





Indoor Class 2 LED Driver

D90MC/V2P175 0S

Description: 90W 0.9 A~1.75 A 0-10V Dimmable /Programmable Class 2 PSU

Input Voltage: 120-277 Vac +/-10% (UL), 23 0Vac +/-10% (CE)

Input Frequency: 50/60Hz

ROHS Compliant: Yes

Output Power (W)	Output Current (A)	Output Voltage (V)	Efficiency at full load (277Vac input)	Max Input Current (A)	Input Power (w)	THD @ 25W Po (277Vac)	PF @ 25W Po (277Vac)	Inrush Current (A/mS)	Surge Protection (kV/kA)	Weight (lbs/g)
90	0.9 -1.75 ±5%	21-51	>90%	0.87A (UL), 0.45A (CE)	103W	<20%	>0.9	See Page below	3kV/0.25kA	1.33lb / 602g

Dimming Function						
Dimming Method	Isolation	Dimming Range (%)	Current source			
0-10V	Class 2	100% - 10%	0.5mA			

Wiring Diagram: See label below

Product Features

Physical

Unit must be installed in compliance with the applicable requirements of the end-product standard for enclosure, mounting, spacing, casualty and segregation. Enclosure wiring must be rated to 600V & 105°C or higher.

Performance

The unit is classified as Class 2 as stipulated in UL1310.

Dimming circuit is classified as Class 2 as stipulated in UL1310.

Minimum ambient operating temperature: -30°C.

Maximum allowable casing temperature: 80°C.

For reliability and failure rate information, contact LED Indoor Electronics Team.

The unit is UL certified for operation in dry/damp locations.

The unit is tolerant of extended open circuit and short circuit conditions.



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(33) 3854 7846 (33) 2265 2513



The unit is compliant to FCC Title 47 Part 15 Class A and EN55015. The unit is resistant to surges as per ANSI C62.41 – 2002 and IEC 61000 -4-5.

UL Conditions of Acceptability – E340135

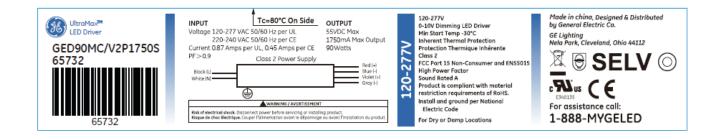
The unit has been examined to comply with Class 2 Output Criteria

The unit is only to be used in dry or damp locations

The metal casing must be connected to EARTH.

The "LED" and "DIM" output circuits must remain isolated form one another to be considered class 2 circuits in the end use.

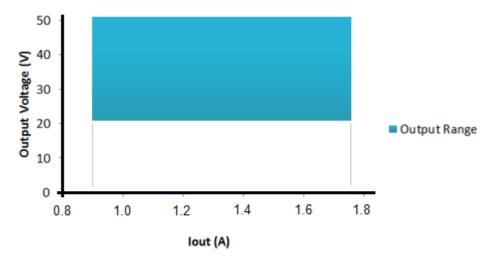
Product Label



Technical Information

Output Voltage/Current Range (23V – 52V, 0.9A – 1.75A)

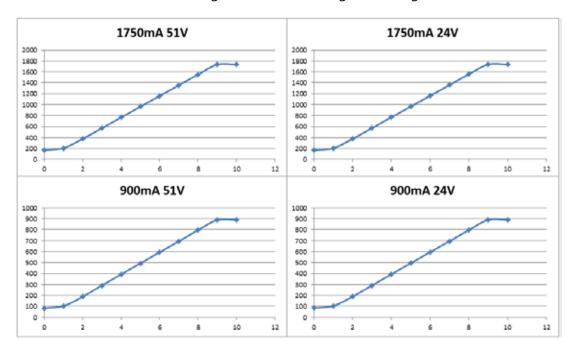
Output Voltage vs. Output Current





0-10V Dimming Curve

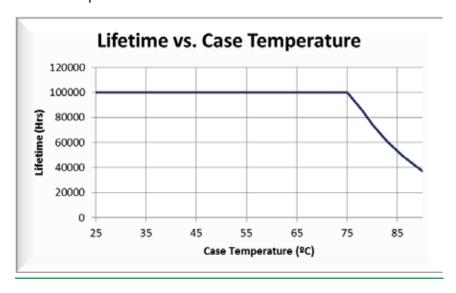
Driver sources 0.5mA dimming currrent. Dimming Level range is from 10% to 100%.



90W CLASS 2 0-10V dimming curves

Technical Information

Lifetime Expectation







Power Factor & Total Harmonics Distortion

Programmed current	Input voltage	Input power	Output power	Power Factor	THD	EFFICIENCY	Output current
1.75A	120V	98.2	87.53	99.9	4.442	89.13	1.74
1.75A	277V	95.4	87.42	98.6	8.836	91.64	1.735
0.90A	277V	35.6	30.15	93.5	18.2	84.69	0.8913

Technical Information

Input Inrush Current

Input Inrush Current						
Input Voltage	Peak Current Pulse	Pulse Duration (50% of Peak)				
[V _{rms}]	[A _{pk}]	[us]				
120V	18.0A	210.4				
277V	40.2A	222.4				

Leakage Current

Input Ground Leakage Current						
Input Voltage	Leakage Current (mA)					
[V _{rms}]	S1 ON	S1 OFF				
120V	0.15	0.32				
240V	0.28	0.60				
277V	0.38	0.78				



Product D imensions



Current Programming Interface

Firstly set the Max Current to 1750mA and the Min Current to 900mA in the input box, then put the value to be programmed (between 900mA to 1750mA) into the input box for Current to Program, finally click the Send button to complete the programming of driver.

