KLPA40JU SERIES

40W Single Output Programmable LED Driver

- NFC technology programmable without driver power on
- Constant power programmable design, constant current output
- High efficiency (up to 91%), active power factor correction
- Ultra low THD at light load
- Programmable timer 0~10V/ PWM/ Timer, Dim to off option
- 10V/20mA AUX Output
- UL recognized with HL/ TL/Surge(Diff:4kV, Common:4kV)
- UL8750 / EMC: EN55015, EN61000-4-2,3,4,5,6,8,11 / EN61000-3-2 Class C

5 Year Warranty

Approvals: c UL us CE IP67 RoHS2

ELECTRICAL SPECIFICATIONS

Part Number	Output Voltage Range Without Dimming	PROGRAMMABLE CONSTANT CURRENT REGION	Maximum Output Power	Input Current	Power Factor	Efficiency 110v	Efficiency 220v	Line Regulation	Load Regulation	Ripple & Noise
KLPA40JU-S024040P	24-40 V	0.67-1.67 A	40W	0.6A (115VAC) 0.3A (230VAC)	0.99 (115VAC) 0.95 (230VAC)	88%	89%	±5%	±3%	2.0% Vo
KLPA40JU-S040068P	40-68 V	0.4-1 A	40W			89%	90%			
KLPA40JU-S068114P	68-114 V	0.24-0.59 A	40W			90%	91%			

PROTECTIONS & CONDITIONS

PROTECTION	OVER CURRENT	95~108%
		Protection type: Constant current limiting, recovers automatically after fault condition is removed
	SHORT CURRENT	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℃ (Refer to "Derating Curve")
	WORKING HUMIDITY	10 ~ 100% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 5 ~ 100% RH
	TEMP. COEFFICIENT	±0.05%℃ (0~50℃)
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
	Max T-case TEMP	89℃

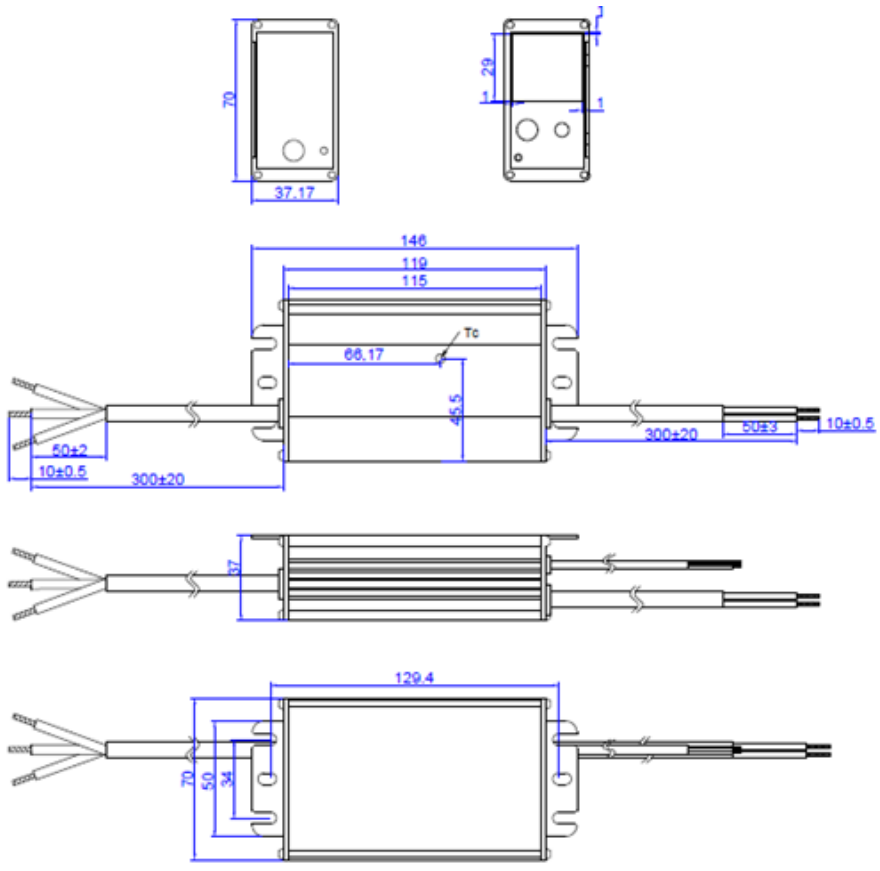
GENERAL INFORMATION

LED Driver Type	Constant current
Maximum Wattage	40 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℃
MTBF	＞200kHrs to MIL-HDBK-217 at25℃,GB
Protection	Overload/Overtemperature/Short circuit protection
Weight	518.2g
Packaging	25pcs/carton

CERTIFICATES & COMPLIANCE

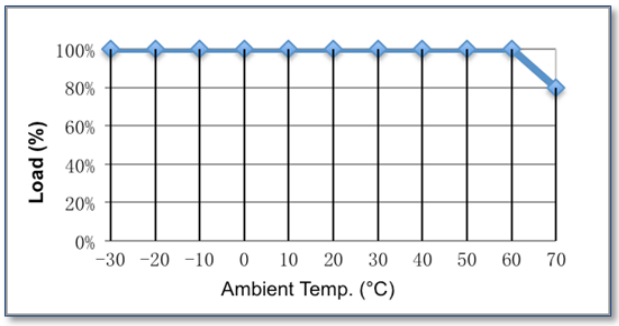
SAFETY & EMC	SATETY STANDARDS	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13
	WITHSTAND VOLTAGE	I/P – O/P: 3.75kVAC
	ISOLTATION RESISTANCE	I/P – O/P: 100M Ohms / 500VDC /25℃ / 70% RH
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3
	EMC IMMUNITY	Compliance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

MECHANICAL SPECIFICATION

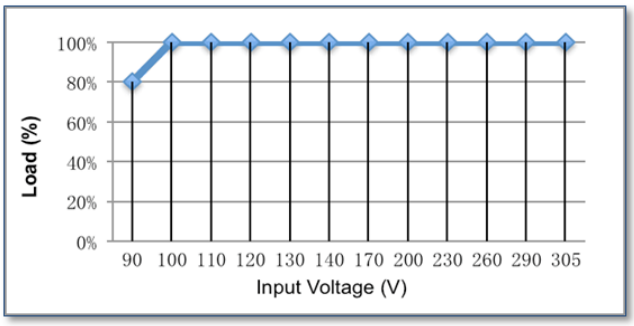


CHARACTERISTIC CHARTS

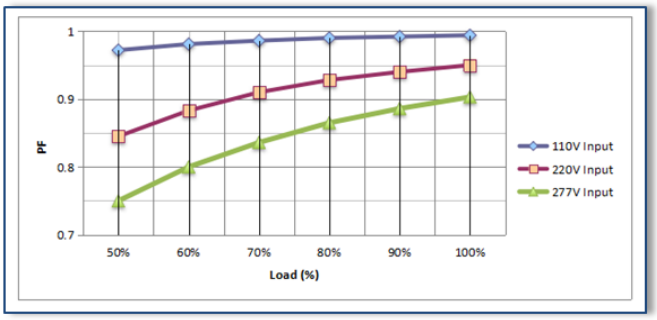
Derating Characteristics



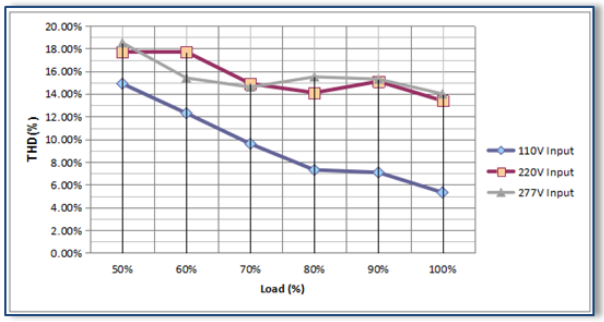
Static Characteristics



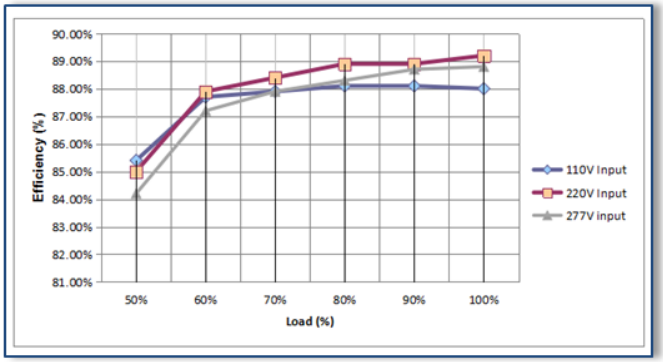
KLPA40JU-S024040P / PF vs Output



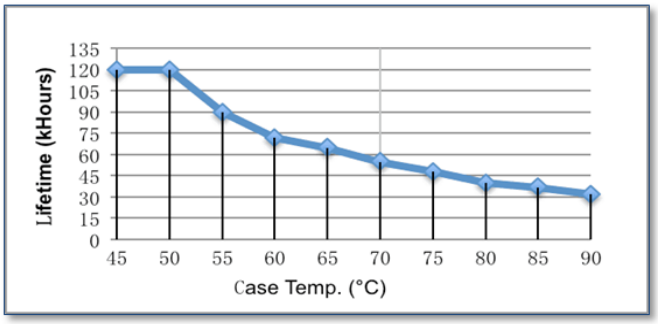
KLPA40JU-S024040P / THD vs Output



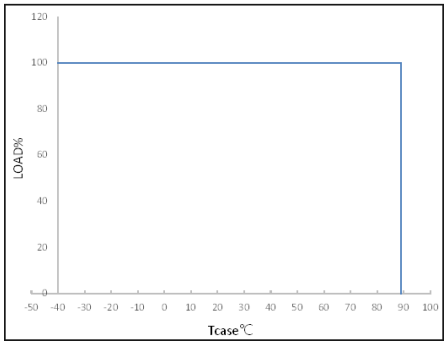
KLPA40JU-S024040P / Efficiency vs Output



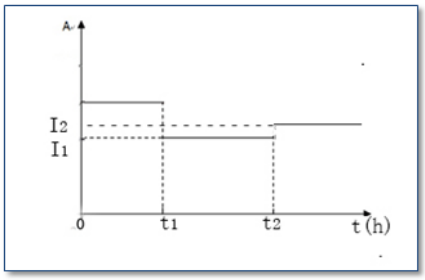
KLPA40JU / Lifetime vs Case Temp



KLPA40JU / LOAD% vs TC



TIMER DIMMING

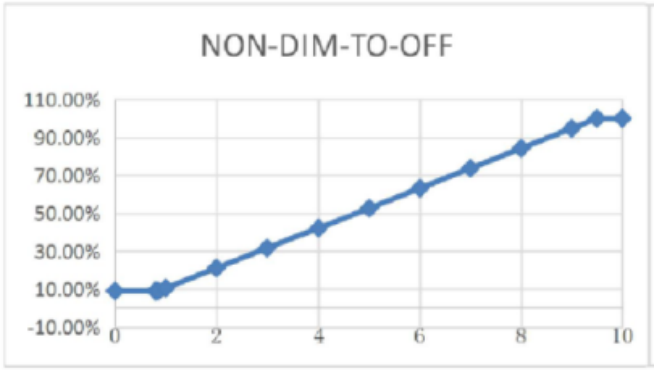


NOTE:

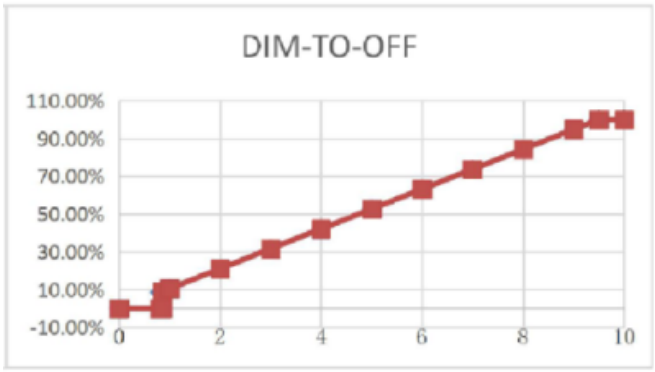
1. The dimming time can be programmed by the NFC controller.
2. The time of t1 and t2 can be set by the NFC programmer. (0.5h step)
3. The value of I1 and I2 can be set by the NFC programmer.
4. Current change from I1 to I2 need a few minutes.

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
10V AUX Source Current	20mA
PWM Frenquency Range	1 ~ 10 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. 1.The NFC controller can program the output current, voltage and timer delays.
2. 2.The NFC programming is a non-contact process, therefore much safer compared to traditional programming methods.
3. 3. Power devices can be programmed without AC power applied to the driver.