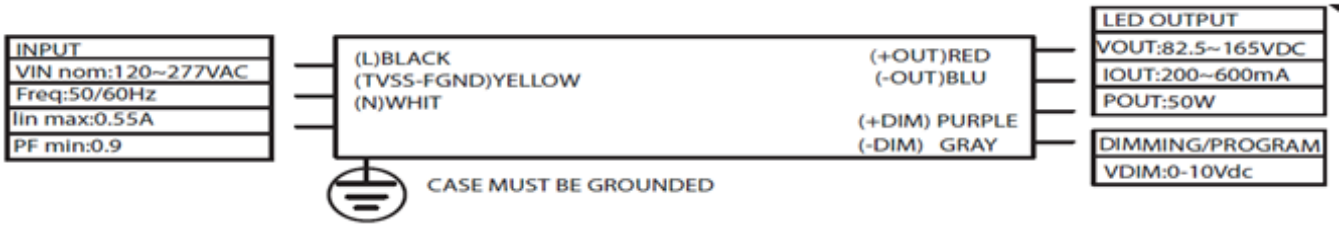
50W TCO Outdoor Dimming Driver

GED50MV1P600
SAP: 95050425
Description: 0~10V/current Programmable Input
Voltage: 120V/277Vac±10%
Input Frequency: 50Hz/60Hz
Surge Protection: 10KV/5KA
ROHS Compliant: Yes

Input Voltage(V)		PF. min	THD	Output power range(W)		Output voltage(V)		Programmable Current Range (A) ±5%		Max ouput current ripple	Dimming	Warranty Life
Nom	Frequency			min	max	Min	Max	Min	Max		0-10V	
120-277Vac	50Hz/60Hz	≥0.9 @full load	≤20%	25.0	50.0	82.5	165.0	0.2	0.6	8% and 120HZ @25℃[(Pk-avg)/avg)	10%-100%	10years @Tc 65C



Product Features

Physical

- Unit must be installed within an electrical enclosure.
- Enclosure wiring must be rated to 600V & 105°C or higher.

Performance

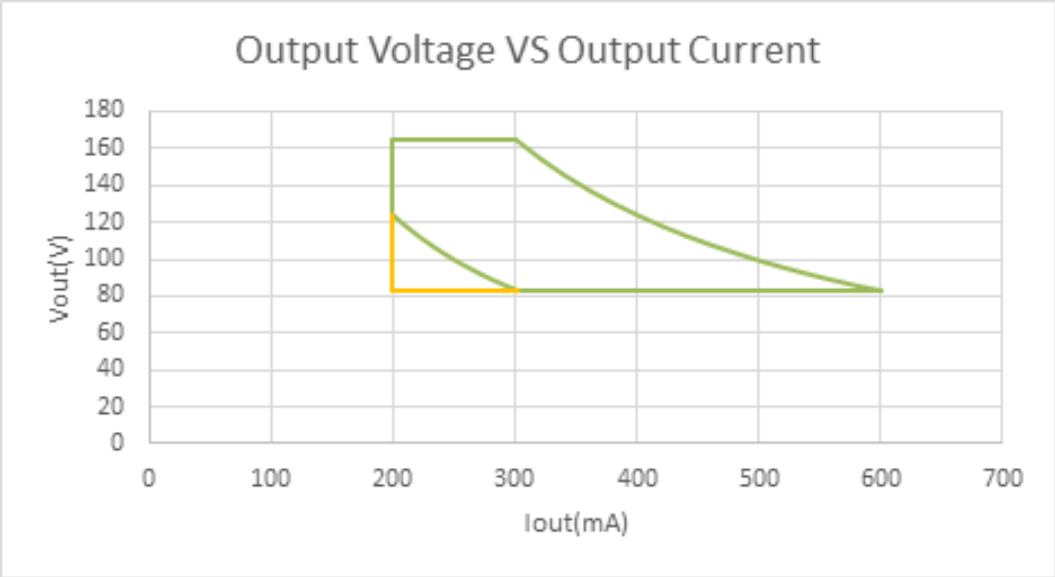
- Driver output is classified as Class 1 as stipulated in NFPA70 article 725 (National Electric Code).
- Dimming circuit is classified as Class 2 as stipulated in UL8750.
- Minimum ambient operating temperature: -40°C.
- Maximum allowable casing temperature: 85°C.
- The unit is UL recognized for operation in dry/damp locations (Outdoor Type 1).
- The unit is tolerant of extended open circuit and short circuit conditions.
- The unit is compliant to FCC Title 47 Part 15 Class A.
- The unit is resistant to surges as per IEEE/ANSI C136.2-2018 Enhanced (10kV/5kA).
- LED load is not protected if load is plugged in while driver is powered.

UL Conditions of Acceptability – E340135

- The unit has been examined to comply with Class 1 Output Criteria.
- The unit is only to be used in dry or damp locations.
- The metal casing must be connected to **EARTH.**
- TVSS-GND (Yellow wire) shall be connected to fixture ground after hi-pot test using closest tab screw. **THIS IS NOT A SAFETY GROUND!**

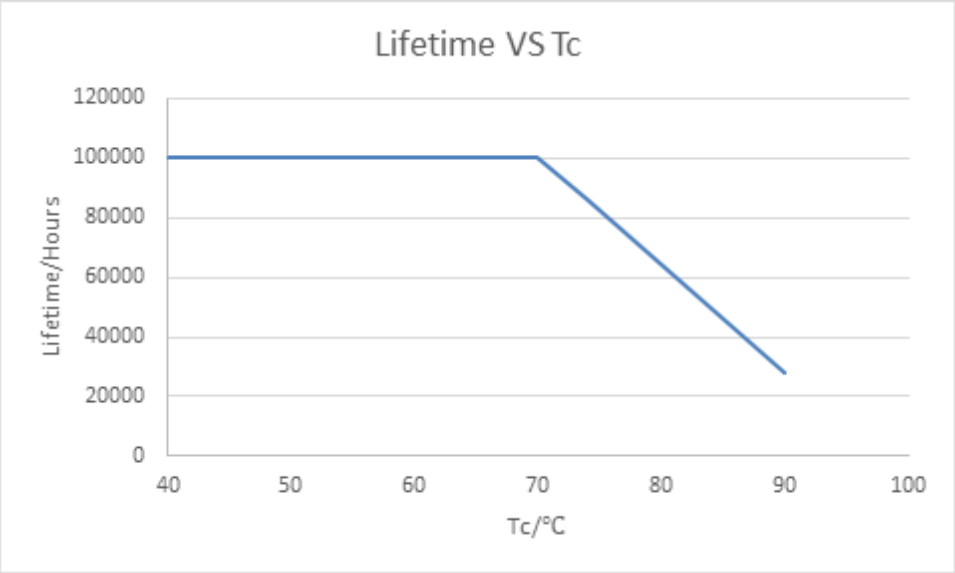
Technical Information

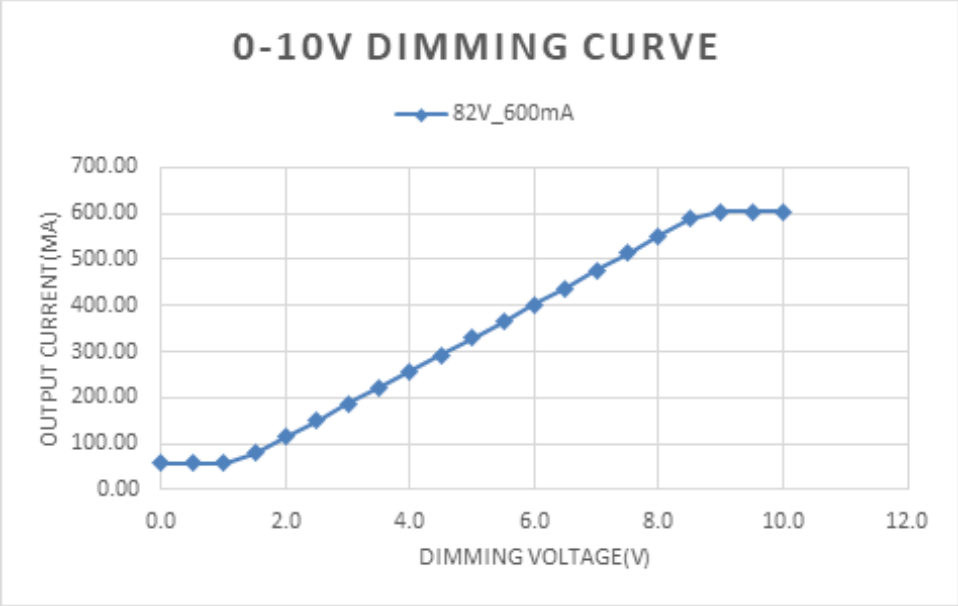
GED50MV1P600

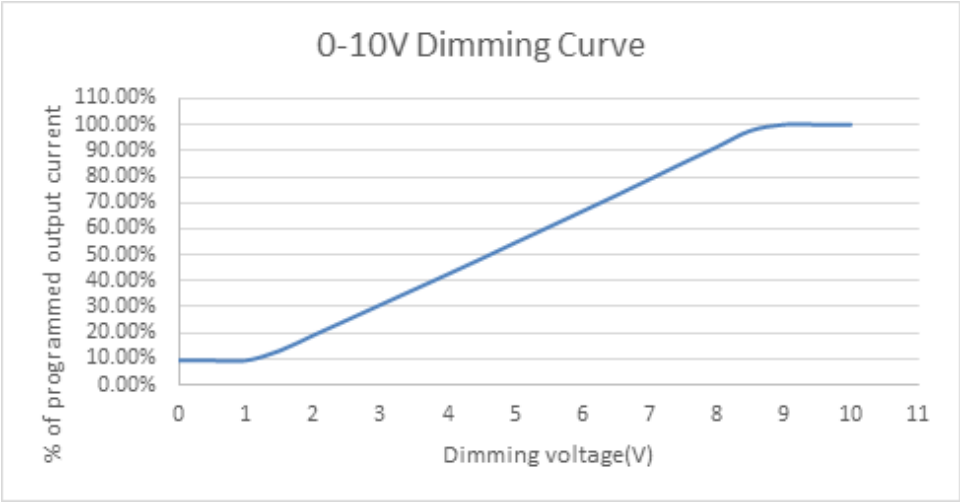


Note: the operation window is tested at room temperature = 25°C
Green Area: Operation Window (PF>0.9, THD<20%)
Yellow Area: Driver operates normally but input PF specification may not be met.

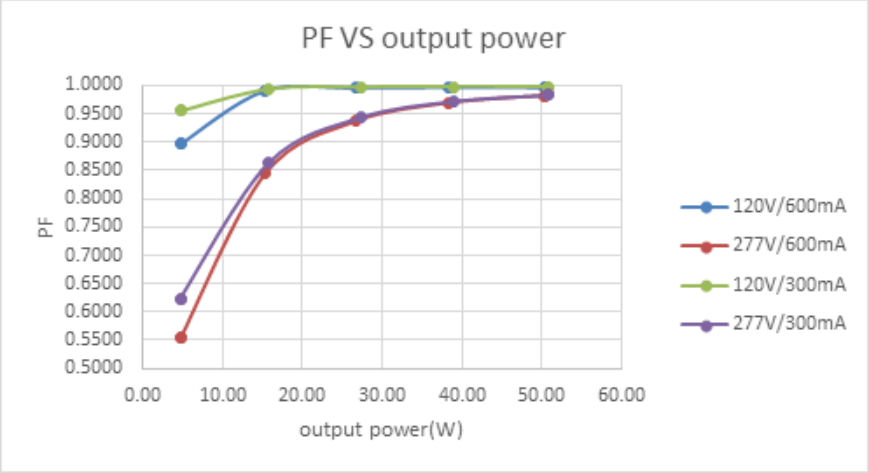
- Driver Design Life is 100,000 hours at Tc < 70C. See life estimation curve based on Tc temp in data below.
- Driver designed for less than .1% failures/1000 hr at Tc = 70C.
- Other factors such as AC line event or thermal excursions above Tc =70 can shorten life expectance.

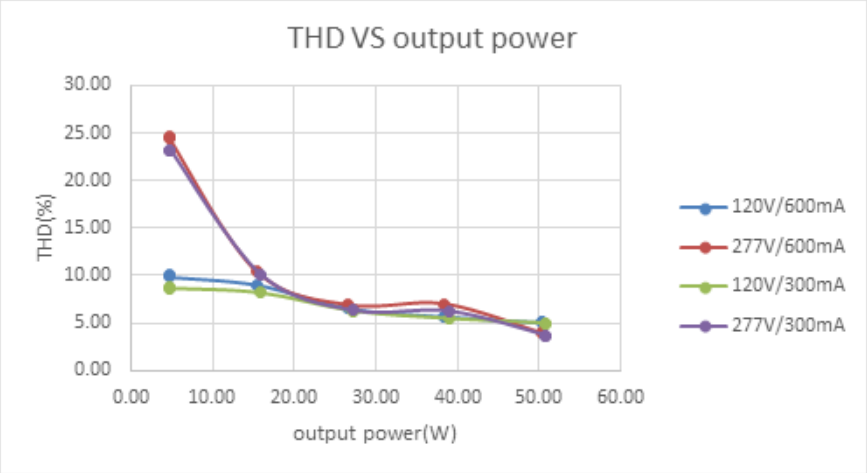

Lifetime VS Tc
120000
100000
80000
60000
40000
20000
0
Lifetime/Hours
40
50
60
70
80
90
100
Tc/°C

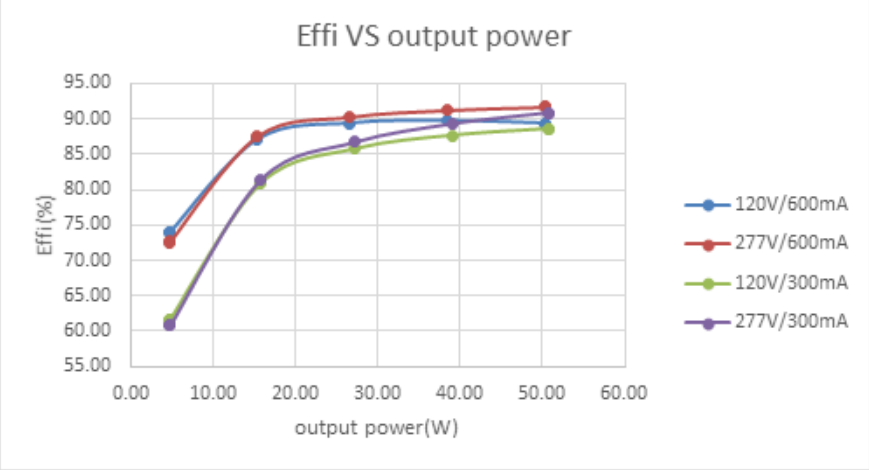

0-10V DIMMING CURVE
82V_600mA
700.00
600.00
500.00
400.00
300.00
200.00
100.00
0.00
OUTPUT CURRENT(MA)
0.0
2.0
4.0
6.0
8.0
10.0
12.0
DIMMING VOLTAGE(V)


0-10V Dimming Curve
110.00%
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
% of programmed output current
0
1
2
3
4
5
6
7
8
9
10
11
Dimming voltage(V)

Power Factoror

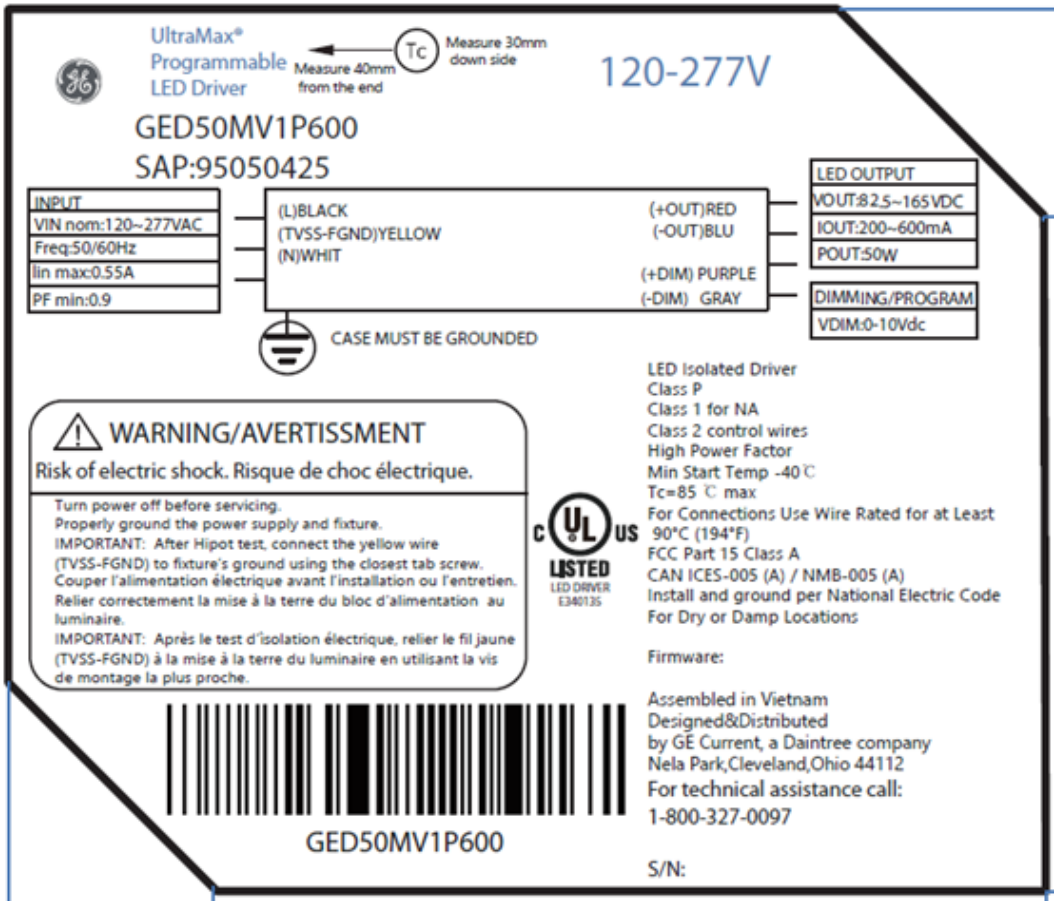






GED50MV1P600		
Input Inrush Current		
Input Voltage (Vrms)	**Peak Current Pulse(A)**	**Pulse Duration (50% of Peak), uS**
120	20.3	155
277	46.3	168

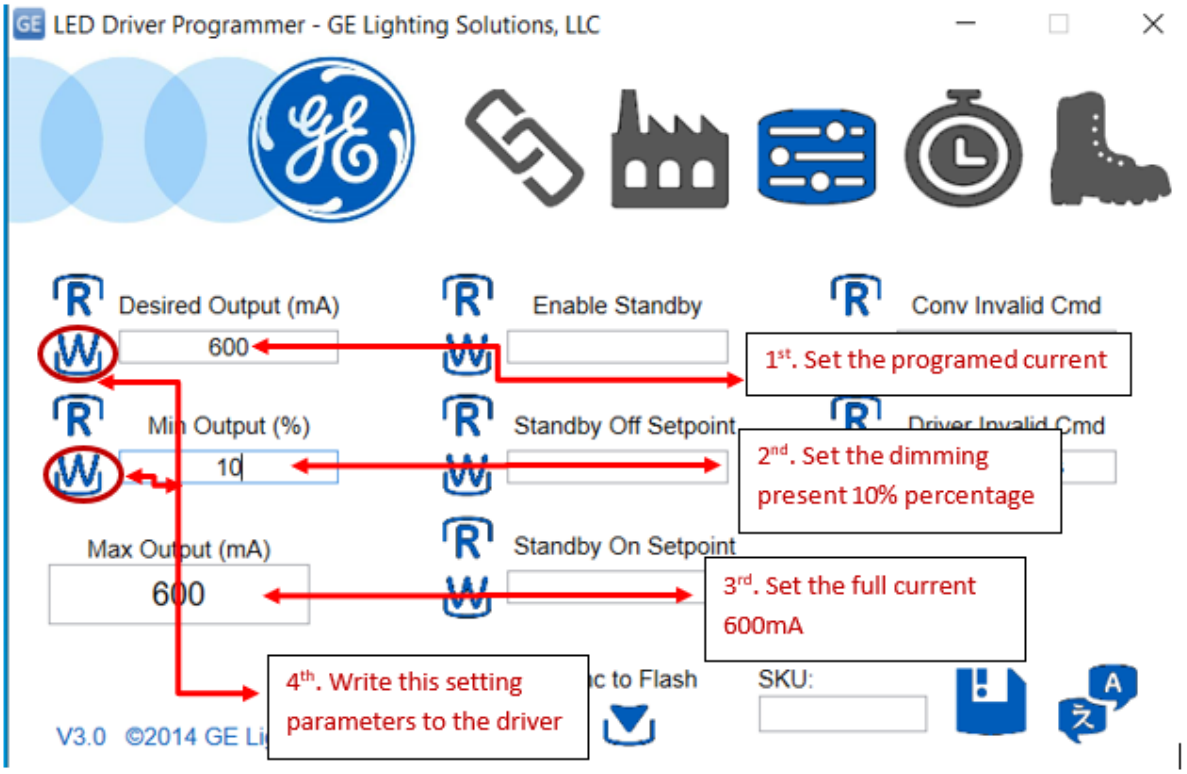
Product Label



Current Programming Interface

Instructions for programming with engineering GUI

- This driver requires 0-10V programming interface controller and software to program to desired output current.
- The programming interface leads are polarized and proper polarity matching is required for the programmer to work correctly. The purple wire is the + polarity and connects to the purple 0-10V dimming wire of the LED driver. The gray (or pink) wire is the common or negative polarity and connects to the corresponding 0-10V dimming wire of the LED driver.
- Power on LED driver and programming interface
- Open engineering programming GUI and select driver programming page
- Input desired maximum current value to be programmed
- Set minimum dimming level to 10%
- Enter 600mA into Max output register for the LED driver
- Select and actuate write button to complete the programming of driver.
- Other driver programming software may be different but the parameters listed for for this driver need to be entered for proper driver programming.



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246C221E (Rev 09/30/20)