



■ **Features**

- Input voltage: 90-305VAC
- Built-in active PFC function: 0.99 Typ.
- High efficiency: 91% Typ.
- IP67 design for indoor or outdoor installations
- High surge immunity
- Support 0-10V / 10V PWM
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations



■ **Specification**

Model (MU075CXXXAQ_0-10V)		035	045	053	070	085	105	120	140	175	210	245	280	300	315	350	375	420	500	
Input	Efficiency(120Vac)(Typ.) _{Note.1}	88%	88%	88%	87%	87%	87%	87%	86%	86%	86%	86%	85%	85%	85%	84%	84%	83%	83%	
	Efficiency(230Vac)(Typ.) _{Note.1}	91%	91%	91%	90%	90%	90%	90%	89%	89%	89%	89%	88%	88%	88%	87%	87%	86%	86%	
	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 80%~100% load,at 120Vac																		
		0.96 (Typ.) with 80%~100% load,at 230Vac																		
		>0.9 with 80%~100% load,at 277Vac																		
	THD(Typ.)	<15% with 80%~100% load, at 100Vac~277Vac																		
	AC Current(Typ.)	<20% with 50%~100% load, at 100Vac~277Vac																		
Inrush Current(Max.)	1.0A at 100VAC input, 0.5A at 230VAC																			
Leakage Current(Max.)	50A at 230Vac input 25°C Cold Start (time wide=500uS, measured at 50% Ipeak,Not applicable for the inrush current to Noise Filter for less than 0.2ms)																			
Output	Voltage range (V)	214	166	142	108	88	72	63	54	43	36	31	27	25	24	21	20	18	15	
	Rated Current(mA)	350	450	530	700	850	1050	1200	1400	1750	2100	2450	2800	3000	3150	3500	3750	4200	5000	
	Rated Power (W)	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	
	Voltage ADJ. Range (V)	107~214	83~166	71~142	54~108	44~88	36~72	32~63	27~54	21~43	18~36	15~31	13~27	13~25	12~24	11~21	10~20	9~18	7~15	
	Ripple&Noise Current(Typ.)	≤10%((PK-AV) /AV) with LED default mode and full load)																		
	Current Tolerance	±5%																		
	Line Regulation	±1%																		
	Load Regulation	±3%																		
	Current ADJ. Range	-																		
	Turn on delay Time	<2s, at 120Vac; <1s, at 277Vac																		
Protection	Over Voltage(V)	230	180	155	119	98	81	71	62	50	43	38	33	31	30	27	26	24	21	
	Protection type: Voltage limiting.output will not exceed the upper limit voltage , recovers automatically after fault condition is removed.																			
	Over Current	Protection type: Constant current limiting.																		
	Short Circuit	Protection type: Hiccup mode. recovers automatically after short is removed.																		
Over temperature	Protection type : Decrease output current . When TC reaches 105±10°C , the output current decrease to 50% rate value until the TC reaches 75±15°C																			
Environment	Operating Temp.	-40~+70°C(Refer to 'Derating Curve')																		
	Tc	90°C max																		
	Operating Humidity	20~95%RH																		
	Storage Temp., Humidity	-40~+80°C , 10-95%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	UL 8750, UL1012, EN61347-1, EN61347-2-13, GB19510.1;GB19510.14																		
	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 , EN61000-3-2 Class C, EN61000-3-3																		
EMC Immunity	EN61000-4-2,3,4,5,6,8,11 (Surge L,N-FG 6KV, L-N 4KV) , EN61547																			
Others	MTBF	300,000 Hours,measured at full load,25°C ambient temperature																		
	Lifetime	50,000 Hours at Tc 75°C(Refer to"Life Time VS. Tcase (Ref.)")																		
	Dimension	177 x 67.5 x 37 mm (LxWxH)																		
	Weight	0.75kg																		

Note.1: Measured at full load and steady-state temperature in 25°C 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 230VAC input , rated load and 25°C of ambient temperature ;

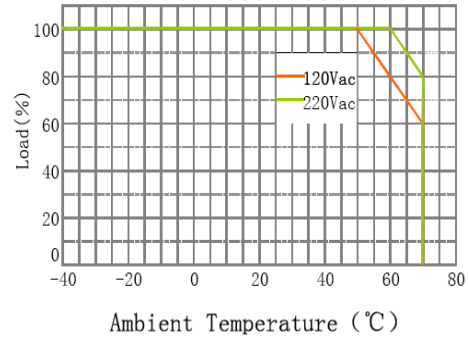
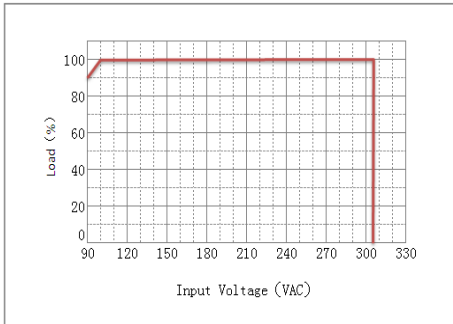
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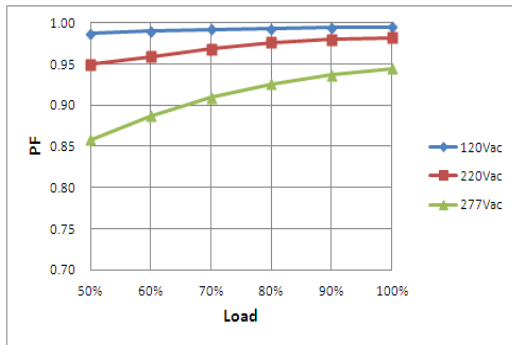
SHANGHAI MOONS' AUTOMATION CONTROL CO., LTD.

Add: No.168, Mingjia Road, Shanghai 201107, P.R.China
Tel: +86 (0)21 52634688 Website: www.moons.com.cn

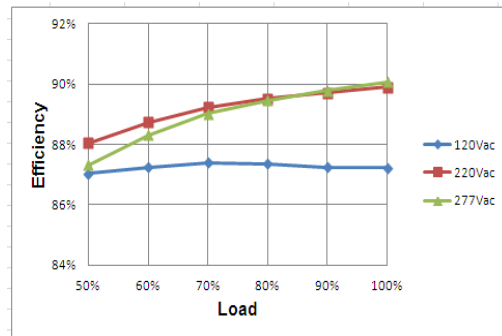
Derating Curve



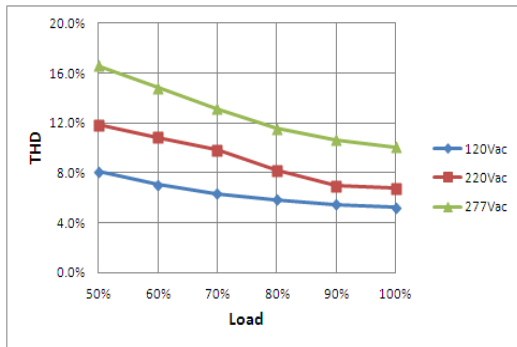
Power Factor VS. Load Curve



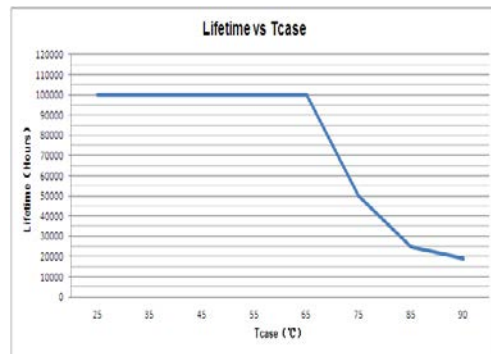
Efficiency VS. Load Curve



THD Curve



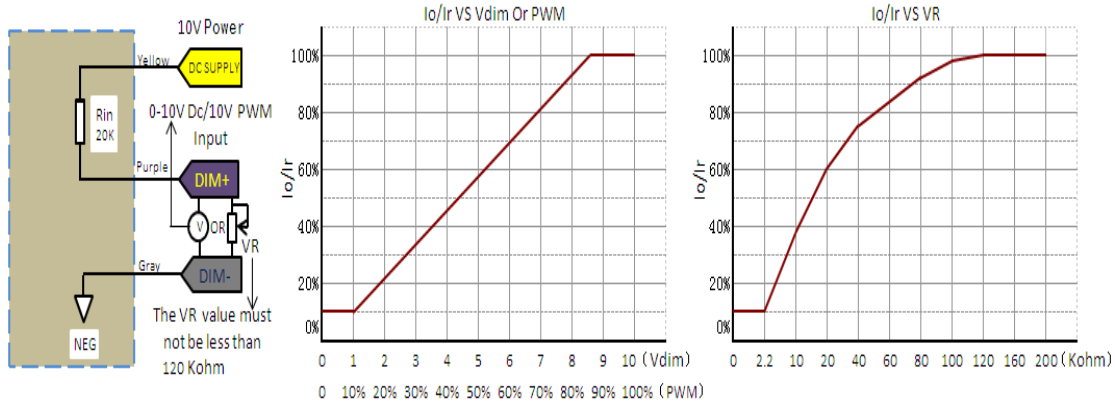
Life Time VS. Tcase (Ref.)



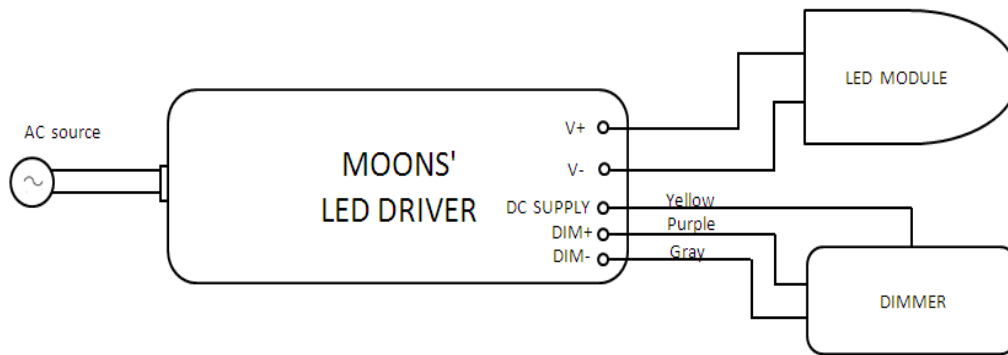
Dimming function description:

- 1.The dimming control may be operated from an input signal of 0(1)-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 120Kohm.

Dimming module diagram and dimming curve:



Dimming connection diagram:



Notes:

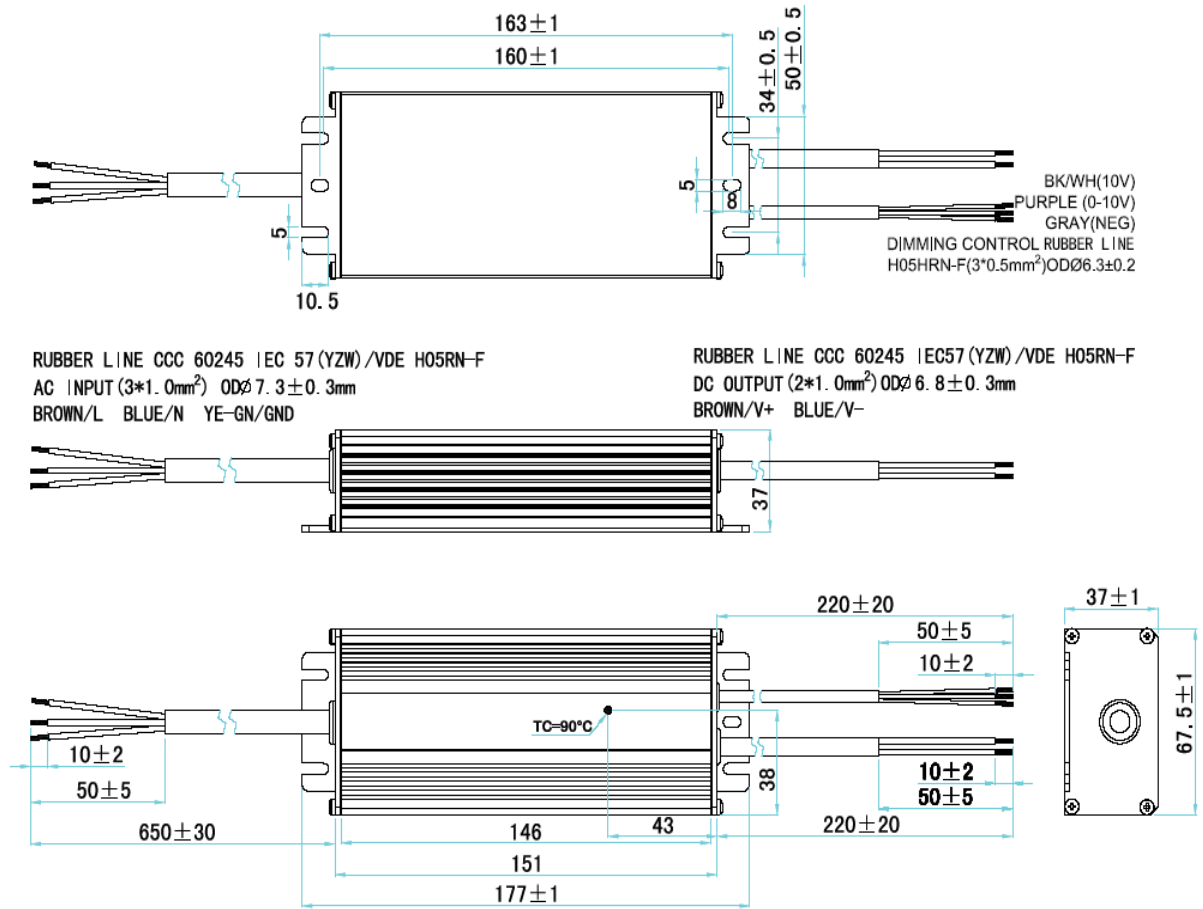
- 1.Io is actual output current with dimming control signal and Ir is rated output current.
- 2.The dimming control signal can be operated output current from 100% to 10% Ir,output voltage must be maintained above 50% of the rated output voltage.
- 3.Do not connect dimming wire to the output;otherwise,the 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	-	10mA	
Absolute maximum voltage on the DIM+	-2V	-	10V	
Source current on the DIM+	0 mA	-	0.5mA	
Value of Rin (the resistor inside the LED driver which locate between the DIM+ and the DC Supply)	19.8k	20k	20.2k	

■ 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.

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