

KLPA250JV SERIES
250W Single Output Programmable LED Driver


- NFC technology programmable without driver power on
- Constant power programmable, CC/CV hybrid output
- High efficiency (Max 94%), active power factor correction
- Ultra low THD at light load
- 0~10V/ PWM/ Timer,
- Dim to off option
- 12V/200mA AUX Output
- Programmable timer
- UL recognized with HL/ TL/Surge (Diff:6kV, Common:10kV)

5 Year Warranty

 Approvals: **IP67**
ELECTRICAL SPECIFICATIONS

Part Number	Output Voltage Range W without Dimming	Programmable Constant Voltage Region	Programmable Constant Voltage Region	Maximum Output Power	Input Current	Power Factor	Efficiency		Line Regulation	Load Regulation	Ripple & Noise
							110V	220V			
KLPA250JV-S024036P	24-36 V	24-36 V	4.1-10.4A	250W	2.4A (115VAC) 1.2A (230VAC)	0.99 (115VAC) 0.97 (230VAC)	90%	92%	±0.3%	±1%	3.0% Vo
KLPA250JV-S036048P	36-48 V	36-48 V	2.7-6.9A	250W			90%	92%			
KLPA250JV-S048080P	48-80 V	48-80 V	2.0-5.2 A	250W			91%	93%			
KLPA250JV-S080140P	80-140 V	80-140 V	1.2-3.2 A	250W			92%	94%			
KLPA250JV-S140233P	140-233 V	140-233 V	1.0-1.78 A	250W			91%	93%			

PROTECTIONS & CONDITIONS

PROTECTION	OVER CURRENT	95~108% Protection type: Constant current limiting, recovers automatically after fault condition is removed
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed
	OVER VOLTAGE	1.3Vo, Protection type: Hiccup mode, recovers automatically after fault condition is removed
	OVER TEMP.	Hiccup mode, recovers automatically after fault condition is removed
ENVIRONMENT	WORKING TEMP.	-35 ~ +70°C (Refer to "Derating Curve")
	WORKING HUMIDITY	10 ~ 100% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 5 ~ 100% RH
	TEMP. COEFFICIENT	±0.05%/°C (0~50°C)
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes

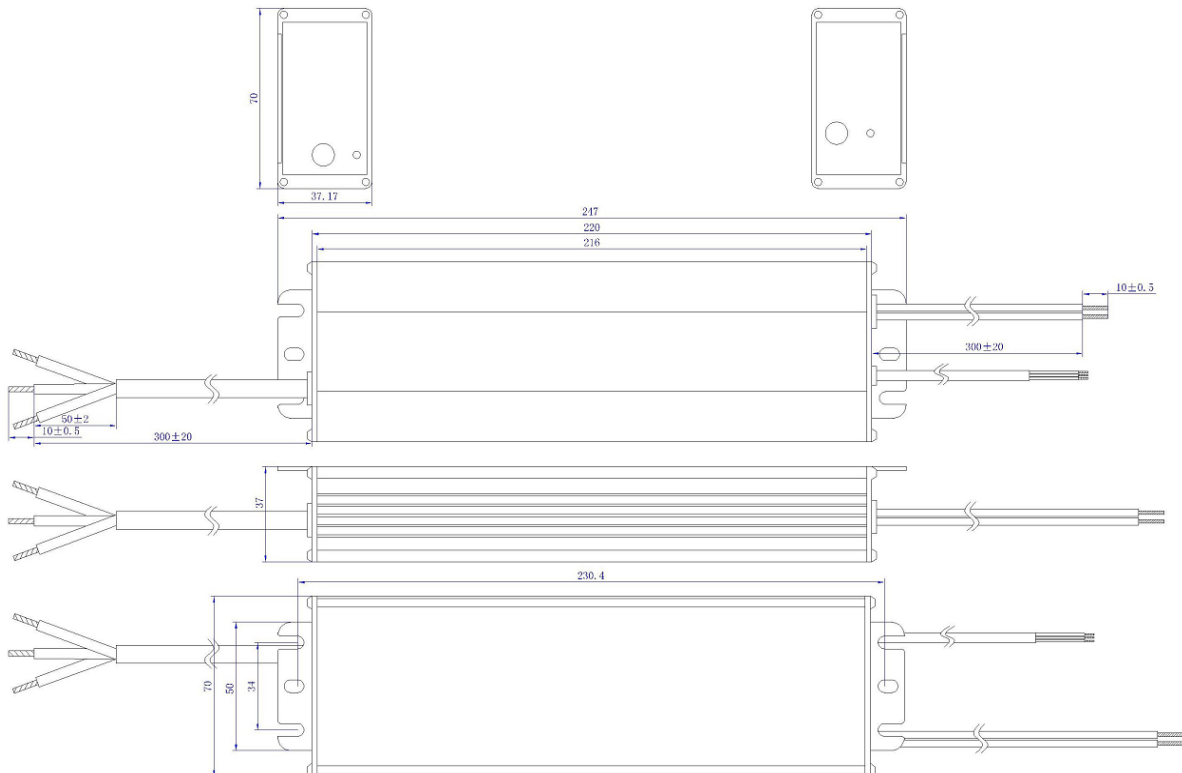
GENERAL INFORMATION

LED Driver Type	Constant Current / Constant Voltage
Maximum Wattage	160 W
Input Voltage	90 ~ 305 VAC
Input Frequency	47 ~ 63 Hz
Total Harmonic Distortion	<20%
WARRANTY	5 year limited warranty
Inrush Current	65A at 230VAC cold start +25°C
MTBF	>200kHrs to MIL-HDBK-217 at 25°C, GB
Protection	Over Load / Over Temperature / Short Circuit Protection
Weight	TBD
Packaging	25pcs/carton

CERTIFICATES & COMPLIANCE

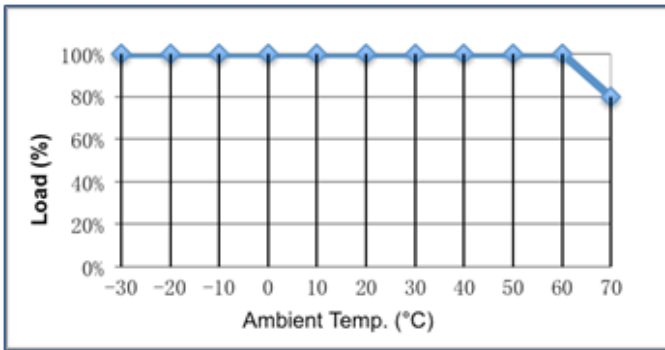
SAFETY & EMC	SATETY STANDARDS	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13
	WITHSTAND VOLTAGE	I/P – O/P: 3.75kVAC
	ISOLTATION RESISTANCE	I/P – O/P: 100M Ohms / 500VDC / 25°C / 70% RH
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C ($\geq 60\%$ load); EN61000-3-3
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024

MECHANICAL SPECIFICATION

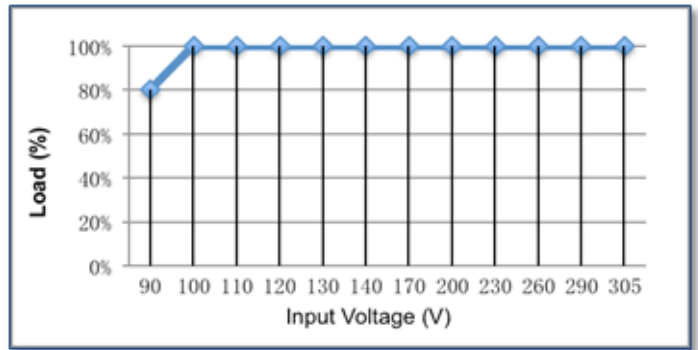


CHARACTERISTIC CHARTS

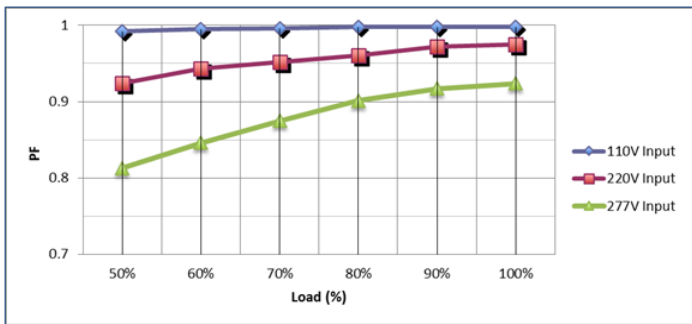
Derating Characteristics



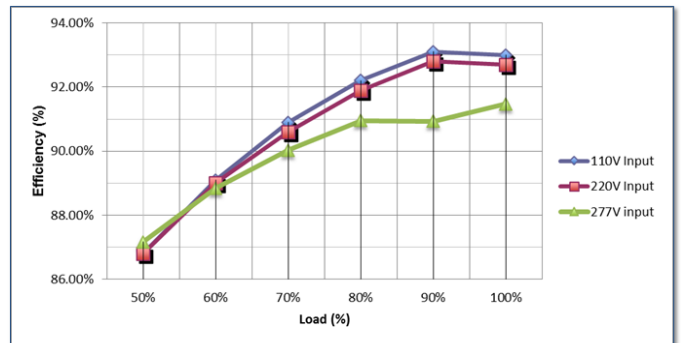
Static Characteristics



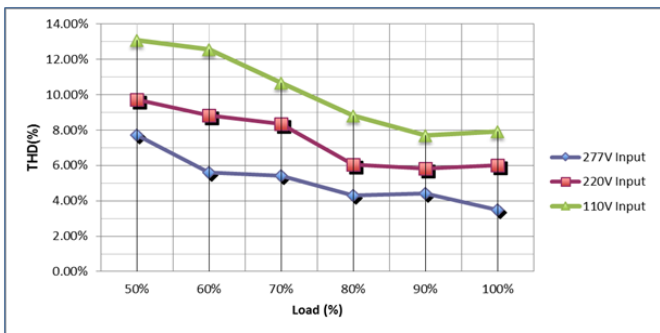
KLPA250JV-S036048P / PF vs Output



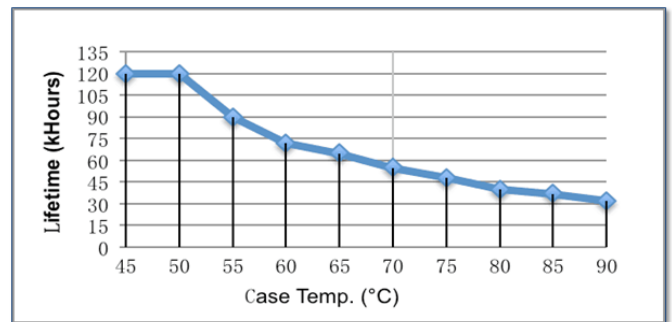
KLPA250JV-S036048P / Efficiency vs Output



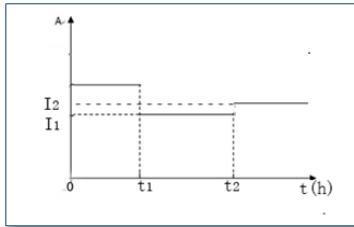
KLPA250JV-S036048P / THD vs Output



Lifetime vs Case Temp.



TIMER DIMMING

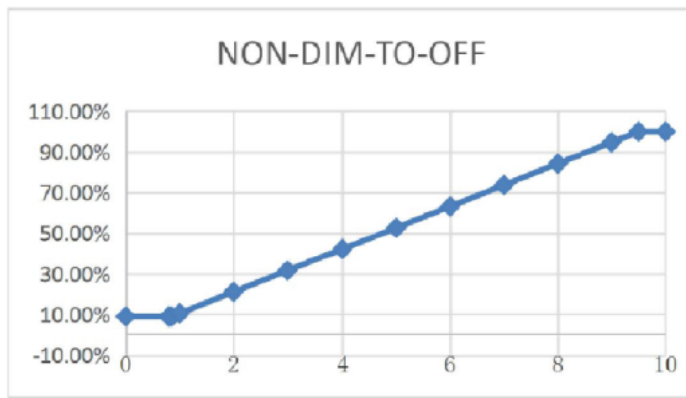


NOTE:

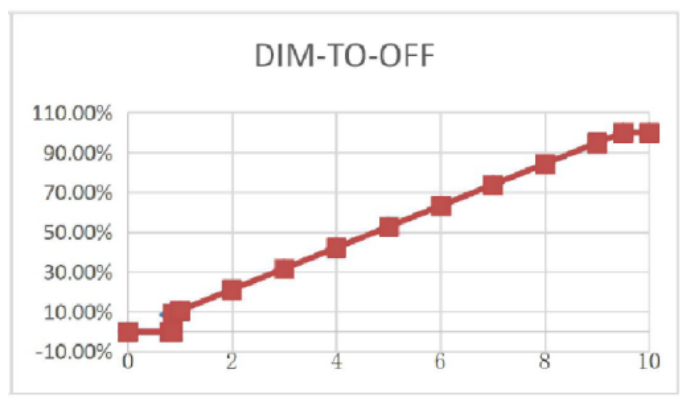
1. The dimming time can be programmed by the NFC controller.
2. The time of t1 and t2 can be set by the NFC programmer. (0.5h step)
3. The value of I1 and I2 can be set by the NFC programmer.
4. Current change from I1 to I2 need a few minutes.

0-10V ANALOG & PWM DIMMING

Io/Ir vs Vdim



Io/Ir vs Vdim



GND	Grey
Dimming wire 0-10V&PWM	Purple
10V AUX	Yellow
Input Dimming Voltage	0-10V
DIM+ Source Current	0-1mA
12V AUX Source Current	200mA
PWM Frequency Range	0.5 ~ 3 kHz
PWM high level	10V

NOTE:

1. Io is actual output current and Ir is rated current without dimming control.
2. For the driver to operate properly, the load voltage must be in the working voltage range.
3. We have DIM-TO-OFF option can be programmed by the programmer.
4. Maximum input voltage at dimming wire is 12V.
5. AUX wire is only for source, can't connect to other voltage source.

NFC CONTROLLER

NOTE:

1. The NFC controller can modulate the output current and output voltage.
2. The NFC dimming is a way of non-contact process, therefore much safer compared to traditional ones.
3. Power devices can be programmed without power on.

