

## Intelligent Programmable Output Power Solutions

Total Power	48 Watts max.
Input Voltages	120 ~ 277VAC
Number of Outputs	One

ANZ#: Z205c, September 24, 2013

## SPECIAL FEATURES

- Universal Input range from 110VAC~304VAC, 50/60Hz
- Linear design and compact size maximizes design flexibility.
- Size: 11.80" (L) x 1.31" (W) x 1.06" (H)
- Fully potted, suitable for dry and damp location applications
- Standard 1-10V dimming; compatible with fluorescent dimmers
- Intelligent Window® GUI interface for programming
- Output current and voltage programmable maximize performance

## ENVIRONMENTAL

Operating temperature:	-30 to +50 ° C, Tc: 80 °C
Storage temperature:	-40 to +85 ° C
Humidity (Non-Condensing):	5% to 95%
Cooling:	Convection
Vibration Frequency:	5 to 50 Hz
MTBF:	>100,000 Hours at full load and 25°C ambient conditions (MIL-217F)



Picture shown above is not to scale

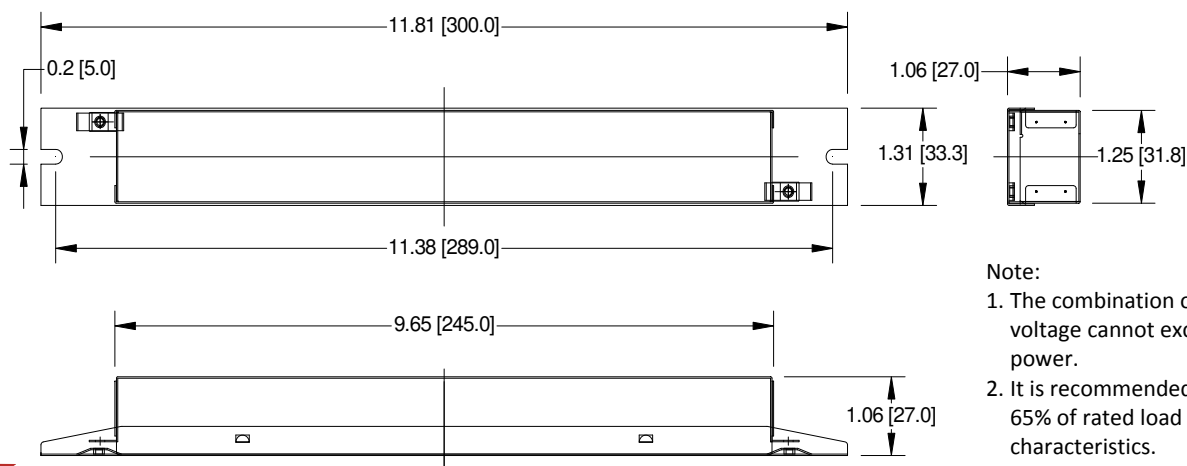
## SPECIFICATIONS :

Input Range : 100 ~ 277VAC	Frequency : 47 to 63Hz
Power Factor: > 0.92 at 65% to 100% load, 115VAC or 230VAC	Inrush Current : 50.0 Amps max. at 230VAC, cold start 25°C
Input Current : 0.6 Amps max. at 115VAC	Efficiency : 83% Typical
Output Current Regulation : ±5%	Maximum Power : 48W
Protection : OCP, SCP, OLP – Auto Recovery	Leakage Current : 300uA typ.
Dimming method : 0-10V dimmer / fluorescent dimmer	Dimension: 11.80" (L) x 1.31" (W) x 1.06" (H)
Hold up time: Half cycle min. at 120VAC and 80% rated load	Regulation Compliance: UL8750 or EN61347, EN55015, EN61547

## MODEL SELECTION :

Model Number	Output Characteristics				
	Dimming	Dimming Range	Output Range (mA)	V Range(DC)	Max. W <sup>Note</sup>
ESL1048-24-C2500 iPOP®	1-10V	8-100%	2500 ~ 1000	14 – 25	48
ESL1048-36-C1660 iPOP®	1-10V	8-100%	1660 ~ 675	24 – 36	48
ESL1048-48-C1200 iPOP®	1-10V	8-100%	1200 ~ 500	30 – 50	48
ESL1048-72-C0830 iPOP®	1-10C	8-100%	830- 350	40 – 72	48

## MECHANICAL SPECIFICATION : ESL1048

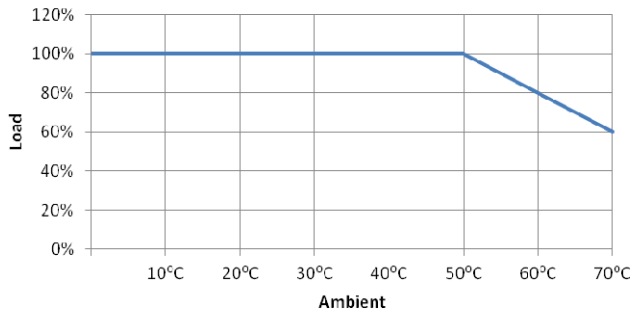


### Note:

1. The combination of output current and voltage cannot exceed maximum rated power.
2. It is recommended to keep a minimum of 65% of rated load to maintain electrical characteristics.

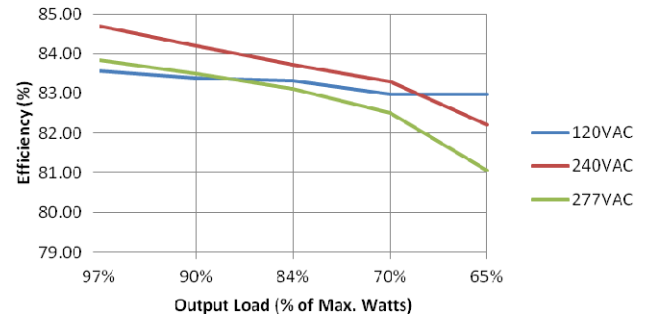
## De-rating Temp. vs. Load

Derating Temp. vs. Load



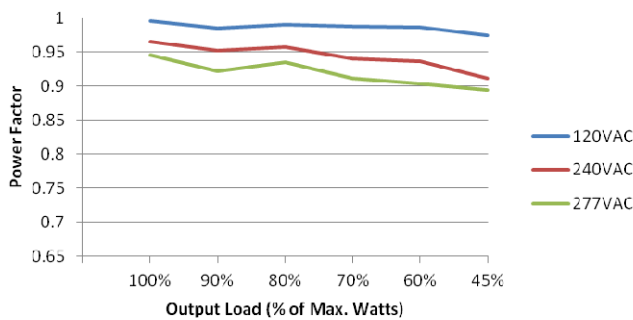
## Efficiency vs. Load

Efficiency vs. Load



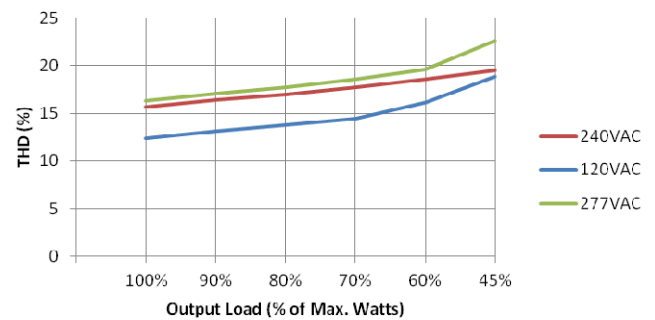
## Power Factor vs. Load

PF vs. Load



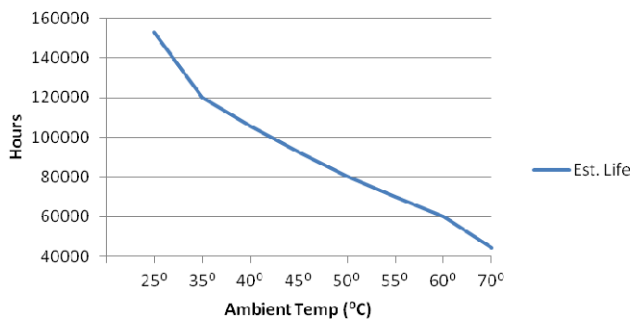
## THD vs. Load

THD vs. Load



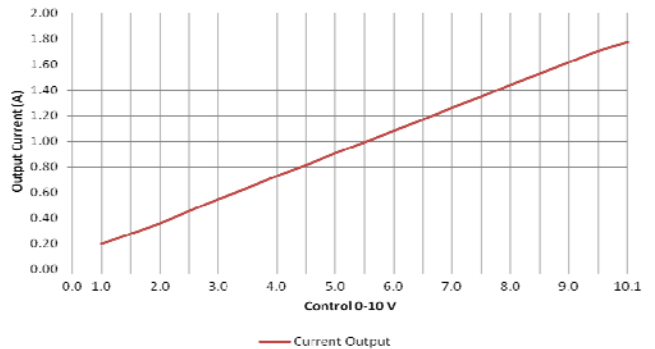
## Life Time vs. Ambient Temp.

Life Time vs. Ambient Temp.

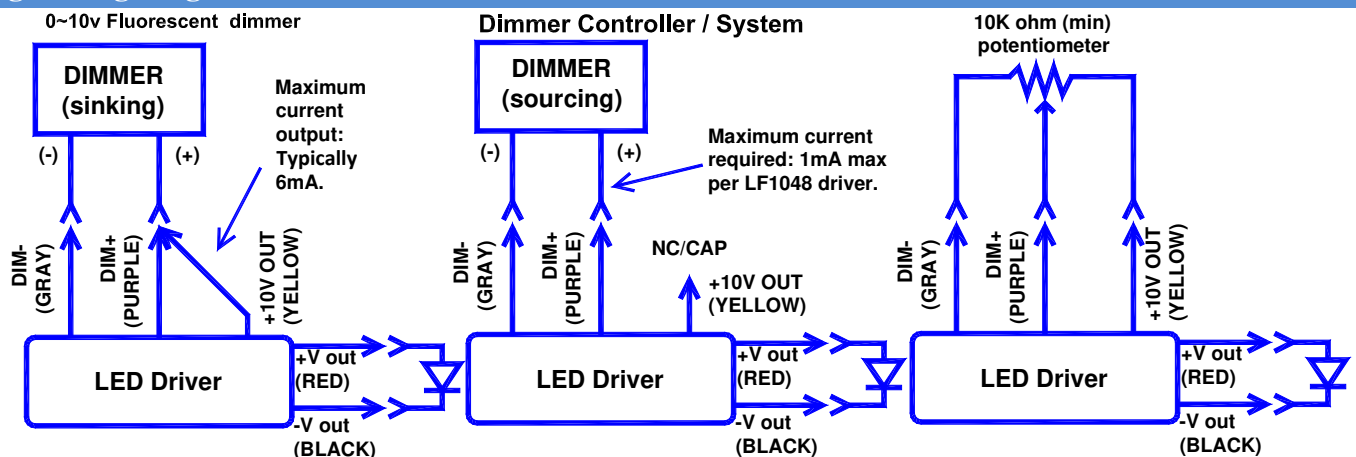


## 1-10V dimming Curve

Dimming Characteristics Example



## Dimming Wiring Diagram



For general operation and networking purposes where an OFF mode condition is required, our LED Driver dimming models (ESS & ESL) operate with 1-10V control input, where 1V input is minimum dim and less than 1V is OFF.