Specifications**

Input	Efficiency (230Vac)	90.5% (Typical)
	Efficiency (120Vac)	88.5% (Typical)
	Voltage Range (Vac)	90~305
	Rated Input Voltage (Vac)	100~277
	Frequency Range (Hz)	50/60
	Power Factor	>0.9 at 100~277Vac 50/60Hz input, with 70%~100% load conditions
	THD	<15% at 100~277Vac 50/60Hz input, with 70%~100% load conditions
	AC Current (Typical)	1A MAX. @100Vac, 0.45A MAX. @230Vac
	Inrush Current (Typical)	<75A at 100~277Vac input 25°C cold start at 100% condition
	Input Power (W)	100(MAX.)
	Standby Power (W)	<0.5W @100Vac/50HZ, 230Vac/50HZ, 277Vac/60HZ
	Leakage Current (MAX.)	0.5mA MAX. @277Vac
Output	Output Voltage Range (VDC)	8~54
	Output Current Range (mA)	200~2100mA each channel The total output current of two channels shall not exceed 3000mA
	Rated Power (W)	75(MAX.)
	Output Channel Number	2CHS.
	Ripple Current (PK-PK)/AV	<10% at max. lout (ripple=(pk-avg)/avg) Low frequency (<120 Hz) content <1%
	Current Tolerance	± 5% at output current range
	Line Regulation	± 1%
	Load Regulation	± 3%
Startup Time	<500ms @ 100Vac/230Vac/277Vac	
Dimming Port	DMX Dimming	Support DMX/RDM
		Isolated DMX dimming 0.1~100%. Optional dimming curve: gamma(default),logarithmic,linear,square
Protection	Over temperature protection	tc 100°C +/-10%, the driver stop working
	Short Circuit	Output current of power supply equals set current
Environment	Operating Temperature	-25~+55°C
	Operating Humidity	20~95%RH, non-condensing
	Storage Temperature	-40~+85°C
	Storage Humidity	10~95%RH
	Vibration	10~500Hz, 5G 12min/cycle, period for 72min each along X、Y、Z axis
	Ingress Protection Rating	IP20
Safety&EMC	Safety Standard	UL8750,UL1310 Class 2, CAN/CSA-C22.2 No.223-M91,EN61347-1, EN61347-2-13
	EMC Emission	FCC Part 15 ClassB, EN61000-3-2 , EN61000-3-3
	EMC Immunity	EN61000-4-3,4,6,8,11, ANSI C62.41.2 (4KV) ,EN61000-4-5(2.5KV),EN61000-4-2(air discharge 8KV)
Others	Lifetime	>50000 hours @Tc =83°C at 100% load conditions
	MTBF	500,000 hours, measured at full load, 25°C ambient temperature SR-332 Issue 3
	Dimension (L x W x H mm)	408x 30 x 21
	Weight	390g

**Dimming Performance**

▪ **Flicker Free**

i. Meet :CEC title 24 JA8 & JA10, IEEE PAR 1789-2015

▪ **Dimming Method**

In the range of 350~2100mA,the current operates in continuous mode;  
In the range of 0~350mA,the current operates in PWM dimming mode, and the PWM frequency 7.2KHZ.

**Programmable Performance**

▪ **Touch Setting**

Program driver's parameters without cable.

[Download Software](#)

▪ **1mA Current Programmable Step**

▪ **Default Factory Setting**

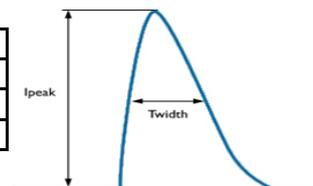
The screenshot shows a software interface for configuring the LED driver. It includes a top toolbar with icons for Load, Save, Read, Write, and Setting. The main area is divided into several sections:

- Current:** Channel 1 and Channel 2 are both set to 350 mA.
- General Setting:**
  - Dimming Strategy: DMX Tunable White Dr
  - Dimming Curve: Logarithmic
  - Minimum Dimming Level: 0.1 %
  - NTC: 85
  - AUX Power: Disable
  - DMX Start Address: 1
  - Device Label: LED DRIVER
  - Fade Time: 300 ms
  - Bit Control: 8 Bit
  - Physical CCT: Warmest 1500 K, Coolest 6500 K
  - Logical CCT: Warmest 1500 K, Coolest 6500 K
  - Power On: Level 100.0 %, CT 4000 K
  - Failure: Level Hold %, CT Hold K
  - Failure Delay Time: 1.0 s
- Other Information:**
  - Maximum Temperature: 25 °C
  - Lights On Time: 0 Hours

**Inrush Current**

▪ **Ipeak & Time**

Input Voltage	Inrush Current Ipeak	Inrush Current Time, measured 50% of Ipeak
100 Vac	16.6A	380 us
220 Vac	38A	400 us
277 Vac	48A	360 us

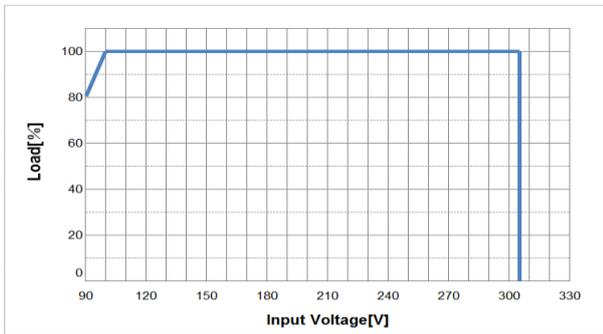


▪ **Automatic Circuit Breakers**

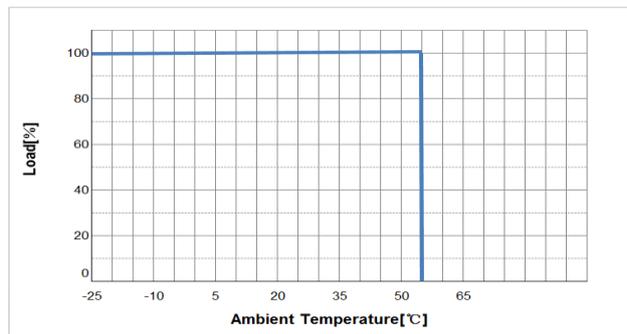
MCB Type	B10	B13	B16	B20	C10	C13	C16	C20
Number of LED Drivers @100Vac	10	13	16	20	10	11	13	20
Number of LED Drivers @220Vac	5	6	8	10	8	11	11	17
Number of LED Drivers @277Vac	4	6	7	9	7	10	12	15

■ Curve

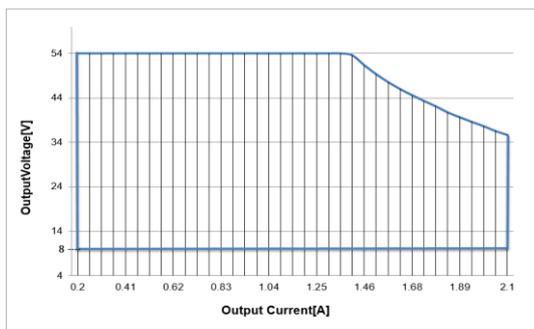
▪ Derating Curve



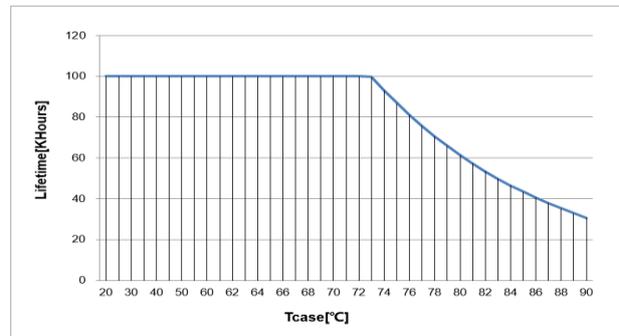
▪ Derating Curve



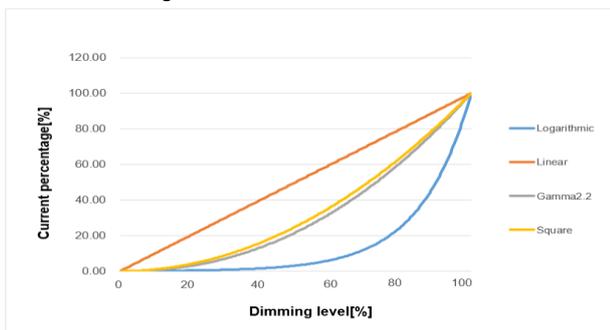
▪ VI Curve



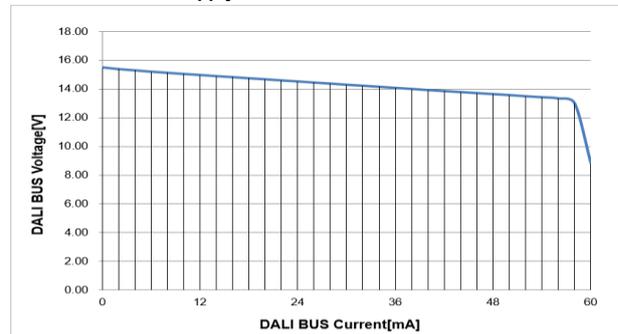
▪ Lifetime Vs Tc



▪ Dimming Curve

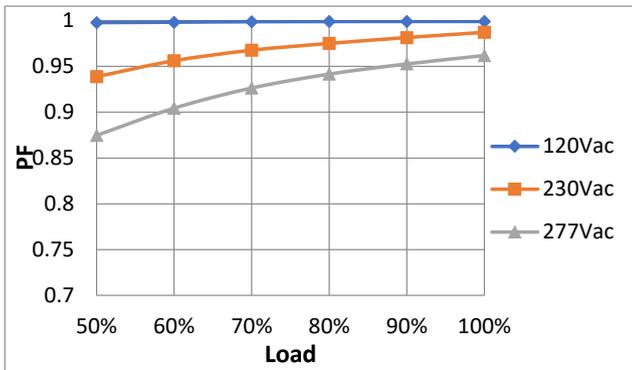


▪ DALI Power Supply VI Curve

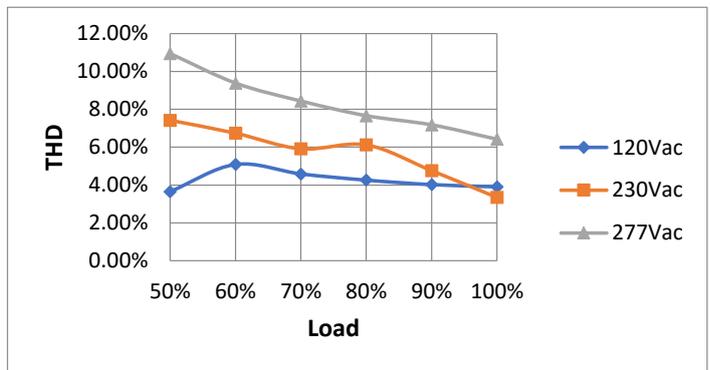


■ Curve

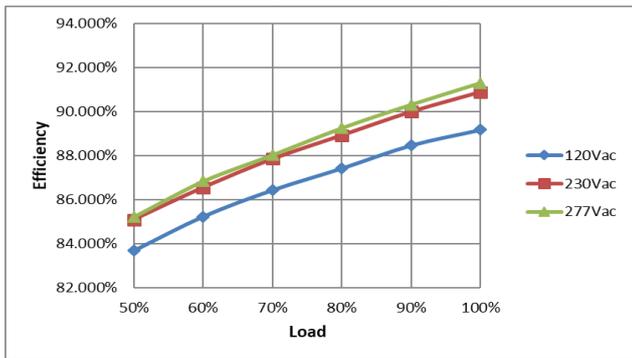
▪ PF VS Load Curve



▪ THD VS Load Curve

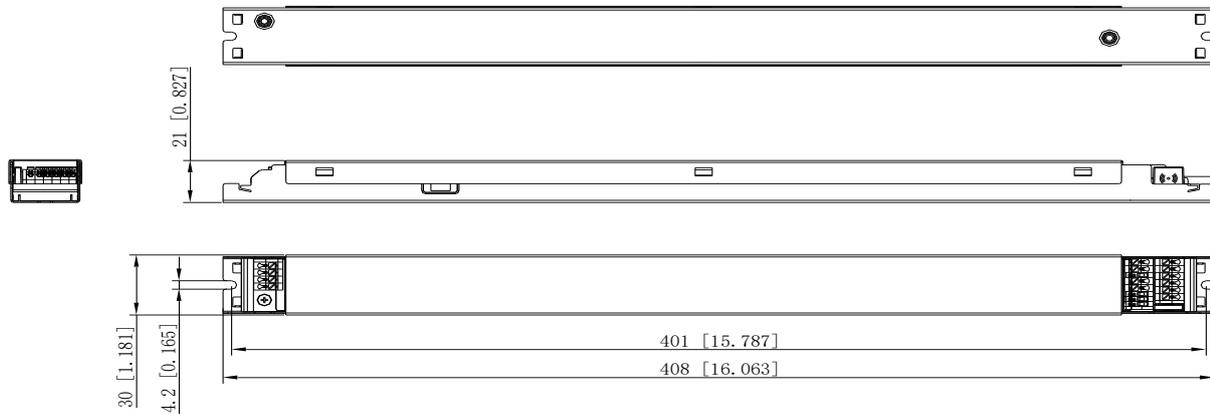


▪ Efficiency VS Load Curve(CH1=CH2=700mA)

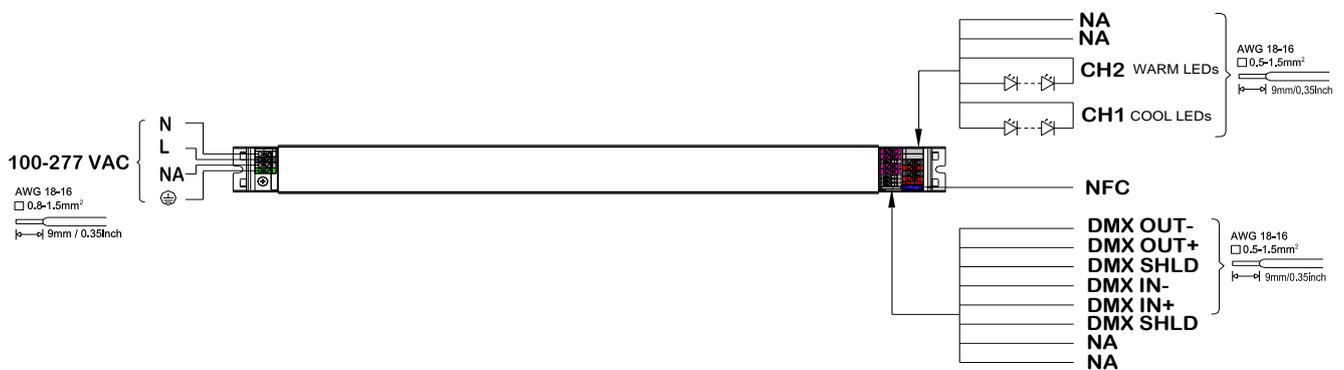


■ **Mechanical Specification**

- Dimensions (Unit: mm,in)



• **Connection diagram**



1. Multiple LED outputs cannot be connected in series to power an LED load with a forward voltage > 54V.
2. Multiple LED outputs cannot be connected in parallel to deliver a drive current that exceeds the maximum drive current that can be delivered by a single LED output.
3. Common-anode or common-cathode configurations are not acceptable.
4. Cross connecting multiple LED outputs of a LED driver may result in permanent damage to the LED driver itself and/or the LED light engine(s).

RoHS Compliance:

Our products comply with the European Directive 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products.