



■ **Features**

- Input voltage: 90-305Vac
- Built-in active PFC function: 0.99 Typ.
- High efficiency: 90% Typ.
- IP66 design for indoor installation
- Support 0(1)-10V dimming
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp environment



IP66



Class 2

Note.3

■ **Specification**

Model (PU040HXXXAQ_0-10V)		035	045	070	105	140	175	210	245	280	315
Input	Efficiency(120Vac,Typ)Note.1	89.0%	88.5%	87.5%	87.0%	86.5%	85.0%	84.0%	83.5%	82.5%	81.5%
	Efficiency(230Vac,Typ)Note.1	90.0%	89.5%	88.5%	88.0%	87.5%	86.0%	85.0%	84.5%	84.0%	83.0%
	Voltage Range (V)Note.2	90 ~ 305Vac,OR 127~ 430Vdc									
	Rated Voltage (V)Note.2	100 ~ 277Vac									
	Frequency Range (Hz)	47~63									
	Power Factor	0.99(Typ) with 80%-100% load at 120Vac									
		0.97(Typ) with 80%-100% load at 230Vac									
		0.9(Min) with 80%-100% load at 277Vac									
	THD	10% (Typ.), at 220Vac input, with 80%-100% load conditions									
		15% (Typ.), at 110/277Vac input, with 80%-100% load conditions									
Output	AC Current(Max.)	0.6A at 100Vac input									
	Inrush Current(Max.)	15A 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)									
	Leakage Current(Max.)	0.5mA at 277Vac/60Hz input									
	Voltage Range (V)	57~114	44~89	28~54	19~37	14~29	11~23	9~19	8~16	7~14	6~12
	Rated Current(mA)	350	450	700	1050	1400	1750	2100	2450	2800	3150
	Rated Power (W)	40	40	38	39	40.6	40	40	39	39	39
	Ripple&Noise Current(%)	<25%((PK-AV) /AV) with LED default mode and full load)									
	Current Tolerance	5%									
	Line Regulation	2%									
	Load Regulation	3%									
Protection	Current ADJ. Range	-									
	Turn on delay	<1.2s, at 120Vac~277Vac									
	Over Voltage(V)	150	118	60	42.4	35	35	25	23	22	18
	Short Circuit	Protection type: Voltage limiting,output will not exceed the upper limit voltage at single fault condition, recovers automatically after fault condition is removed.									
Environment	Over temperature	Protection type: Resumable mode.when the inside temperature of PSU rise to 100°C(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~+60°C									
	Tc	90°C max									
	Operating Humidity	20~95%RH									
	Storage Temp.,Humidity	-40~+85°C , 10~95%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,UL1310 Class 2,CSA-C22.2 No.223-M91,EN61347-1,EN61347-2-13" for Class 2 model, " UL8750,UL1012,CSA-C22.2 NO. 107.1,EN61347-1,EN61347-2-13" for non-Class 2 model.									
	Withstand Voltage	I/P-O/P:3.75KVAC									
	Isolation Resistance	I/P-O/P:100M Ohms/500VDC/25°C/70%RH									
	EMC Emission	FCC Part 15 Class B/EN55015 , EN61000-3-2 Class C , EN61000-3-3									
Others	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 , EN61547 (Surge: L-N 2KV)									
	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	95 x 70 x 32 (mm) (LxWxH)									
	Weight(Typ.)	0.3 kg									

Note.1: Measured at full load and steady-state temperature in 25°C ambient;

Note.2: Derating may be needed under low input voltage, Please Refer to 'Derating Curve'; Note.3: UL Class2 incompilant model "035", "045";

Note: All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.

Subject to change without notice

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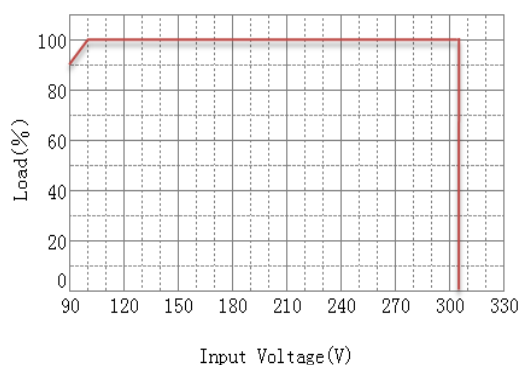
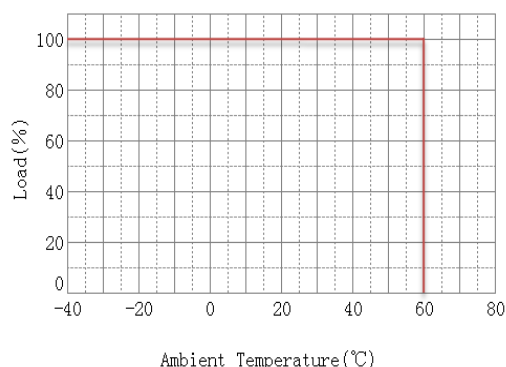
SHANGHAI MOONS' AUTOMATION CONTROL CO., LTD.

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

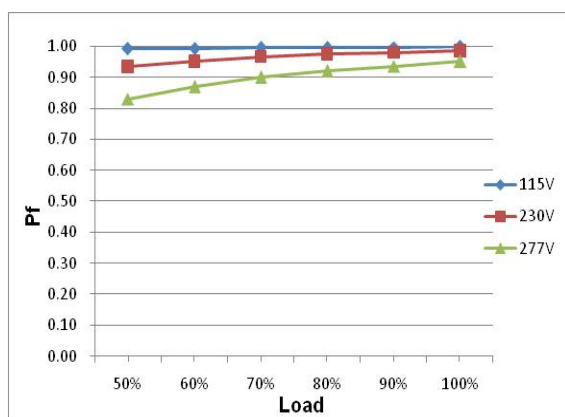
Tel: +86 (0)21 52634688 Website: www.moons.com.cn

■ Test Curve

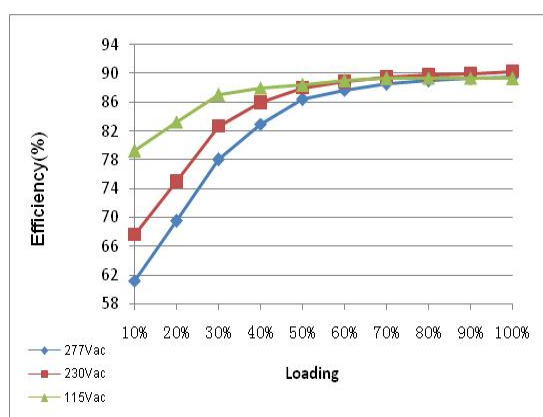
Derating Curve



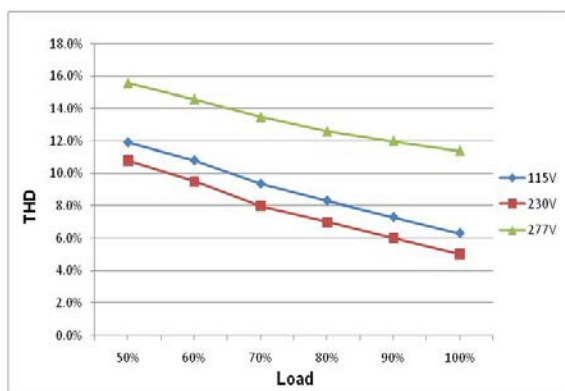
Power Factor VS. Load Curve(Ref 700mA)



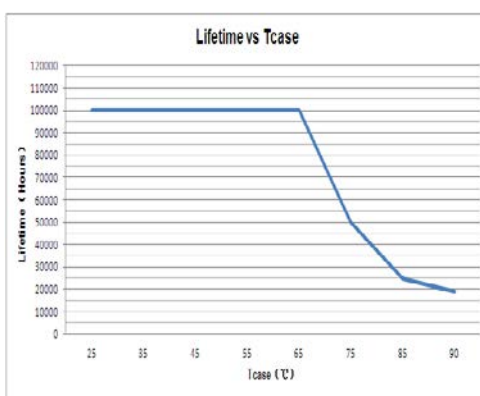
Efficiency VS. Load Curve(Ref 700mA)



THD Curve(Ref 700mA)



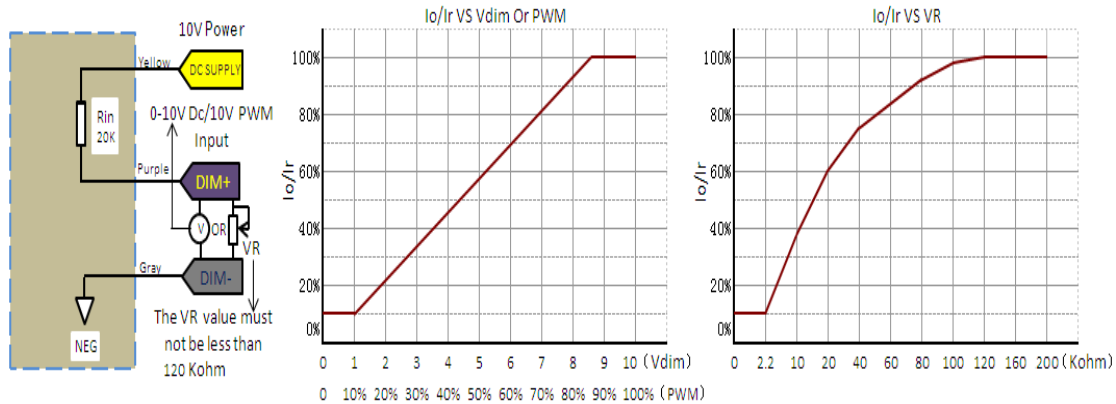
Life Time VS. Tcase (Ref.)



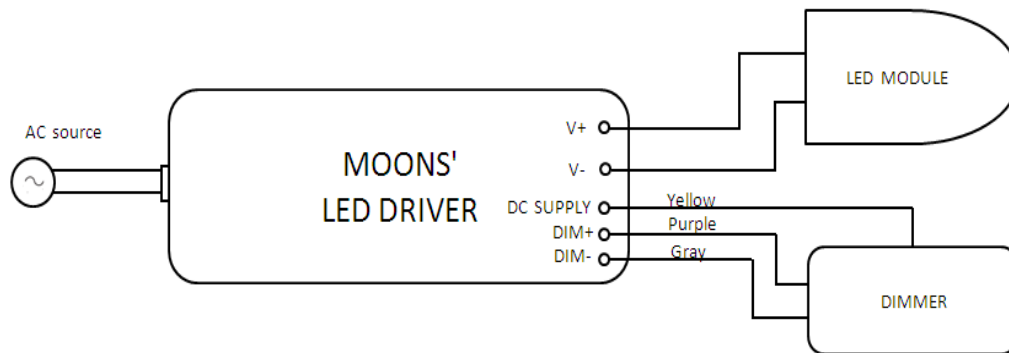
Dimming function description:

- 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:



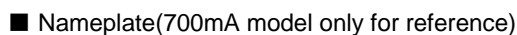
Notes:

- 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	

Dimensions (Unit: mm)



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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