



SPECIFICATIONS

MDR-701-450-18-D5

■ Features



Note-

1. UL in process.



- ✓ 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

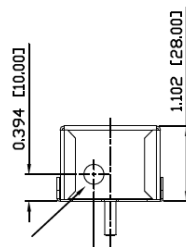
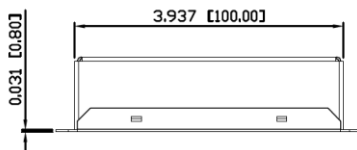
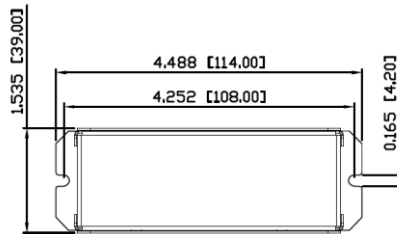
■ Mechanical and Thermal

Dimensions L 4.488" × W 1.535" × H 1.102"

Weight 215 g

Lead Wire Length 6" (Standard)

Max. Case Operation Temp. 80°C



* Dimension in Inch / Metric

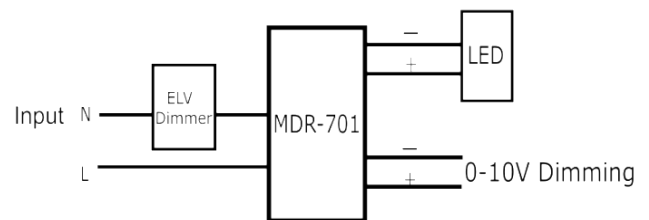
■ Protection

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

■ Environmental Specifications

- MTBF >100,000 hrs
- RoHS Compliant
- Lead Free SMT process
- Power Factor Correction / Low Load
- FCC Part 15 Class B compliant

■ 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		21		
Power Factor(PF)		0.9	>0.9		From 100% to 80% of rated power
Input Current	A	-	-	0.18A@120VAC 0.08A@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		-	>87%	-	Efficiency is measured after driver has thermally stabilized + full load
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				

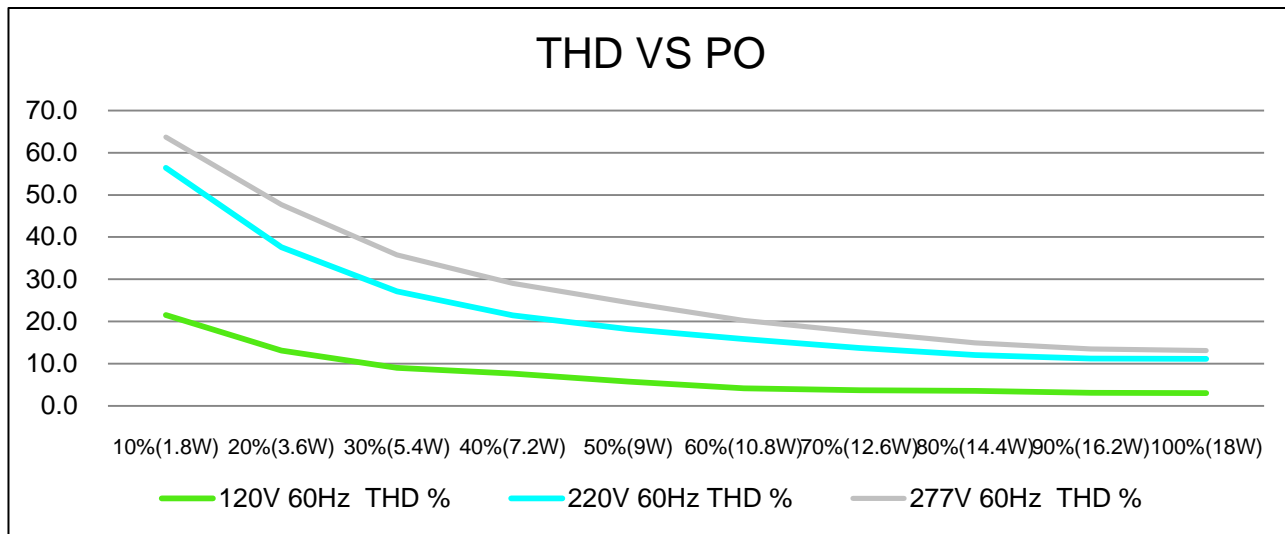
2. Output - specification

	Units	Minimum	Typical	Maximum	Notes
Output Voltage(Volt)	Vdc	30		40	
Output Current(Iout)	mA		450		
Output Current Tolerance	%		±3		
Output Ripple Current		< 30% peak-to-peak of 450 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	%	1%		100%	Please refer to Dimmer compatibility list
Star-up Time	ms		300-400		<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			

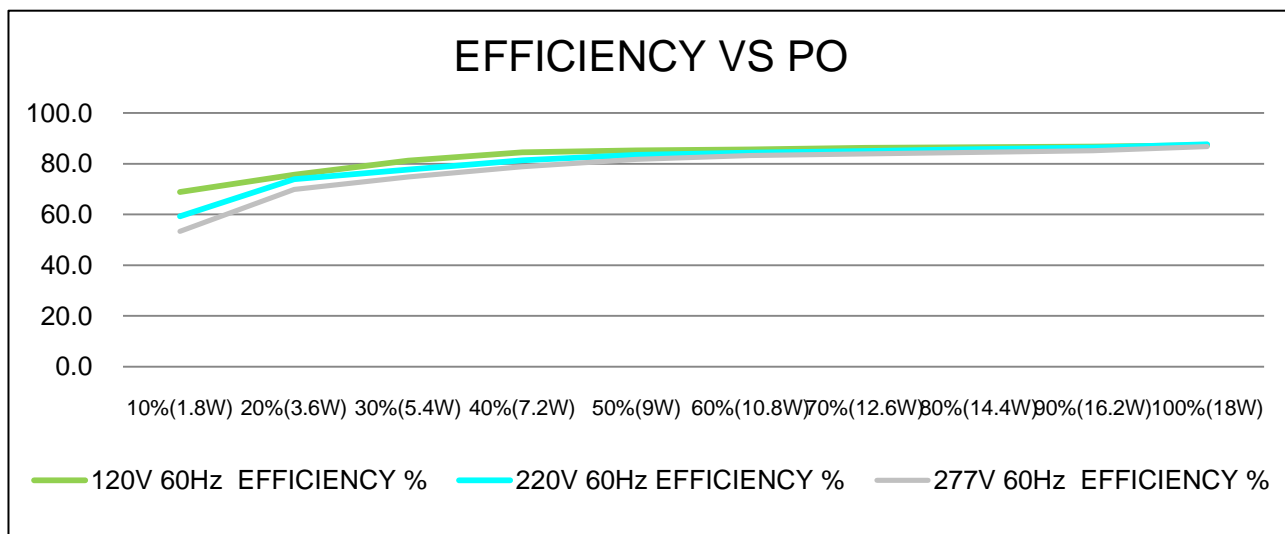
3. EMC / Protection / Compliance

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) :

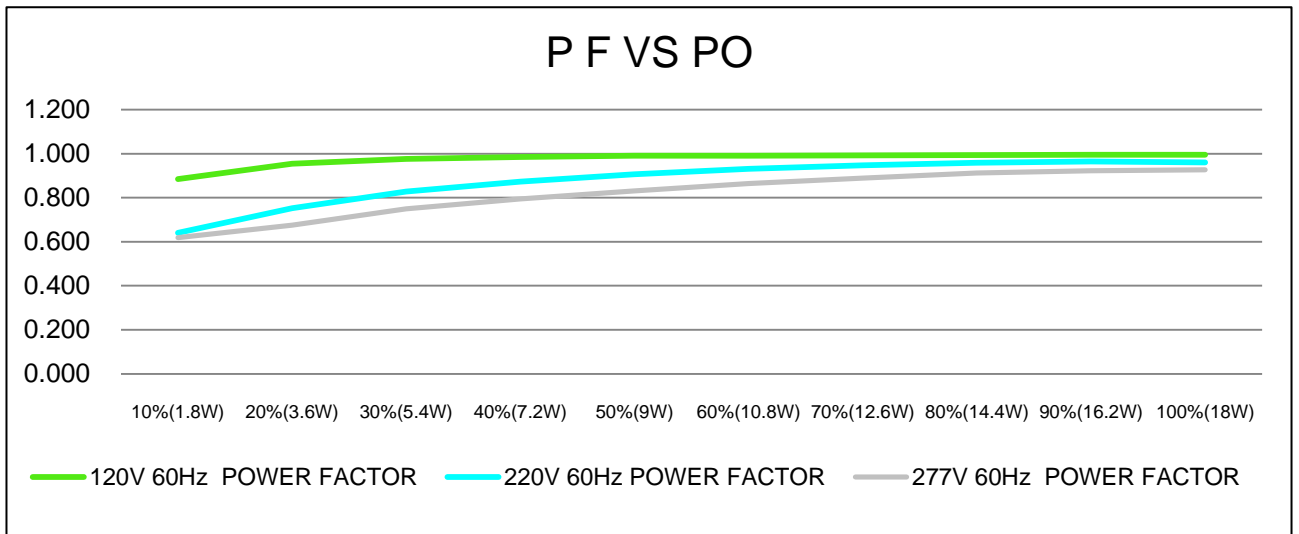


Efficiency of the driver VS Power Output (W) :

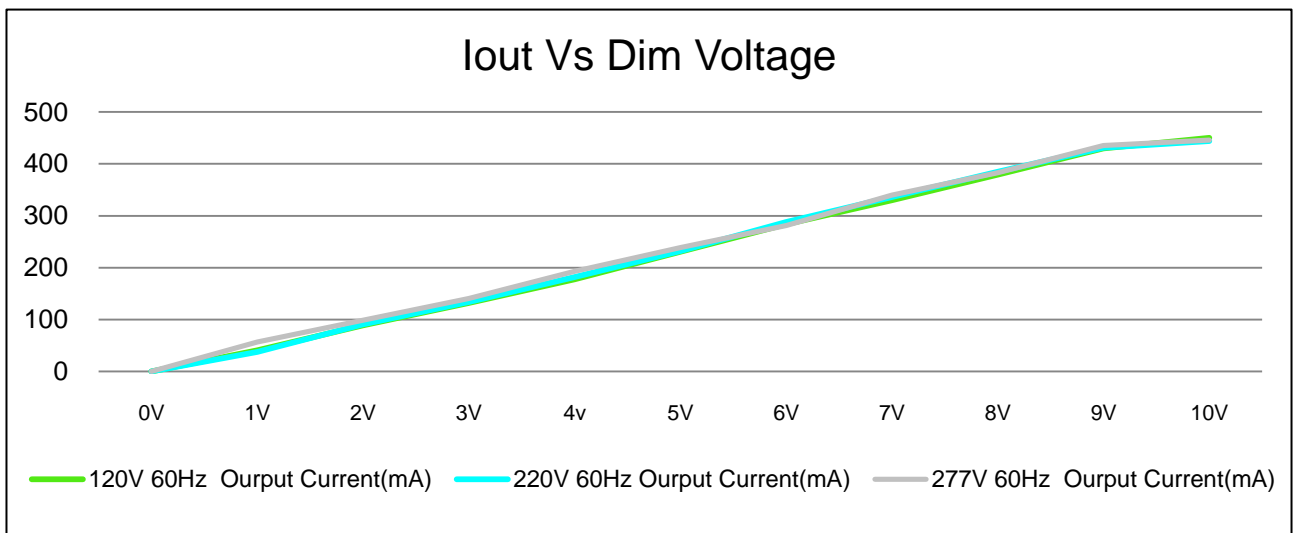


Electrical Specifications

Efficiency of the driver VS Power Output (W) :



Dim Voltage(V) VS Output Current



Macron Associate Co. – Power Supply Team

NO.352, Perng-Yi Road, Taiping, Taichung, Taiwan 411

TEL: 886-4-22708357 FAX: 886-4-22767307 Email: macron@macrongroup.com