



Plug-and-Play Class 2 75 Watt LED Driver

The GRE Alpha XLD series is the industry's only UL Listed LED driver. As a standalone unit, this unique patented, conduit-ready, LED power supply will enable complete installation of your system without having to install external junction boxes saving you invaluable time and money in installation and approvals. It's as simple as plug-and play!

Efficient, Reliable and easy to install, the XLD 75 (75 Watt power rating) is fully potted and can work in extremely low temperature environments (-40°C-60°C). This unit features universal input 90-305 VAC and its user-friendly output voltage/current adjust pots allow you to easily tune the unit to drive your system at the appropriate power levels enabling flexibility and compatibility with a wide variety of indoor/outdoor LED lighting systems.

Features

- The only UL Listed LED Driver on the market, enabling drastically reduced approval times and agency approval costs
- Plug-and-Play Conduit Entry and Wiring Compartments. Eliminates need for external Junction boxes.
- Wide Input Voltage: 90-305 VAC
- User Adjustable Output Voltage/Current High Efficiency: Active PFC
- Extremely Low operating temperature - 40°C -60°C
- SCP, OCP, OTP, OVP
- Remote Dimming Options
- 3 Years Warranty

Applications

- Architectural Lighting
- Effect & Contour Lighting
- Office General Illumination
- Warehouses
- Street Lighting
- Signage
- Strip Lighting
- Swimming Pools/Fountain lighting

XLD75 UL/cUL Listed LED Drivers



Model Selection Key

XLD75-ABBV-FC

- With Trim Pots
- Nominal Output Voltage
- Number of Output Channel(s)
- Series Name

Models	Nominal Vout (V) per Channel	CV mode Voltage POT Adjust Range (V)	CC mode LED Voltage Range(V)	Current POT* Adjust Range (A)	Class 2 Max Output Current	Max Ripple/ Noise (mV pp)	Efficiency	Max Output Power (W)
XLD75-108V-FC	8	5.6 - 8.4	4 - 8	0.5 - 5.25	5	120	83%	40
XLD75-112V-FC	12	8.4 - 12.6	6 - 12	0.5 - 5.25	5	180	85%	60
XLD75-115V-FC	15	10.5 - 15.7	7.5 - 15	0.5 - 5.25	5	225	86%	75
XLD75-124V-FC	24	16.8 - 25.2	12 - 24	0.31 - 3.29	3.13	360	87%	75
XLD75-136V-FC	36	25.2 - 37.8	18 - 36	0.21 - 2.18	2.08	540	88%	75
XLD75-148V-FC	48	33.6 - 50.4	24 - 48	0.16 - 1.64	1.56	720	89%**	75

* US Patent: US7154755 B2, China Patent No: 201020223052.2

** Efficiency at 91% when utilizing synchronous rectification

Input Specification

Voltage Range	Frequency Range	Max Inrush Current	Power Factor
90-305 VAC (NOM: 120/240/277 VAC)	47-63 Hz	50A@230 VAC input, 25°C, cold start-up	0.9 min @100-277 VAC, Full load

Output Specification

Max Power	75 W	Transient Response	8 mS, full load to Half load, 120 VAC Input
Line Regulation	+/- 1% Max	Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.
Efficiency	230 VAC input, full load, See Model Table Page	Constant Voltage (CV) Mode Load Regulation	+/- 5% Max (Voltage Setting Adjustable via on-board pot: +5%/-30%)
Noise/Ripple	1.5% of Rated Output Voltage*	Constant-Current (CC) Mode Regulation	+/- 5% Max (Current Setting Adjustable via on-board pot: +5%/-90%)
Over Current Protection	125% Max	Over Voltage Protection	132% Max
Hold-up Time	2 mS @ full load, 120VAC input	Start-up Time	2 sec. Typical@ start-up to full load, 120VAC input
		Over temperature Protection	105°C Max, Hiccup-Mode, Auto-Recovery

* All noise measurements made at the output terminals, connected to a 20MHz low pass filter.

Environmental Specifications

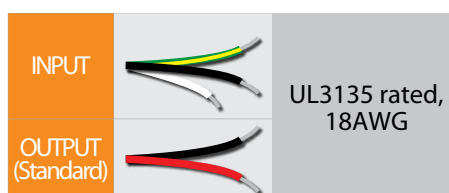
MTBF	Cooling	Operating Temp	Storage Temp	Relative Humidity
55,000 hours (Full load @ 25°C Ambient, Based on MIL-217F)	Convection	-40°C- 60°C (Full load)	-40°C- 85°C	5% - 95 %

Compliance / Safety

EMI/RFI:	CISPR-22 Class B FCC part 15 Class B EN 55015
Safety Standards:	UL 1012/1585, UL8750, UL Class 2 Wet locations , UL 48,cUL, CE, UL #: E342485
Weatherability:	EN60529 IP 65

Remote Dimming Options

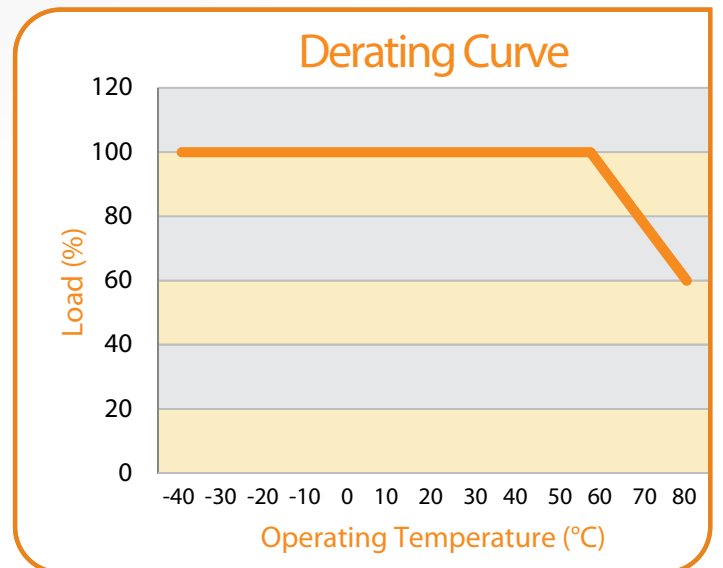
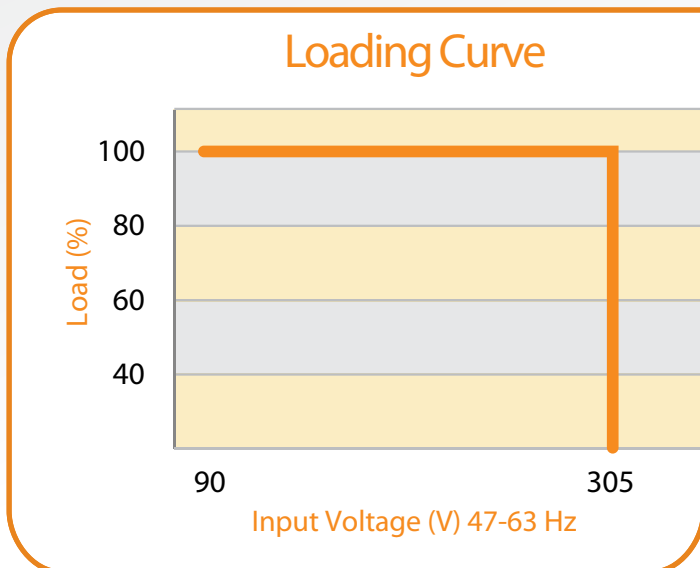
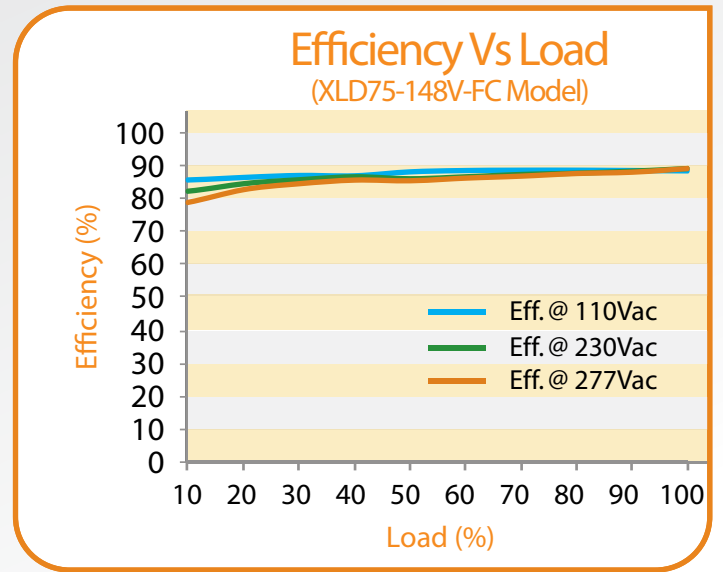
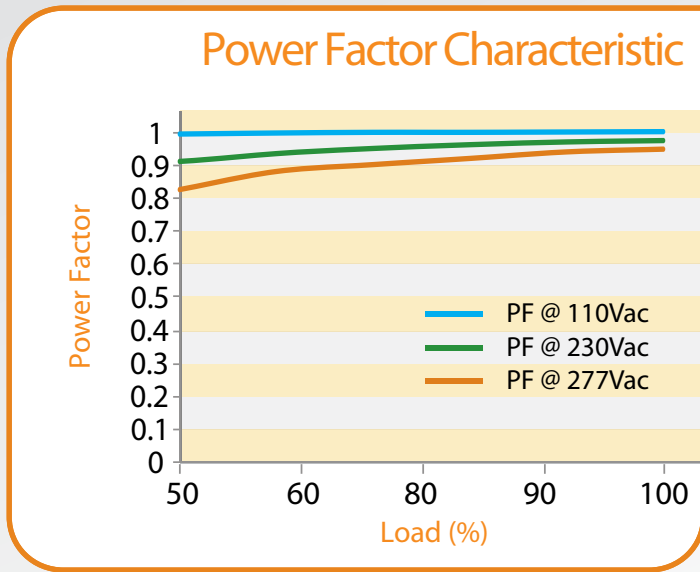
Dimming Types	Dimming Control
1. PWM-1kHz, 1-100%	• 1-10V DC
2. Constant Current, 10-100%	• Potentiometer
3. Output Voltage, 75-100%	• Serial Comm. (2-wire)
4. Compatible with SLD/XLD DIM	• Wireless Remote



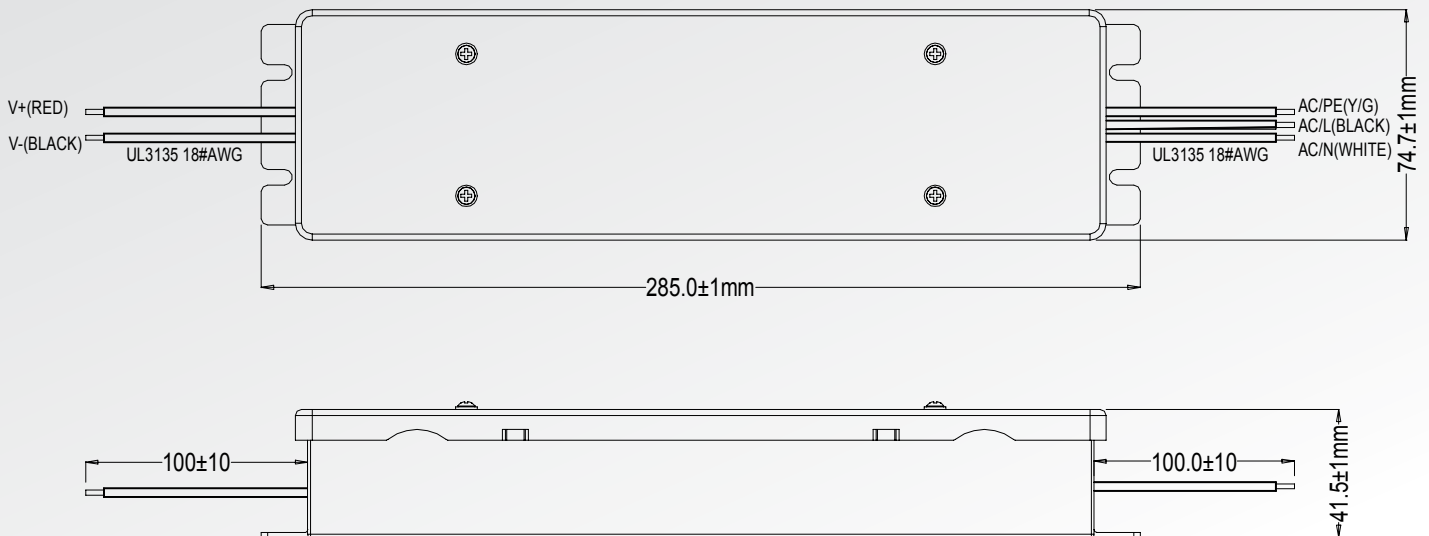
Mechanical

Material:	
NEMA 3 Design with patented AC and DC Wiring compartments, fully potted PCB.	

Reliabilities Curves



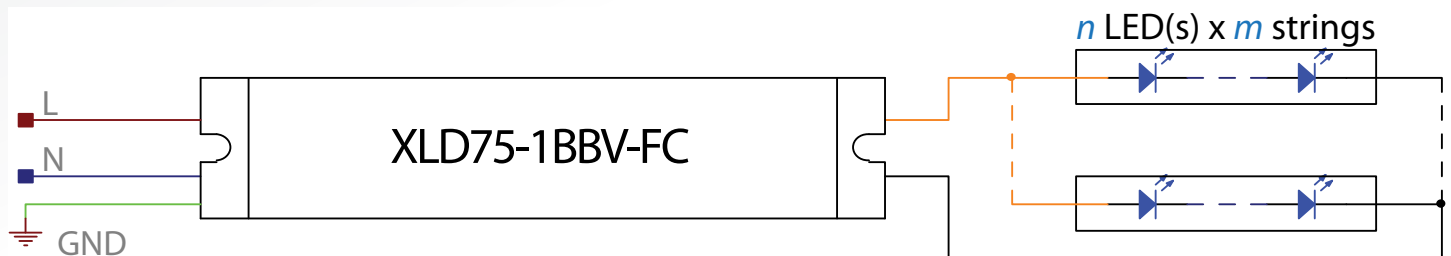
Mechanical Diagrams



Packing Information

Weight: 0.958 kg/pcs, 24.5 kg/carton
 24 pcs/carton; L644xW340xH195 (mm)

Configuration Arrays



Model	CC mode LED Voltage Range (V)	Recommended n LED(s) per String *	Current POT Adjust Range (A)	LED Current per String
XLD75-108V-FC	4 - 8	1 - 3	0.5 - 5.25	$= \frac{I_{out}}{m \text{ Strings}}$
XLD75-112V-FC	6 - 12	2 - 4	0.5 - 5.25	
XLD75-115V-FC	7.5 - 15	2 - 5	0.5 - 5.25	
XLD75-124V-FC	12 - 24	4 - 9	0.31 - 3.29	
XLD75-136V-FC	18 - 36	7 - 14	0.21 - 2.18	
XLD75-148V-FC	24 - 48	9 - 18	0.16 - 1.64	

* LED Vf range: 2.7-3.6V

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