

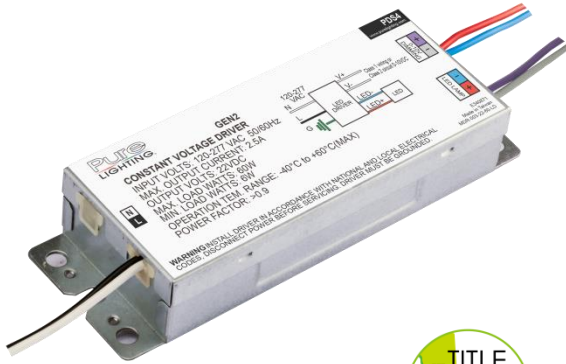


SPECIFICATIONS

MDR-503-22-60-LD

GEN 2

Exclusive for pure edge lighting

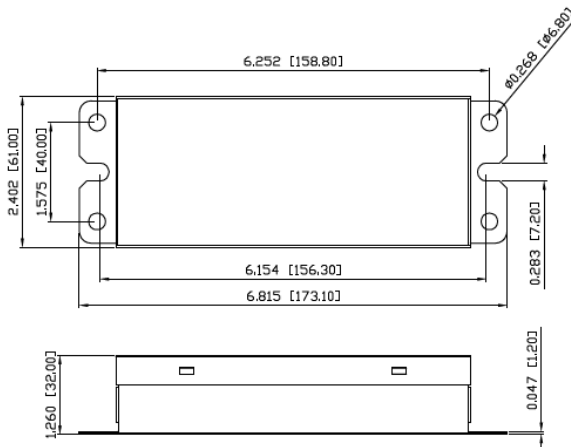


Note-

1. UL file number : E340871 (Upgrading)

Mechanical and Thermal

| | |
|---------------------------|--------------------------------|
| Dimensions | 6.8" (L) x 2.4"(W) x 1.26" (H) |
| Weight | 550 g |
| Lead Wire length | 6" (Standard) |
| Max. Case Operating Temp. | 80°C |



*Dimension in Inch(Metric)

Features

- 0-10V Dimming
- Constant Voltage Output
- UL1310 Class 2 Compliance
- Half Bridge Circuit Topology
- Low In-Rush Current
- 5 Year Warranty
- Precise output tolerance (+/-3%)

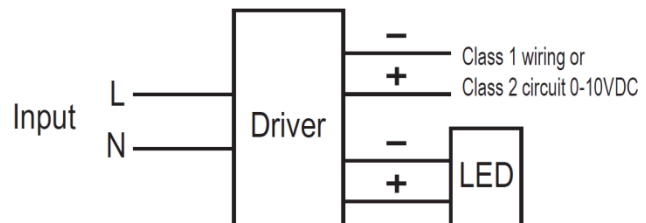
Protection

- Open circuit & Short circuit protection
- Overload protection
- Class 2
- Isolated 0-10V Dimming wires

Environmental Specifications

- Operating Temperature -20° to 60°C
- Storage Temperature -20° to 70°C
- MTBF >100,000 hrs
- -Lead Free SMT process

Wiring Diagram



1. Input – specification

| | Units | Minimum | Typical | Maximum | Notes |
|----------------------------------|---|----------------------------|---------|------------------------------|--|
| Input Voltage Range(Vin) | Vac | 108 | 120-277 | 304 | |
| Input Frequency Range | Hz | 50 | 60 | 63 | |
| Input Power | W | | 70 | | |
| Power Factor(PF) | | 0.9 | >0.9 | | From 100% to 80% of rated power |
| Input Current | A | - | - | 0.58A@120VAC 0.25A@277VAC | |
| Inrush Current | A | Meet NEMA 410 requirements | | | See the inrush current information |
| Total Harmonics Distortion (THD) | | | | 20% | At nominal input voltage and nominal LED voltage |
| Efficiency | | - | >80% | - | Efficiency is measured after driver has thermally stabilized + full load |
| Isolation | Meet UL1310/UL8750 for class 2 isolation power supply | | | | |

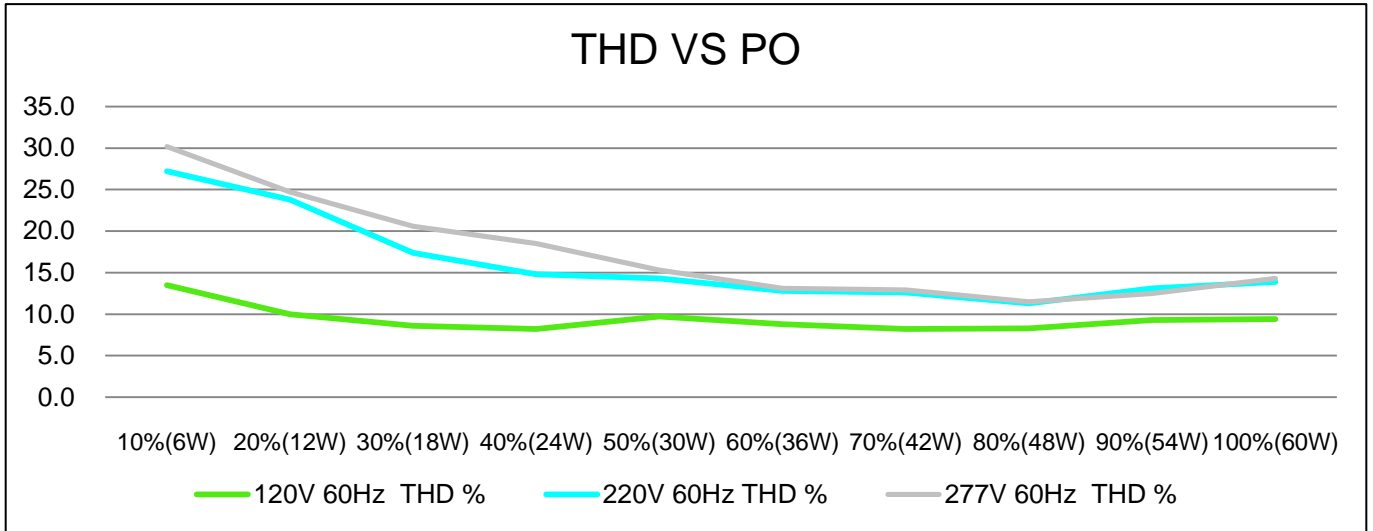
2. Output - specification

| | Units | Minimum | Typical | Maximum | Notes |
|----------------------------|---|----------------|---------|---------|--|
| Output Voltage(Volt) | Vdc | | 22 | | |
| Output Current(Iout) | mA | | 2500 | | |
| Output Voltage Tolerance | % | | ±3 | | |
| Output Ripple Current | < 30% peak-to-peak of 2500 mA | | | | ≤ 20% pk-to-pk of the rated output current for all models with Vout max ≥ 32V ≤ 50% pk-to-pk of the rated output current for all models with Vout max ≤ 30V At nominal LED voltage and nominal input voltage without dimming |
| Dimming Range | % | 2% | | 100% | Please refer to Dimmer compatibility list |
| Star-up Time | ms | | 350-400 | | <ul style="list-style-type: none"> Measured at the Maximum load and normal input voltage. Complies with California title 24 and Energy star® luminaire specification. |
| Isolation | Meet UL1310/UL8750 for class 2 isolation power supply | | | | |
| Operation Case Temperature | °C | -30 | | 80C | |
| Audible Noise | dB | < 24dB Class A | | | |

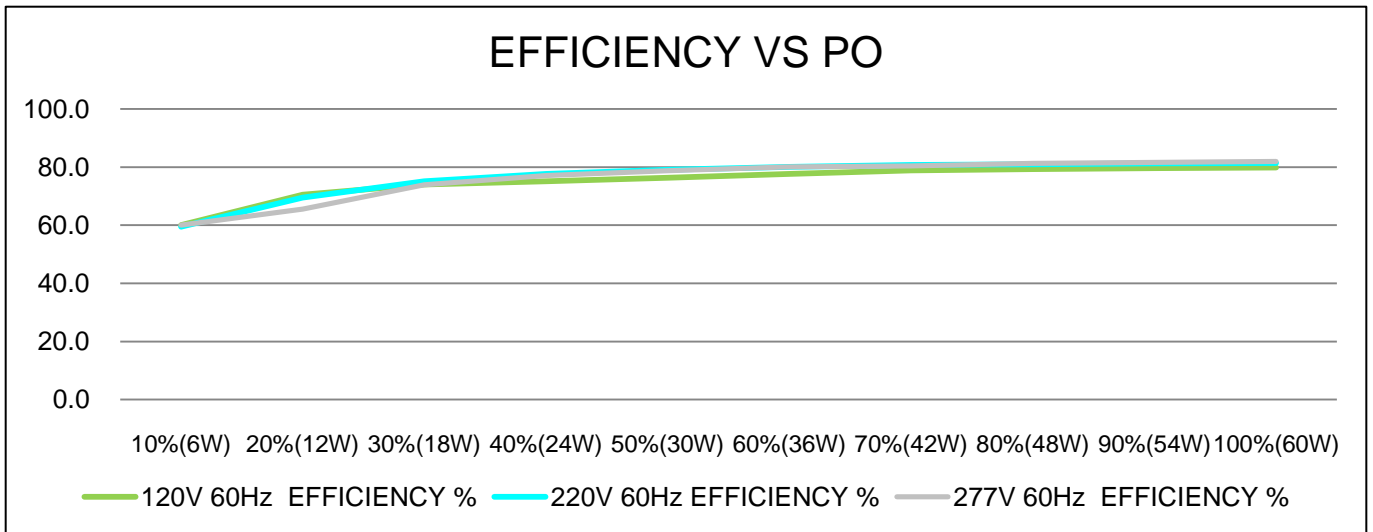
3. EMC / Protection / Compliance

| | | | | | |
|----------------------------|-------------------------------|--|--|--|--|
| Conducted and Radiated EMI | | FCC CFR Title 47 Part 15 Class B and EN55022(CISPR 22) Class B compliant | | | |
| Immunity Compliance | ESD (Electrostatic Discharge) | IEC61000-4-2 | 6 kV contact discharge, 8 kV air discharge, level 3 | | |
| | Electrical Fast Transient | IEC61000-4-4 | ±2 kV on AC power port for 1 minute, ±1kV on signal/control lines | | |
| | Surge | IEC61000-4-5 | ±2kV line to line/±2kV line to earth on AC power port, ±0.5kV for outdoor cables | | |
| Transient Protection | Ring Wave | | ANSI/IEEE c62.41-1-2002 & c62.41-2-2002 category A, 2.5kV ring wave | | |

THD of the driver VS Power Output (W)



Efficiency of the driver VS Power Output (W)

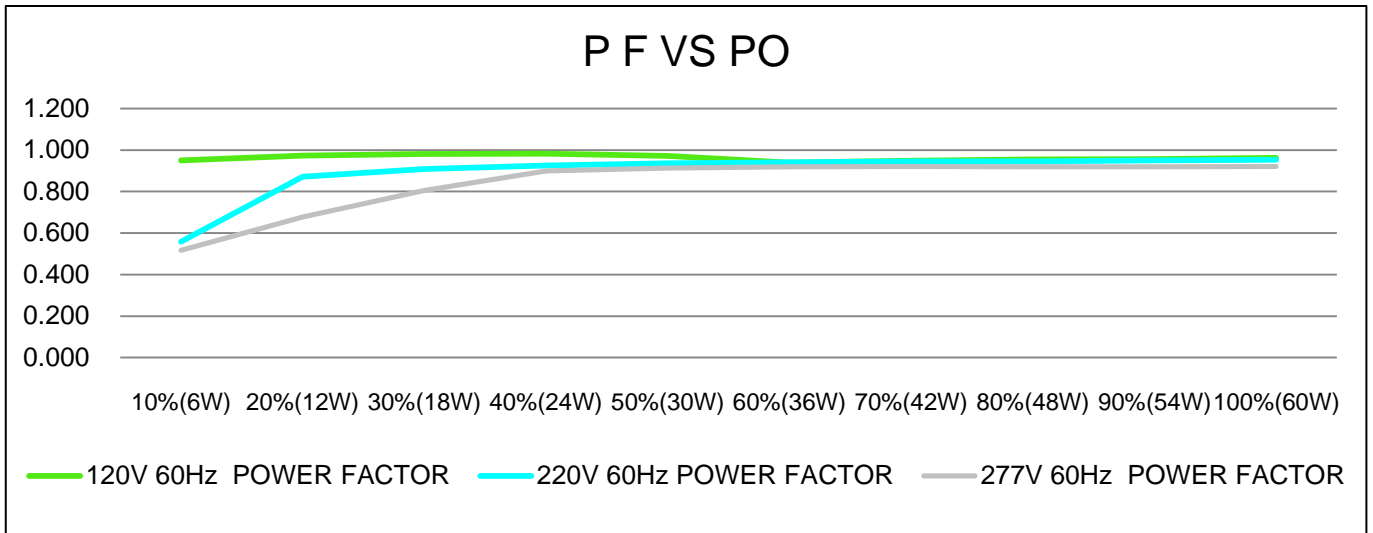


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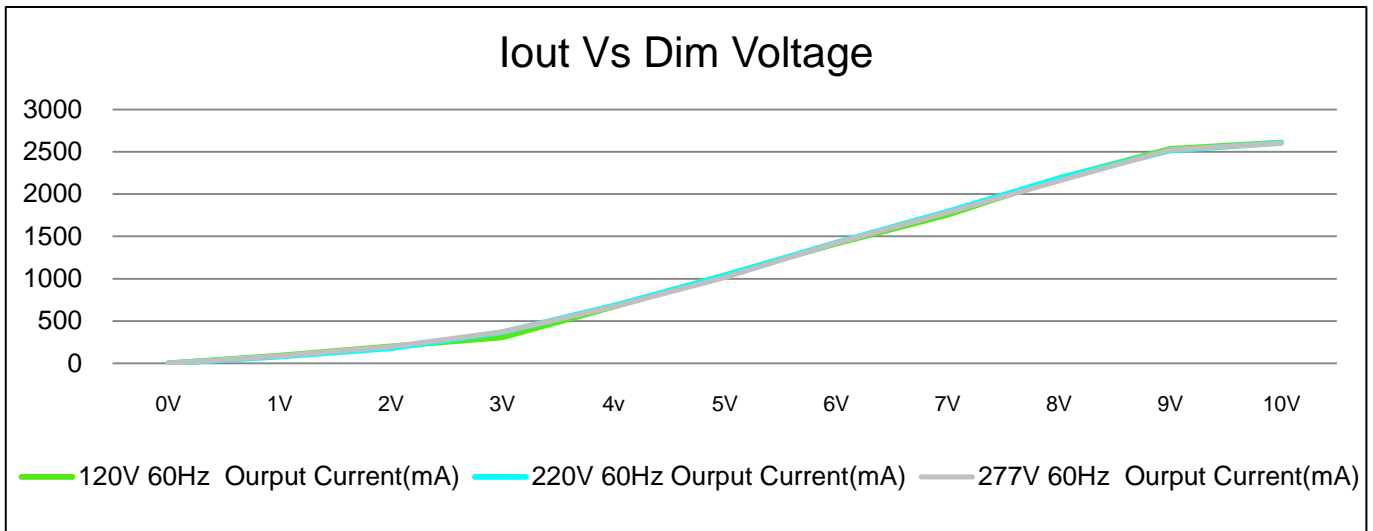
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Power Factor VS Power Output (W)



Lout of the driver VS Dim Voltage



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