



- **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 0-10V / 10V PWM / VR dimming function
  - Compliance to worldwide safety regulations for lighting
  - Suitable for dry/damp locations



**Class 2**

Note.4



■ **Specification**

Model		035	045	053	070	105	140	175	210	245	280	315	350	420	500
(MU075HXXXAQ_0-10V)															
Input	Efficiency(110Vac)(Typ.) <sub>Note.1</sub>	90%	90%	89%	89%	89%	88%	88%	87%	87%	86%	86%	85%	85%	84%
	Efficiency(220Vac)(Typ.) <sub>Note.1</sub>	91%	91%	90%	90%	90%	89%	89%	88%	88%	87%	87%	86%	86%	85%
	Voltage Range (V) <sub>Note.2</sub>	90 ~ 305Vac, OR 127~ 430Vdc (Derating may be need under low inputs, Refer to 'Derating Curve' )													
	Voltage Rate (V) <sub>Note.2</sub>	100Vac-277Vac													
	Frequency Range (Hz)	47~63													
	Power Factor(Typ.)	0.99 (Typ.) with 70%~100% load,at 110Vac													
		0.96 (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													
	AC Current(Typ.)	1A at 110VAC input, 0.5A at 220VAC													
Output	Inrush Current(Max.)	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 0.2													
	Leakage Current(Max.)	0.75mA at 277Vac/60Hz													
	Voltage range (V)	107~214	83~166	71~142	54~108	36~72	27~54	21~43	18~36	15~31	13~27	12~24	10~20	9~18	7~15
	Rated Current(mA)	350	450	530	700	1050	1400	1750	2100	2450	2800	3150	3500	4200	5000
	Rated Power (W)	74.90	74.70	75.26	75.60	75.60	75.60	75.25	75.60	75.95	75.60	75.60	75.00	75.60	75.00
	Ripple&Noise Current( Typ.)	≤30%((PK-AV) /AV) with LED default mode and full load)													
	Current Tolerance <sub>Note.5</sub>	±5%													
	Line Regulation	±1%													
	Load Regulation	±3%													
	Current ADJ. Range	10% to 100%, continuously adjustable													
	Turn on delay Time	<1.5s, at 110Vac; <0.75s, at 220Vac													
Protection	Over Voltage(V)	217	180	146	112	76	57	46	39	34	30	27	23	21	18
		Protection type : Limit the output voltage , recovers automatically after fault condition is removed													
	Over Current	Protection type : constant current limiting, recovers automatically after fault condition is removed													
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.													
Environment	Over temperature	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													
	Operating Humidity	20~95%RH													
	Storage Temp., Humidity	-40~+80℃ , 10~95%RH													
Safety & EMC	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													
	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℃/70%RH													
UL Level	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 )													
Others	UL,CUL class 2						V	V	V	V	V	V	V	V	V
	NON-UL, NON-CUL class 2	V	V	V	V	V									
	MTBF	300,000 Hours,measured at full load,25℃ ambient temperature													
	Lifetime	50,000 Hours at Tc 75℃(Refer to"Life Time VS. Tcase (Ref.)")													
	Dimension	173 x 67.5 x 40 (mm) ( LxWxH )													
	Weight	0.82kg													

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 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 and load regulation.

subject to change without notice

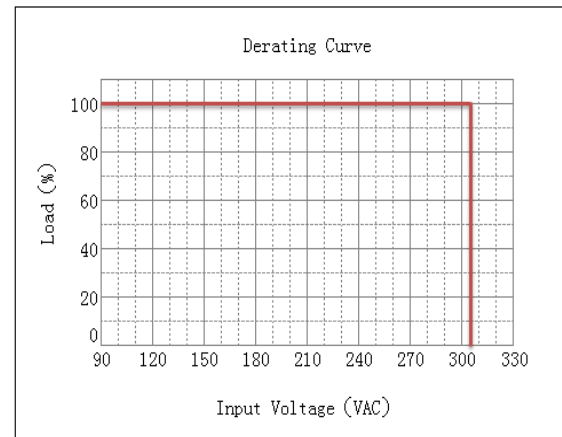
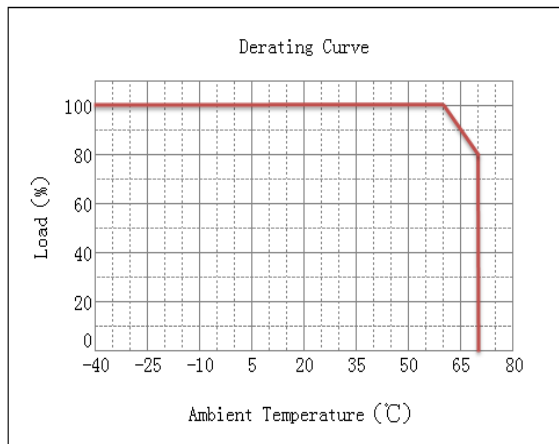
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**SHANGHAI MOONS' AUTOMATION CONTROL CO., LTD.**

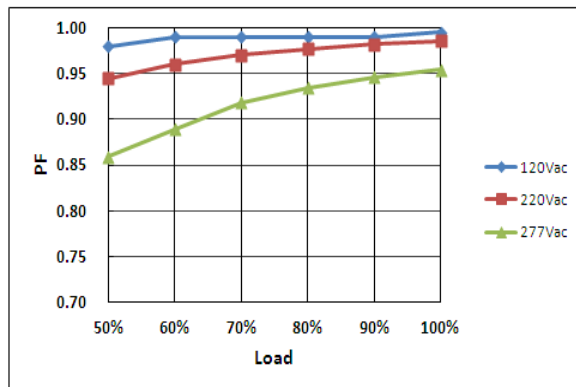
Add: No.168, Mingjia Road, Shanghai 201107, P.R.China

Tel: +86 (0)21 52634688 Website: www.moons.com.cn

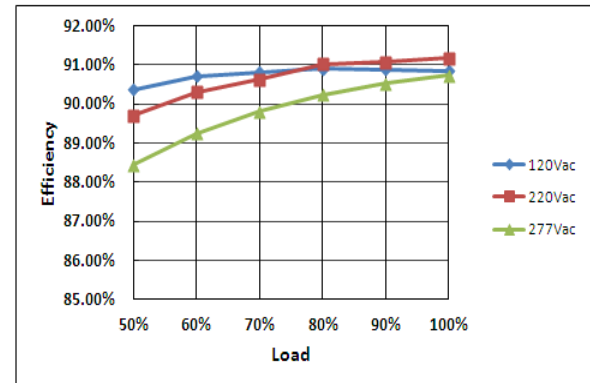
**Derating Curve**



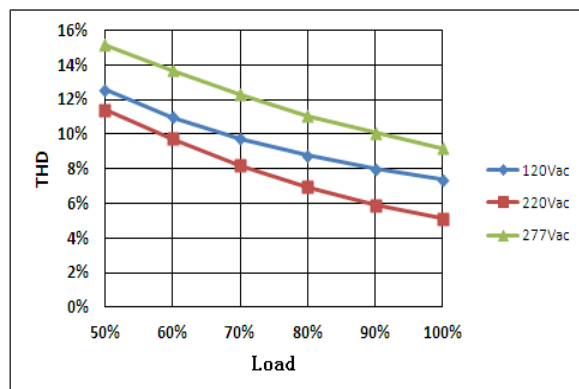
**Power Factor VS. Load Curve**



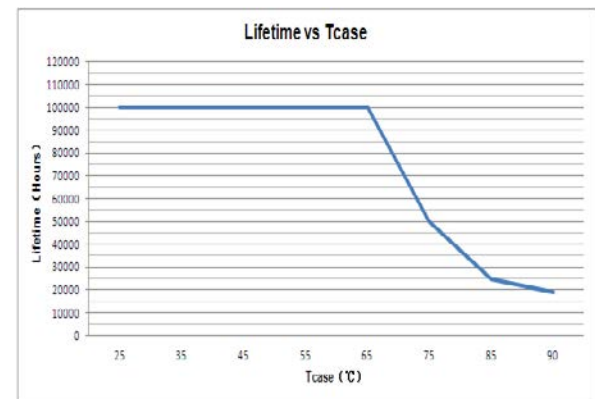
**Efficiency VS. Load Curve**



**THD Curve**



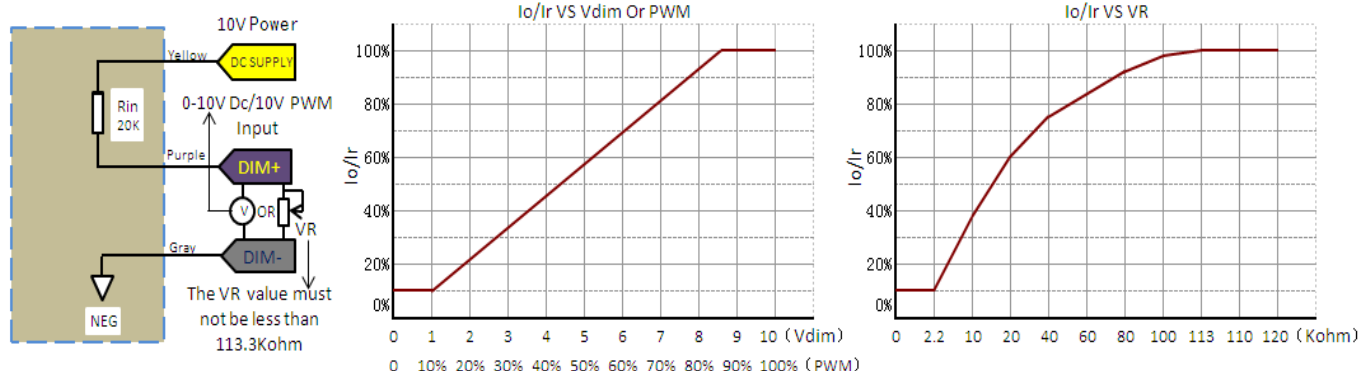
**Life Time VS. Tcase (Ref.)**



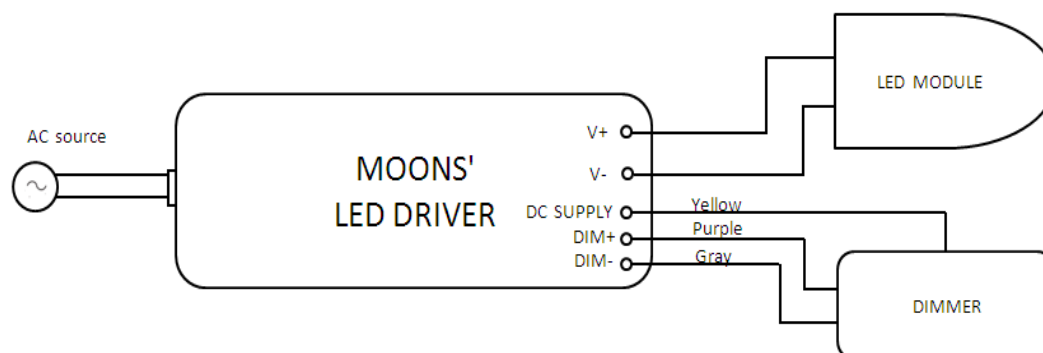
### Dimming function description:

- 1.The dimmer control may be operated from an input signal of 0 - 10 Vdc / 10V PWM (Frequency range:500Hz to 5KHz,Duty:0-100%) .
- 2.With one external variable resistor,the VR value must not be less than 113.3Kohm.

### Dimming module diagram and dimming cruve:



### Dimming connection diagram:



### Notes:

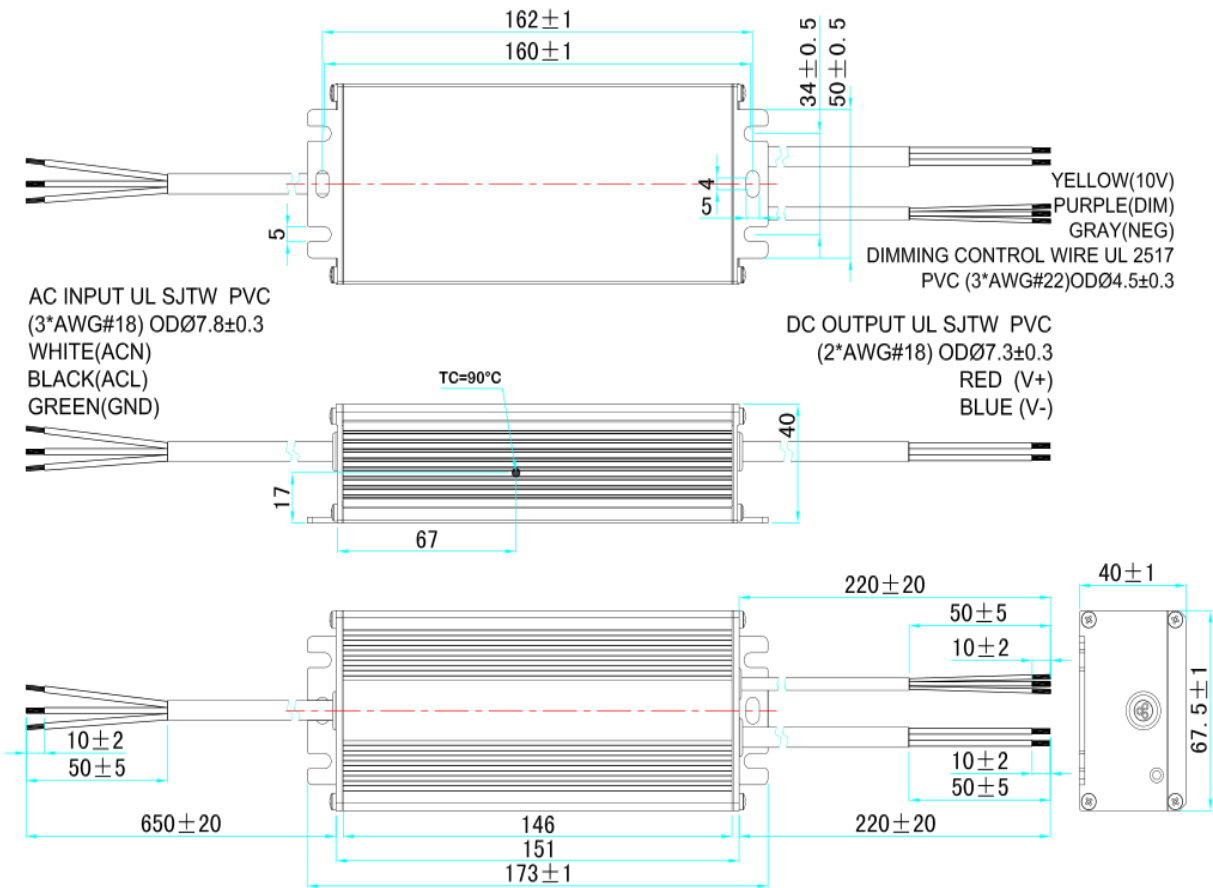
- 1.Io is actual output current with dimming control signal and Ir is rated output current.
- 2The dimming control signal can be operated output current from 100% to 10% Ir,output voltage must be maintained above 50% of the rated output voltage.
- 3.Do not connect dimming wire to the output;otherwise,the LED driver can not work normally.
- 4.The dimming signal is allowed to be less than 1V/10% PWM ,the output current can be maintained 10% Ir. (about on/off function specification ,please contact MOONS for details).

### Dimming Control Module Parameter(On secondary side)

Parameter	Min.	Typ.	Max.	Notes
DC supply output voltage	8V	10V	12V	
DC supply output source current	0 mA	-	10 mA	
Absolute maximum voltage on the DIM+	-2V	-	12V	
Source current on the DIM+	0 mA	-	0.01 mA	
Value of Rin ( the resistor inside the LED driver which locate between the DIM+ and the DC	19.8k	20k	20.2k	

■ 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			Dimming control		
	Wire Type	Assignmen	Description	Wire Type	Assignmen	Description	Wire Type	Assignmen	Description
UL apporval	UL SJTW PVC	BLACK/L	3*AWG#18	UL SJTW PVC	RED/+	2*AWG#18	UL2517 PV CODΦ 4.5±0.3mm	YE/10V	3*AWG#22
		WHITE/N			BLUE/-			PU/DIM+	
		GREEN/GN						GR/NEG	