



■ **Features**

- Input voltage range: 90~305Vac
- Built-in active PFC function: 0.99 Typ.
- High efficiency: 89% Typ.
- IP67 design for indoor or outdoor installations
- Surge protection: DM 4KV,CM 6KV
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations



Note.3

■ **Specification**

Model (MU050HXXXAQ)		035	045	053	070	105	120	140	175	210	245	280	315	
Input	Efficiency(120Vac)(Typ.) <sup>Note.1</sup>	90%	90%	90%	89%	89%	88%	88%	88%	87%	87%	86%	84%	
	Efficiency(230Vac)(Typ.) <sup>Note.1</sup>	91%	91%	91%	90%	90%	89%	89%	89%	88%	88%	87%	85%	
	Voltage Range (V) <sup>Note.2</sup>	90~305Vac,OR 127~ 430Vdc												
	Rated Voltage (V) <sup>Note.2</sup>	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(Typ.)		10% (Typ.), at 220Vac input, with 80%~100% load conditions											
			15% (Typ.), at 110/277Vac input, with 80%~100% load conditions											
AC Current(Max.)	0.7A at 100Vac input; 0.35A at 220Vac input													
Inrush 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)													
Leakage Current(Max.)	0.75mA at 277Vac/60Hz input													
Output	Voltage Range (V)	71-142	55-111	47-94	36-72	24-48	21-42	18-36	14-29	12-24	10-20	9-18	8-16	
	Rated Current(mA)	350	450	530	700	1050	1200	1400	1750	2100	2450	2800	3150	
	Rated Power (W)	50	50	50	50	50	50	50	50	50	50	50	50	
	Ripple Current((PK-AV)/AV)	≤30%,With LED mode full load.												
	Current Tolerance	5%												
	Line Regulation	3%												
	Load Regulation	3%												
	Current ADJ. Range	-												
Turn on Delay Time	<1.5s, at 120Vac; <0.75s, at 230Vac													
Protection	Over Voltage(V)	<170	<133	<122	<95	<60	<55	<50	<40	<34	<28	<26	<25	
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.												
	Over Temperature	When the Tc of PSU rise to 110°C(Typ.), the ouput current will decrease to less than 30% of rated current or shutdown. The power supply should resume its normal operation when the inside temperature of PSU drop to normal temperature												
Environment	Operating Temp.	-40~+70°C												
	Tc	88.9°C max for UL												
	Operating Humidity	20~95%RH												
	Storage Temp., Humidity	-40~+85°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	"UL8750,UL1310 Class 2,CSA-C22.2 No.223-M91,EN61347-1,EN61347-2-13,GB19510.1,GB19510.14" for Class 2 model, "UL8750,UL1012,CSA-C22.2 NO. 107.1,EN61347-1,EN61347-2-13,GB19510.1,GB19510.14" for non-Class 2 model.												
	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												
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547 ( Surge: L-N 4KV, L/N-Earth 6KV )												
Others	MTBF	300,000 hours, measured at full load, 25°C ambient temperature MIL-HDBK-217F(25°C)												
	Life Time	50,000 Hours at Tc 75°C (Refer to"Life Time VS. Tcase (Ref).")												
	Dimension	193 x 42.5 x 34.5 mm ( LxWxH )												
	Weight(Typ.)	0.55kg												

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 in compliant model "035", "045", "070";

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

Subject to change without notice

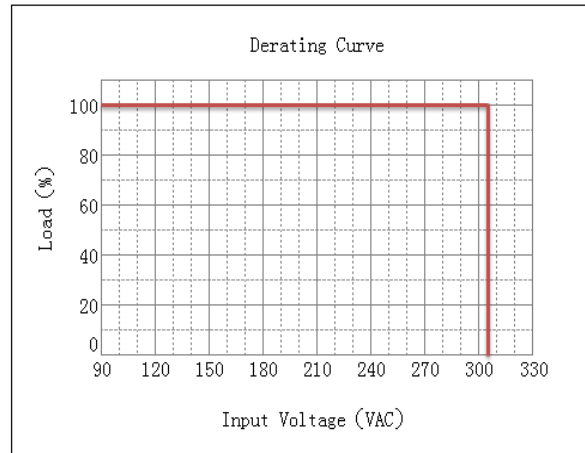
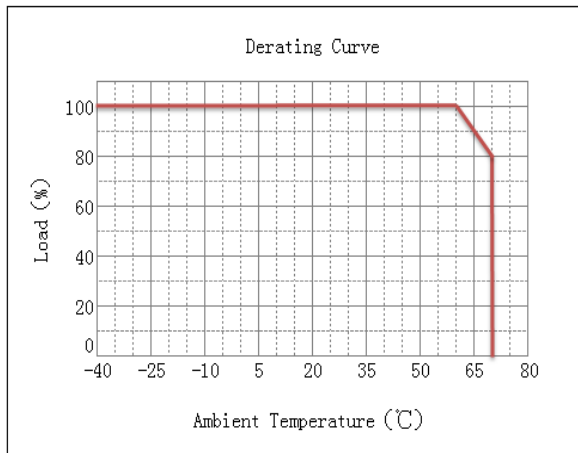
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**SHANGHAI MOONS' AUTOMATION CONTROL CO., LTD.**

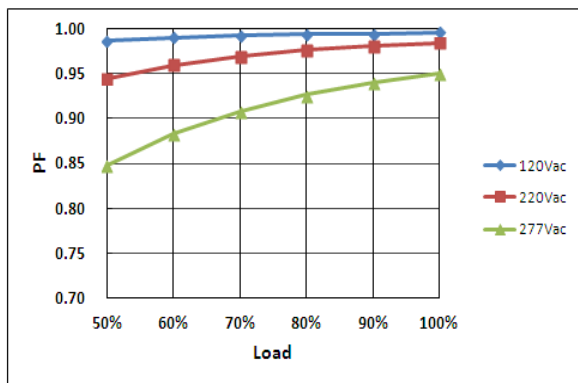
Add: No.168, Mingjia Road, Shanghai 201107, P.R.China  
Tel: +86 (0)21 52634688 Website: www.moons.com.cn

■ Test Curve

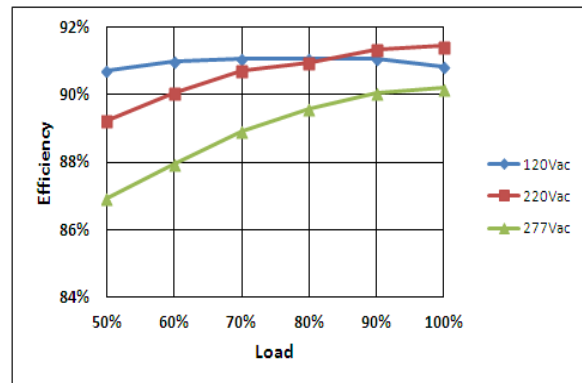
Derating Curve



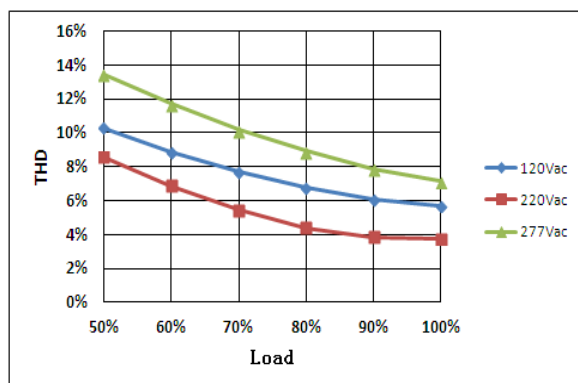
Power Factor Curve



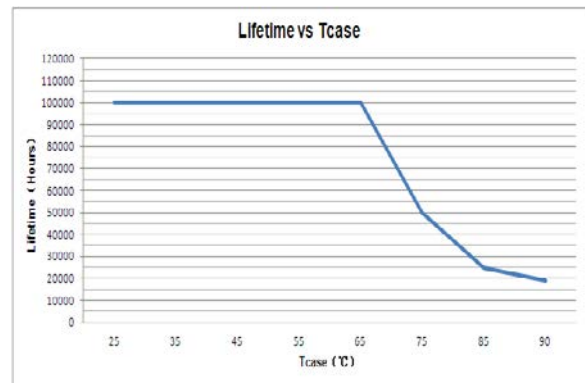
Efficiency VS. Load Curve(Model:350mA)



THD Curve(Ref)



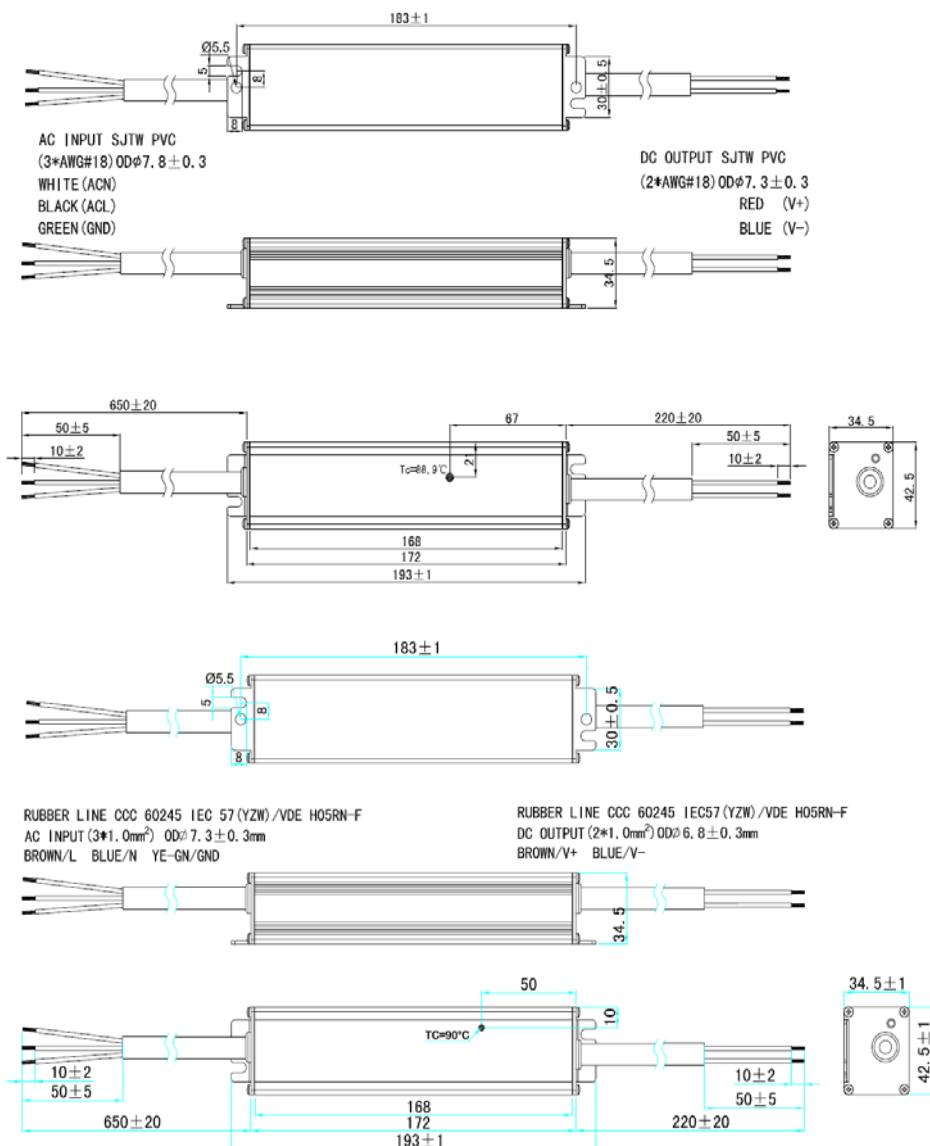
Lifetime vs. Case Temperature



**■ 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		
	Wire Type	Assignment	Description	Wire Type	Assignment	Description
UL approval	UL SJTW PVC	BLACK/L	3*AWG#18	UL SJTW PVC	RED/+	2*AWG#18
		WHITE/N			BLUE/-	
		GREEN/GND				
CCC approval	RUBBER CCC+VDE 60245 IEC57 YZW/H05RN-F	BROWN/L	3*1.0mm <sup>2</sup> OD $\phi$ 7.3 $\pm$ 0.3mm	RUBBER CCC+VDE 60245 IEC57 YZW/H05RN-F	Brown/+	2*1.0mm <sup>2</sup> OD $\phi$ 6.8 $\pm$ 0.3mm
		BLUE/N			Blue/-	
		YE-GN/GND				

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