

# Q48 Series

# Product Specifications

ANZ#: Z213d, January 30, 2014

High Power LED Driver	
Total Power	50 Watts max.
Input Voltages	110 ~ 277VAC
Number of Outputs	One

## SPECIAL FEATURES

- Universal Input range from 100VAC~304VAC, 50/60Hz
- Versatile mechanical design maximizes design flexibility.
- Size: XP: TBD / XM: 108.3x76.3x30mm (LxWxH)
- Fully potted, suitable for dry and damp location applications
- 3 in 1 Dimming Control plus “ENABLE” input
- UL8750 and CE compliant
- Wide selection of pre-adjusted C/C outputs (factory setting)

## ENVIRONMENTAL

Operating temperature:	-40 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 (TELC3 – Telcordia SR-332, Issue 3)



Picture shown above is not to scale

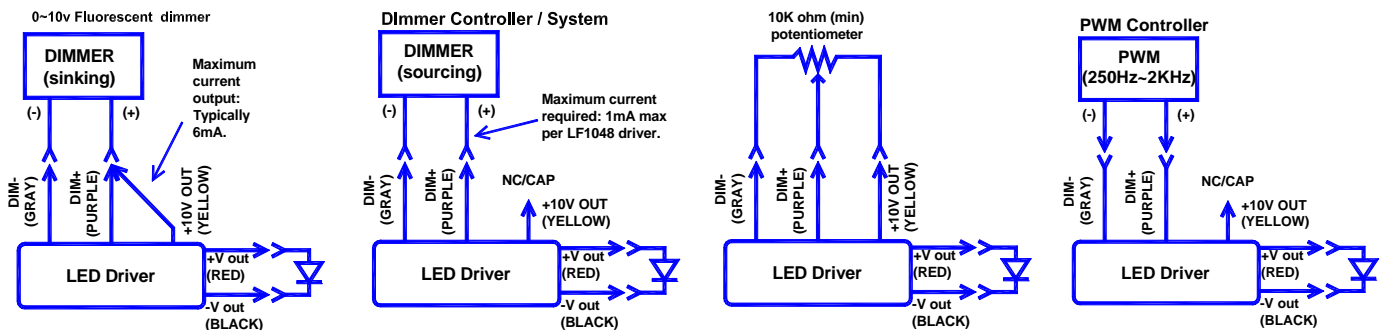
## SPECIFICATIONS :

Input Range : 100 ~ 277VAC	Frequency : 47 to 63Hz
Power Factor: > 0.92 at 65% to 100% load, 115VAC or 230VAC	Inrush Current : 30.0 Amps max. at 230VAC, cold start 25 °C
Input Current : 0.6 Amps max. at 115VAC	Efficiency : 87% Typical
Output Current Regulation : ±3%	Maximum Power : 48W
Protection : OCP, SCP, OLP – Auto Recovery	Leakage Current : 50uA typ.
Control : 0-10V dimmer; PWM (250-3KHz); Potentiometer; Enable	Dimension: XP: TBD / XM: 108.3x76.3x30mm (LxWxH)
Hold up time: Half cycle min. at 120VAC and 80% rated load	Regulation Compliance: UL8750 or EN61347, EN55015, EN61547

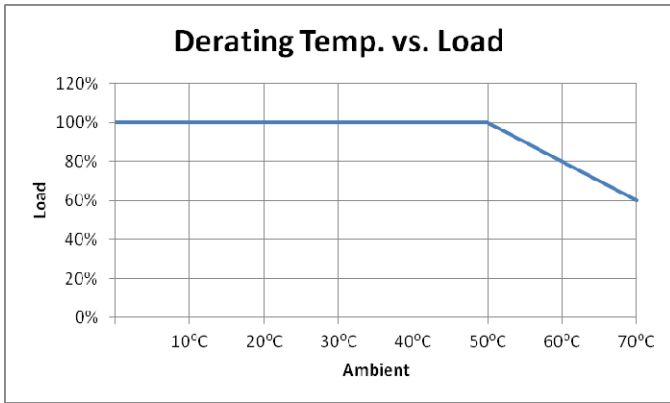
## MODEL SELECTION :

Model Number	Constant Voltage Mode			Model Number	Constant Current Mode		
	V (DC)	A (mA)	Max. W		A (mA)	V (DC)	Max. W
Q48-U24-Xz	24, ±5%	2000	50	Q48-U24-Cyyyy-Xz	2200 ~ 1000	14 ~ 24	50
Q48-U36-Xz	36, ±5%	1330	50	Q48-U30-Cyyyy-Xz	1800 ~ 800	19 ~ 30	50
Q48-U48-Xz	48, ±5%	960	50	Q48-U36-Cyyyy-Xz	1500 ~ 660	23 ~ 36	50
Notes: 1. “Xz” is optional - “Blank” = 5VA plastic case ; “Xp” = 94V-0 plastic case ; “Xm” = stud-mount metal case 2. yyyy = Output current 3. 72VDC output is not UL certified; CV UL is pending.	Q48-U42-Cyyyy-Xz	1250 ~ 630	27 ~ 42	50			
	Q48-U48-Cyyyy-Xz	1100 ~ 570	30 ~ 48	50			
	Q48-U54-Cyyyy-Xz	1000 ~ 450	34 ~ 54	50			
	Q48-U72-Cyyyy-Xz	750 ~ 350	47 ~ 72	50			

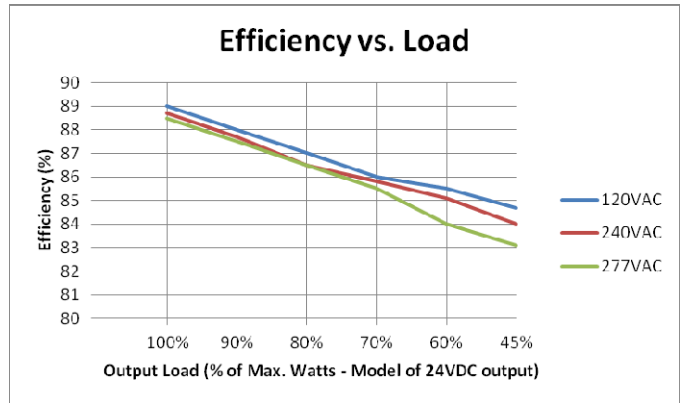
## Dimming Wiring Diagram



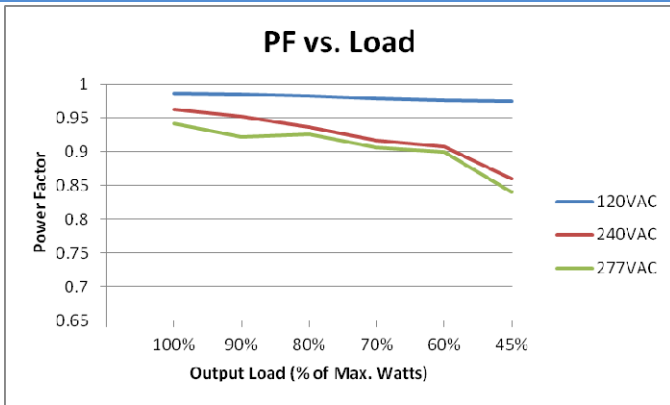
## De-rating Temp. vs. Load



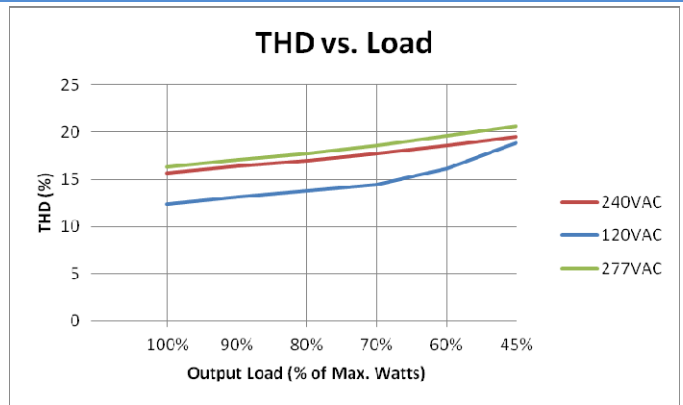
## Efficiency vs. Load



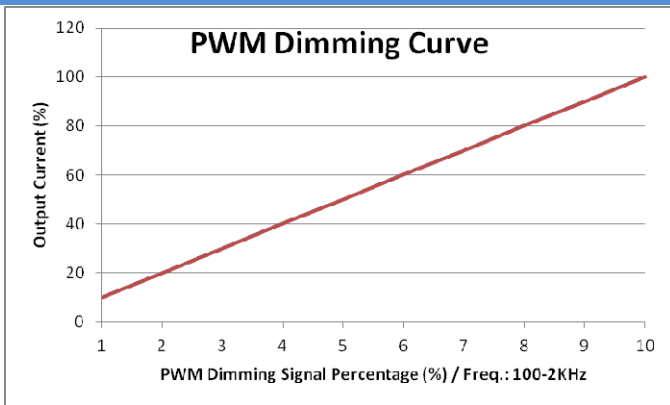
## Power Factor vs. Load



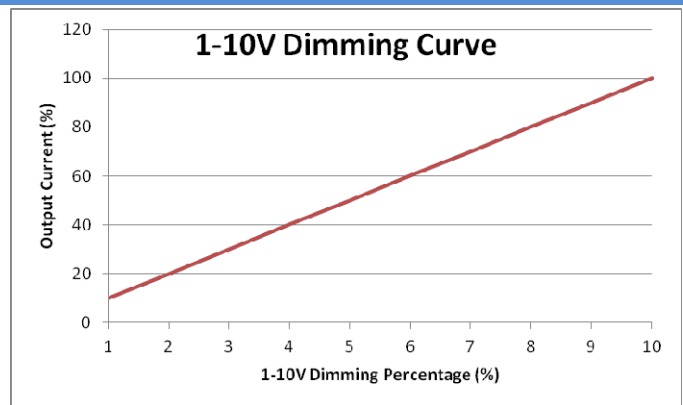
## THD vs. Load



## PWM Dimming Curve



## 1-10V Dimming Curve



## MECHANICAL SPECIFICATION : Q48-UXX-CYYYY

-XP, plastic enclosure

-XM, metal stud-mount enclosure (Preliminary)

