

Q12 Series

Preliminary Product Specifications

ANZ#: Z219, May 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.
- Size: XP: TBD (LxWxH)
- Fully potted, suitable for dry and damp location applications
- 4 in 1 Dimming Control plus “ENABLE” input
- UL8750 and CE compliant (pending)
- Wide selection of pre-adjusted C/C outputs (factory setting)

Picture Not Available

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

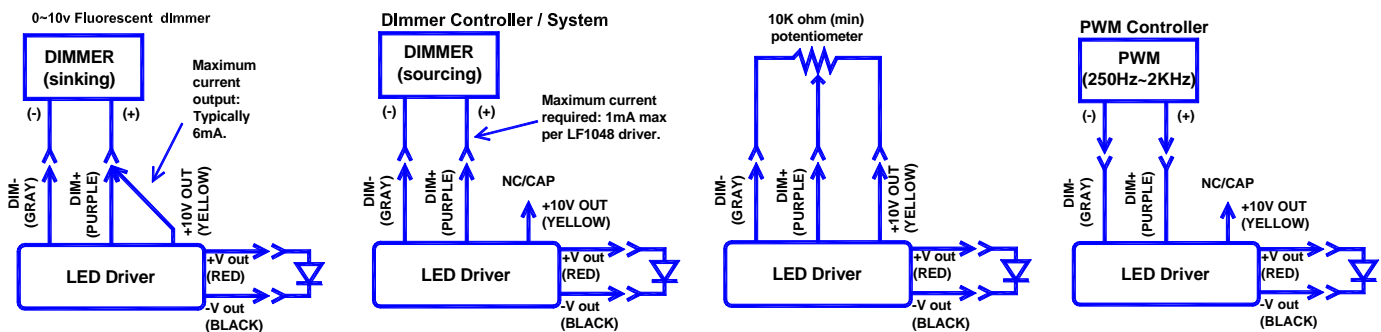
SPECIFICATIONS :

Input Range : 100 ~ 277VAC	Frequency : 47 to 63Hz
Power Factor: > 0.92 at 65% to 100% load, 115VAC or 230VAC	Inrush Current : 25.0 Amps max. at 230VAC, 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: XP: TBD (LxWxH)
Hold up time: Half cycle min. at 120VAC and 80% rated load	Regulation Compliance: UL8750 or EN61347, EN55015, EN61547

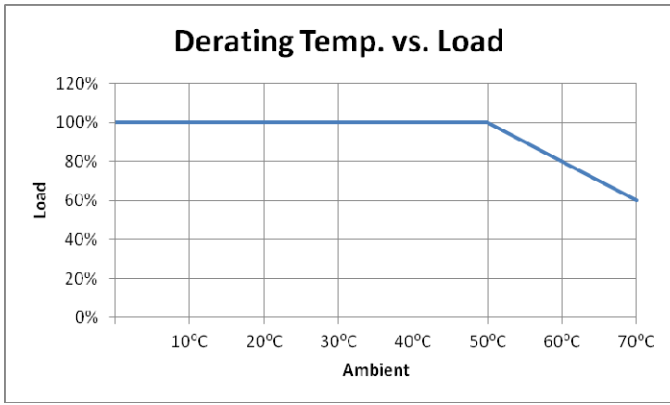
MODEL SELECTION :

Model Number	Constant Voltage Mode			Model Number	Constant Current Mode		
	V (DC)	A (mA)	Max. W		A (mA)	V (DC)	Max. W
Q12-U12-XP	12, ±5%	1000	12	Q12-U12-Cyyyy-Xz	1300 ~ 1000	6 ~ 12	12
Q12-U24-XP	24, ±5%	500	12	Q12-U24-Cyyyy-Xz	675 ~ 500	14 ~ 24	12
Q12-U36-XP	36, ±5%	335	12	Q12-U30-Cyyyy-Xz	540 ~ 400	19 ~ 30	12
Q12-U48-XP	48, ±5%	850	12	Q12-U36-Cyyyy-Xz	450 ~ 335	23 ~ 36	12
Notes: yyyy = Output current “z” = P for plastic or M for metal enclosure				Q12-U42-Cyyyy-Xz	385 ~ 285	27 ~ 42	12
				Q12-U48-Cyyyy-Xz	360 ~ 250	30 ~ 48	12
				Q12-U54-Cyyyy-Xz	300 ~ 220	34 ~ 54	12

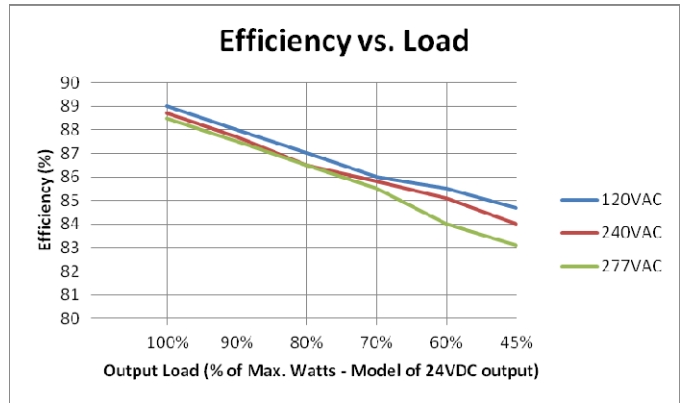
Dimming Wiring Diagram



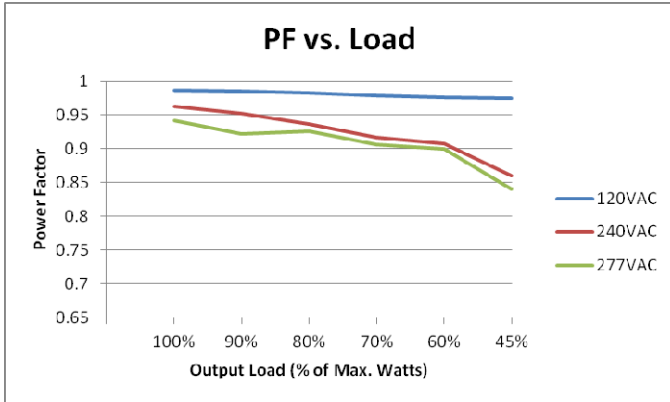
De-rating Temp. vs. Load



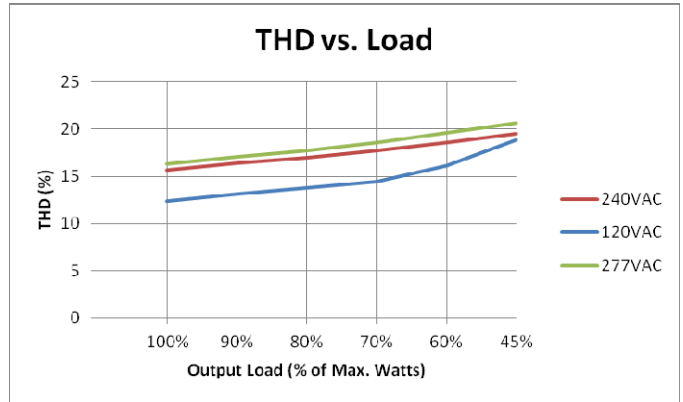
Efficiency vs. Load



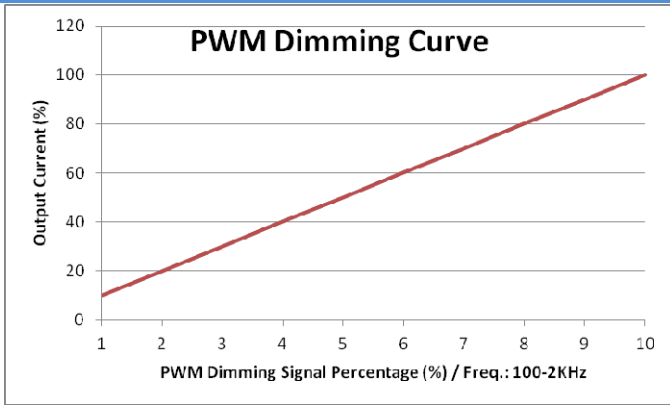
Power Factor vs. Load



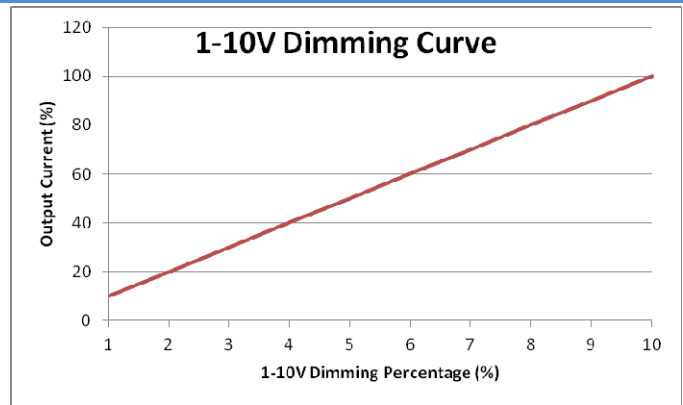
THD vs. Load



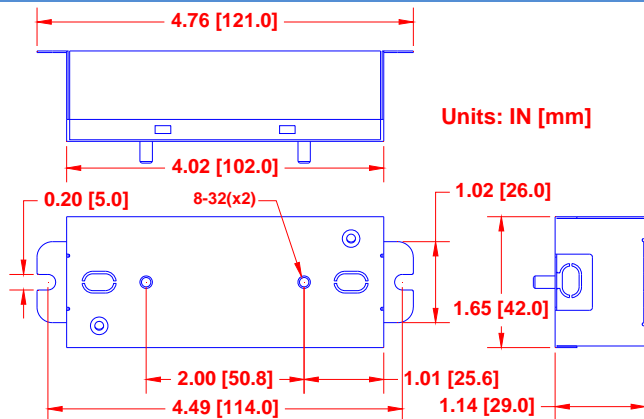
PWM Dimming Curve



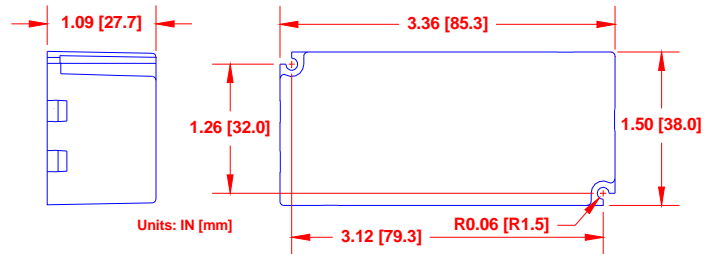
1-10V Dimming Curve



MECHANICAL SPECIFICATION : Q38-UXX-Xz-CYYYY



“Xm” – Stud-mountable Metal Case



“Xp” – Plastic Case