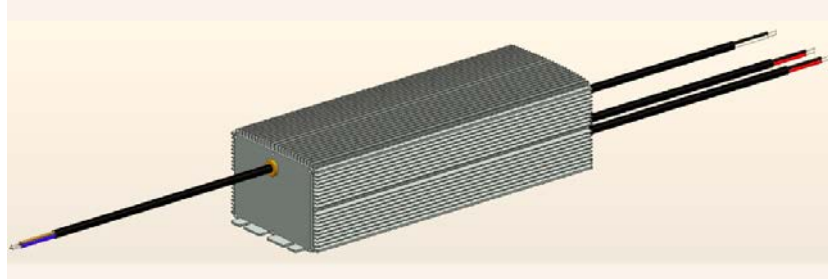


**Autec's L4HCP1200SXXXXST series** offers digital programmable drivers with wide-range adjustable output current and up to 660Vac unparalleled input capability, together with 12V/200mA auxiliary output (optional) for smart lighting.

The output current of this series is programmable up to 21/23/29/33A, and designed for 0(0.05)-10V/PWM/Rset/Clock/DMX ultra-deep dimming applications.



## Applications

- Outdoor & indoor LED lights
- LED lights with flexible current settings
- Parking lights and architecture decoration lights
- LED horticulture lights
- LED fishing lights



## Specifications

Input Voltage	Output Power	Output Voltage	Output Current	Efficiency	Max. Case Temperature	Max. Input Current	Max. Input Power	THD	Power Factor
305~660Vac	1200W	24V ... 58.8V	21A ... 33A	96%	90°C	6.5A	1360W	<20%	>0.95

\* Based on 25°C ambient temperature, rated input voltage, and full load.

\*\* Refer to Page 2 for detailed specifications for this series of LED drivers.

## Features

- Ultra-deep dimming down to 0.5%, compatible with DMX
- > 70,000 hours lifetime at 75°C Tcase
- > 7 years warranty at 75°C Tcase
- Min. operating temperature @ -40°C
- 12V/200mA auxiliary output (optional)
- Constant current & constant voltage output
- Output current & output voltage programmable
- Compatible with 0(0.05)-10V, PWM, external resistor, clock, DMX dimming
- Ultra-high input voltage: 305~660Vac
- Safety according to UL8750 & EN61347-2-13
- Surge voltage rating: L-N 5.5kV, L/N-Earth 11kV
- EMC according to FCC Part 15 Class A
- Lightning, OVP, SCP, OTP & Open Circuit Protection

## Enclosure

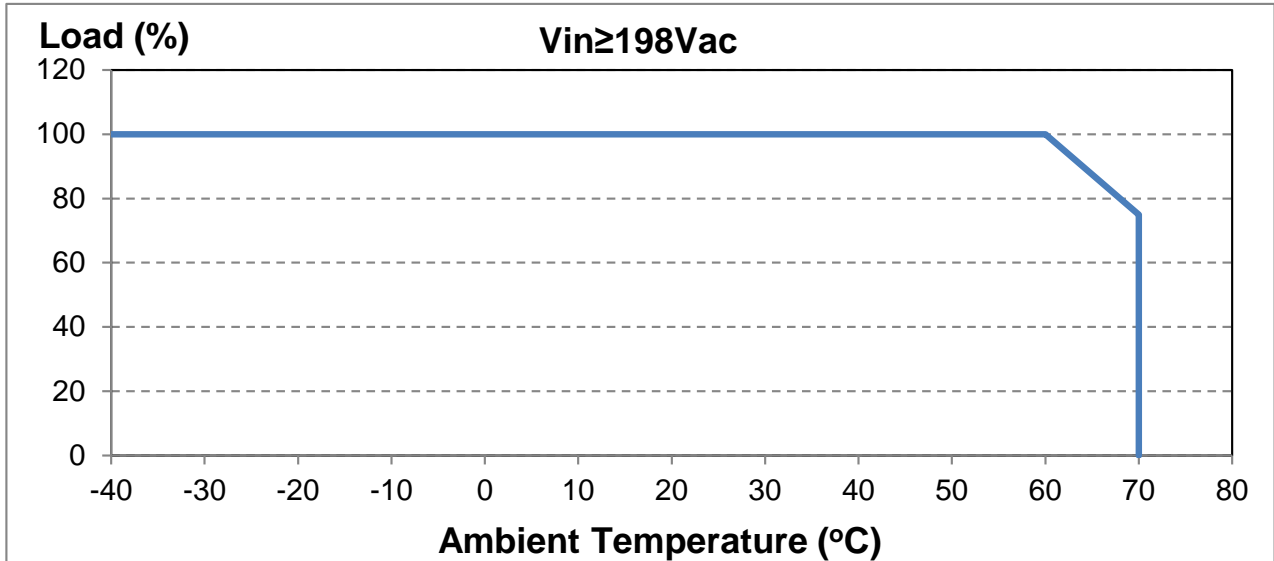
	mm (inch)
Case Length	321 (12.6)
Case Width	123 (4.84)
Case Height	88 (3.5)
Mounting Length	352 (13.85)
Overall Length	368(14.5)

### Electrical Specifications

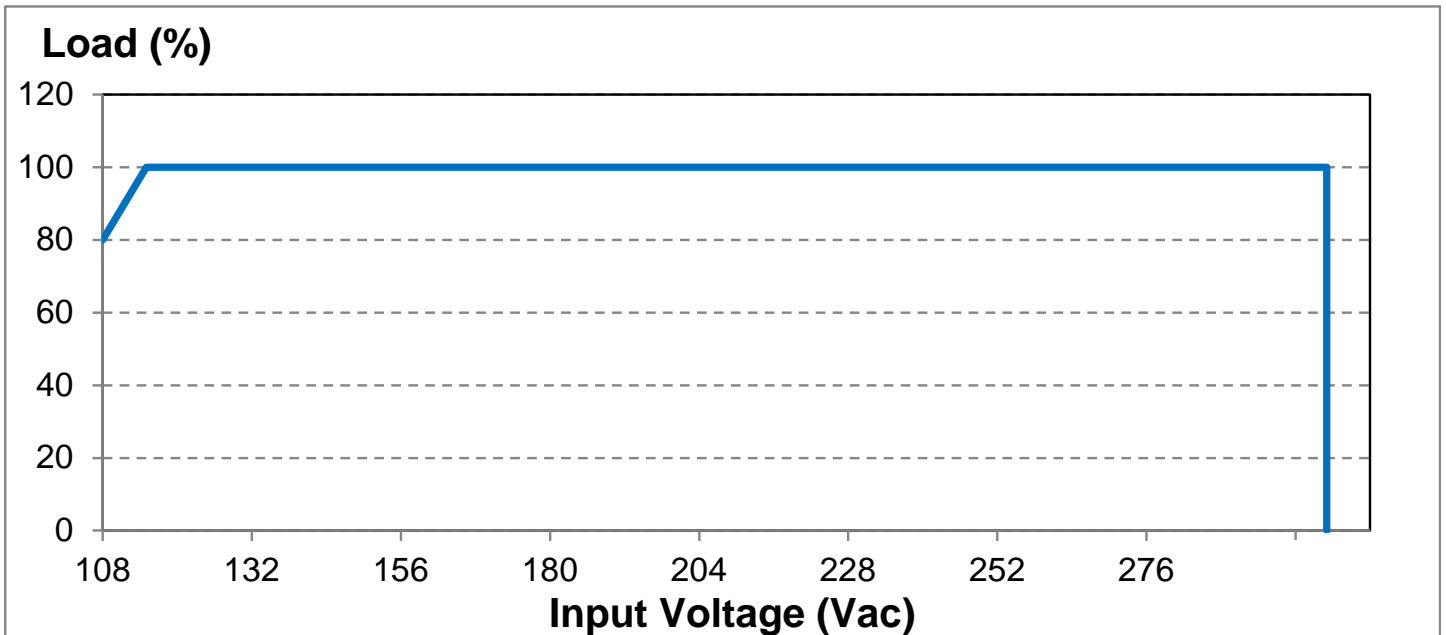
Model	L4HCP1200S3340ST	L4HCP1200S2840ST	L4HCP1200S2220ST	L4HCP1200S2040ST
Output Voltage	24-36V	32-48V	36-54V	40-58.8V
Output Current	33.4A	28.4A	22.2A	20.4A
Output AUX Power Voltage (Optional)	12V	12V	12V	12V
Output AUX Power Current (Optional)	0-200mA	0-200mA	0-200mA	0-200mA
Dimming	0(0.05)-10V, PWM, External Resistor, Clock, DMX			
Current Programmable	Yes			
Output Power	1200W	1200W	1200W	1200W
Max. Current Ripple	±5%	±5%	±5%	±5%
Max. Voltage Ripple	250mVp-p	250mVp-p	350mVp-p	350mVp-p
Voltage Range	305-660Vac	305-660Vac	305-660Vac	305-660Vac
Frequency Range	47-63Hz	47-63Hz	47-63Hz	47-63Hz
Max. Input Current	6.5A	6.5A	6.5A	6.5A
Max. Input Power	1360W	1360W	1360W	1360W
Power Factor	>0.95 @ 480Vac & 80-100% full load, >0.90 @ 600Vac & 80-100% full load			
Efficiency	95.5%	95.5%	96%	96%
Max. Open Circuit Voltage	39V	51V	61.8V	61.8V
THD	<20% @ 480Vac & 80-100% full load, <20% @ 600Vac & 80-100% full load			
Protections	OVP, OTP, OCP, SCP			
Environmental Protection	UL Dry & Damp & Wet			
Working Temperature	-40~+70°C			
Max. Case Temperature	90°C			
Surge Protection	L-N 5.5kV, L/N-Earth 11kV			
Agency Approbations	UL8750			
Electromagnetic Compliance	Per Title 47 CFR Part 15 Class A			
Ansi Surge Type	1.2/50µs Combination Wave (w/t 2Ω)			
Isolation (Primary to Secondary)	3750Vac / 10mAMax / 60seconds			
Isolation (Primary to Earth)	1875Vac / 10mAMax / 60seconds			
Isolation (Secondary to Earth)	500Vac / 10mAMax / 60seconds			
Case Type	Metal			
Dimension	321x123x88 mm (12.6x4.84x3.5inch)			
Mounting Length	352 mm (13.85inch)			
Overall Length	368 mm (14.5 inch)			
Weight	7.5 kg (16.6 lb)			
Life Time	>70,000 hours @ full load, 75°C Tcase			

\* Unless otherwise noted, the data are based on 25°C ambient temperature, 480Vac input voltage, and full load.

Derating Curve

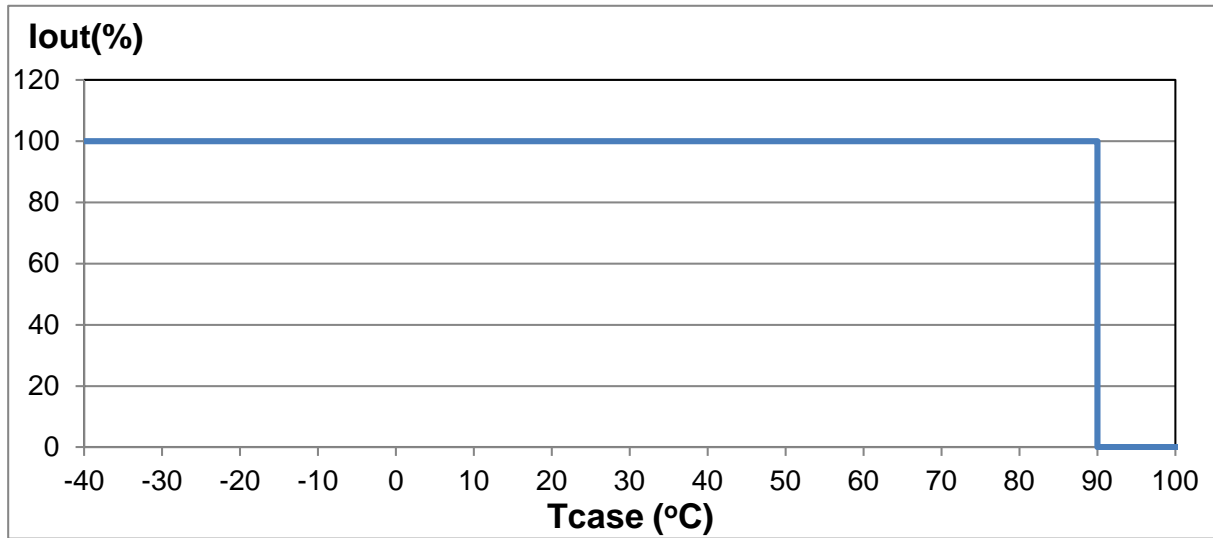


Static Characteristics

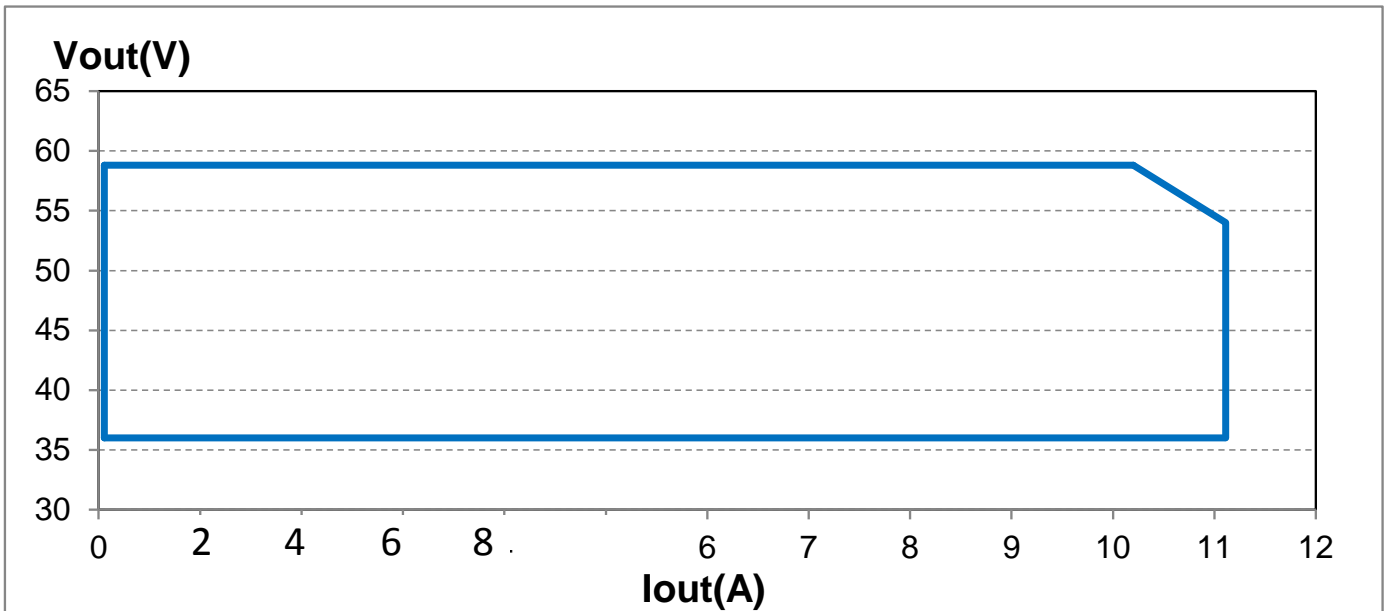


Electrical Specifications

Output Current vs. Case Temperature (with  $\pm 5^{\circ}\text{C}$  Tolerance)

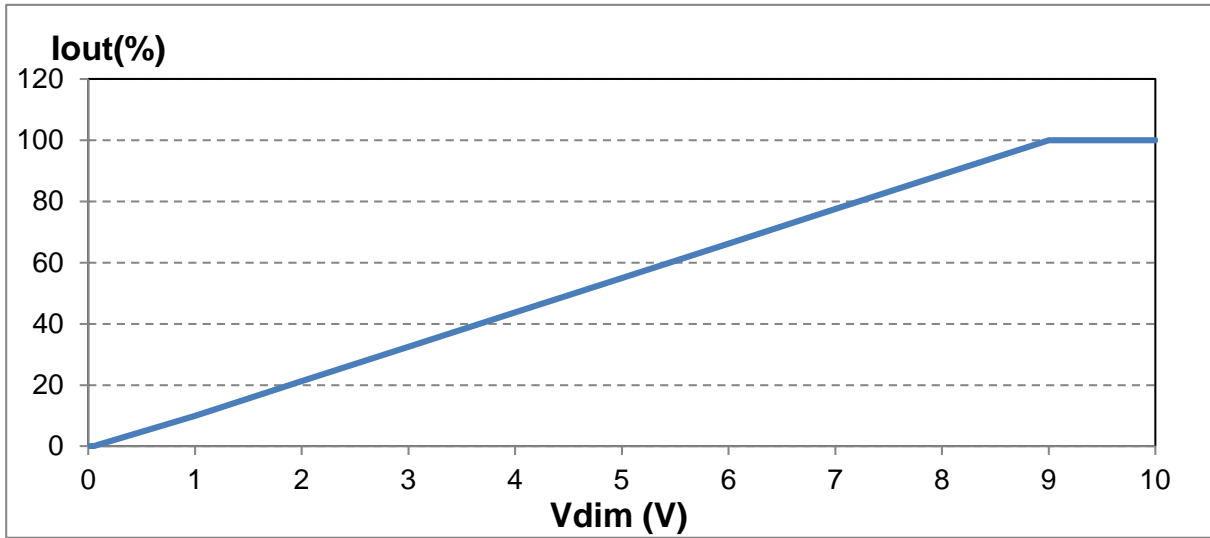


I-V Programming Area: Output Voltage vs. Output Current (Example with L4HCP1200S2220ST)

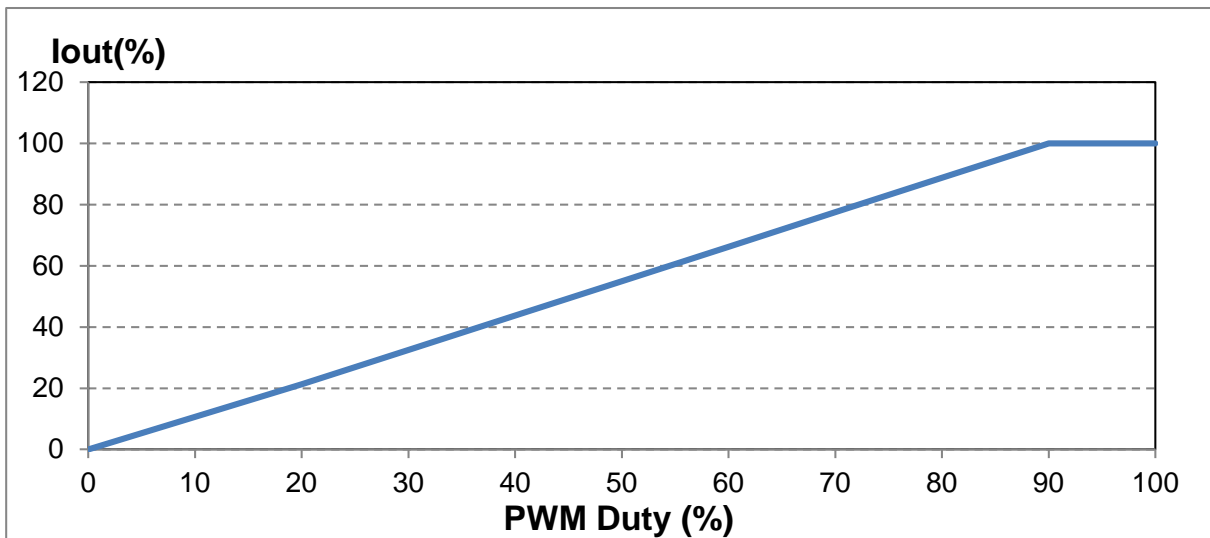


## Electrical Specifications

### Output Current vs. 0(0.05V)-10V Dimming Control Voltage

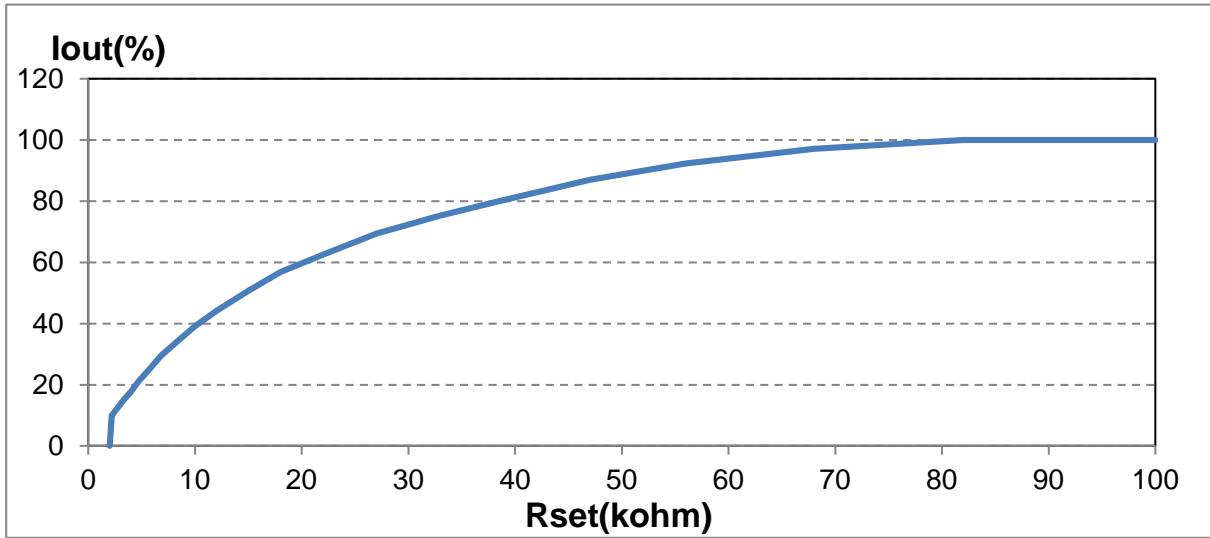


### Output Current vs. PWM Dimming Duty Cycle

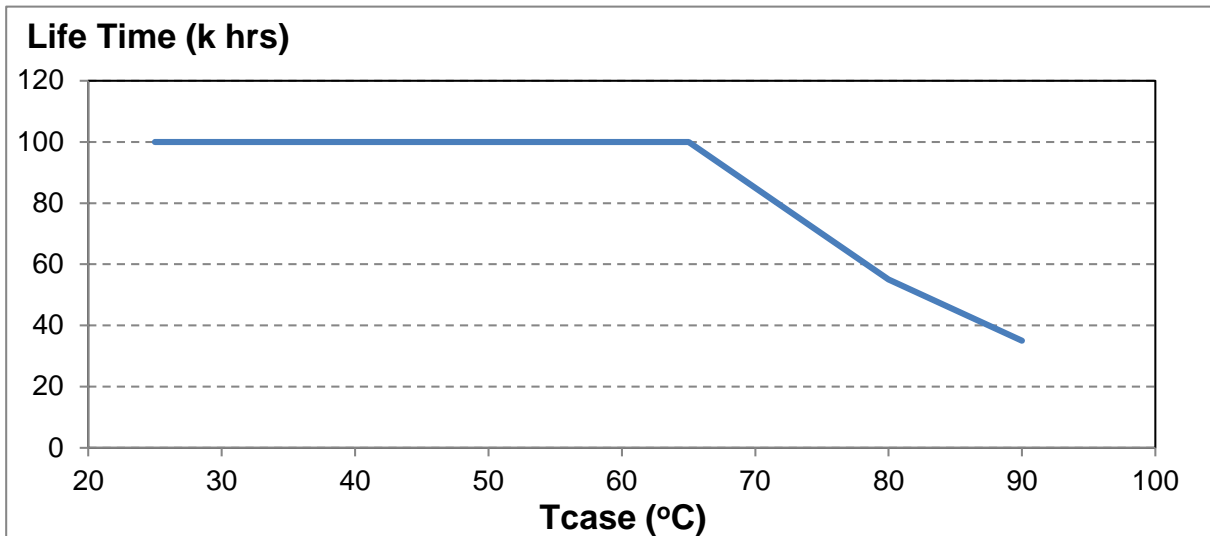


## Electrical Specifications

### Output Current vs. External Setting Resistor

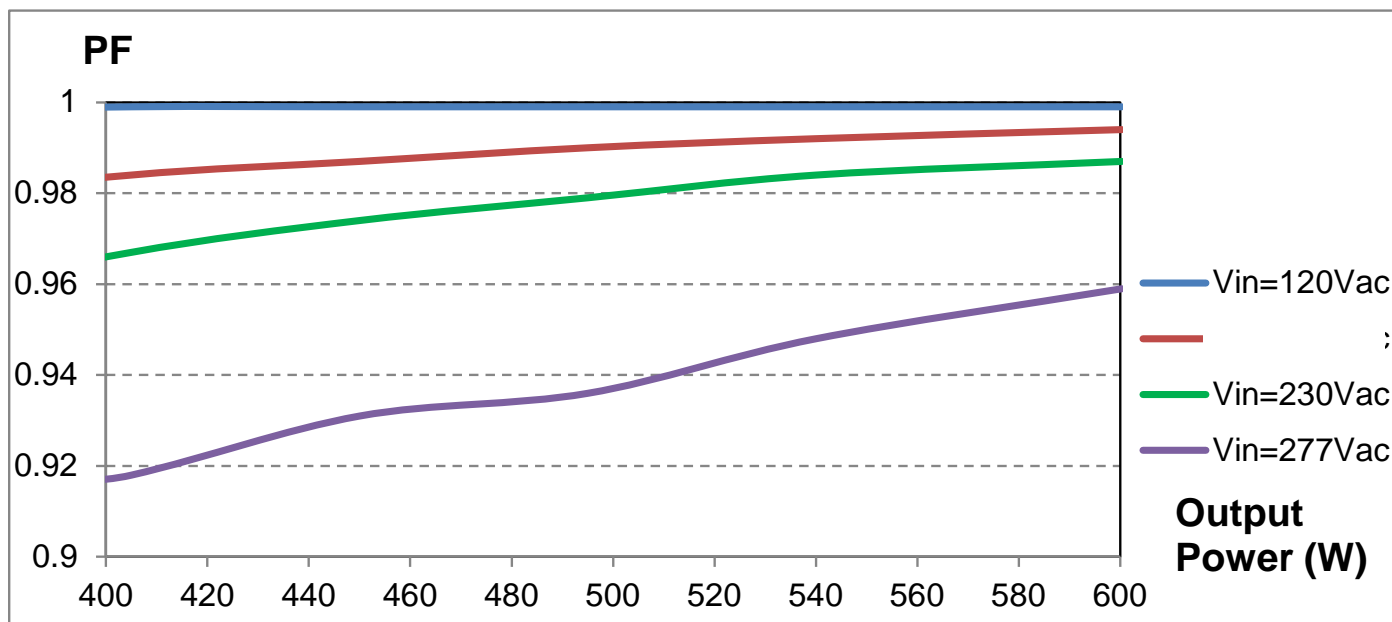


### Life Time vs. Case Temperature

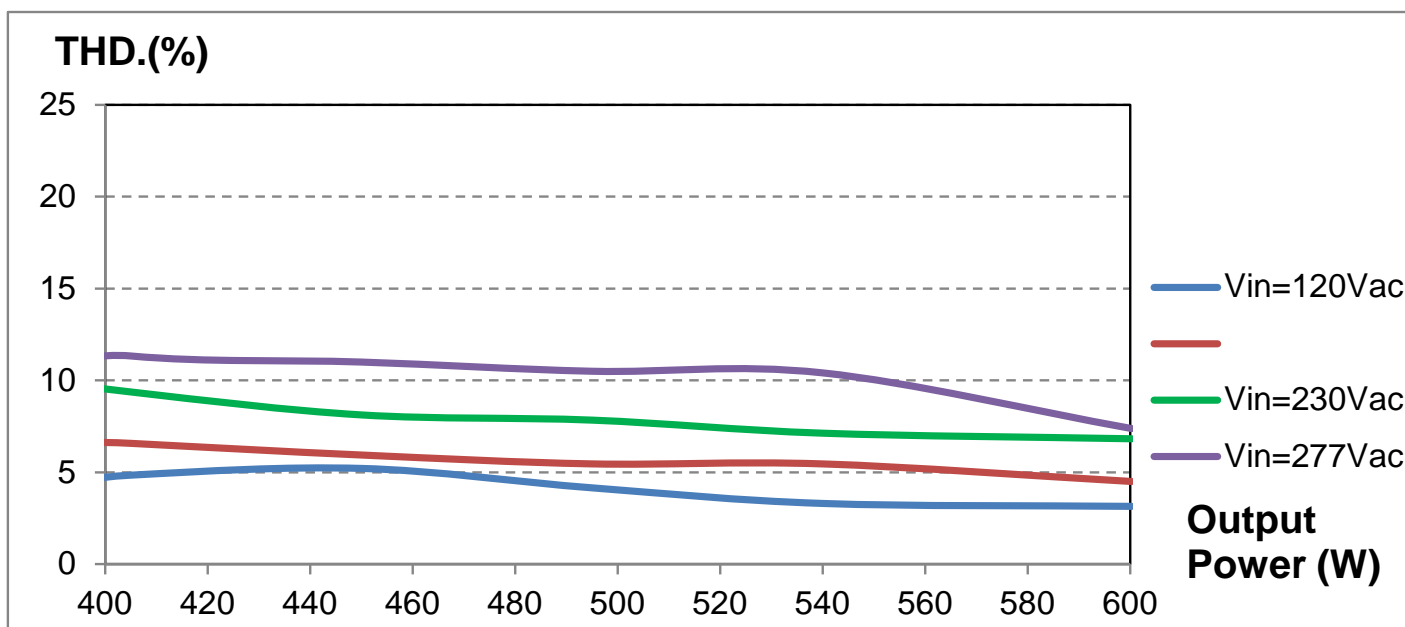


Performance Characteristics

Power Factor vs. Output Power (@ 25°C)

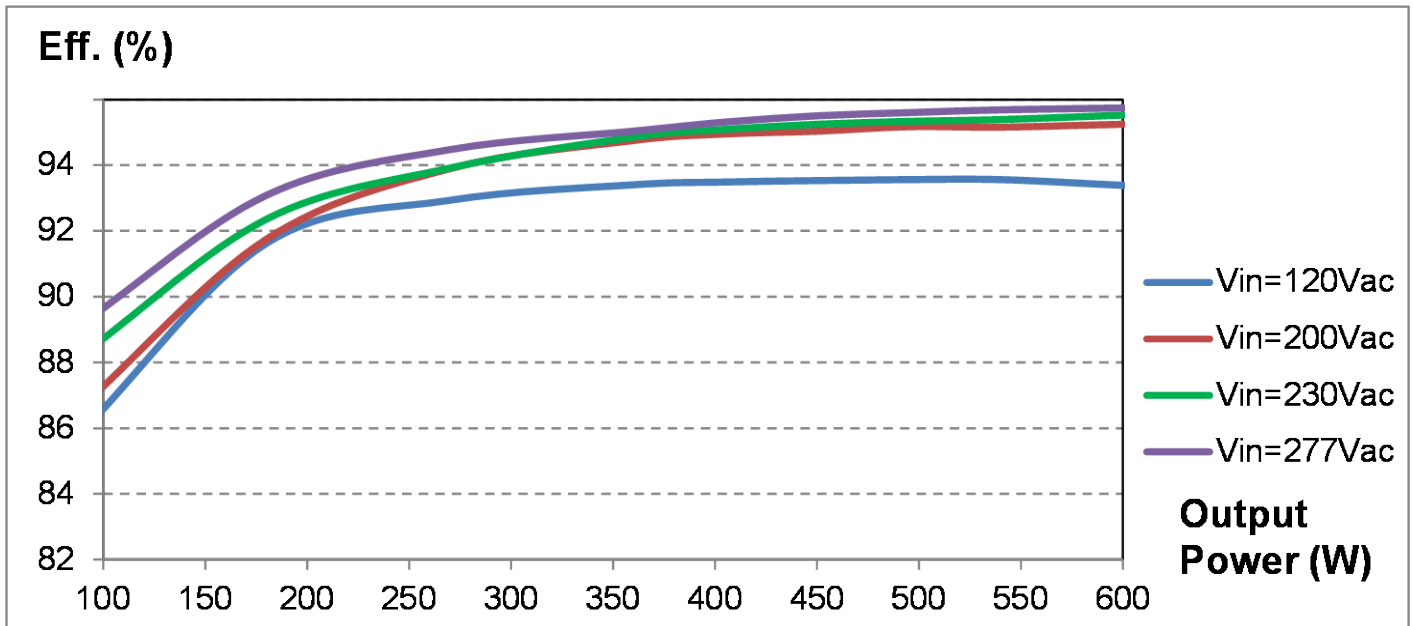


THD vs. Output Power (@ 25°C)

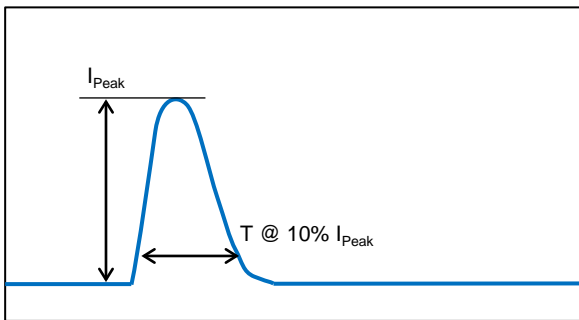


**Performance Characteristics** (Tested with L4HCP1200S2220ST)

Efficiency vs. Output Power (@ 25°C)



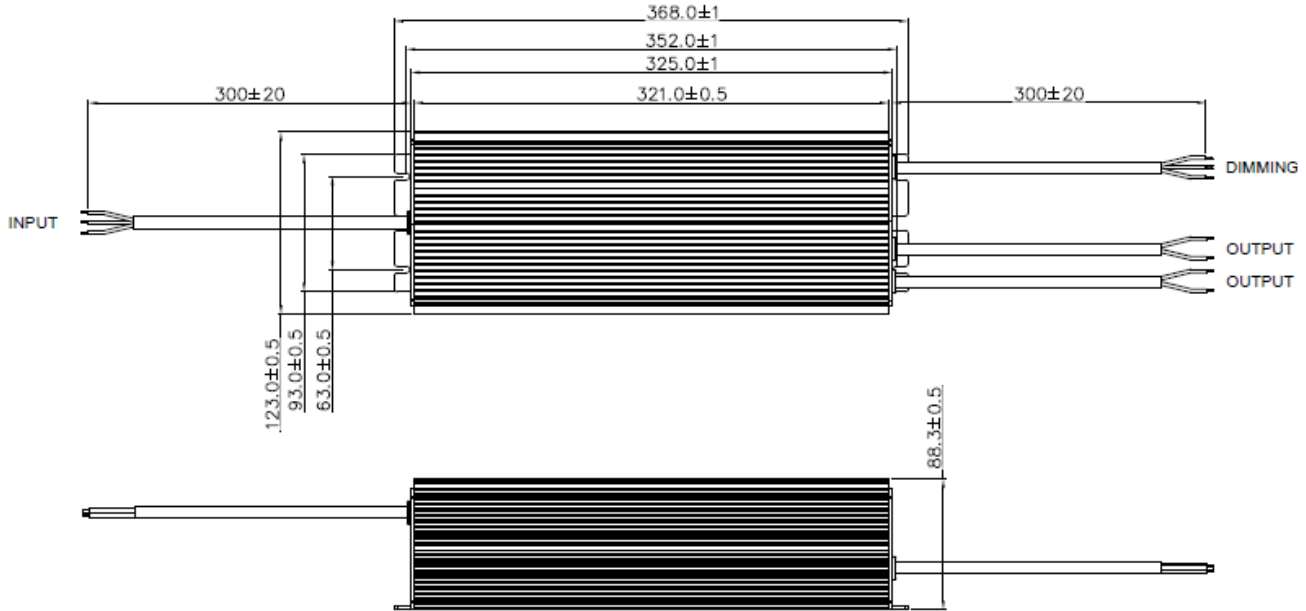
**Inrush Current**



V <sub>in</sub>	I <sub>peak</sub>	T
108 Vac	14.0 A	860 us
115 Vac	16.0A	890 us
230 Vac	40 A	1205 us
305 Vac	43.0 A	1570 us



Mechanical Specification



- NOTES : 1. OUTLINE DIMENSION : 304L\*123W\*54H  
 2. IF CASE BY NCT PROCESS, THE TOLERANCE OF ALL DIMENSIONS MUST BE ENLARGED  $\pm 0.2\text{mm}$  FOR CPK INSPECTION.  
 3. INPUT AND OUTPUT CONNECTOR & PIN ASSIGNMENT.

INPUT WIRE 1	3	UL SJTW 18AWG*3C	GREEN/YELLOW	GND
	2		BLUE	N
	1		BROWN	L
	WIRE NUM	WIRE SPEC	COLOR	RATING
DIMMING WIRE	3	UL SJTW 18AWG*3C	GREEN	12V+
	2		BLACK	DIM-
	1		WHITE	DIM+
	WIRE NUM	WIRE SPEC	COLOR	RATING
OUTPUT WIRE	2	UL SJTW 14AWG*2C	BLACK	LED-
	1		RED	LED+
	WIRE NUM		WIRE SPEC	COLOR

4. THE GREEN DIMMING WIRE IS OPTIONAL FOR 12V AUXILIARY POWER.

Revision History

Date	Rev.	Description of Change		
		Item	From	To
2017-05-02	A	Datasheets Release	/	/