

RoHS 2

Compliant



60W, 100-240 Vac Input, Constant Voltage LED Driver

Features

Power rating: 60W

• Input Voltage: 100-240Vac

• Constant voltage design

• Output Current (0mA-5000mA)

Efficiency to 89%

Protections: SCP, OTP, and OCP

• UL Class II output available

Class P

• Tc = 90°C

IP65

• 5-year warranty

■ Application

• LED luminaries such as high bays, high mast, and street lights

• Dry, Damp, and Wet Locations

■ Model List

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Certification
L3UV-060S012ST	100-240Vac	60W	12V	0	5000mA	85%	UL/cUL/ CE
L3UV-060S024ST	100-240Vac	60W	24V	0	2500mA	89%	UL/cUL/ CE

■ Input Characteristics

Parameter	Min	Тур.	Max	Remarks
Rated AC input range	100Vac		240Vac	
AC input range	90Vac		264Vac	
Input frequency range	47Hz	50/60Hz	63Hz	
Max input current			1.5A	90Vac, 80% load
Max Input Power 12V			75W	120vac, full load
Max Input Power 24V			75W	120vac, full load
Inrush current			230A	cold start
No load power		0.4W	0.5W	220Vac/50Hz, No load

HNPUY

SING-BASE

*Product images are for illustrative purposes only and may vary from actual design.



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■ Output Characteristics

Parameter		Min	Тур.	Max	Remarks
Output current	L3UV-060S012ST		5A		_
range	L3UV-060S024ST		2.5A		
Output voltage	L3UV-060S012ST		12V		
range	L3UV-060S024ST		24V		
Efficiency@220Vac	L3UV-060S012ST	84%	85%		Output 12V/5A
Efficiency@220vac	L3UV-060S024ST	88%	89%		Output 24V/2.5A
No load Voltago	L3UV-060S012ST			12.6V	
No load Voltage	L3UV-060S024ST			25.2V	
Output voltage tolerance		-5%		+5%	
Output voltage ripple (pk-pk)			1%	2%	Full load
Start-up time				0.5S	120Vac
Line regulation		-1%		+1%	Full load
Load regulation		-3%		+3%	
	Overshoot	-5%		+5%	
Transient response	amplitude	-3/0		TJ/0	_ di/dt=1A/μs, 25%-50%-25%
	Recover time			10ms	

■ Other Characteristics

Param	eter	Min	Тур.	Max	Remarks
	OCP	120%lo		150%lo	Hiccup mode
	OVP	110% Vo		150%Vo	The output voltage will be limited at the design range
Protection	ОТР	110°C	115 °C	120 °C	Tc case, recovers automatically after fault condition is removed.
	Short Circuit Protection	Driver will not damage with short circuit power <10W			Hiccup mode
Life Time		≥30,000hrs			80% load
MTBF			200,000hrs		230Vac full load, (MIL-HDBK-217F)
Temperature	Coefficient	-0.03%/°C		+0.03%/°C	Tc: 0°C~90°C
Tc			90°C		
Warranty			5 years		
Net Weight		354g			
Dimen	sion	164.7x42.5x32mm		m	LxWxH
Packaging		0.354kg	/unit; 20pcs,	/carton	

^{*}Note: All the parameters above are tested at 25 °C, unless specified

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■ Environmental Requirements

Parameter	Min	Тур.	Max	Remarks
Operating Temperature	-25°C	25°C	+90°C	
Storage Temperature	-40°C	25°C	+85°C	
Operation Humidity	10%RH		90%RH	
Storage Humidity	5%RH		95%RH	
Altitude	-65m		4,000m	

■ Safety Compliance

Certification		Standard	Status	Remark
UL/cUL		UL8750	٧	
		EN 61347-2-13:2014		
C	Œ	EN61347-	V	
		1:2008+A1:2011+A2:2013		
Ite	em	Standard	Re	mark
Insulation Strength	Input-output	1600Vac/10mA Max/60s	Reinforce	ed insulation
Insulation Resistance	Input-output	≥10 MΩ	Testing Voltage: 500Vdc	
Ground	Resistor	NA		
Leakage	Current	≤0.75mA	24	l0Vac
Item		Criterion	R	emark
Conduction Emission		EN55015:2013+A1:2015	Class B	
Radiation	n Emission	EN55015:2013+A1:2015	Class B	
Surge		IEC/EN61000-4-5	Difference mode 2kV, Criterion A	

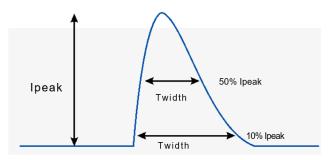
Disclaimer:

Autec Power Systems' (Autec) LED Drivers are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the LED Driver into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.



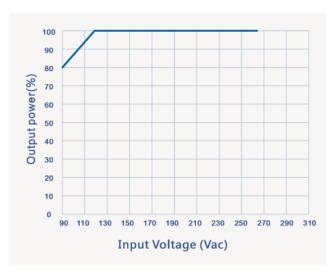
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Inrush Current

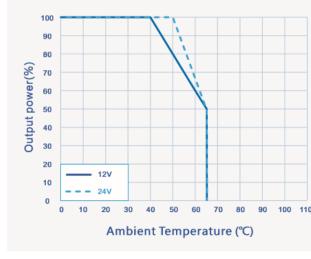


Vin	Ipeak	T(@10% of Ipeak)	T(@50% of Ipeak)
220Vac	230A		0.15mS

Performance Curves Output power Vs. Input Voltage

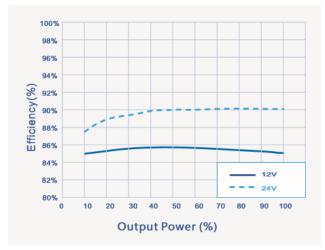


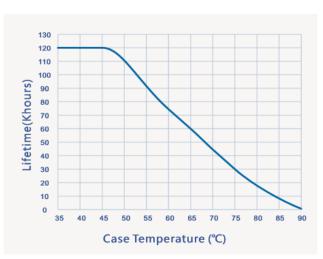
Eifficiency Vs. Output Power



Output power Vs. Ambaient Temperature

Lifetime Vs. Case Temperature





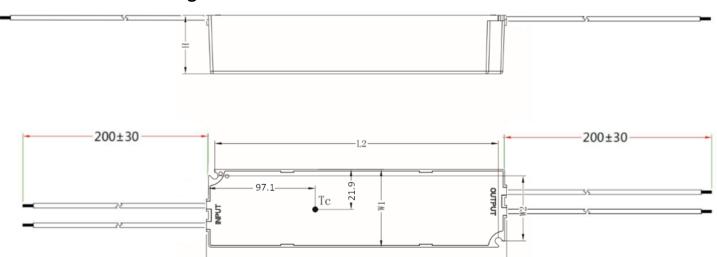
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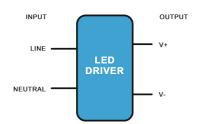
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■ Mechanical Diagram

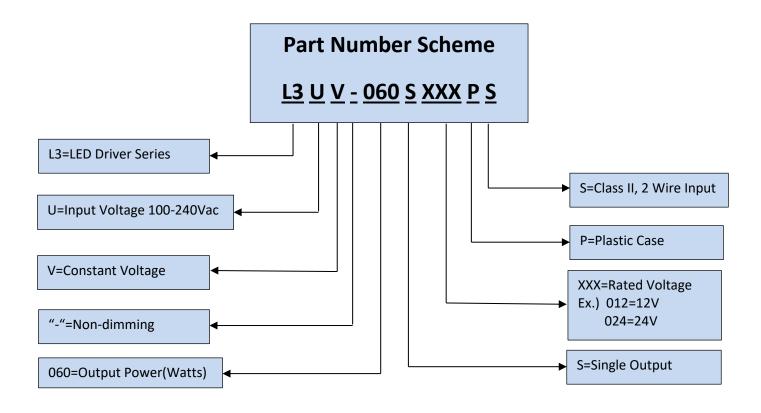




Name Description	Call out	mm(in.)
Case Width	W1	42
Case Height	Н	32
Overall Length	L1	164.7
Mounting Hole Length	L2	154.7
Mounting Hole Width	W2	32

Wire Specifications			
Input	UL 1015 #18AWG 105°C, O.D: 2.6mm, BLACK: L, WHITE: N		
Output	UL 1015 #18AWG 105°C, O.D: 2.6mm, RED: V+, BLACK: V-		





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*Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.