

ALCV060 LED DRIVER SERIES

IP20 CONSTANT VOLTAGE LED DRIVER

ALCV060-xxx

FEATURES

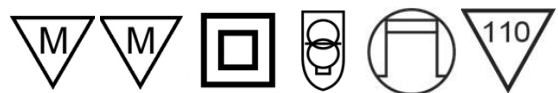
- Universal AC Input Range 90 ~ 264VAC
- Active PFC design
- High Efficiency up to 89 %
- Fully Insulated Plastic Case
- Meet application for ErP (EU) 2019/2020
- No-load power consumption < 0.5W at 230VAC
- Set up time < 0.5s at 230VAC
- Withstand 300VAC Surge Input for 5 Seconds
- Protections: OVP / OCP / SCP / OTP

APPLICATION

- Can be used with LED Strips (aLED KIDEFLEX)



SELV CE



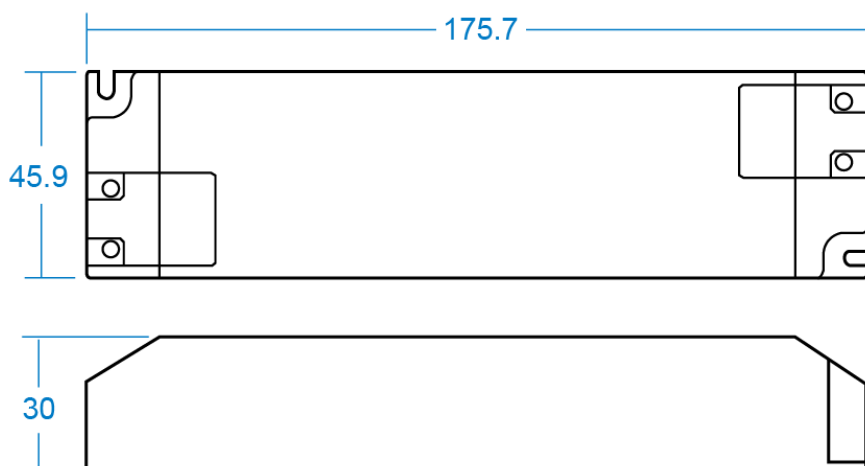
Technical Data

Product Code		ALCV060-012	ALCV060-024
Output	DC Voltage Range	12V	24V
	Rated Current	0~5A	0~2.5A
	Rated Max. Power	60W	60W
	Voltage Tolerance	± 5%	± 5%
	Ripple & Noise (Max.) note.2	200mV	200mV
	Efficiency at 230VAC (Typ.)	86.5%	89%
	Set up Time (Max)	<0.5s at 230VAC, full load	
Input	Rated Voltage	100 - 240VAC	
	Voltage Range	90 - 264VAC	
	Frequency Range	47 Hz ~ 63 Hz	
	AC Current (Max.)	0.65A at 115VAC / 0.35A at 230VAC	
	Inrush Current (Max.)	Cold Start 45A (Td=330us measured at 50% Ipeak) at 230VAC	
	Leakage Current	<1mA at 240VAC	
	Total Harmonic Distortion	THD < 15% at 230VAC, full load	
	No Load Consumption	< 0.5W at 230VAC (0.37W Typ.)	
	Max. Number of PSUs on Circuit Breaker	B type : 5units (10A) / 8 units (16A) / 13 units (25A), C type : 8 units (10A) / 14 units (16A) / 22 units (25A), D type : 28 units (16A) / 44 units (25A) at 230VAC	
Protections	Over Current	5.5A~7.5A	2.75A~3.75A
		Type: Hiccup mode (Auto recover after fault condition disappeared).	
	Short Circuit	Type: Hiccup mode (Auto recover after fault condition disappeared).	
	Over Temperature	Tcase: 95°C ± 10°C	
		Type: Shut down output, recovers automatically after temperature goes down.	
Environment	Over Voltage	13.2V~18V	26.4V~36V
		Type: Hiccup mode (Auto recover after fault condition disappeared).	
	Operation Temp.	-20°C ~50°C (Refer to output load derating curve).	
	Operation Humidity	20% ~ 90% RH non-condensing.	
	Storage Temp & Humidity	-40 ~ +80°C ,10% ~ 90% RH	
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.	

NOTES

1. All specifications not specially mentioned are measured at 230VAC full load and 25°C ambient temperature.
2. Ripple & Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf & 47uf parallel capacitor.
3. Voltage Tolerance: includes line regulation, load regulation and set-up tolerance.
4. The power supply is considered a component which will be installed a final equipment. The final equipment must be reconfirmed that it still meets EMC directives.

Dimensions



Lenght	175.7mm
Width	45.9mm
Height	30mm
Weight	345g

Connection

Input	2P screw terminal block
Output	2P screw terminal block

Safety

Safety Standards	EN61347-1, EN61347-2-13, independent.
Withstand Voltage	I/P-O/P: 3.75KVAC
Isolation Resistance	I/P□O/P :100M ohms / 500V DC at 25°C
EMI Conduction & Radiation	Compliance to EN55015
Harmonic Current	Compliance to EN61000-3-2 Class C(100% load), EN61000-3-3
EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, criteria B

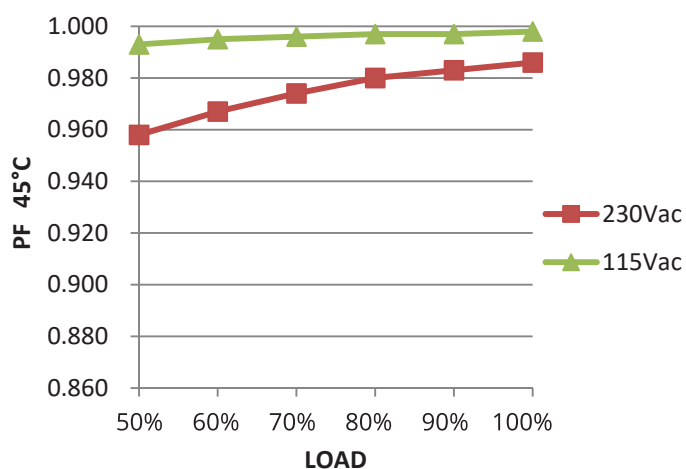
Warranty and Lifetime

Warranty	5 years
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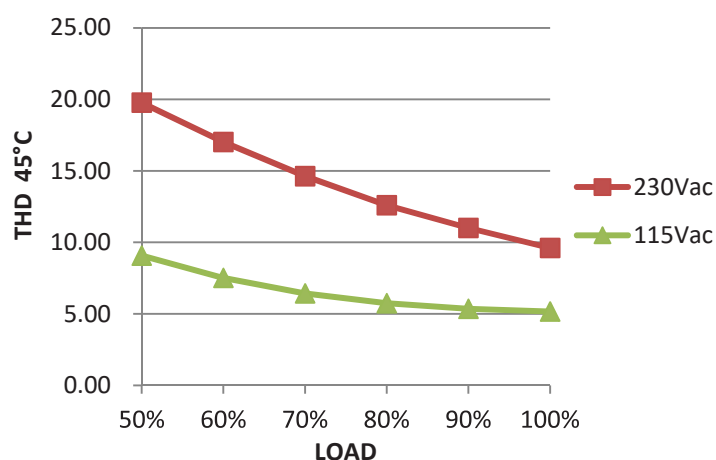
Compatible products

aLED KIDEFLEX LED Strip

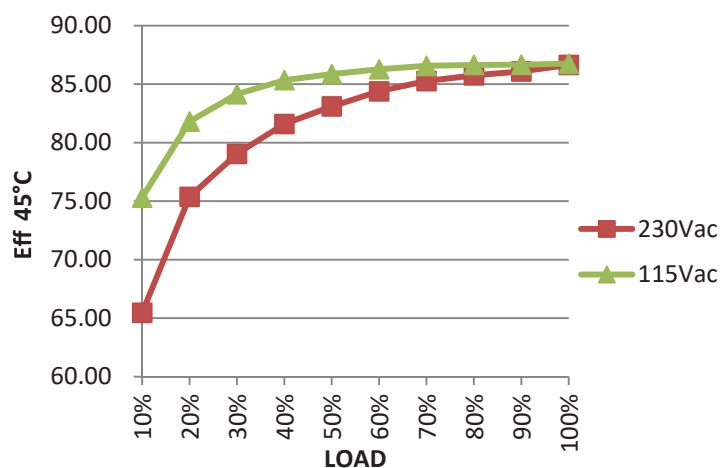
Power Factor (PF) Characteristics



Total Harmonic Distortion (THD)



Power Factor (PF) Characteristics



Derating Curve

