

# Q12 Series

# Product Specifications

ANZ#: Z219d, Sep. 19, 2014

High Power LED Driver	
Total Power	12 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.
- Form-factor: Available in metal and plastic
- Fully potted, suitable for dry and damp location applications
- 4 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: 85 ° 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

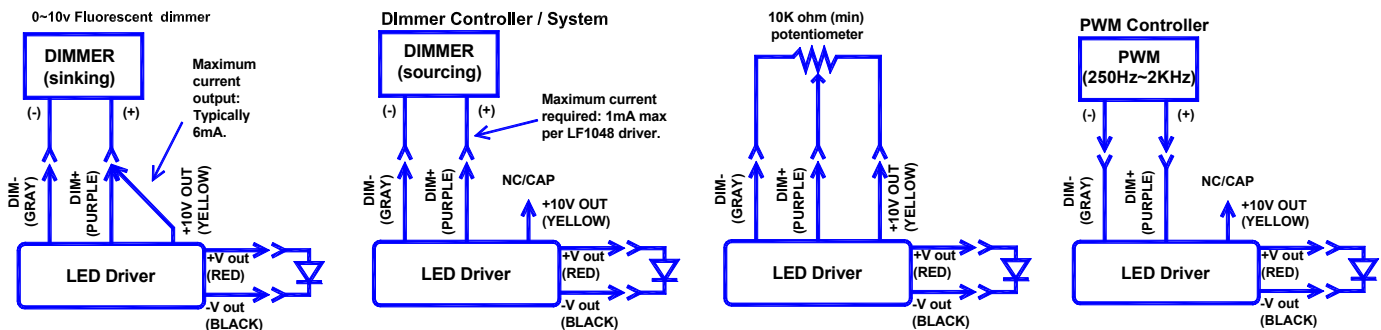
## SPECIFICATIONS :

Input Range : 100 ~ 277VAC	Frequency : 47 to 63Hz
Power Factor: > 0.92 at 65% to 100% load, 115VAC or 230VAC	Inrush Current : 2.0 Amps max. at 115VAC, cold start 25°C
Input Current : 0.25 Amps max. at 115VAC	Efficiency : 87% Typical
Output Current Regulation : ±3%	Maximum Power : 12W
Protection : OCP, SCP, OLP – Auto Recovery	Leakage Current : 50uA typ.
Control : 0-10V dimmer; PWM (250-3KHz); Potentiometer; Enable	Dimension: See mechanical specifications
Hold up time: Half cycle min. at 120VAC and 80% rated load	Regulation Compliance: UL8750 or EN61347, EN55015, EN61547

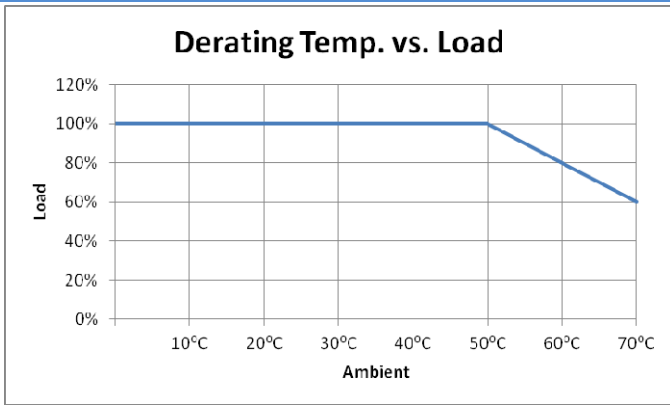
## MODEL SELECTION :

Model Number	Constant Voltage Mode			Model Number	Constant Current Mode		
	V (DC)	A (mA)	Max. W		A (mA)	V (DC)	Max. W
Q12-U12-XP	12, ±5%	1000	12	Q12-U12-Cyyyy-Xz	1300 ~ 650	6 ~ 12	12
Q12-U24-XP	24, ±5%	500	12	Q12-U24-Cyyyy-Xz	675 ~ 325	14 ~ 24	12
Q12-U36-XP	36, ±5%	335	12	Q12-U30-Cyyyy-Xz	540 ~ 260	19 ~ 30	12
Q12-U48-XP	48, ±5%	850	12	Q12-U36-Cyyyy-Xz	450 ~ 220	23 ~ 36	12
Notes: yyyy = Output current “z” = P for plastic enclosure M for metal enclosure T for plastic enclosure with terminal blocks				Q12-U42-Cyyyy-Xz	385 ~ 200	27 ~ 42	12
				Q12-U48-Cyyyy-Xz	360 ~ 160	30 ~ 48	12
				Q12-U54-Cyyyy-Xz	300 ~ 160	34 ~ 54	12

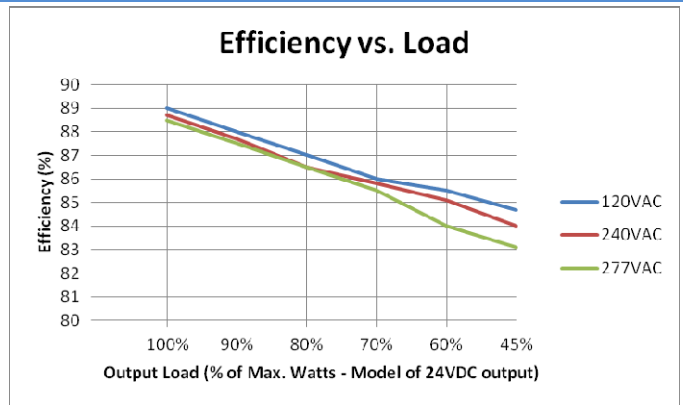
## Dimming Wiring Diagram



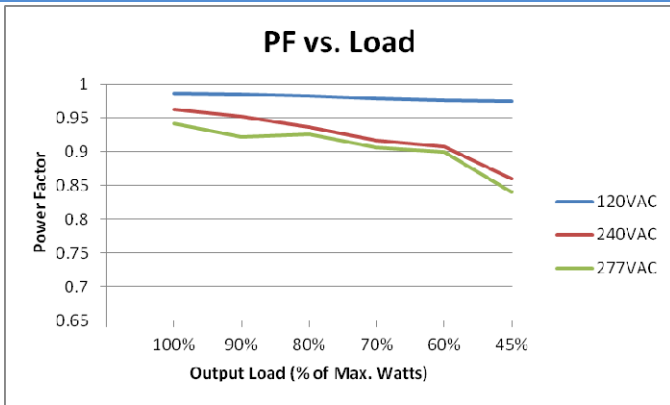
## De-rating Temp. vs. Load



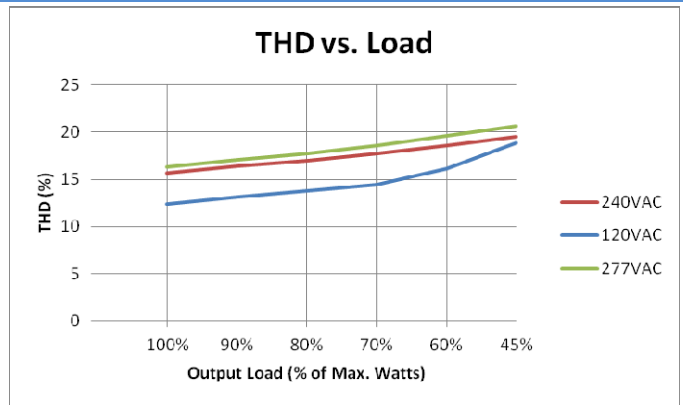
## Efficiency vs. Load



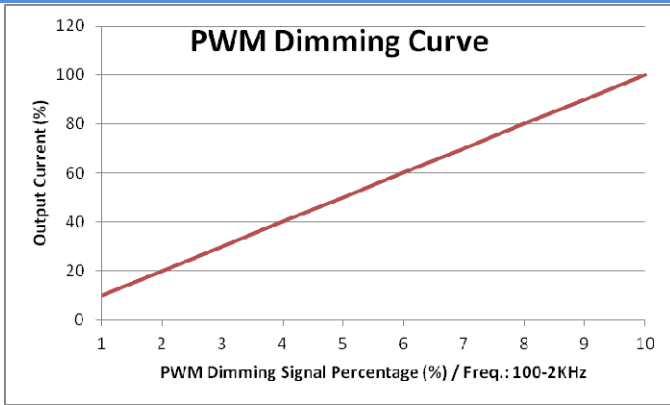
## Power Factor vs. Load



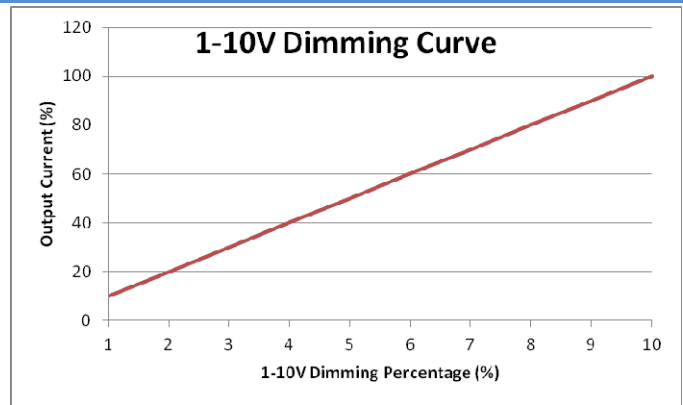
## THD vs. Load



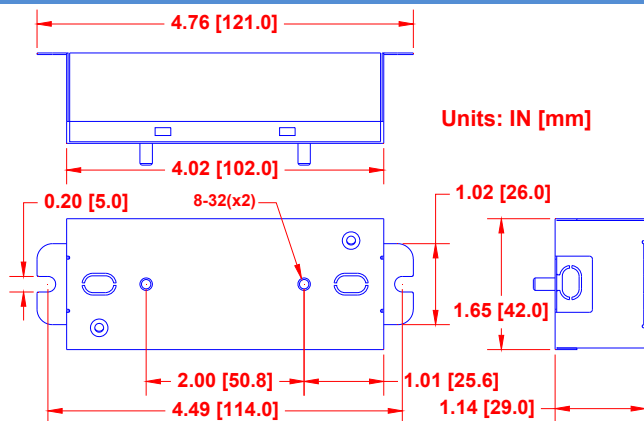
## PWM Dimming Curve



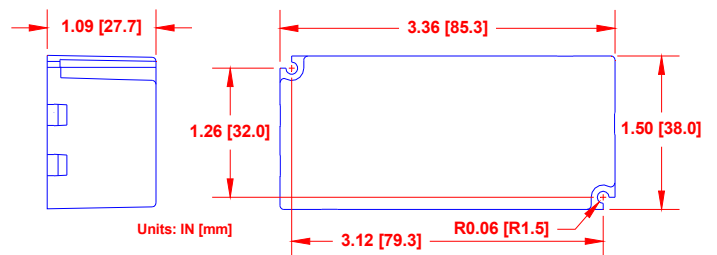
## 1-10V Dimming Curve



## MECHANICAL SPECIFICATION : Q12-UXX- CYYYY-Xz



Mechanical drawing below representing "non-XP" case dimensions



"Xm" – Stud-mountable Metal Case

"XP" – 85.3 x 37.9 x 25.0 mm