

LED DRIVER SPECIFICATIONS

Customer's Part Number:

MOONS' Part Number:

Model:

PU025H040AQ1

P/N:

CUSTOMER'S APPROVAL STAMP

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Please sign back after your approval. The specifications will come into force when we receive purchase order.

DWG	CHK	STANDARD	APPD

Rev.	Date	Contents	ECO NO.	DWG	CHK	APPR
A0	2025/3/3	First Release		YangZhi	qinfeng zhuang	Bilin Tu

■ **Features**

- Input voltage: 90-305VAC
- Built-in active PFC function: 0.99 Typ.
- Low THD: 15% Typ.
- Efficiency: 87% Typ.
- IP66 design for indoor or outdoor installations
- High surge immunity
- Compliance to worldwide safety regulations for lighting

■ **Specification**

PU025H040AQ1

Input	Efficiency(120Vac) ^{Note.1}	85%(Typ.) with full load
	Efficiency(220Vac) ^{Note.1}	87%(Typ.) with full load
	Voltage Range (V) ^{Note.2}	90 ~ 305Vac, OR 127~ 300Vdc
	Voltage Rated (V) ^{Note.2}	100-277Vac
	Frequency Range (Hz)	47~63
	Power Factor	0.99 (Typ.)with 80% load,at 120Vac
		0.93(Typ.) with 80% load,at 220Vac
		>0.9 with 80% load, at 100~240Vac
	THD	15% (Typ.), at 220Vac input, with 80%~100% load conditions
		<20% with 80% load, at 100~240Vac
Output	AC Current(Max)	0.26A at 100VAC input, 0.12A at 230VAC
	Inrush Current(Max.)	30A 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
	Output Voltage range (V)	25-50
	Rated Current(mA)	400
	Rated Power (W)	20
	Ripple Current	<10%((PK-AV) /AV) full load)
	Current Tolerance	8%
	Line Regulation	5%
	Load Regulation	5%
Protection	Turn on delay Time	<1.2s, at 120Vac; <0.75s, at 230Vac
	Over Voltage(V)	<60
	Over Current	-
	Short Circuit	Protection type: Hiccup mode. recovers automatically after short is removed.
Environment	Operating Temp.	-40~+60℃(Refer to 'Derating Curve' , -60℃ can start up within 40 seconds,the output current should be stablized within 5 minutes)
	Tc	90℃ max
	Operating Humidity	20~95% RH non-condensing
	Storage Temp., Humidity	-60~+85℃, 10-95%RH
	Temp. Coefficient	0.03%/℃ (0~50℃)
	Vibration	10-500Hz,5G 12min/cycle, period for 72min each along X、Y、Z axes
Safety & EMC	Safety Standard	UL8750, IEC61347-1,IEC61347-2-13
	Withstand Voltage	I/P-O/P:3.75KVAC
	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 Immunity Test:Level 4(Line to Neutral: ±2kV)
Others	MTBF	300,000 Hours,measured at full load,25℃ ambient temperature
	Lifetime	-
	Dimension	80 x 78 x 27 (mm) (LxWxH)
	Weight(Typ.)	0.22 kg

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

subject to change without notice

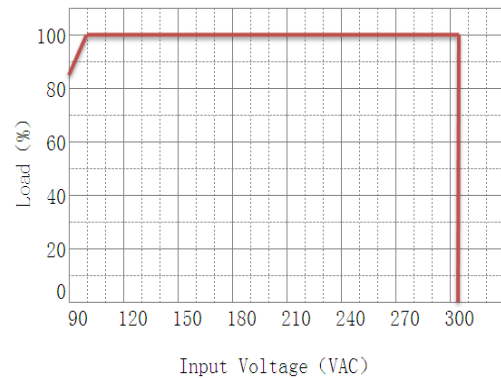
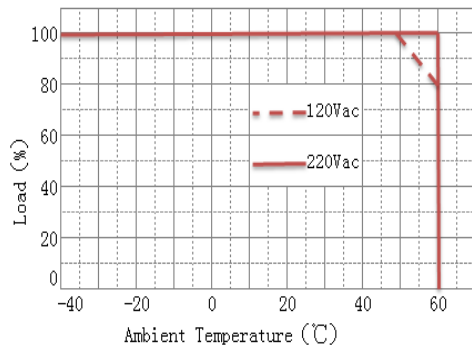
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MOONS' Electric (Taicang) Co., Ltd.

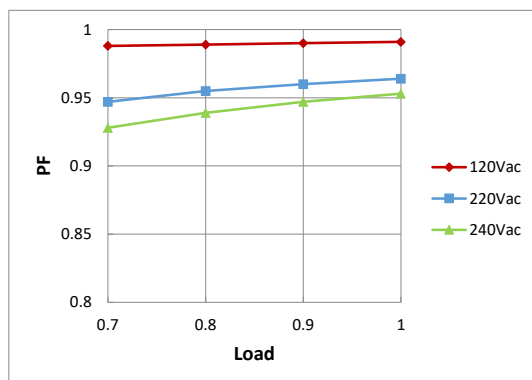
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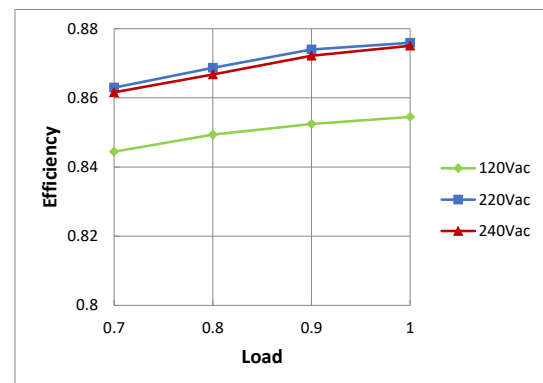
Derating Curve



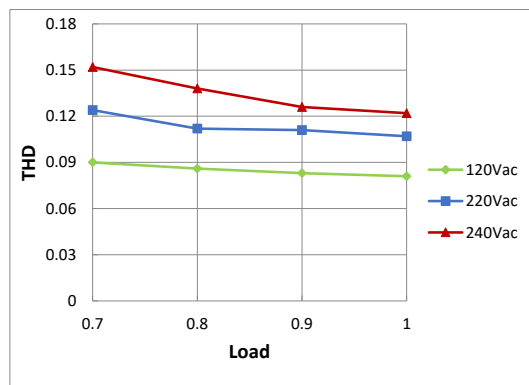
Power Factor VS. Load Curve



Efficiency VS. Load Curve

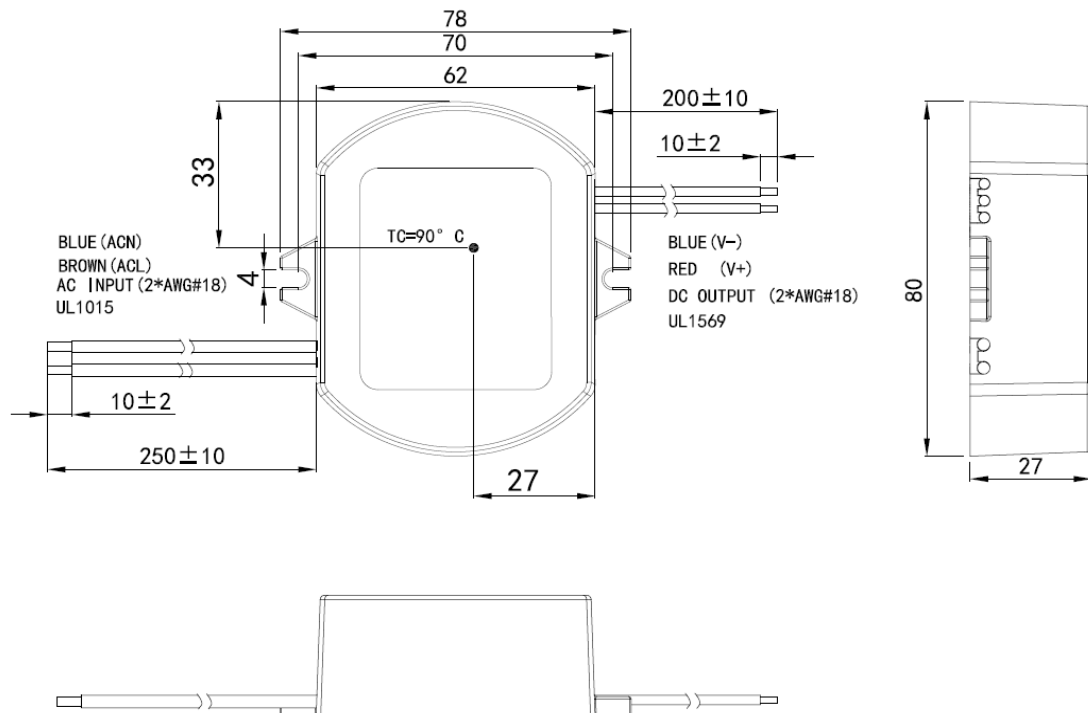


THD Curve

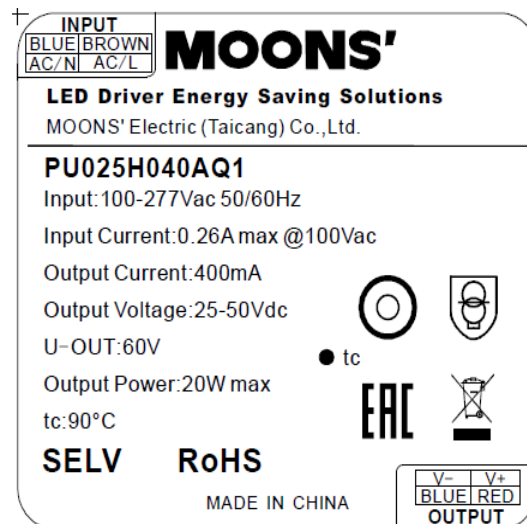


■ Mechanical Specification

Dimensions (Unit: mm)



■ Nameplate



RoHS Compliance:

Our products comply with the European Directive 2011/65/EU, calling for the elimination of lead and other hazardous substances from electronic products.