

■ Features

- Input voltage: 90-305VAC
- Built-in active PFC function: 0.99 Typ.
- Low THD: 10% Typ.
- High efficiency: 93.5% Typ.
- IP67 design for indoor or outdoor installations
- High surge immunity
- Support 0-10V / 10V PWM / VR dimming function and on/off function
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations
- 5 Years Warranty

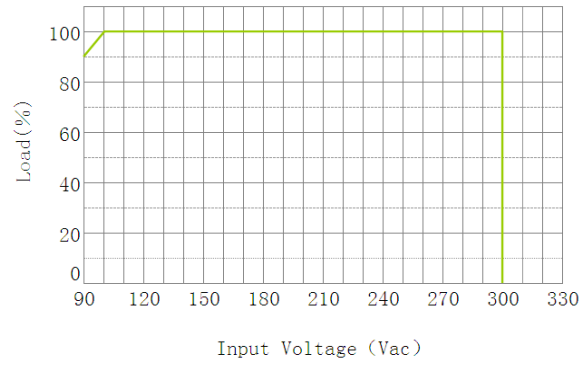
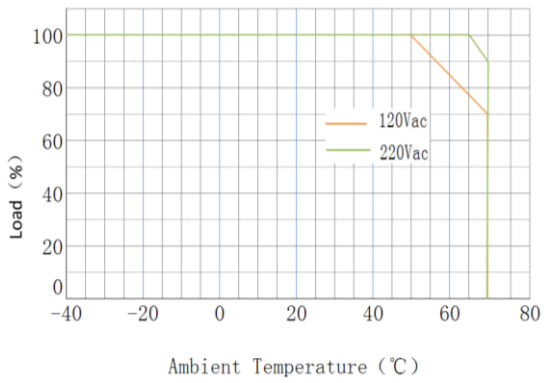


■ Specification																
Model		035	045	053	070	105	140	175	210	245	280	315	350	420	490	560
(MU200AXXXAQ_0-10V)																
Input	Efficiency (Typ.)110VAC	90.5%	90.5%	90.5%	90.5%	90.0%	90.0%	89.0%	89.0%	89.0%	89.0%	88.5%	88.5%	88.5%	88.0%	88.0%
	Efficiency (Typ.)220VAC	93.5%	93.5%	93.5%	93.5%	93.0%	93.0%	92.0%	92.0%	92.0%	92.0%	91.5%	91.5%	91.5%	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.)	2.4A at 110VAC , 1.2A 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)	571	444	377	285	190	142	114	95	81	71	63	57	48	40	36
	Rated Current(mA)	350	450	530	700	1050	1400	1750	2100	2450	2800	3150	3500	4200	4900	5600
	Rated Power (W)	199.9	199.8	199.8	199.5	199.5	198.8	199.5	199.5	198.5	198.8	198.5	199.5	201.6	196.0	201.6
	Ripple&Noise (Vp-p)	17.13	13.32	11.3	8.55	5.7	4.26	3.42	2.85	2.43	2.13	1.89	1.71	1.41	1.2	1.05
	Voltage ADJ. Range(V)	286~571	222~444	189~377	143~285	95~190	71~142	57~114	48~95	41~81	36~71	32~63	29~57	24~48	20~40	18~36
	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.)	770	601	508	385	257	192	154	128	109	96	85	77	63	54	47
	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)														
Safety & EMC	Vibration	10-500Hz, 5G 12min/cycle, period for 72min each along X、 Y、 Z axes														
	Safety Standard	UL8750, UL1012, CAN/CSA-C22.2No.107.1-01														
	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														
Others	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 , EN61547 (Surge L,N-FG 6KV , L-N 4KV)														
	MTBF	300,000 hours, measured at full load, 25°C ambient temperature, 80% Load ,MIL-HDBK-217F														
	Dimension	251 x 67.5 x 40 mm (LxWxH)														
	Weight	1.20kg														

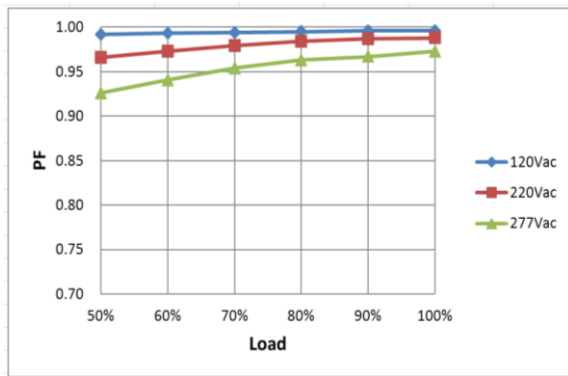
Note.1: Includes set up tolerance, line regulation and load regulation.

Test Curve

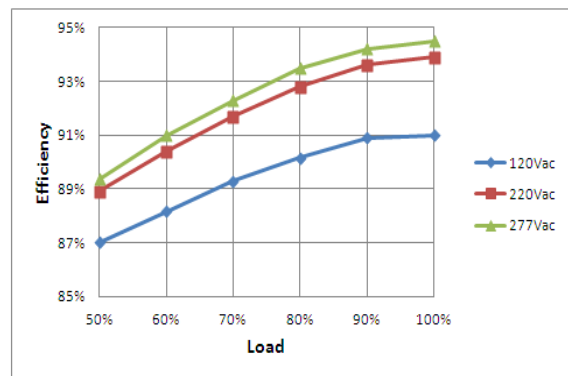
Derating Curve



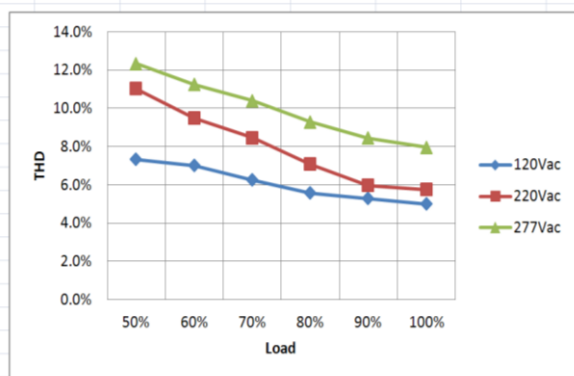
Power Factor Curve



Efficiency VS. Load Curve(Model:700mA)



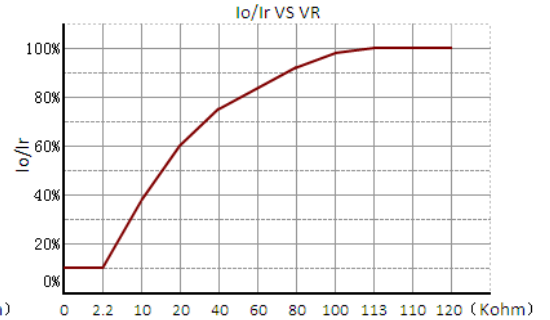
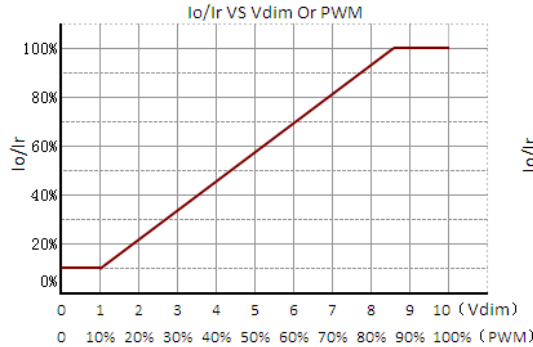
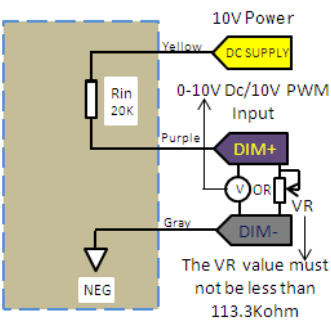
THD Curve



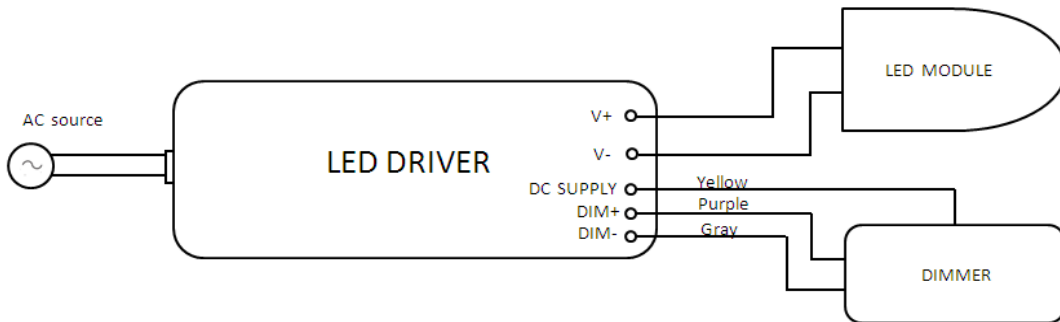
Dimming function description:

- 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).

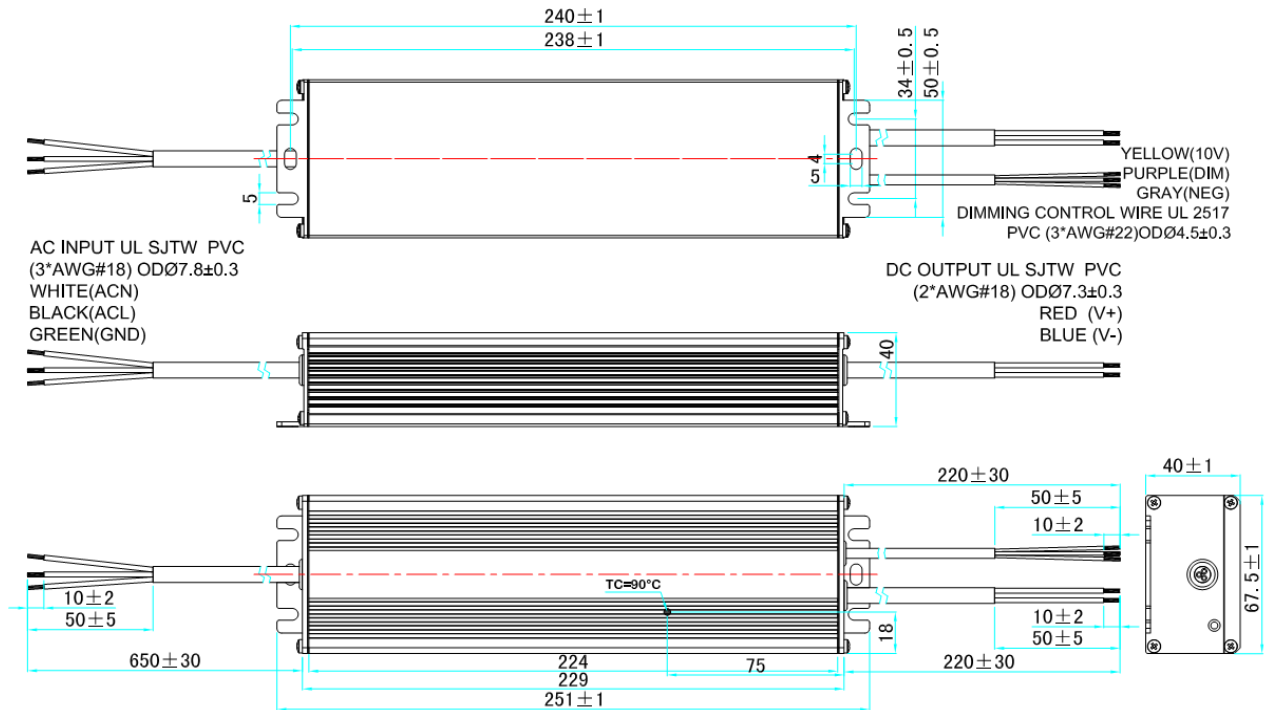
Dimming Control Module Parameter(On secondary side)

Parameter	Min.	Typ.	Max.	Notes
DC supply output voltage	10V	12V	14V	
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	

AKON MU200HxxxAQ_0-10V Series General-Outdoor

■ 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.