



# SPECIFICATIONS



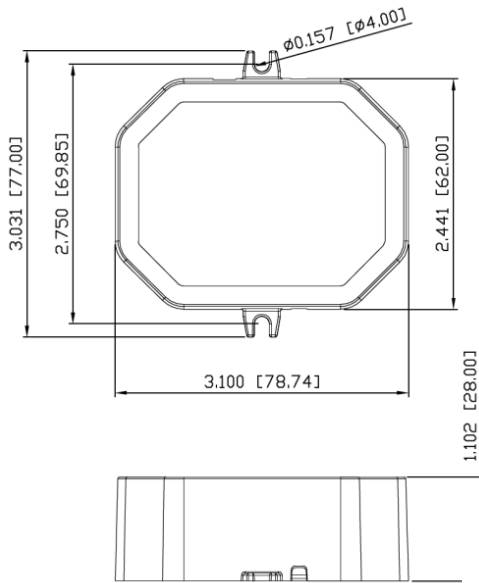
Note-

1. UL file: E340871



## Mechanical and Thermal

Dimensions	L2.441" X W3.1" X H1.102"
Weight	160g
Lead Wire Length	6.7"



\* Dimension in Inch / Metric

# MDR-701-600-25-D3

## Features

- ✓ 0-10V & TRIAC/ELV Dimmable in 1
- ✓ Compact size
- ✓ Low profile
- ✓ Constant Current Output
- ✓ Active Power Factor
- ✓ Class 2 compliance
- ✓ 5 Year Warranty
- ✓ Bottom Wire Exits
- ✓ Universal Input (Dim on 120V For TRIAC/ELV & 120/277V For 0-10V)
- ✓ Ultra Slow Ripple
- ✓ Hot Wire Protection
- ✓ - Fit 4" J-Box

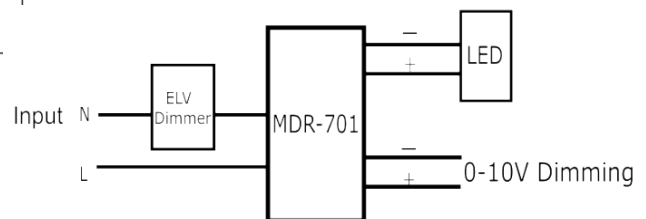
## Protection

- Auto-reset electronic short circuit
- Overload protection
- Thermal protection
- Class 2

## Environmental Specifications

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

## Wiring Diagram



Macron Associate Co. – Power Supply Team

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## 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		27		
Power Factor(PF)		0.9	>0.9		From 100% to 80% of rated power
Input Current	A	-	-	0.23A@120VAC 0.1A@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		-	>82%	-	Efficiency is measured after driver has thermally stablized + full load
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				

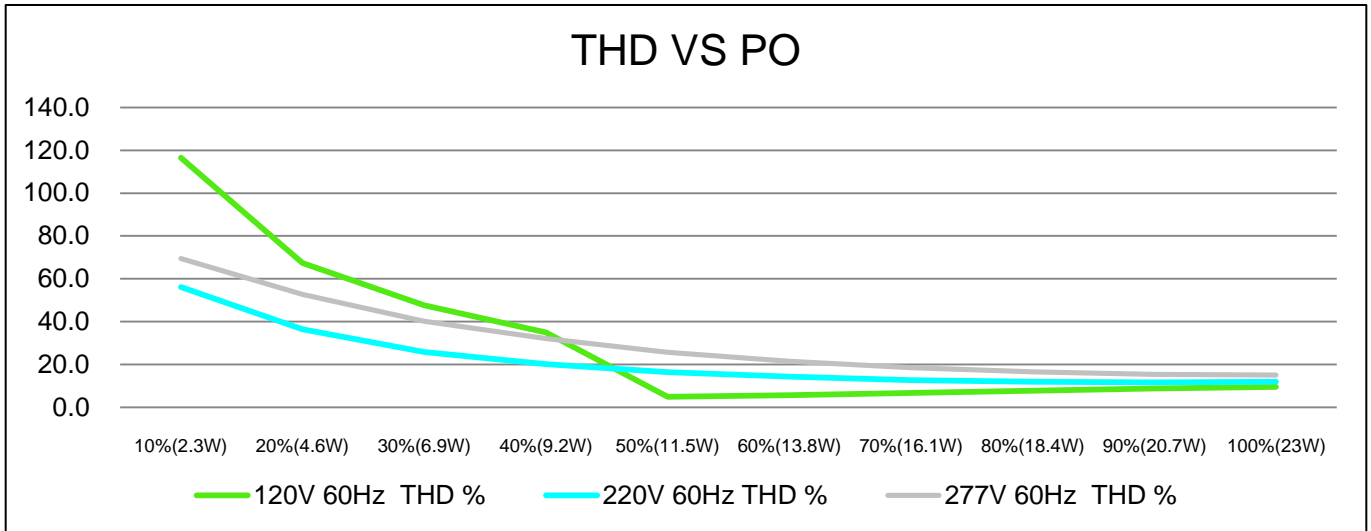
## 2. Output - specification

	Units	Minimum	Typical	Maximum	Notes
Output Voltage(Volt)	Vdc	30		38	
Output Current(Iout)	mA		400/500/600		
Output Current Tolerance	%		±3		
Output Ripple Current		< 30% peak-to-peak of 400/500/600 mA			<p>≤ 20% pk-to-pk of the rated output current for all models with Vout max ≥ 32V</p> <p>≤ 50% pk-to-pk of the rated output current for all models with Vout max ≤ 30V</p> <p>At nominal LED voltage and nominal input voltage without dimming</p>
Dimming Range	%	<p>&lt;1% for TRIAC / ELV</p> <p>&lt; 5 % for 0-10V</p>			Please refer to Dimmer compatibility list
Star-up Time	ms		250-300		<ul style="list-style-type: none"> <li>Measured at the Maximum load and normal input voltage.</li> <li>Complies with California title 24 and Energy star® luminaire specification.</li> </ul>
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				
Operation Case Temperature	°C	-30		80C	
Audible Noise	dB	< 24dB Class A			

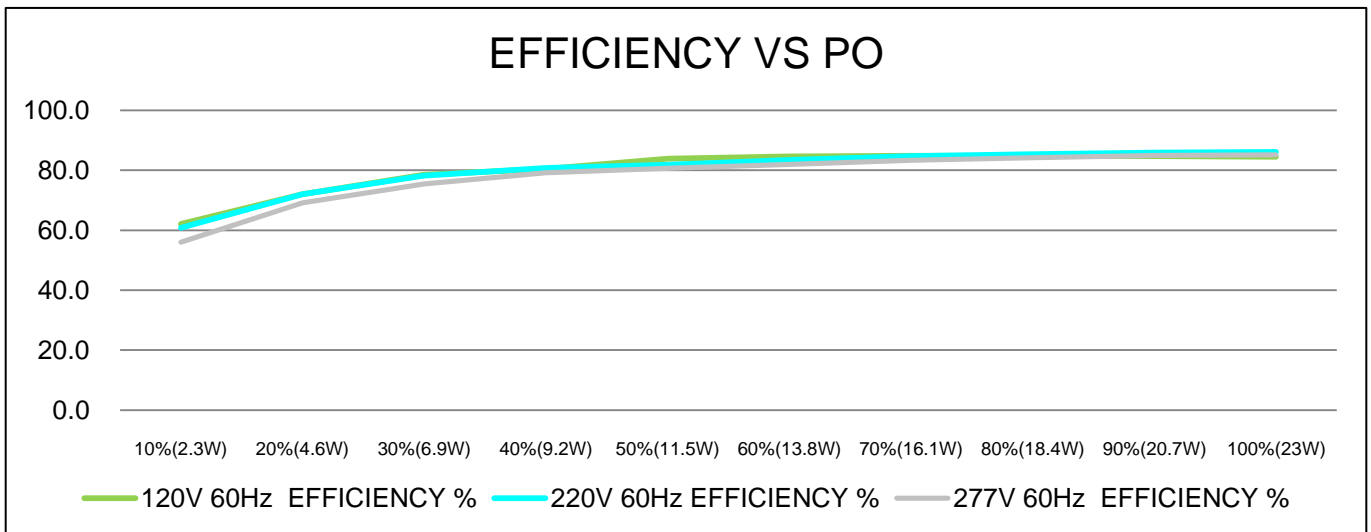
## 3. EMC / Protection / Compliance

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)

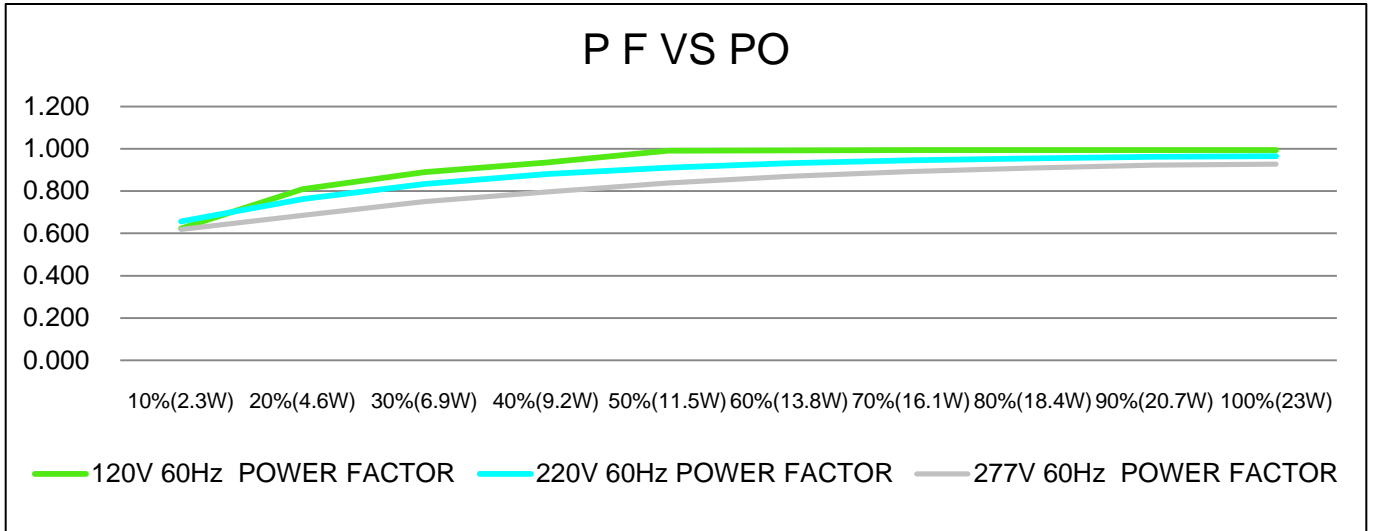


## Efficiency of the driver VS Power Output (W)

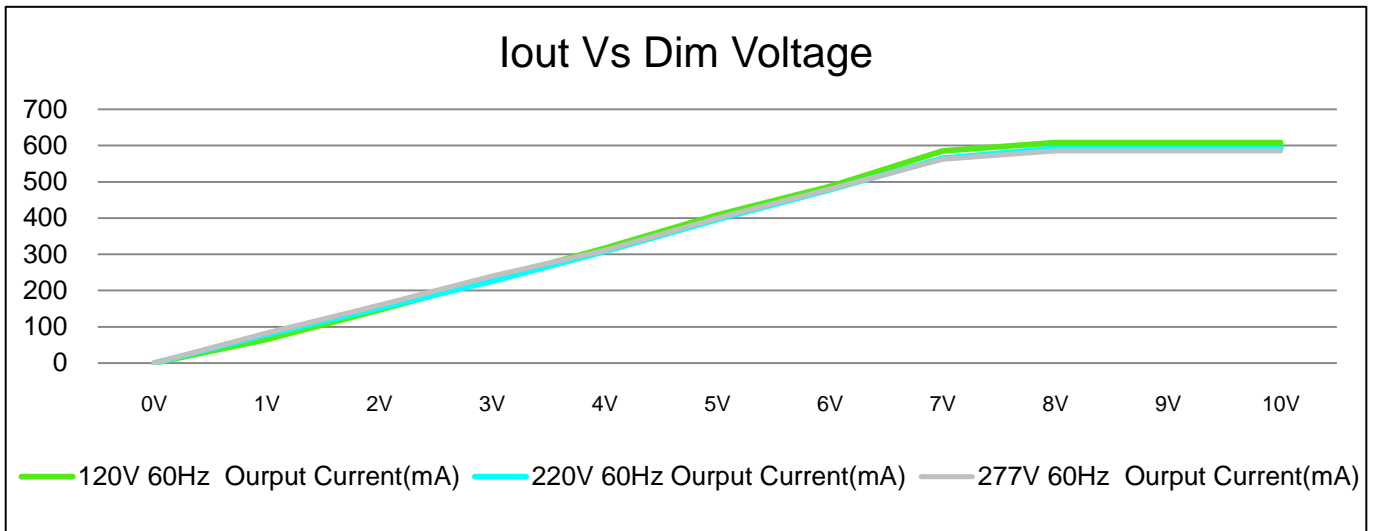


# Electrical Specifications

## Power Factor VS Power Output (W):



## Lout of the driver VS Dim Voltage



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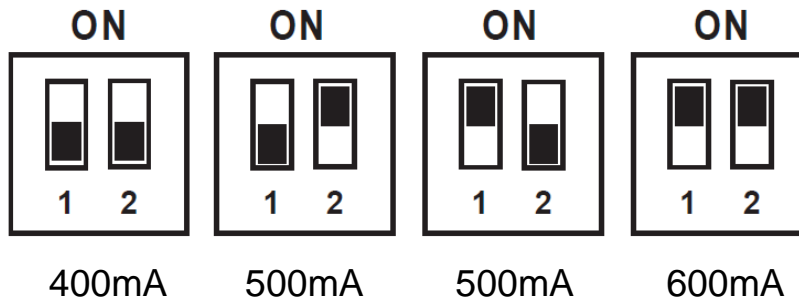
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## Current Settings :

LED Current Tolerance over temperature and component variations is  $\leq 5\%$  at any level.

The output current of the driver can be adjusted using the two dip switches provided on the top of the driver. The below pictures shows the switch positions required to set the current to different levels.



The driver will be shipped out of factory with both switches set to ON (600mA).



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