

■ Features

- Input voltage: 90-305VAC
- Built-in active PFC function: 0.99 Typ.
- Low THD: 10% Typ.
- High efficiency: 93% 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.
- 5 Years Warranty.



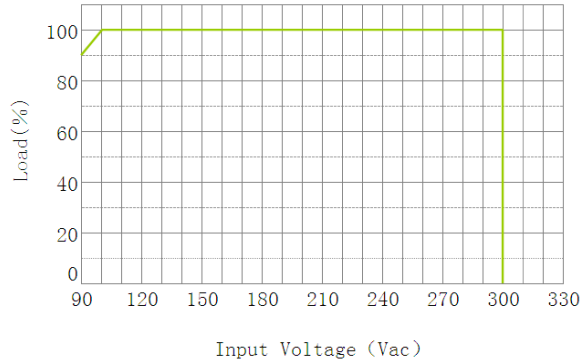
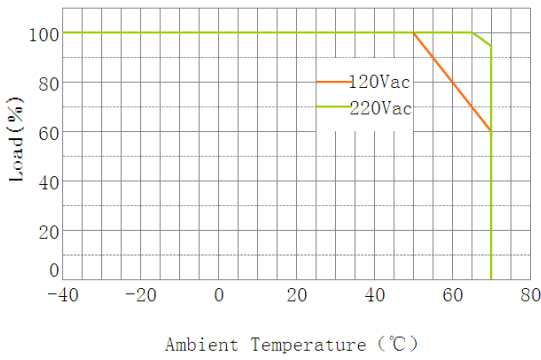
■ Specification

Model		035	045	053	070	105	140	175	210	245	280	315	350	420	500	
(MU150AXXXAQ_STB)																
Input	Efficiency (Typ.)110VAC	90.0%	90.0%	90.0%	90.0%	89.0%	89.0%	89.0%	89.0%	89.0%	89.0%	88.0%	88.0%	88.0%	88.0%	
	Efficiency (Typ.)220VAC	93.0%	93.0%	93.0%	93.0%	92.0%	92.0%	92.0%	92.0%	92.0%	92.0%	91.0%	91.0%	91.0%	91.0%	
	Voltage Range (VAC)	90-305														
	Frequency Range (Hz)	47-63														
	Power Factor(Typ.)	0.99 (Typical) , >0.90 at 100~277VAC input, 70%~100% load														
	THD(Typ.)	<10% at 220VAC input 50Hz, 70%~100% load, <15% at 110VAC and 277VAC input 60Hz, 70%~100% load,														
	AC Current(MAX.)	1.8A at 110VAC , 0.9A MAX at 220VAC														
	Inrush Current(MAX.)	65A (25°C , at 230VAC , cold start)														
	Leakage Current(MAX.)	1mA at 277VAC 50Hz input														
Output	DC Voltage (V)	428	333	283	214	142	107	85	71	61	53	48	42	36	30	
	Rated Current(mA)	350	450	530	700	1050	1400	1750	2100	2450	2800	3150	3500	4200	5000	
	Rated Power (W)	149.8	149.9	150.0	149.8	149.1	149.8	148.8	149.1	149.5	148.4	151.2	147.0	151.2	150.0	
	Ripple&Noise (Vp-p)	12.84	9.99	8.49	6.42	4.26	3.21	2.55	2.13	1.83	1.59	1.44	1.26	1.08	0.9	
	Voltage ADJ. Range(V)	214~428	167~333	142~283	107~214	71~142	54~107	43~85	36~71	31~61	27~53	24~48	21~42	18~36	15~30	
	Current Tolerance ^{Note.1}	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%	±5%
	Line Regulation	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%
	Load Regulation	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%	±3%
	Setup, Rise Time	1.2s max, measured at 120VAC input; 1s max, measured at 220VAC input														
	Hold Up Time	10ms at 220VAC 100% load														
Protection	Over Voltage(V)(Typ.)	556	433	382	278	185	139	111	92	79	69	62	55	47	39	
	Short Circuit	Hiccup mode. The power supply shall be self-recovery when the fault is removed. No damage , The power supply shall be self-recovery when the fault is removed.														
	Over Temperature	Protection type : Decrease output current . When TC reaches 110±10°C , the output current decrease to 50% rate value until the TC reaches 75±10°C														
Environment	Working Temp.	-40~+70°C, refer to the derating curve for detail														
	Working Humidity	5~100%RH, non-condensing														
	Storage Temp., Humidity	-40~+85°C , 5%-100%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, CAN/CSA-C22.2No.107.1-01,EN61347-1, EN61347-2-13														
	Withstand Voltage	I/P-O/P:3.75KVAC 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°C/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-FG 6KV , L-N 4KV)															
Others	MTBF	300,000 hours, measured at full load, 25°C ambient temperature, 80% Load ,MIL-HDBK-217F														
	Dimension	221 x 67.5 x 40 mm (LxWxH)														
	Weight	1.05kg														

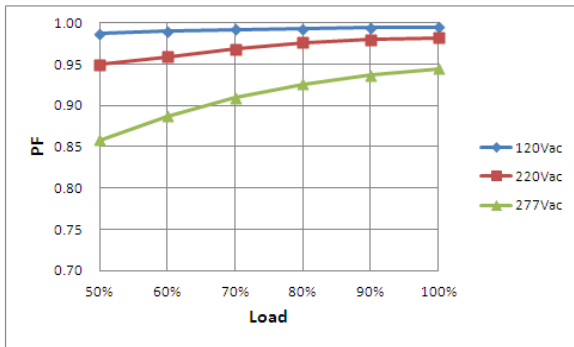
Note.1: Includes set up tolerance, line regulation and load regulation.

Test Curve

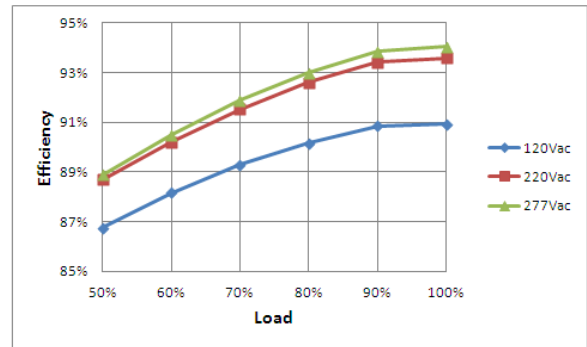
Derating Curve



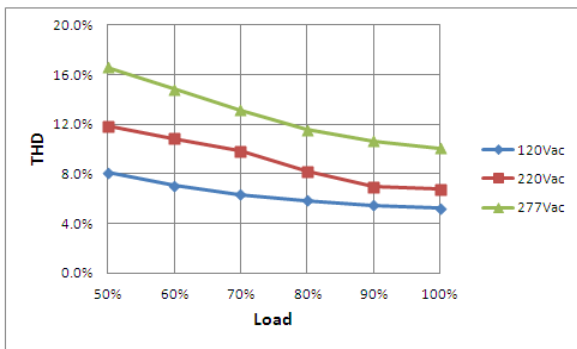
Power Factor Curve



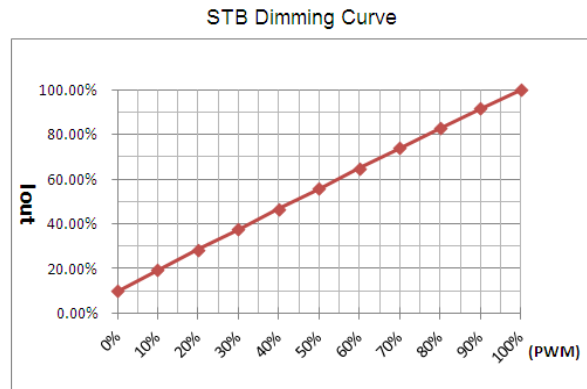
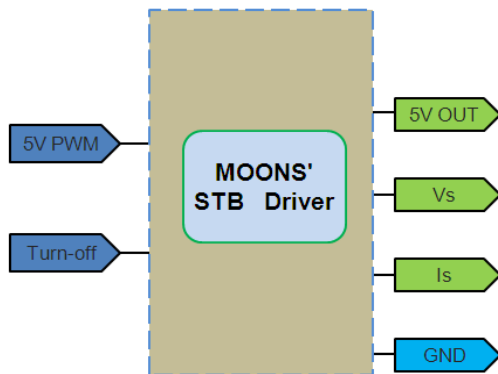
Efficiency VS. Load Curve(Model:700mA)



THD Curve



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.



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	Turn-off	Turn-off input pin

Notes:

MOONS' STB Driver dimming interface with Standby controller , you can achieve the following functions:

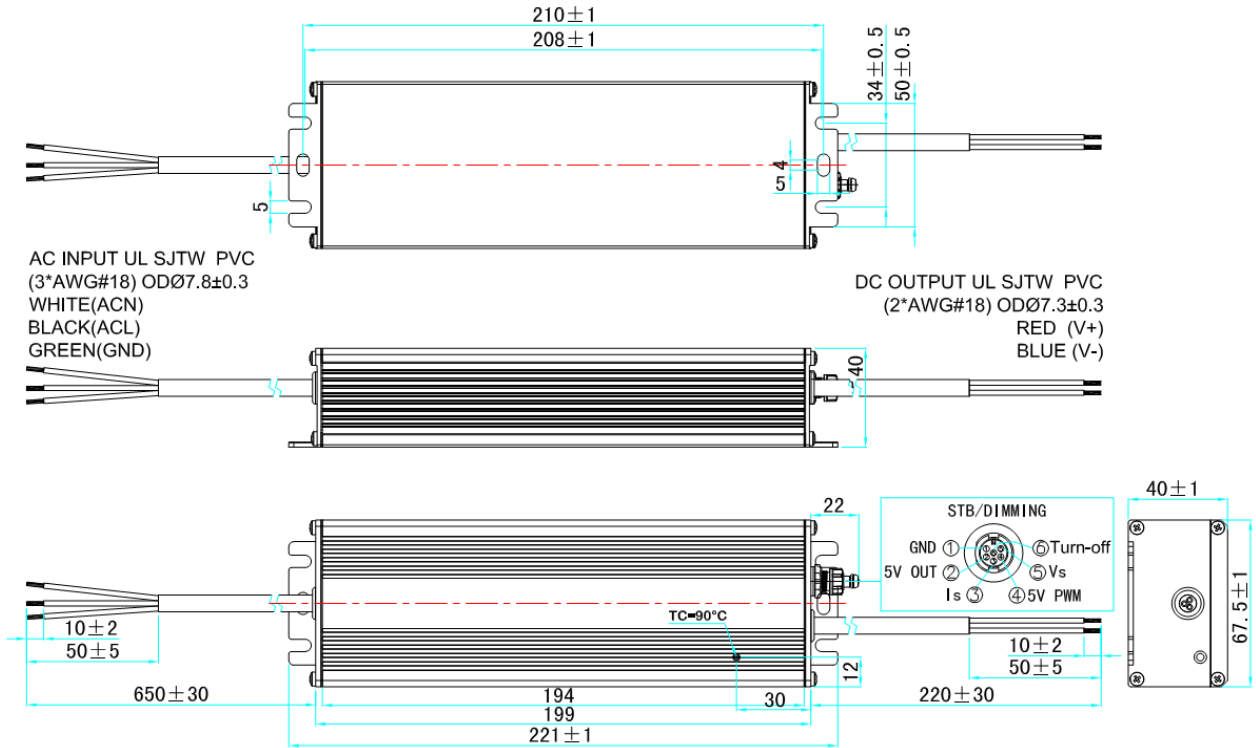
- A. Dimming levels: 10% to 100%, continuously adjustable.
- B. Turn-off function: when the signal of turn-off Pin is high, turn-off the luminaire;when the signal is unconnected or low,output normal.
- C. Status query: output voltage/current status query.
- D. Output: 5V 300mA.

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 Turn-off input pin	3.0V	3.3V	5.25V	
Source current on the Turn-off input pin	-	1mA	2mA	
voltage on the Vs output pin	0V	2.0V	2.4V	
voltage on the Is output pin	0V	2.0V	2.4V	

■ 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.