

■ **Features**

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



IP66    **Class 2**

■ **Specification**

Model (PU040HXXXAQ)		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(Typ.)	<25%((PK-AV) /AV) with LED default mode and full load									
	Current Tolerance	5%									
	Line Regulation	2%									
	Load Regulation	3%									
mA model	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									
	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.3: All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.

Subject to change without notice

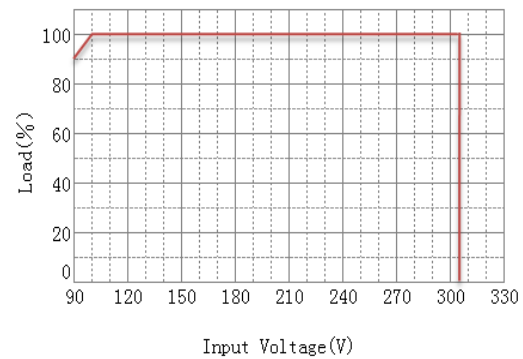
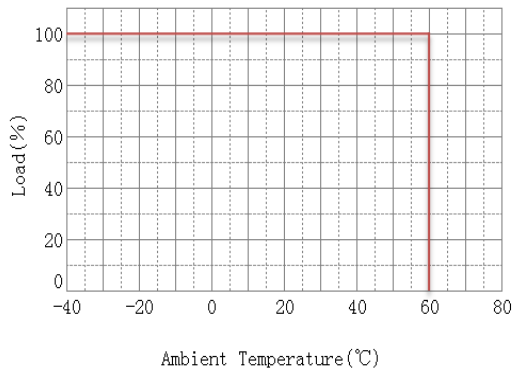
Page 1 of 3

SHANGHAI MOONS' AUTOMATION CONTROL CO., LTD.

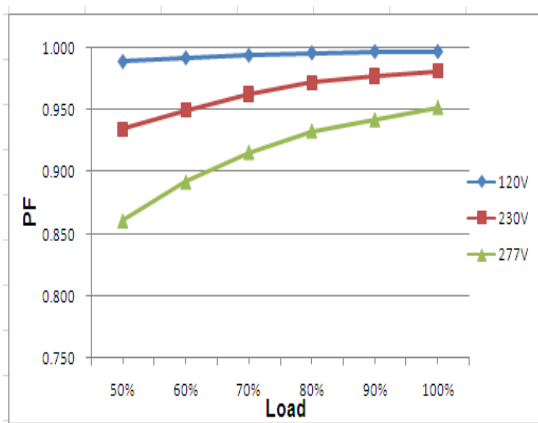
Add: No.168, Mingjia Road, Shanghai 201107, P.R.China
Tel: +86 (0)21 52634688 Website: www.moons.com.cn

■ Test Curve

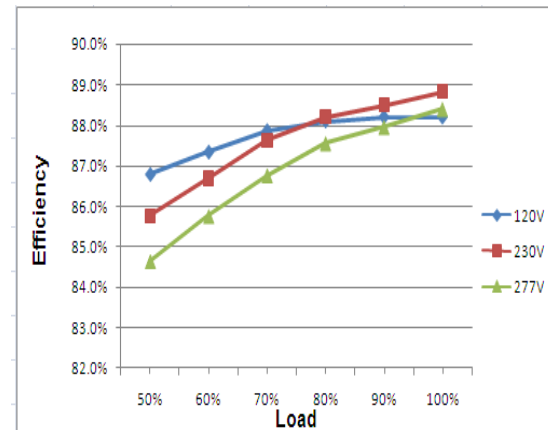
Derating Curve



Power Factor VS. Load Curve(Ref 700mA)

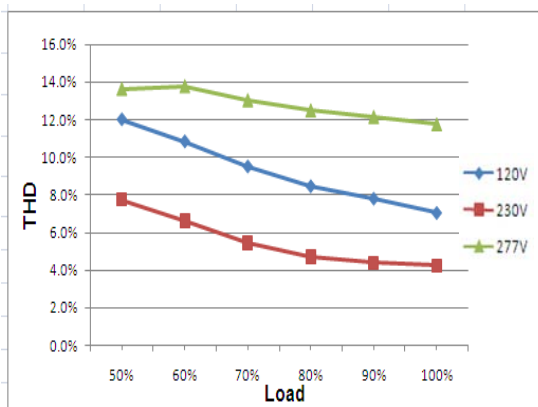


Efficiency VS. Load Curve(Ref 700mA)

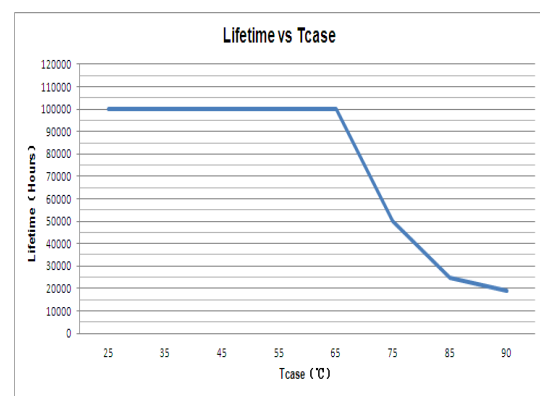


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THD Curve(Ref 700mA)

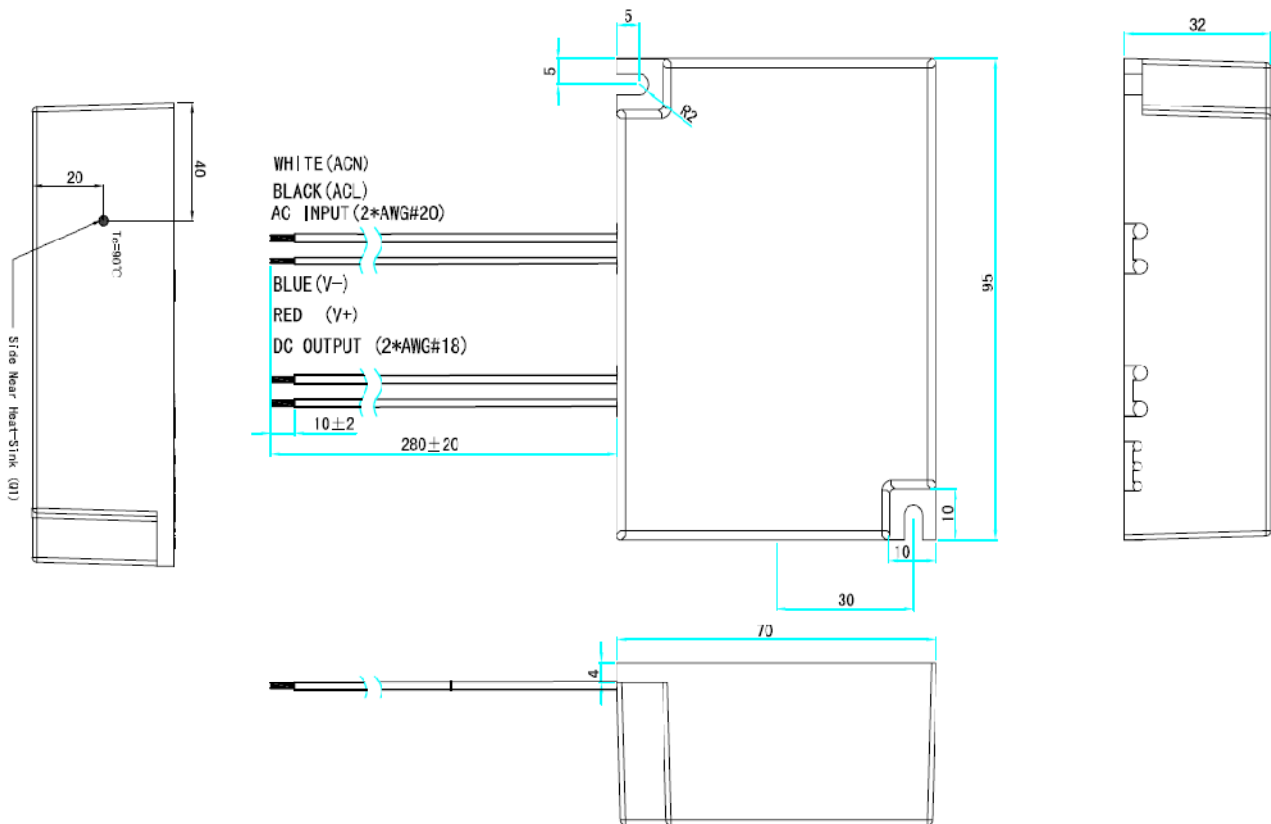


Life Time VS. Tcase (Ref.)



■ **Mechanical Specification**

Dimensions (Unit: mm)



■ **Nameplate(700mA model only for reference)**

MOONS' LED Driver Energy Saving Solutions			
PU040H070AQ			
UL Input:100-277Vac 50/60Hz	IP66	SELV	
ENEC Input:100-240Vac 50/60Hz	RoHS		
Input Current:0.60A max @100Vac	CE		
Output Current:700mA			
Output Voltage:28-54Vdc			
Output Voltage:58Vdc max			
Output Power:40W			
LED Class 2 output			
tc:90°C(Specific "tc" REF the report)			
PF>0.95 for ENEC			
SHANGHAI MOONS' AUTOMATION CONTROL CO.,LTD.			
MADE IN CHINA			
INPUT		OUTPUT	
WHITE	BLACK	BLUE	RED
AC/N	AC/L	V-	V+

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.