



■ Features

- Input voltage: 90-305VAC
- Built-in active PFC function: 0.99 Typ.
- Low THD: 10% Typ.
- High efficiency: 88% Typ.
- IP66 design for indoor installations
- High surge immunity
- Support 0-10V / 10V PWM / VR dimming function
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations



■ Specification

Model		035	045	050	053	070	105	120	140	175	210
(PU025HXXXAQ_0-10V)											
Input	Efficiency (120Vac)(Typ.) ^{Note.1}	87%	86%	85%	85%	85%	84%	83%	82%	81%	80%
	Efficiency (230Vac)(Typ.) ^{Note.1}	88%	87%	86%	86%	86%	85%	84%	83%	82%	81%
	Voltage Range (V) ^{Note.2}	90 ~ 305Vac, OR 127~ 430Vdc									
	Voltage Rated (V) ^{Note.2}	100Vac-277Vac									
	Frequency Range (Hz)	47~63									
	Power Factor	0.99 (Typ.), with 85%~100% load, at 120Vac									
		0.97 (Typ.), with 85%~100% load, at 230Vac									
		0.9 (Min.), with 85%~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.)	0.4A at 100VAC input, 0.2A at 230VAC									
	Inrush Current (Max.)	15A at 230Vac input 25℃ 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									
	Voltage Range (V)	36~72	28~55	25~50	24~48	18~36	12~24	10~21	9~18	7~14	6~12
	Rated Current (mA)	350	450	500	530	700	1050	1200	1400	1750	2100
	Rated Power (W)	25.2	24.75	25	25.4	25.2	25.2	25.2	25.2	24.5	25.2
	Ripple Current((PK-AV)/AV) with LED default mode full load(Typ.)	<25%	<25%	<30%	<30%	<30%	<30%	<35%	<35%	<40%	<40%
	Current Tolerance	5%									
	Line Regulation	5%									
	Load Regulation	5%									
Protection	Current ADJ. Range	-									
	Turn on Delay Time	<1.2s, at 120Vac; <0.75s, at 230Vac									
	Over Voltage (V)	90	60	58	56	42.4	32	25	25	22	18
Environment	Short Circuit	Protection type : Limit the output voltage , recovers automatically after fault condition is removed									
	Operating Temp.	-40~+60℃(Refer to 'Derating Curve')									
	Tc	90℃ max									
Safety & EMC	Operating Humidity	20~95%RH									
	Storage Temp., Humidity	-40~+85℃ , 10-95%RH									
	Temp. Coefficient	0.03%/℃ (0~50℃)									
Others	Vibration	10~500Hz, 5G 12min/cycle, period for 72min each along X、Y、Z axes									
	Safety Standard	UL8750, UL1012, UL1310, CSA-C22.2 NO. 107.1, CSA-C22.2 NO. 223-M91, EN61347-1, EN61347-2-13									
	Withstand Voltage	I/P-O/P:3.75KVac									
Safety & EMC	Isolation Resistance	I/P-O/P:100M Ohms/500Vdc/25℃/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 2kV)									
Others	MTBF	300,000 Hours, measured at full load, 25℃ ambient temperature									
	Lifetime	50,000 Hours at Tc 75℃ (Refer to"Life Time VS. Tcase (Ref.)")									
	Dimension	80 x 78x 27 (mm) (LxWxH)									
Others	Weight (Typ.)	0.18kg									

Note.1: Measured at full load and steady-state temperature in 25℃ ambient; Note. 2: Derating may be needed under low input voltage, Please refer to 'Derating Curve' ; Note. 3: All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ ambient temperature;

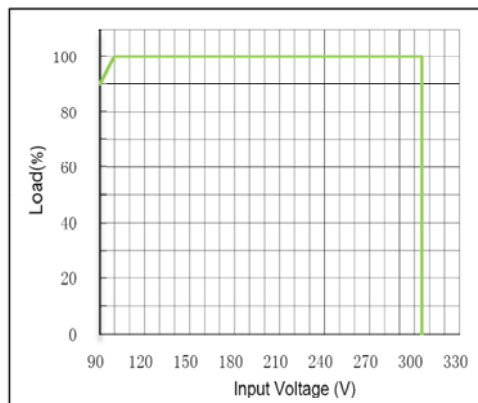
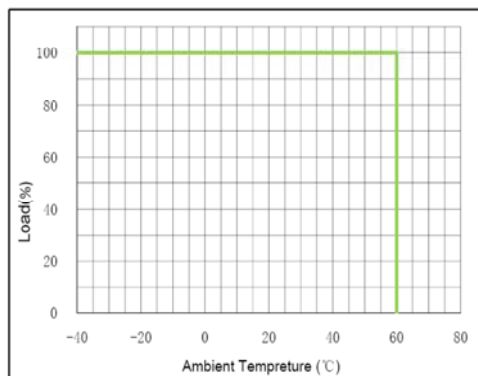
subject to change without notice

Page 1 of 4

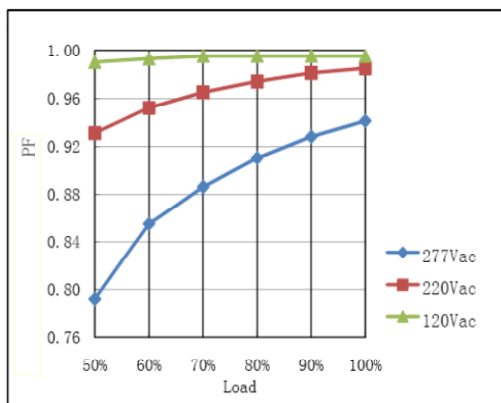
SHANGHAI MOONS' AUTOMATION CONTROL CO., LTD.

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

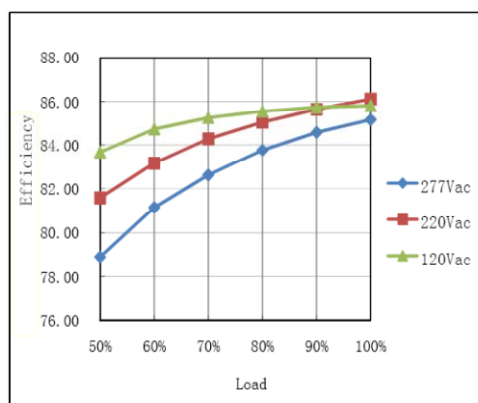
Derating Curve



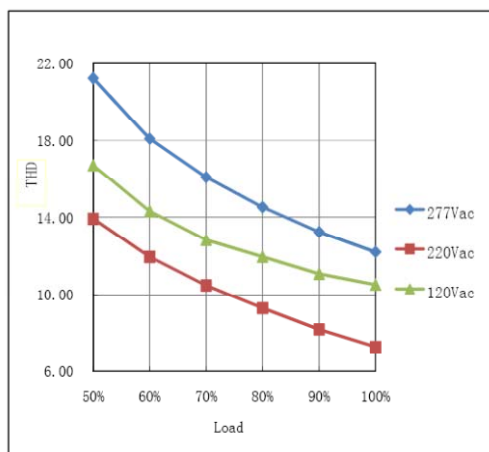
Power Factor VS. Load Curve(Model:700mA)



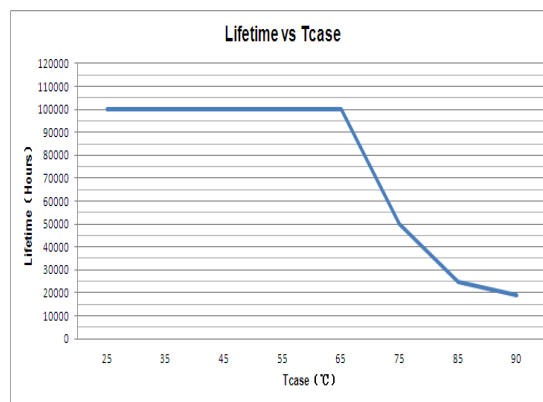
Efficiency VS. Load Curve(Model:700mA)



THD Curve(Model:700mA)



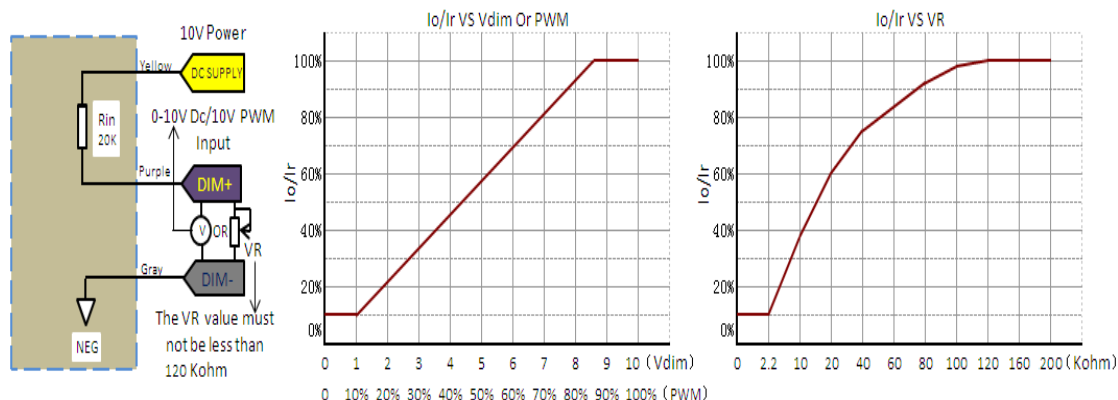
Life Time VS. Tcase (Ref.)



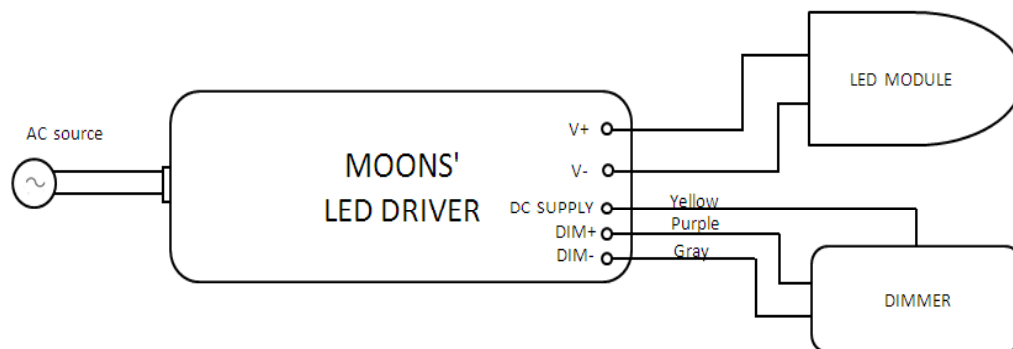
Dimming function description:

- 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:

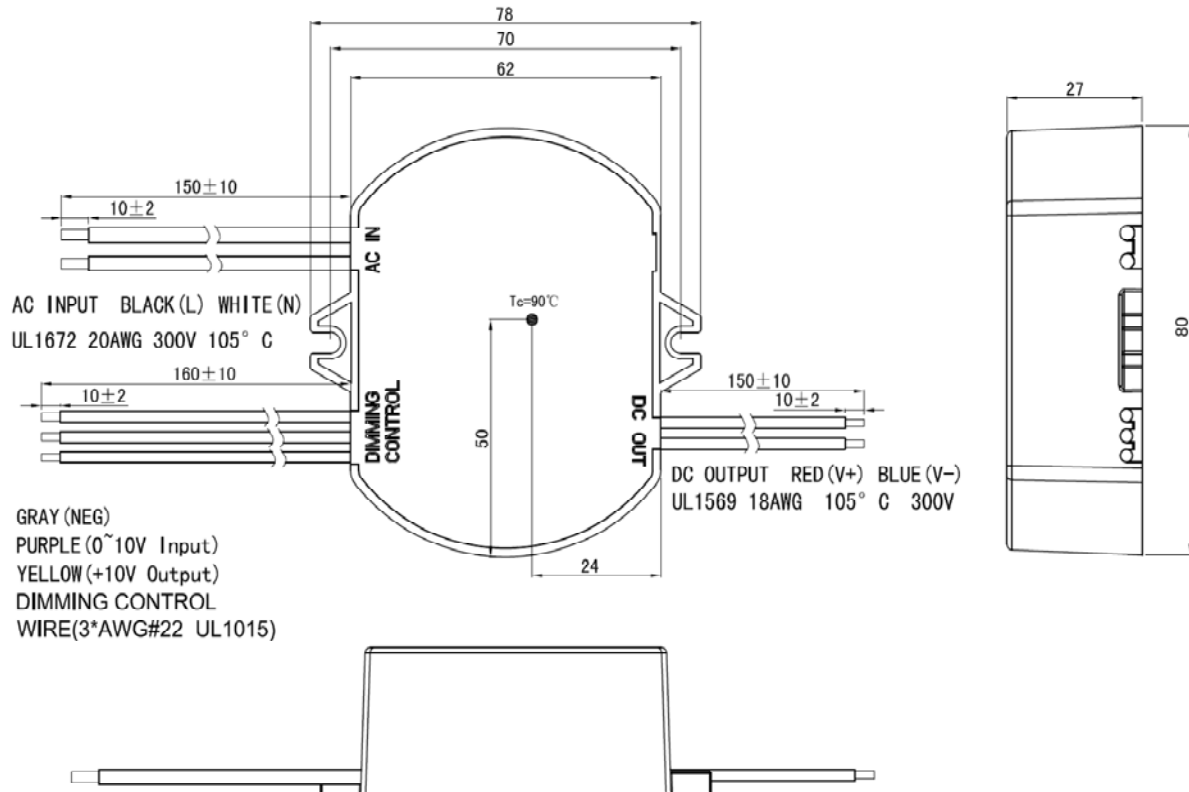
- 1.Io is actual output current with dimming control signal and Ir is rated output current.
- 2.The dimming control signal can be operated output current from 100% to 10% Ir,output voltage must be maintained above 50% of the rated output voltage.
- 3.Do not connect dimming wire to the output;otherwise,the 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	

■ 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.