

- **Features**
- Input voltage: 90-305VAC
 - Built-in active PFC function: 0.99 Typ.
 - Low THD: 10% Typ.
 - High efficiency: 91% Typ.
 - IP67 design for indoor or outdoor installations
 - High surge immunity
 - Support 5V PWM dimming function and on/off function
 - Compliance to worldwide safety regulations for lighting
 - Suitable for dry/damp locations



Class 2

Note.4



■ **Specification**

Model		035	045	053	070	075	105	140	175	180	210	245	280	315	350	420	500
(MU060HXXXAQ_STB)																	
Input	Efficiency(110Vac)(Typ.) _{Note.1}	90%	90%	90%	89%	89%	89%	88%	88%	87%	87%	86%	85%	84%	83%	82%	81%
	Efficiency(220Vac)(Typ.) _{Note.1}	91%	91%	91%	90%	90%	90%	89%	89%	88%	88%	87%	86%	85%	84%	83%	82%
	Voltage Range (V) _{Note.2}	90 ~ 305Vac, OR 127~ 430Vdc (Derating may be need under low inputs, Refer to 'Derating Curve')															
	Voltage Rate (V) _{Note.2}	100Vac-277Vac															
	Frequency Range (Hz)	47~63															
	Power Factor(Typ.)	0.99 (Typ.) with 70%~100% load,at 110Vac															
		0.97 (Typ.) with 70%~100% load,at 220Vac															
		>0.9 with 75%~100% load,at 277Vac															
	THD(Typ.)	10% Typical, at 220Vac input, with 70%~100% load conditions 15% Typical, at 110/277Vac input, with 70%~100% load conditions															
Output	AC Current(Typ.)	0.8A at 110VAC input, 0.4A at 220VAC															
	Inrush Current(Max.)	50A at 230Vac input 25℃ 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															
	Voltage range (V)	85~170	67~134	56~113	43~86	40~80	29~58	21~43	17~35	17~33	14~29	12~25	10~21	9~19	8~17	7~14	6~12
	Rated Current(mA)	350	450	530	700	750	1050	1400	1750	1800	2100	2450	2800	3150	3500	4200	5000
	Rated Power (W)	59.50	60.30	59.89	60.20	60.00	60.90	60.20	61.25	59.40	60.90	61.25	58.80	59.85	59.50	58.80	60.00
	Ripple&Noise Current(Typ.)	≤30%((PK-AV)/AV) with LED default mode and full load)															
	Current Tolerance _{Note.5}	±5%															
	Line Regulation	±1%															
Protection	Load Regulation	±3%															
	Current ADJ. Range	10% to 100%, continuously adjustable															
	Turn on delay Time	<1.5s, at 110Vac; <0.75s, at 220Vac															
	Over Voltage(V)	180	142	120	92	86	63	48	40	38	33	29	25	23	21	17	15
	Over Current	Protection type : Limit the output voltage , recovers automatically after fault condition is removed															
Environment	Short Circuit	Protection type : constant current limiting, recovers automatically after fault condition is removed															
	Over temperature	Hiccup mode, recovers automatically after fault condition is removed. When the Tc of PSU rise to 110℃(Typ.), the PSU will shutdown The power supply should resume its normal operation when the inside temperature of PSU drop to normal temperature															
	Operating Temp.	-40~+70℃(Refer to 'Derating Curve')															
	Tc	90℃ max															
Safety & EMC	Operating Humidity	20~95%RH															
	Storage Temp., Humidity	-40~+80℃ , 10~95%RH															
	Temp. Coefficient	0.03%/℃ (0~50℃)															
	Vibration	10~500Hz, 5G 12min/cycle, period for 72min each along X、 Y、 Z axes															
	Safety Standard	UL8750, UL1012,UL1310, CSA-C22.2 NO. 107.1,CSA-C22.2 NO. 223-M91, EN61347-1, EN61347-2-13															
UL Level	Withstand Voltage	I/P-O/P:3.75KVvac, I/P-FG:1.875KV, O/P-FG:1.5KV															
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500Vdc/25℃/70%RH															
	EMC Emission	EN55015/FCC Part 15 Class B, EN61000-3-2 Class C, EN61000-3-3															
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547 (Surge: L-N 4KV, L/N-Earth 6KV)															
	MTBF	300,000 Hours,measured at full load,25℃ ambient temperature															
Others	Lifetime	50,000 Hours at Tc 75℃(Refer to"Life Time VS. Tcase (Ref.)")															
	Dimension	173 x 67.5 x 40 (mm) (LxWxH)															
	Weight	0.80kg															

Note.1: Measured at full load and steady-state temperature in 25℃ ambient(Efficiency will be about 2% lower if measured immediately after startup) ; Note. 2: Derating may be needed under low input voltages , Please Refer to 'Derating Curve' ; Note. 3: All parameters NOT specially mentioned are measured at 220VAC input , rated load and 25℃ of ambient temperature ; Note.4: see UL Level; Note.5: Includes set up tolerance, line regulation and load regulation.

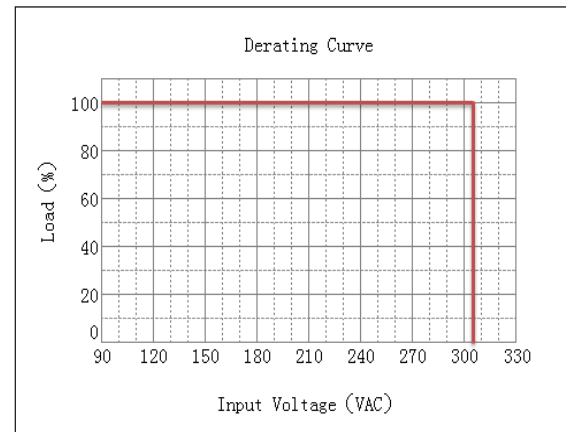
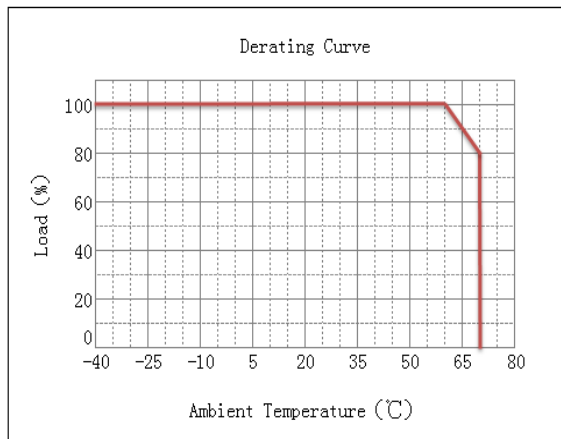
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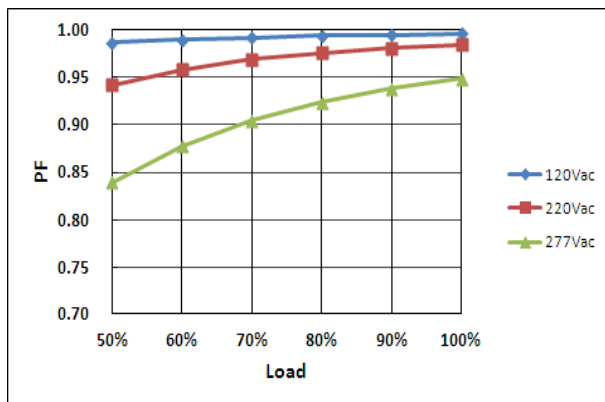
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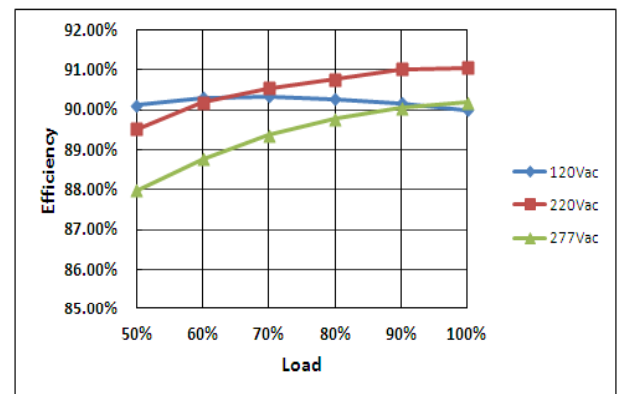
Derating Curve



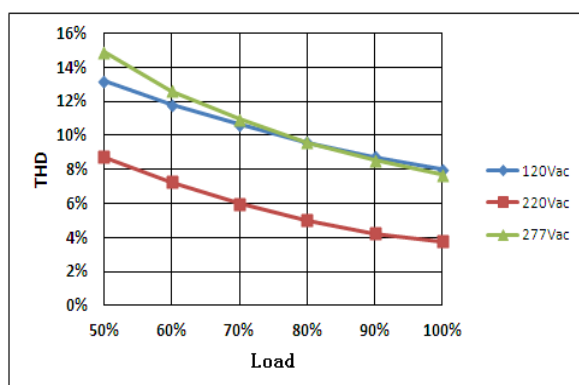
Power Factor VS. Load Curve



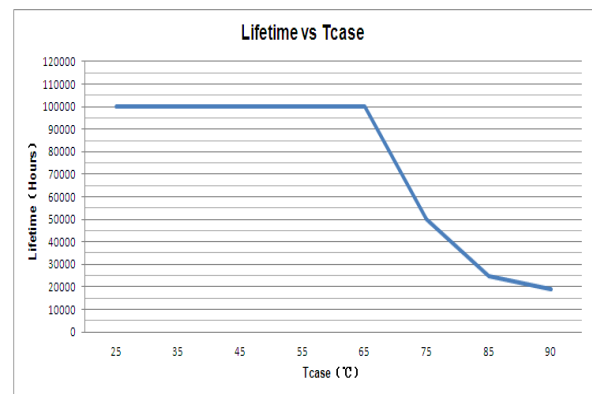
Efficiency VS. Load Curve



THD Curve

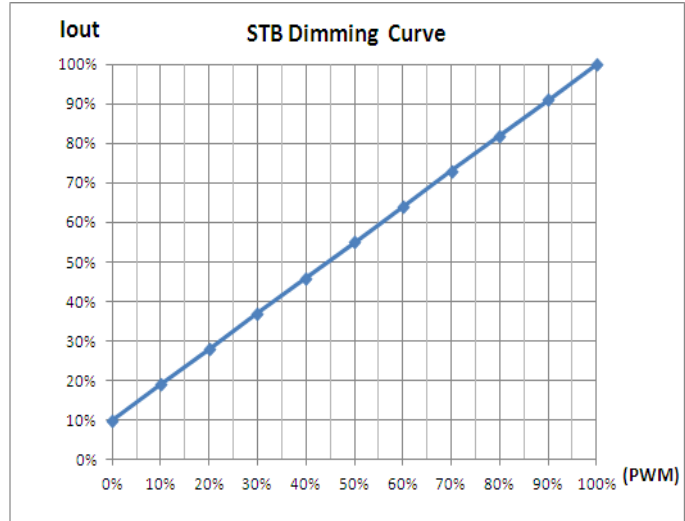
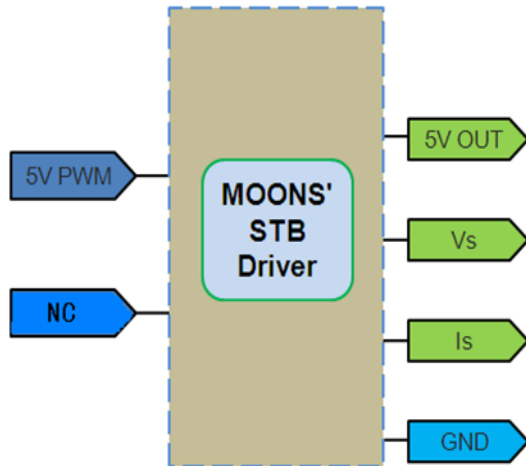


Life Time VS. Tcase (Ref.)



The dimmer control may be operated from an input signal of 5V PWM(frequency: 500Hz~5kHz,duty cycle: 0%~100%) Recommended implementations are provided below.

STB dimming connection diagram and dimming curve



Dimming Interface Description

	Pin	Name	Description
	1	GND	DC Ground
	2	5V OUT	DC Supply Output
	3	Is	Current feedback
	4	5V PWM	PWM input pin
	5	Vs	Voltage feedback
	6	NC	NC

Notes:

MOONS' STB Driver dimming interface with Standby controller (It is recommended to use MOONS' standby controller,using other standby controller may be not compatible and leads to flicker), you can achieve the following functions:

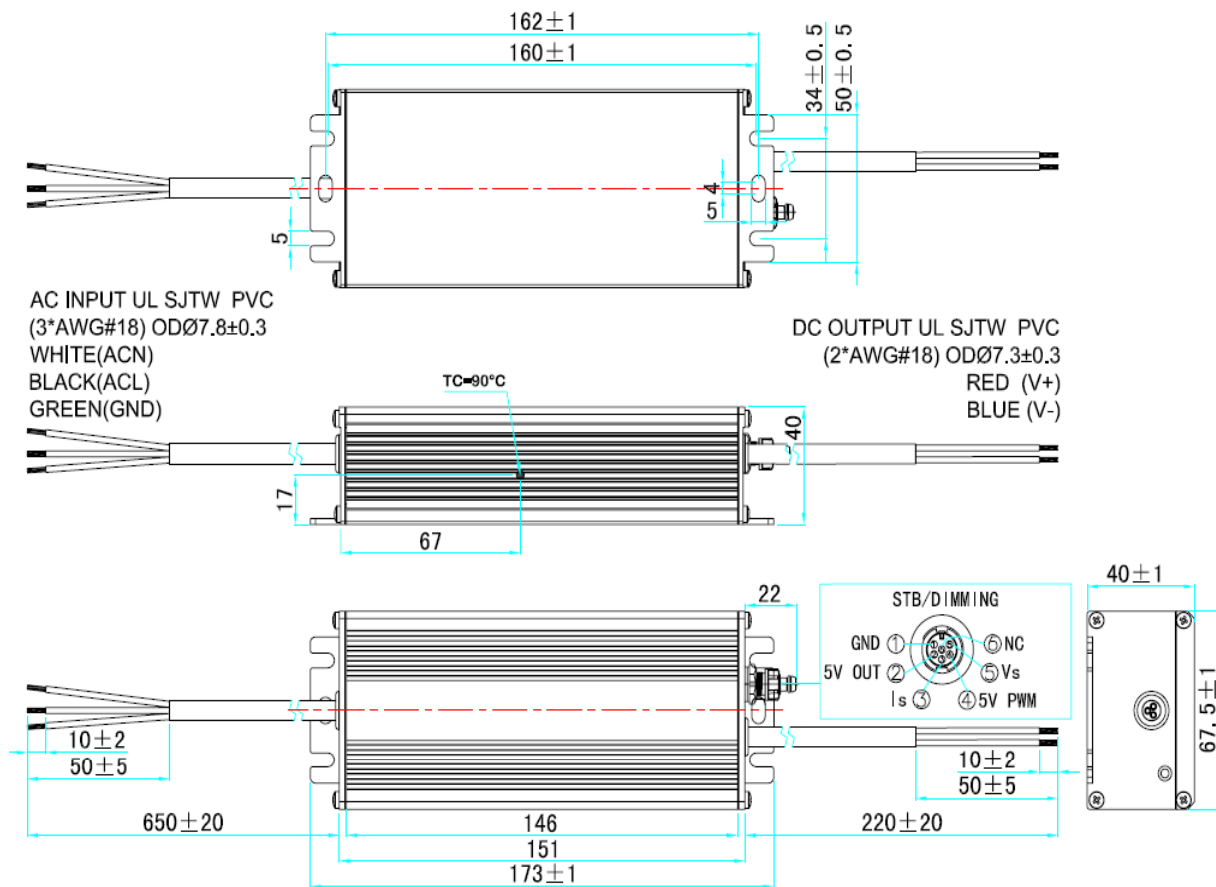
- A、Dimming levels: 10% to 100%, continuously adjustable.
- B、Status query: output voltage/current status query.
- C、Output: 5V 300mA.

Dimming Parameter (On secondary side)

Parameter	Min.	Typ.	Max.	Notes
5V output voltage	4.75V	5V	5.25V	
5V output source current	-	300 mA	-	
The voltage on the 5V PWM input pin	3.0V	3.3V	5.25V	
Source current on the 5V PWM input pin	-	1mA	2mA	
frequency on the 5V PWM input pin	500Hz	1KHz	5kHz	
Duty cycle on the 5V PWM input pin	0%	-	100%	
voltage on the Vs output pin	0V	2.0V	2.4V	
voltage on the Is output pin	0V	2.0V	2.4V	

■ Mechanical Specification

1. 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.

2. Terminal wire Type

Products	AC Input			DC output		
	Wire Type	Assignment	Description	Wire Type	Assignment	Description
UL approval	UL SJTW PVC	BLACK/L	3*AWG#18	UL SJTW PVC	RED/+	2*AWG#18
		WHITE/N			BLUE/-	
		GREEN/G				