ESS1048 Series

High Power Constant Current LED Driver	
Total Power	48 Watts max.
Input Voltages	120 ~ 240VAC, 277VAC
Number of Outputs	One

Preliminary Product Specifications

ANZ#: Z187, August 20, 2012

SPECIAL FEATURES

- Universal Input range from 110VAC~304VAC, 50/60Hz
- Stud-mount and Tab-mount design maximize design flexibility
- Size: 4.25" (L) x 3.00" (W) x 1.18" (H)
- Suitable for dry and damp location applications
- Standard 0-10V dimming; compatible with fluorescent dimmers
- UL8750 and CE compliant - **Pending**
- Wide selection of pre-adjusted C/C outputs

The picture shown is not to scale

ENVIRONMENTAL

Operating temperature:	-20 to +50 ° C, Tc: 80
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 25ºC ambient conditions (MIL-217F)

SPECIFICATIONS :

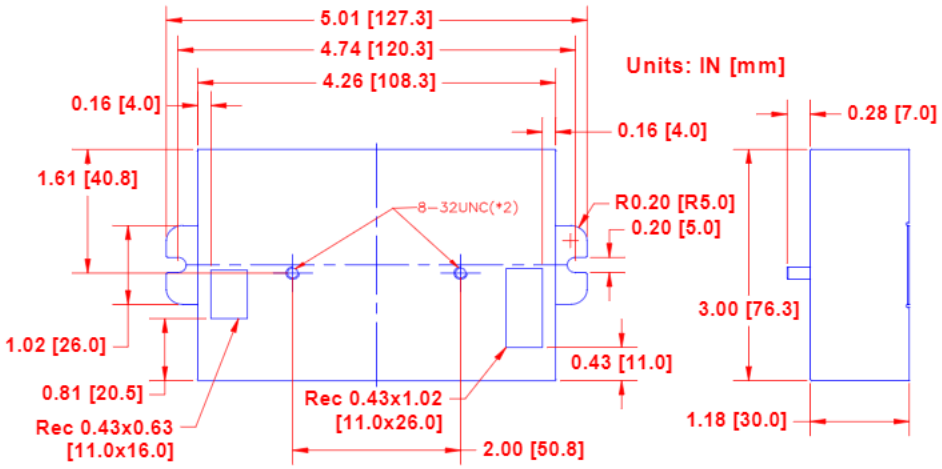
Input Range : 100 ~ 264VAC; 277VAC	Frequency : 47 to 63Hz
Power Factor: > 0.92 at 65% to 100% load, 115VAC or 230VAC	Inrush Current : 50.0 Amps max. at 230VAC, cold start 25°C
Input Current : 0.6 Amps max. at 115VAC	Efficiency : 83% Typical
Output Current Regulation : ±5%	Maximum Power : 48W
Protection : OCP, SCP, OLP – Auto Recovery	Leakage Current : 300uA typ.
Dimming method : 0-10V dimmer / fluorescent dimmer	Dimension: 108mm (L) x 76mm (W) x 30mm (H)
Hold up time: Half cycle min. at 120VAC and 80% rated load	Regulation Compliance: UL8750 or EN61347, EN55015, EN61547

MODEL SELECTION :

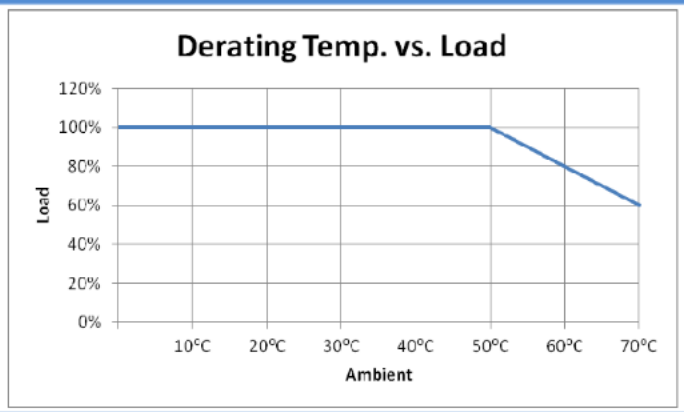
Model Number	Constant Voltage Mode			Model Number	Constant Current Mode		
	V (DC)	A (mA)	Max. W		A (mA)	V (DC)	Max. W
ESS1048-24	24, ±5%	2000	48	**ESS1048-24-C2500**	2500 - 2000	14 – 25	48
ESS1048-36	36, ±5%	1330	48	**ESS1048-36-C1660**	1660 – 1330	24 – 36	48
ESS1048-48	48, ±5%	960	48	**ESS1048-48-C1200**	1200 - 960	30 – 50	48
Note: Constant Voltage models are not dimmable				**ESS1048-72-C0830**	830 - 660	40 – 72	48

MECHANICAL

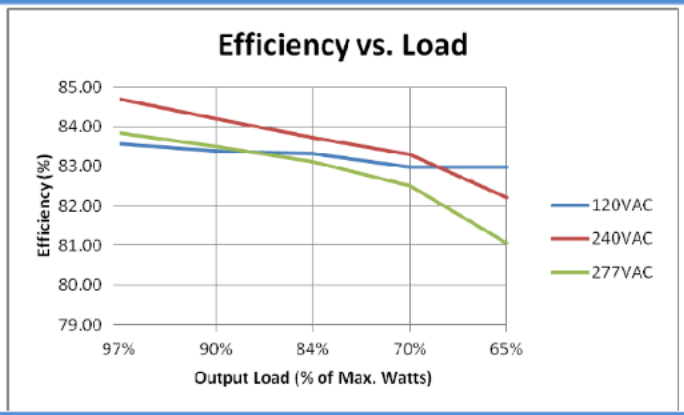
XX = Maximum Forward Voltage (Vf)
YYY = Constant Current Output (If)
AC input terminal block
DC output terminal block
0-10V dimming control terminal block



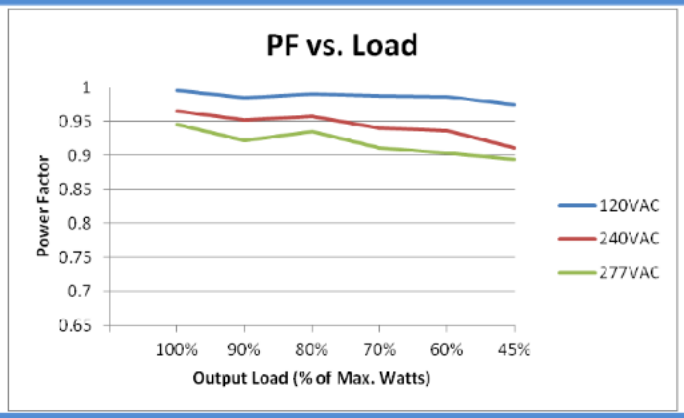
De-rating Temp. vs. Load



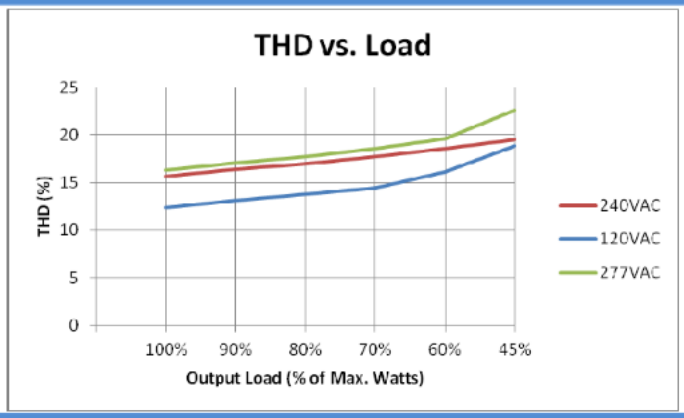
Efficiency vs. Load



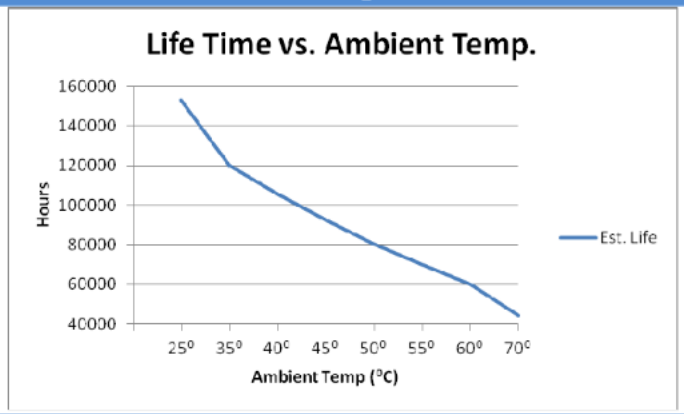
Power Factor vs. Load



THD vs. Load



Life Time vs. Ambient Temp.



Dimming Wiring Diagram