

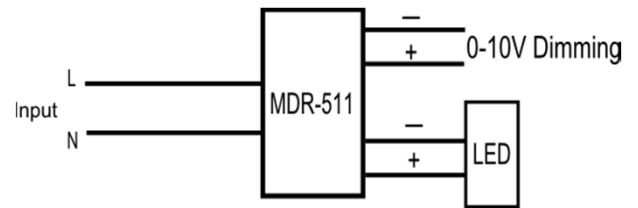
# SPECIFICATIONS

## MDR-511-420-18-TT

### Features

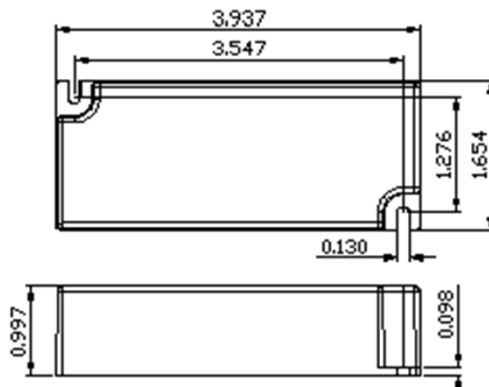
- Constant Current Output
- 0-10V Analog Dimming
- Class II Compliance
- Damp Location
- 5 Year Warranty
- Hot Wire Protection
- Supporting DIM TO OFF Capability

### Wiring Diagram



### Mechanical Specifications

Dimensions	L3.937"XW1.654"XH0.997"
Weight	140g
Lead Wire Length	6" (Standard)
Max. Case Operation Temp.	80°C



\* Dimension in Inch

### Protection

- Auto-reset electronic short circuit
- Overload protection
- Class II
- Inherent Thermal Protection

### Environmental Specifications

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



Note –

1. UL file No.: E340871
2. Driver is designated for "Stand by mode" at minimum light intensity (<0.8Vdc) power will not be OFF.



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## Input - specification

	Units	Minimum	Typical	Maximum	Notes
Input Voltage Range(Vin)	Vac	108	120-277	305	
Input Frequency Range	Hz	47	60	63	
Input Power	W			19	
Power Factor(PF)		0.9	>0.9		>80% Load
Input Current	A	-	-	0.17A@120VAC 0.08A@277VAC	
Inrush Current	A			5 A peak	According to IEC 60555
Total Harmonics Distortion (THD)				20%	1. At nominal input voltage and nominal LED voltage 2. Measure at full load
Efficiency		-	82%	-	Efficiency is measured after driver has thermally stabilized + full load
Isolation	Meet UL1310/UL8750 for class II isolation power supply				

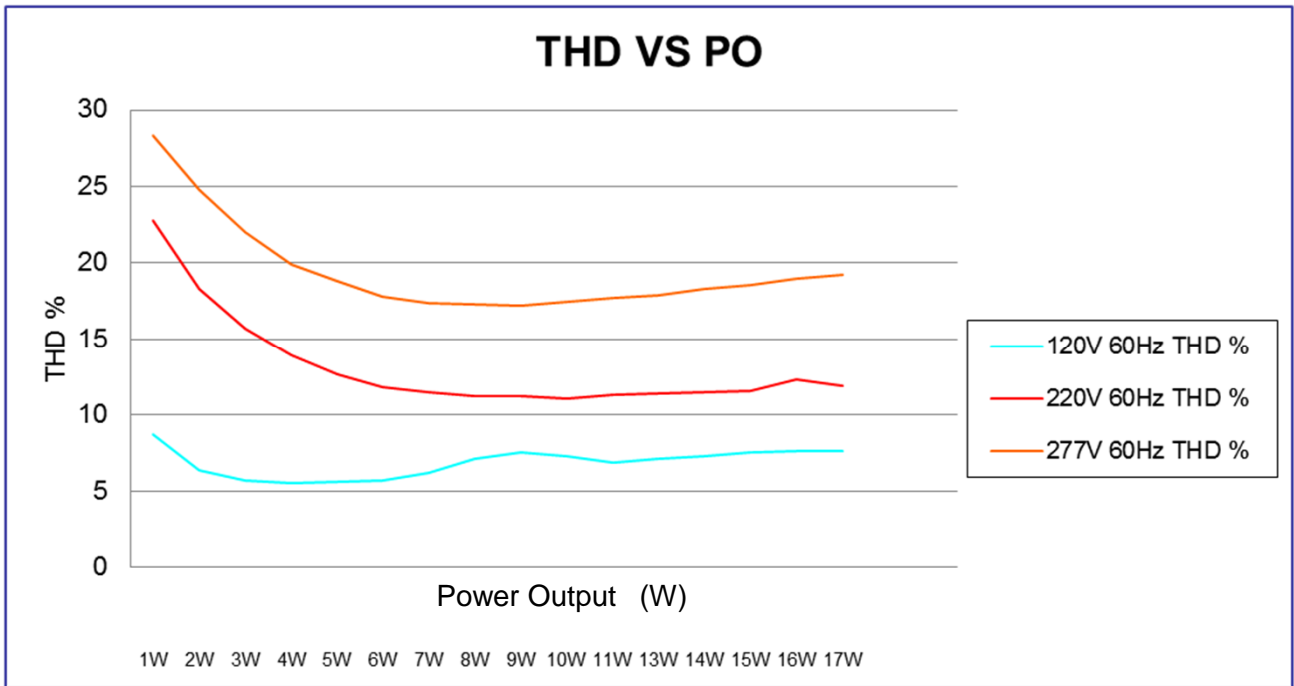
## Output - specification

	Units	Minimum	Typical	Maximum	Notes
Output Voltage(V out)	Vdc	30		42	
Output Current(I out)	mA		420		
Output Current Tolerance	%		±3		
Output Ripple Current	<20% peak-to-peak of 420mA				$\leq 20\%$ pk-to-pk of the rated output current for all models with Vout max $\geq 32V$ $\leq 50\%$ pk-to-pk of the rated output current for all models with Vout max $\leq 30V$ At nominal LED voltage and nominal input voltage without dimming
Dimming Range	%	6%		100%	Please refer to Dimmer compatibility list
Start-up Time	ms		100		With nominal LED voltage and without dimmer attached
			150		With nominal LED voltage, with an recommended dimmer attached(see dimmer compatibility list) and at the full dimming conduction angle
Operation Case Temperature	°C	-30		80C	
Isolation	Meet UL1310/UL8750 for class II isolation power supply				

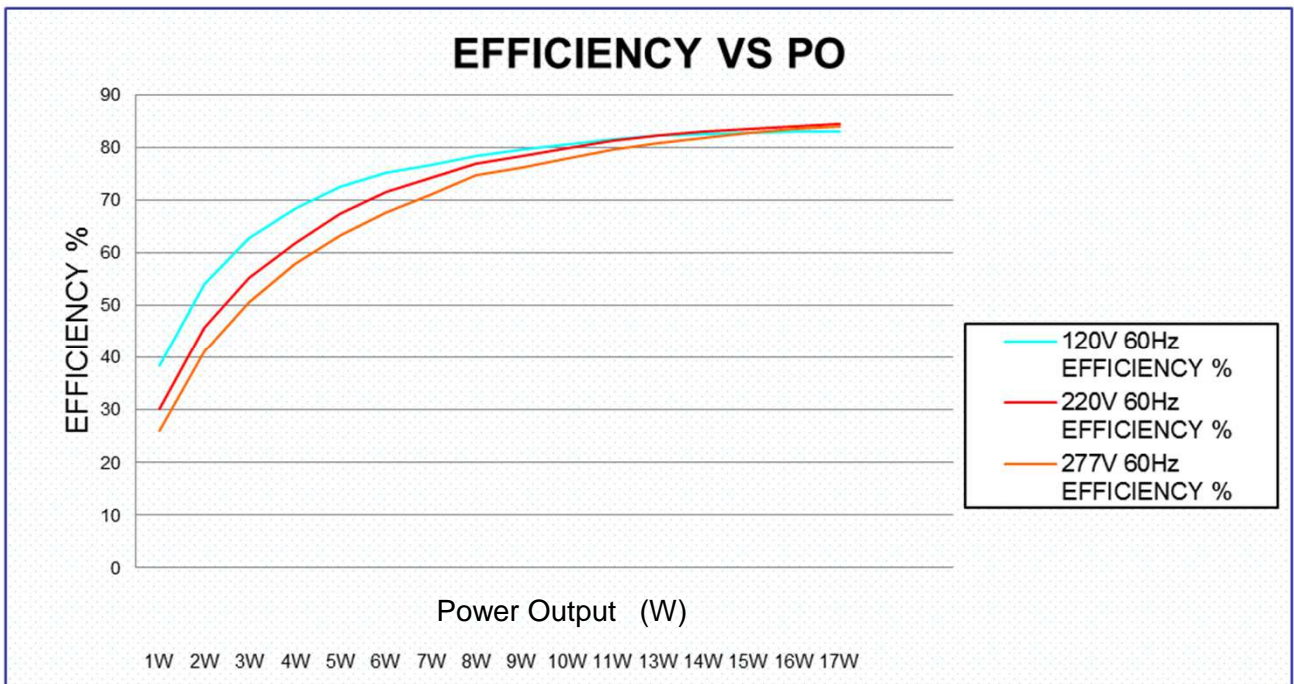
## EMC / Protection / Compliance

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	±1kV 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		

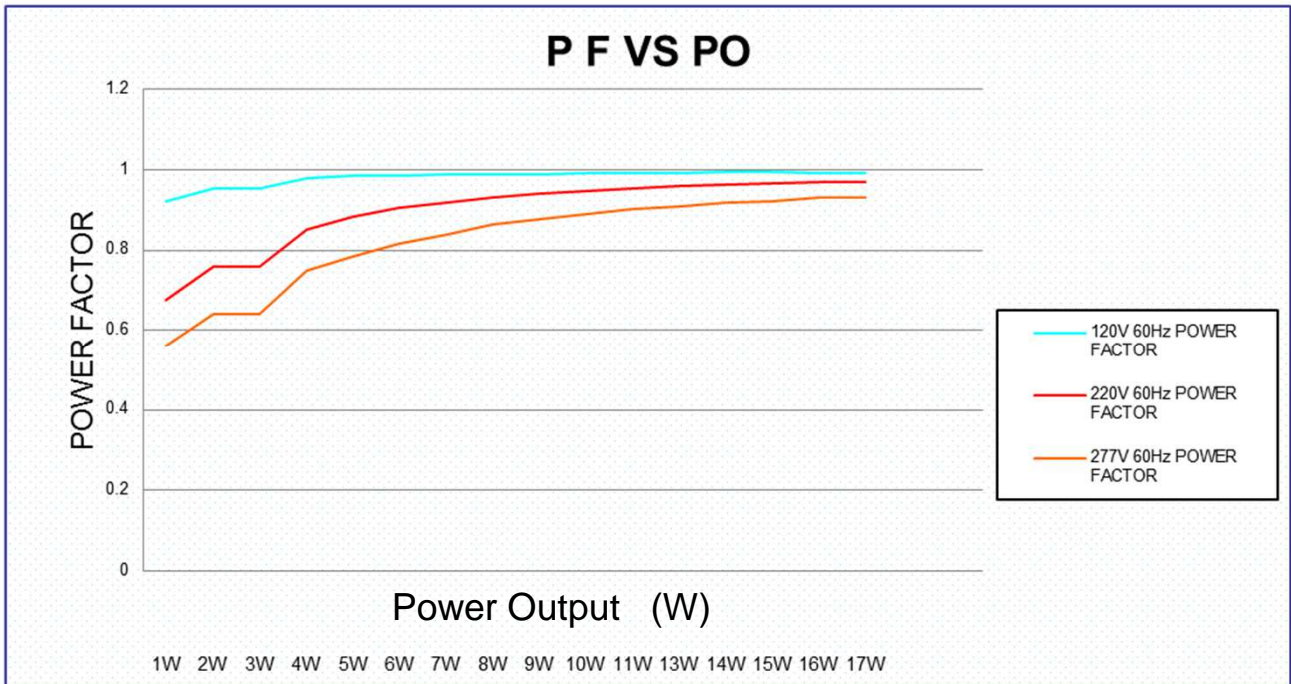
THD of the driver VS Power Output (W)



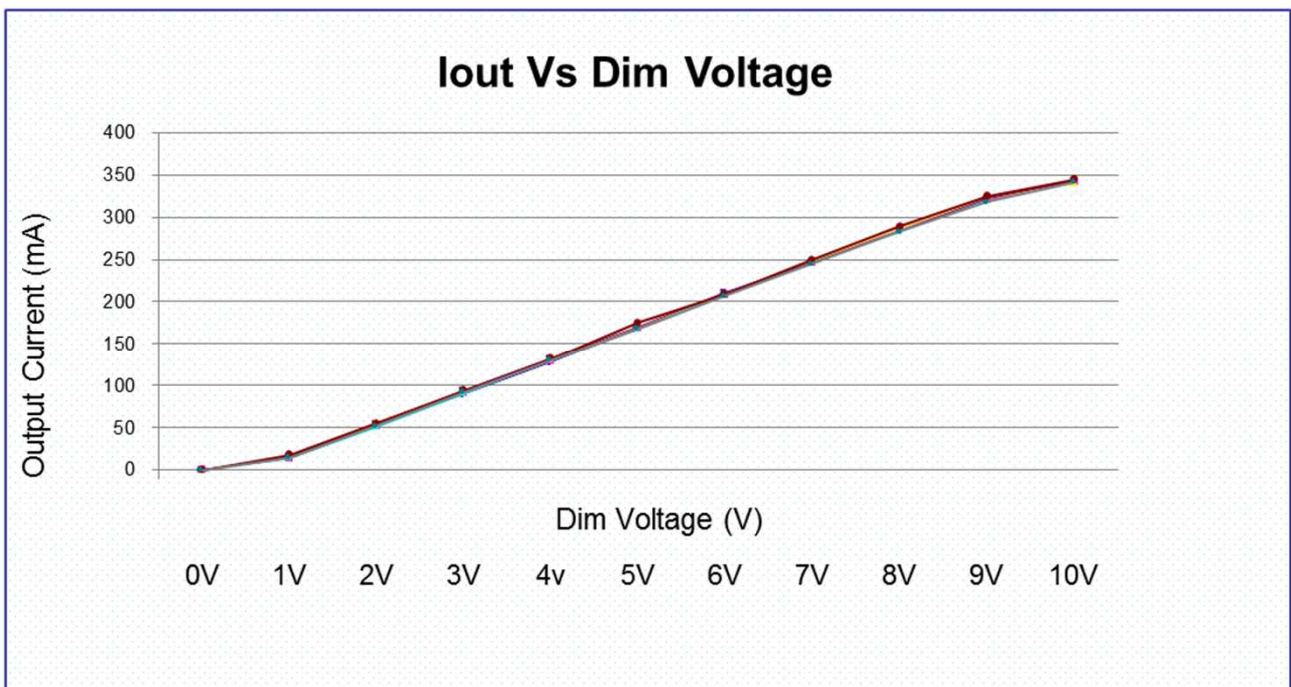
Efficiency of the driver VS Power Output (W)



PF of the driver VS Power Output (W)



0-10V Dimming



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