



Linear Lighting Pro Dimmable Series XLAV80

The Linear Lighting Pro Series is the ideal, dimmable powering solution for linear lighting applications. The XLAV80 is a 80W UL Class II, Constant-Voltage, phase dimmable, LED driver, capable of providing full range, 0-100%, smooth, flicker-free dimming. Tested with over 70 dimmer brands on the market, this unit works with both forward/reverse phase (TRIAC/ELV) type dimmers, and is unsurpassed in dimmer compatibility and performance. This unit comes in two versions - A compact version (SI) for space constrained applications, and a UL listed version (SSB), with patent pending, integral wiring compartments for easy installation.

Features

- Wide Dimmer compatibility-supports most phase type dimmers in the market, including leading edge and trailing edge, electronic low voltage (ELV), TRIAC, and SCR dimmers.
- Dimming Range: 0-100%
- Integral 1-10V Dimming options available
- Integral wiring compartments for reduced installations costs
- Active Power Factor Correction, PF > 0.9
- Energy Star Compliant
- Built-in protection: SCP, OTP, OVP, OCP
- UL Class II, cUL, CE, FCC Title 47 CFR 15 Class B, PSE, CCC
- IP 65
- 3 years warranty



XLAV80-SSB XLAV80-SI

Model Selection Key

XLAV(A)80-BCV-D

SI: Waterproof standard aluminum housing

SSB: Aluminum housing with easy install wiring compartments

B: 1 channel output

C: Max Vout

V: Voltage

Max Output Power

H 200-240V_{AC} Input
L 100-120V_{AC} Input

Series Name

Model Number		Channel(s) Output	Output				Max Output Power per Channel (W)	Rated Output Power (W)	
100-120V _{AC} Models	200-240V _{AC} Models		Vout (VDC)	Loading Current (with dimmer) per Channel (A)		Loading Current (without dimmer) per Channel (A)			
				min	max	min			max
XLAV(L)80-112V☒	XLAV(H)80-112V☒	1	12	2.28	6.50	0.33	6.50	78	80
XLAV(L)80-124V☒	XLAV(H)80-124V☒	1	24	1.16	3.30	0.17	3.30	79.2	80

☒ = SSB: Aluminum housing with easy install wiring compartments or SI: Waterproof standard aluminum housing

* Dimming performance is not guaranteed when the loading current is below the min. value mentioned in the above

table.

* UL marking: for products manufactured in Vietnam only, effective October 2020.

Input Specification

Voltage Range	Frequency Range	Max Inrush Current	Power Factor	Max Input Current:
XLAV(L) Low Input: 90-130 V _{AC} XLAV(H) High Input: 200-240V _{AC}	47-63 Hz	XLAV(L): 120V _{AC} @ 25 °C , cold start-up XLAV(H): 240V _{AC} @ 25 °C , cold start-up	0.9 min	1.1 A @ 100 V _{AC} Input
THD	<20% @ full load			

Output Specification

Max Power	80 W	Noise/Ripple	10% of Rated Output Voltage*
Line Regulation	+/- 10% Max	Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.
Current Regulation	N/A	Over Voltage Protection	105% of Voltage (typ) Min
Efficiency	80%(min)	Over Current Protection (OCP)	Voltage Reduce
Start-up Time	< 500 ms	Over Temperature Protection	Shutdown- auto recovery
Hold-up Time	0.5mS @ full load, 100V _{AC} input	Load regulation	< 5%

* All noise measurements made at the output terminals, connected to a 20MHz low pass filter.

Environmental Specifications

MTBF	Cooling	Operating Temp	Storage Temp	Relative Humidity
80,000 hours (Full load @ 25°C Ambient, Based on MIL-217F)	Convection	-40°C to 60°C (Full load)	-40°C to 85°C	5% - 95 %

Compliance / Safety

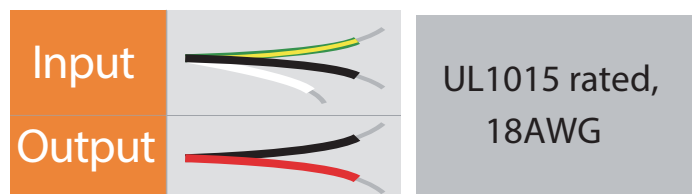
EMI/RFI	ISPR-22 Class B FCC part 15 Class B EN55015, EMC
Safety Agency	UL 1012, 1310 Class 2, UL 8750, UL 879, CSA C22.2 No.107.1 CE(IEC/EN61347-1, IEC/EN61347-2-13)
Weatherability	IP 65

Mechanical

Material:	
NEMA 3 Design with aluminum extruded enclosure, with IP65 Waterproof, fully potted PCB.	

Supported Dimming Options:

TRIAC/ ELV (Trailing/Leading Edge)/ SCR

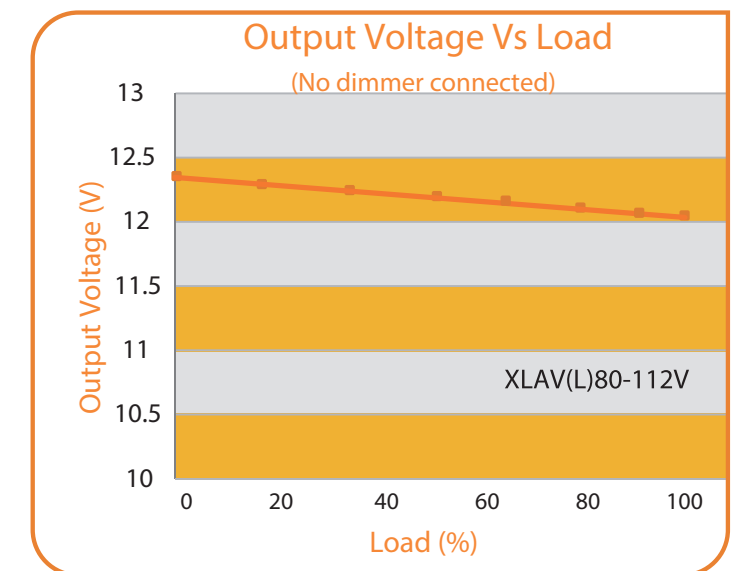
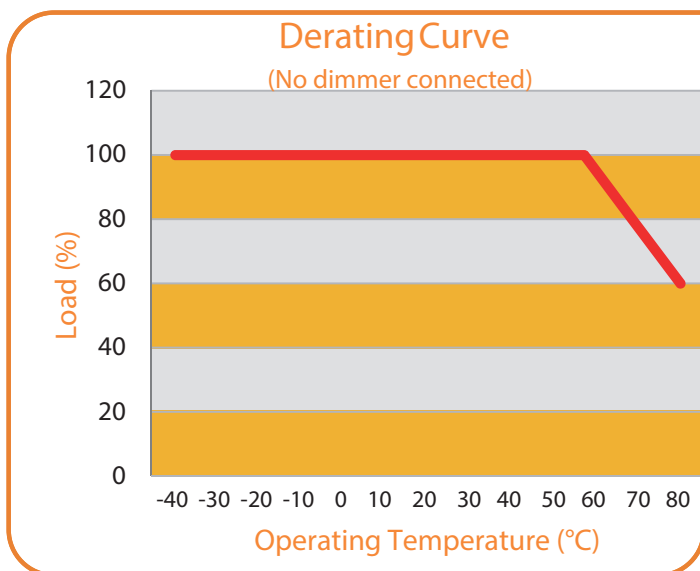
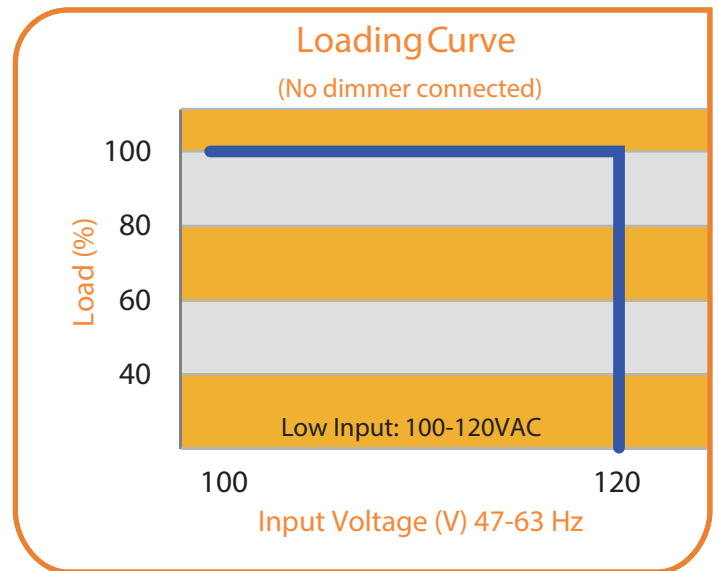
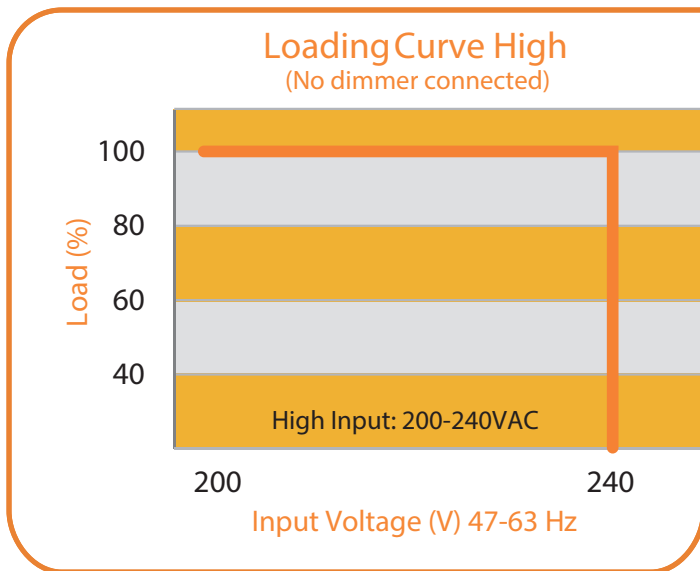
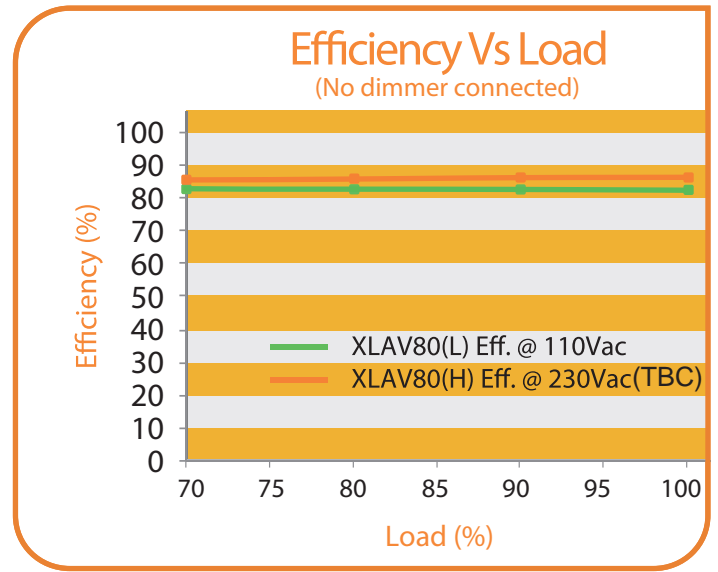
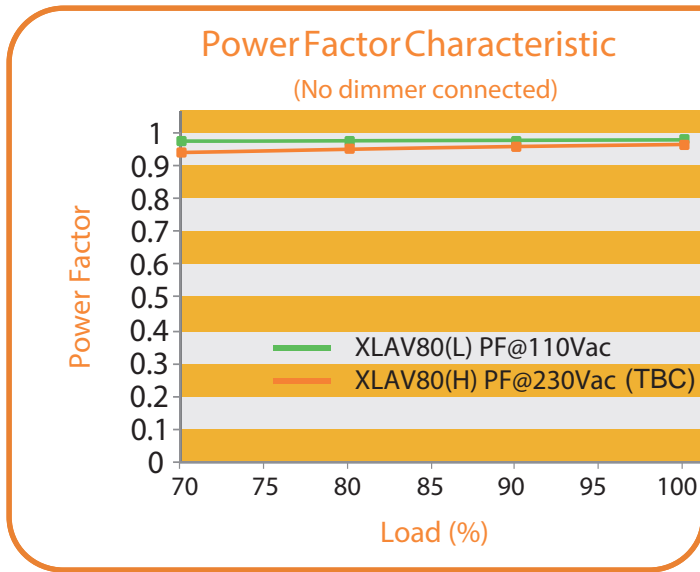


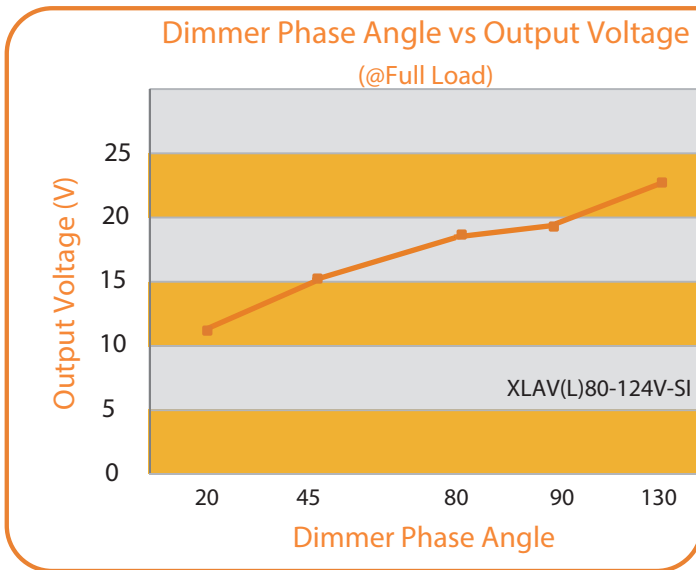
Expected Life-time*

T _c	65°C	75°C
Life-time	50,000h	30,000h

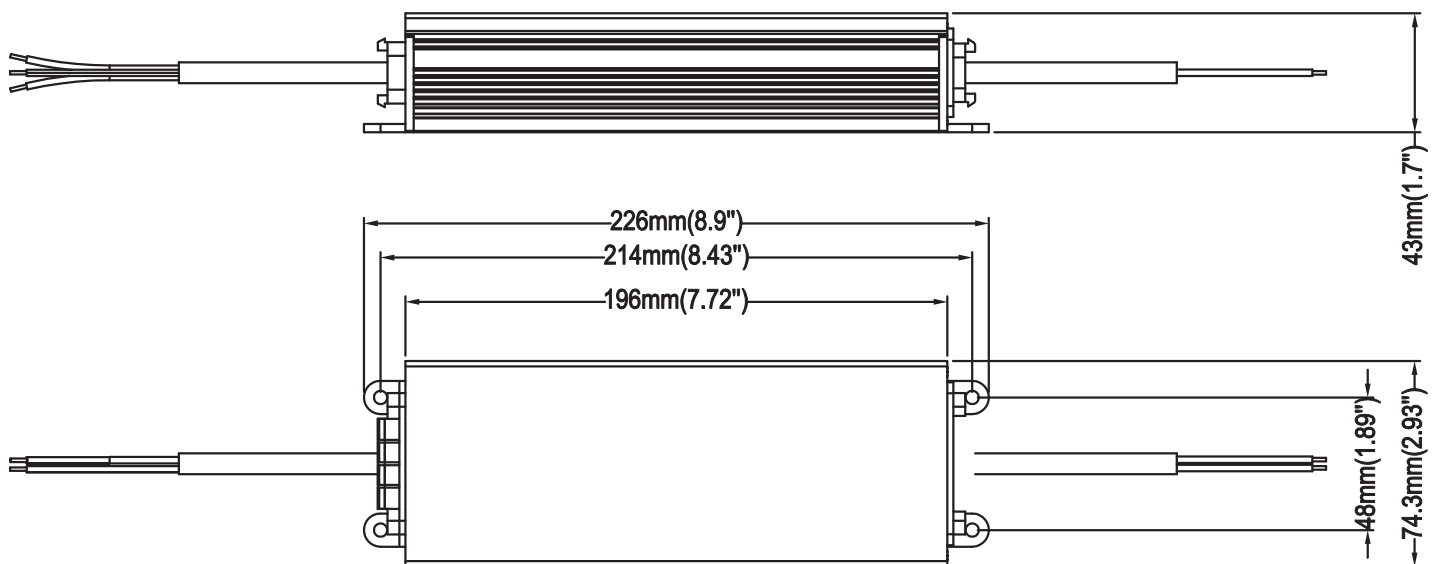
*: @ Full load, based on a failure rate of < 10%

Performance Curves





Mechanical and Wiring Diagrams

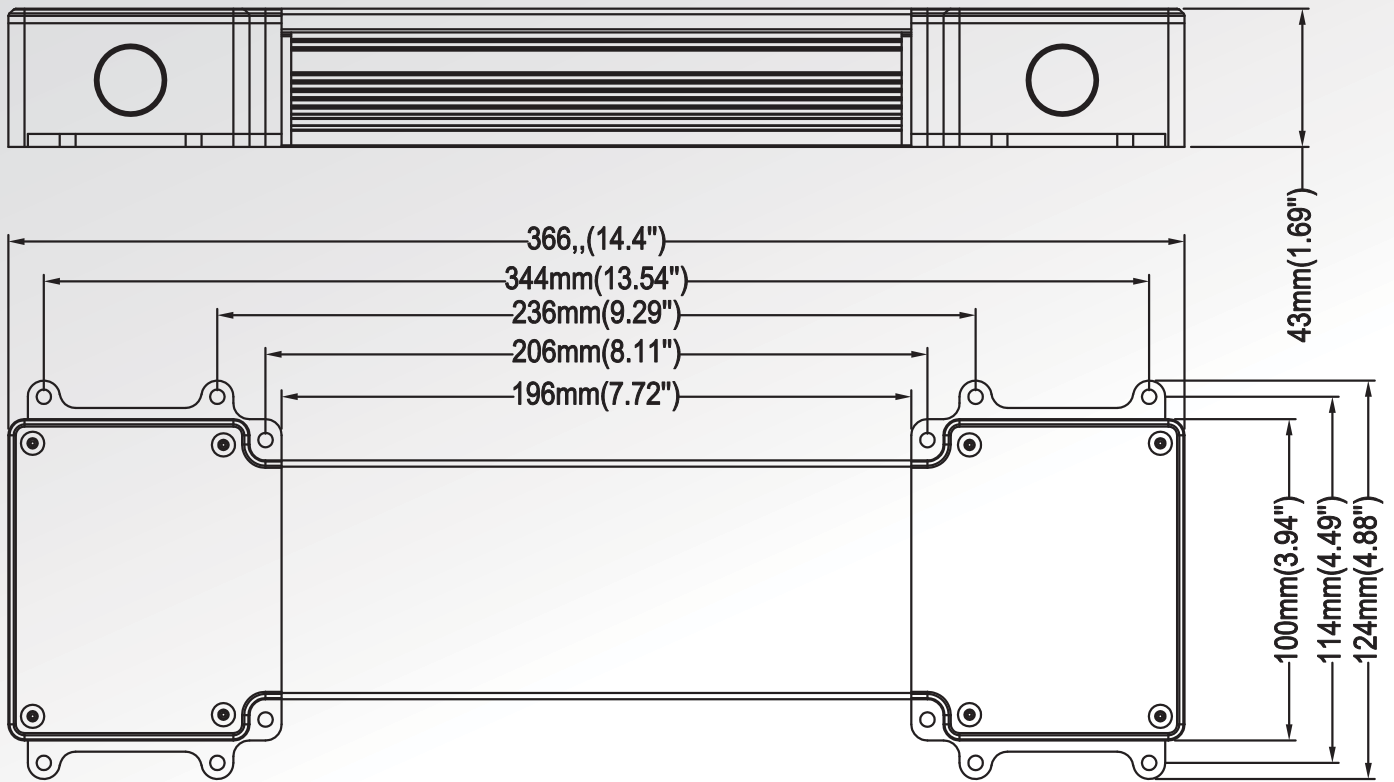


XLAV80-SI

Packing information

Weight: 1.4kgs/pcs, 8.1kgs/carton;
6pcs/carton, L288xW237xH268(mm)

Mechanical and Wiring Diagrams



XLAV80-SSB

Packing information

Weight: 1.4kgs/pcs, 9.9kgs/carton;
6pcs/carton, L418xW318xH267(mm)

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