

LED DRIVER SPECIFICATIONS

Customer's Part Number: _____

MOONS' Part Number: _____

Model: MU030PxxxAQ_0-10V

P/N: _____

CUSTOMER'S APPROVAL STAMP

Note:

1. 0-10V dimming is analogs signal.
2. Dimming technology: The dimming is implemented by controlling the amplitude of the output current of the driver.

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

DWG	CHK	STANDARD	APPD.



- **Features**
- ◆ Input voltage: 108-305Vac
 - ◆ Built-in active PFC function 0.95 Typ.
 - ◆ High efficiency: up to 86% Typ.
 - ◆ Built-in Lightning protection
 - ◆ Constant Current / 0-10V Dimming
 - ◆ Protection: OVP, SCP,OTP
 - ◆ Full potting: material Asphalt



■ **Specification**

Model (MU030PxxxAQ_0-10V)		035	045	050	065	070	085	100
Input	Efficiency(230Vac)	80.0%	80.0%	81.0%	83.0%	85.0%	85.0%	85.0%
	Voltage Range (Vac)	108 ~ 305						
	Rated Input Voltage (Vac)	120-277						
	Frequency Range (Hz)	47~63						
	Power Factor	0.95 (Typical) at 230Vac						
	THD	<20% with 80%~100% load, at 230Vac						
	AC Current(Typ.)	0.2A MAX at 230VAC						
	Inrush Current(Typ.)	25A 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)						
Output	Leakage Current(max.)	0.75mA at 277Vac 50Hz input						
	Output Voltage Range (V)	24-43	24-43	24-43	24-43	24-43	20-35	20-31.5
	Rated Current(mA)	350	450	500	650	700	850	1000
	Maximum Power (W)	15	19	21	28	30	30	32
	Ripple Current((PK-AV) /AV)	5% max. (peak-to-average value) at 100% Iout						
	Current Tolerance ^{Note.1}	±5%						
Dimming Control	Setup, Rise Time	0.5s(typ.), measured at 230Vac input						
	0-10V/DMI+ Voltage	Absolute maximum voltage -20Vmin~20Vmax						
	0-10V/DMI+ Short Current	<2mA						
	DIMMING FUNCTION	0-10V/10%lo~100%lo ref. Dimming curve						
Protection	Over Voltage(V)	60	60	60	60	60	60	60
	Short Circuit	Hiccup mode. The power supply shall be self-recovery when the fault is removed.						
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Environment	Operating Temp.	-30~+50℃ (Refer to 'Derating Curve')						
	Tcase	85℃ max						
	Operating Humidity	20~95%RH, non-condensing						
	Storage Temp., Humidity	-40~+85℃, 10-95%RH						
	Temp. Coefficient	0.03%/℃ (0~50℃)						
Safety & EMC	Vibration	10~500Hz, 5G 12min/cycle, period for 72min each along X、 Y、 Z axes						
	Safety Standard	EN61347-1, EN61347-2-13						
	Withstand Voltage	I/P-O/P:3.0KVAC I/P-FG(Case):1.5KV O/P-FG(Case):0.5KV						
	Isolation Resistance	I/P-O/P ,I/P-FG,O/P-FG:100M Ohms/500VDC/25℃/70%RH						
	EMC Emission	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-FG(Case) 2KV, L-N 1KV) Power supply shall comply with IEEE C.62.41-1991,Class A operation.The line transient shall consist of seven strikes of a 100 kHz ring wave,2.5kV level for both common mode and differential mode.						
	MTBF	200,000 hours, measured at full load, 25℃ ambient temperature MIL-HDBK-217F(25℃)						
	Lifetime	>=100 KHrs lifetime (continous) at Tcase = 65 ℃ >=50 KHrs lifetime (continous) at Tcase = 75 ℃						
	Dimension	118.5*33.6*30 mm (LxWxH)						
	Weight	250 g						

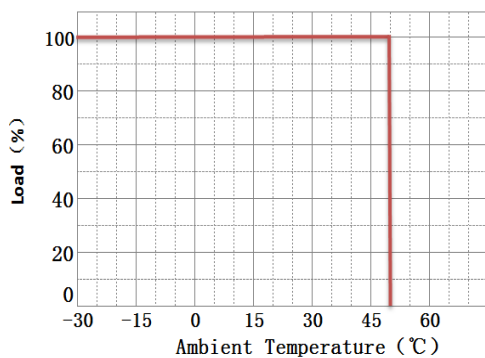
Note.1: At Rated Current ,Includes set up tolerance, line regulation and load regulation.

Version:A1 Page 2 of 4

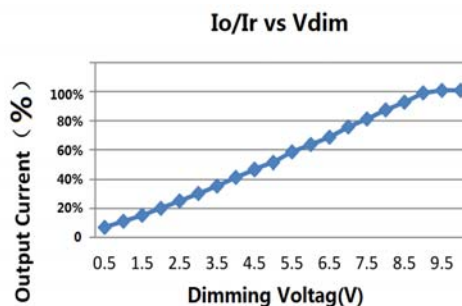
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■ Curve

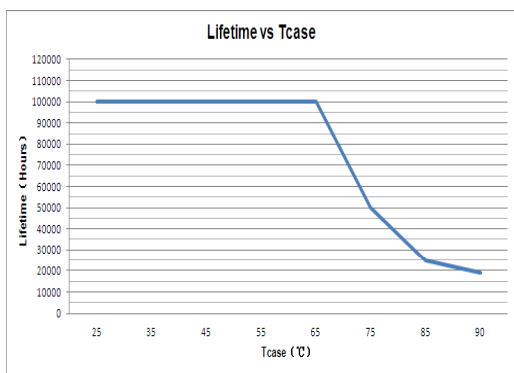
Derating Curve



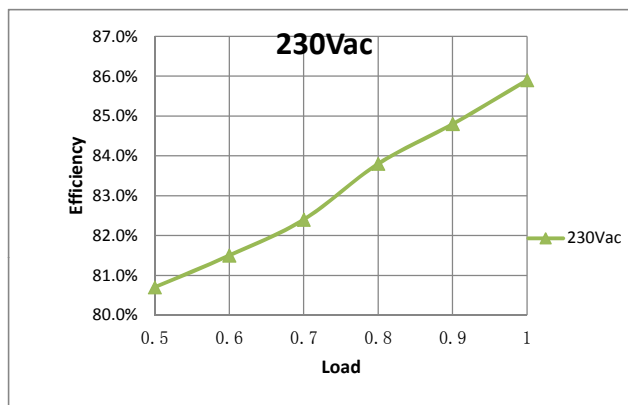
Dimming Curve



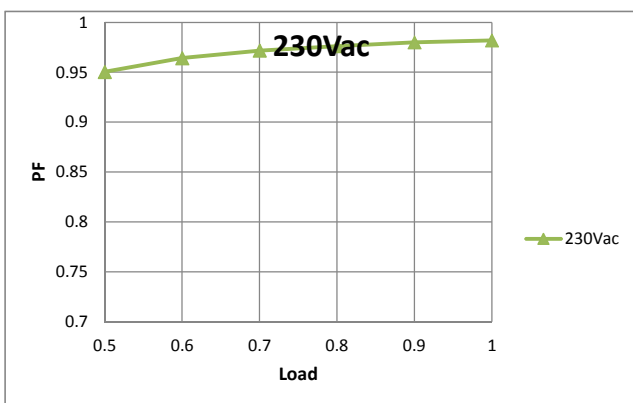
Life Time VS. Tcase (Ref.)



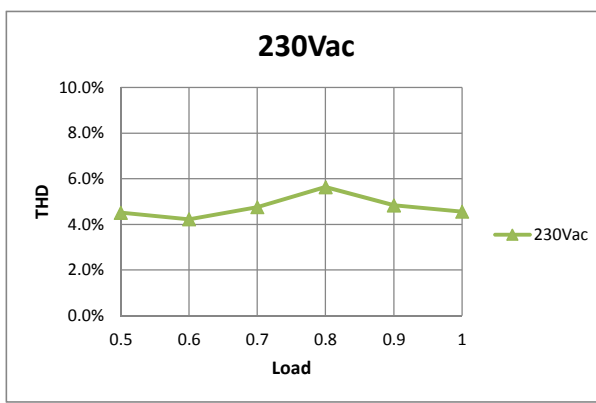
Efficiency VS. Load Curve (MU030P100AQ_0-10V)



Power Factor VS. Load Curve

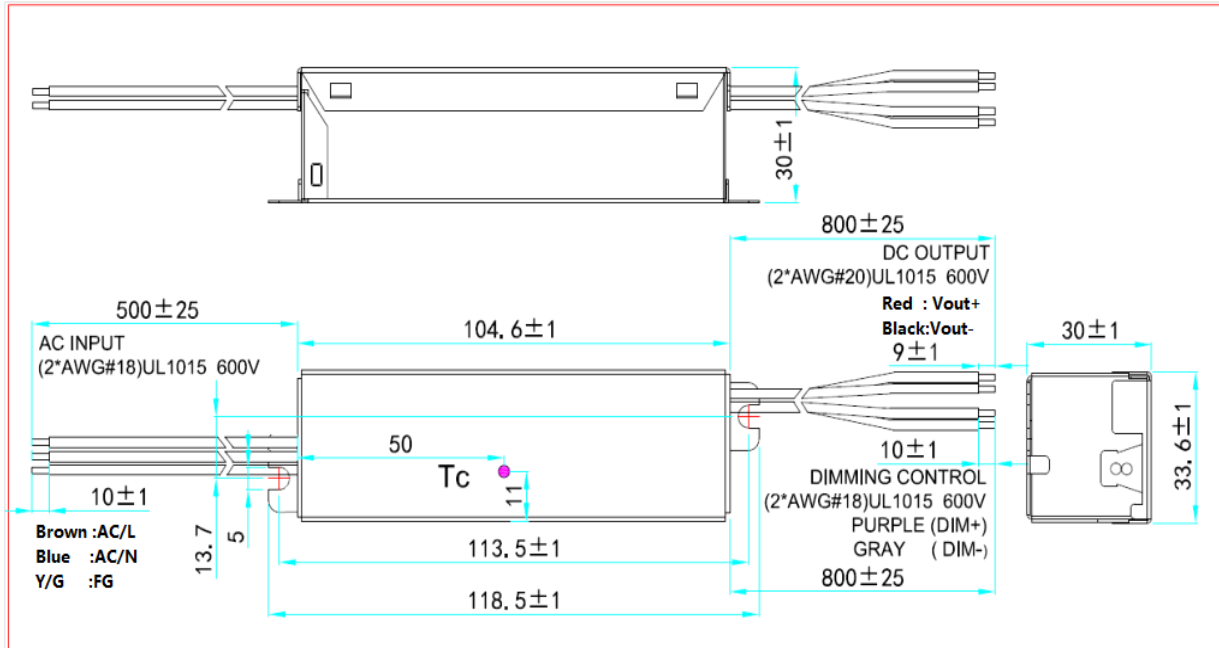


THD Curve



■ Mechanical Specification

Dimensions(Unit:mm)



RoHS Compliance:

Our products comply with the European Directive of LVD (2014/35/EU), WEEE (2012/19/EU) and ROHS (2011/65/EU and (EU) 2015/863), calling for the elimination of lead and other hazardous substances from electronic products.