



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 wide 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
- Horticultural Lighting

XLD 75

UL/cUL Listed LED Drivers

US Patent Numbers: 7,154,755 & 7,738,253



Model Selection Key

XLD75-ABBV-FC

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

Model Number	Input Voltage Range (V _{AC})*	Channel(s) Output	CC mode					CV Mode				Max Output Power (per Channel) (W)	Total Output Power (W)	
			Rated Current (per Channel) (A)	Compliance (LED) Voltage (V _{bc})		Current Pot Adjustable Range (All Channels) (A)		Preset Vout (V _{bc})	Load Range (per Channel) (A)		Voltage Pot Adjustable Range (V _{bc})			
				min	max	min	max		min	max	min			max
XLD75-112V-FC	90-305	1	5.0	6.0	12.0	0.50	5.25	12	0	5.25	8.4	12.6	60	60
XLD75-115V-FC	90-305	1	5.0	7.5	15.0	0.50	5.25	15	0	5.25	10.5	15.8	75	75
XLD75-124V-FC	90-305	1	3.1	12.0	24.0	0.31	3.30	24	0	3.30	16.8	25.2	75	75
XLD75-136V-FC	90-305	1	2.1	18.0	36.0	0.21	2.18	36	0	2.18	25.2	37.8	75	75
XLD75-148V-FC	90-305	1	1.6	24.0	48.0	0.16	1.65	48	0	1.65	33.6	50.4	75	75

FC = Patented, easy install enclosure with integral wiring compartments.

* = CCC Approval: 100-240 VAC Only; PSE Approval: 100-120 VAC Only.

* UL marking: for products manufactured in Vietnam only, effective October 2020.

Input Specification

Voltage Range	Frequency Range	Max Inrush Current	Power Factor	THD
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	<25% @ 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	>80% @ Full Load, 230 VAC input	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

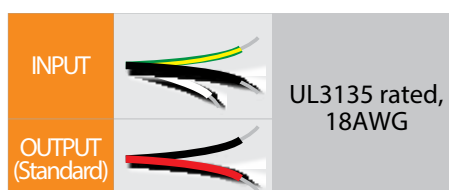
MTBF	Cooling	Operating Temp	Storage Temp	Relative Humidity
55,000 hours (Full load @ 25°C Ambient, Based on MIL-217F)	Convection	-40°C- 60°C (Full load)	-40°C- 85°C	5% - 95 %

Compliance / Safety

EMI/RFI:	CISPR-22 Class B FCC part 15 Class B EN 55015
Safety Standards:	UL1012/1585, UL8750,UL879, UL Class 2 Wet locations , UL 48,cUL, CE, UL #: E342485 EN 61347-2-13, CCC, PSE
Weatherability:	EN60529 IP 65
Surge Immunity	Line - Line: 2.5kV Line - Earth: 4kV

Remote Dimming Options

Dimming Types	Dimming Control
1. PWM-1kHz, 1-100% 2. Constant Current, 10-100% 3. Output Voltage, 75-100% 4. Compatible with SLD/XLD DIM	<ul style="list-style-type: none"> 1-10V DC Potentiometer Serial Comm. (2-wire) Wireless Remote



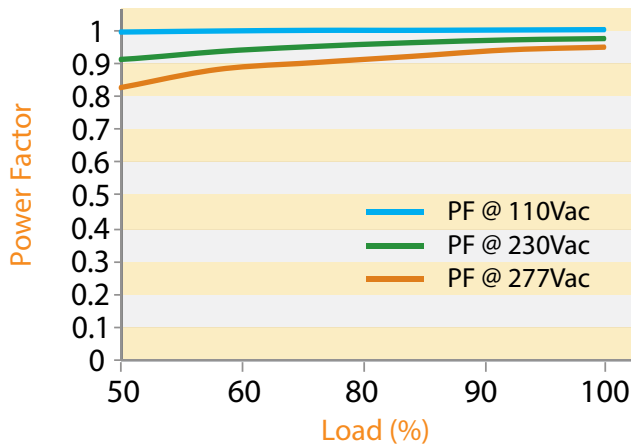
Mechanical

Material:

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

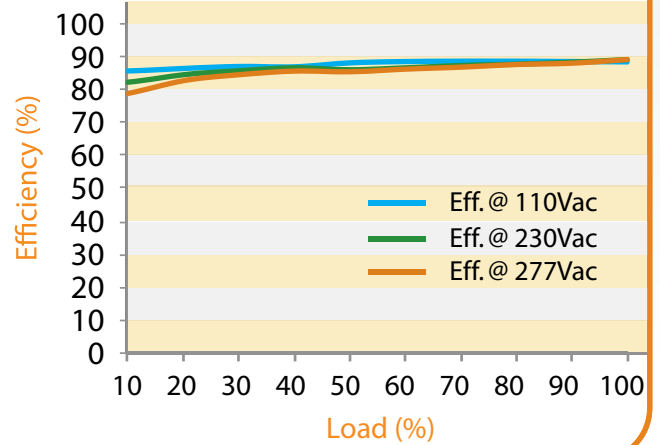
Reliabilities Curves

Power Factor Characteristic

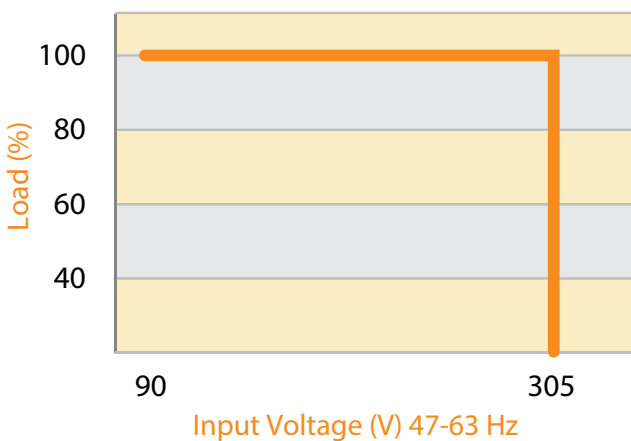


Efficiency Vs Load

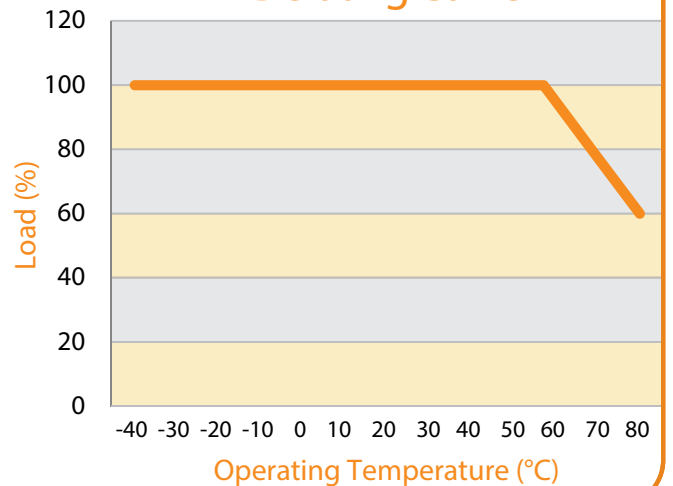
(XLD75-148V-FC Model)



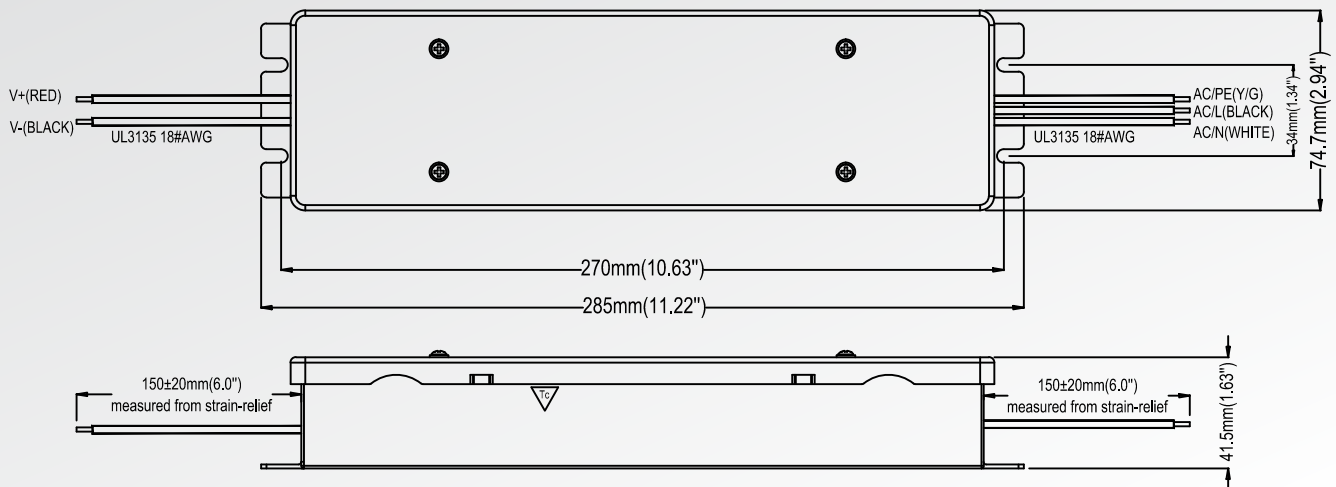
Loading Curve



Derating Curve



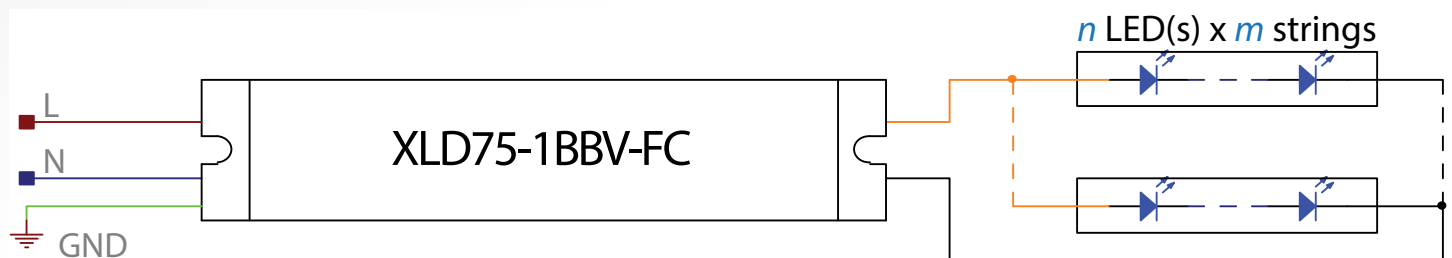
Mechanical Diagrams



Packing Information

Weight: 0.97 kg/pcs, 11.8kg/carton
12 pcs/carton; L322xW340xH180 (mm)
US Patent Numbers: 7,154,755 & 7,738,253

Configuration Arrays



Model	CC mode LED Voltage Range (V)	Recommended n LED(s) per String *	Current POT Adjust Range (A)	LED Current per String
XLD75-112V-FC	6 - 12	2 - 4	0.5 - 5.25	$= \frac{I_{out}}{m \text{ Strings}}$
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				

Information furnished is believed to be accurate and reliable. However, GRE Alpha assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of GRE Alpha. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied.

The GRE Alpha logo is a registered trademark of GRE Alpha Electronics Ltd.
All other names are the property of their respective owners