

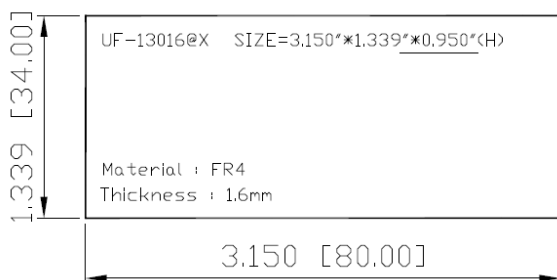


Note –

1. UL file No: E340871

Mechanical and Thermal

Lead Wire Length 6" (Standard)



Dimension in Inch/ Metric

Mechanical and Thermal

Maximum Load	18W
Minimum Load	12W
Input Voltage	120-277V
Max Output Voltage/Current	30VDC/600mA
Power Factor	>0.90
Max. Harmonic Distortion	<20%
Efficiency	80 typ.
No Load Loss	<1 W

MDR-602-600-18-O1

Features

- ✓ Work for most 3-wire/2-wire dimmer
- ✓ Compact size/ Low profile
- ✓ Constant Current Output
- ✓ Active Power Factor
- ✓ Class 2 compliance
- ✓ 5 Year Warranty
- ✓ Restart at Lowest Dimming setting
- ✓ Universal Input (DIM on 120V only)

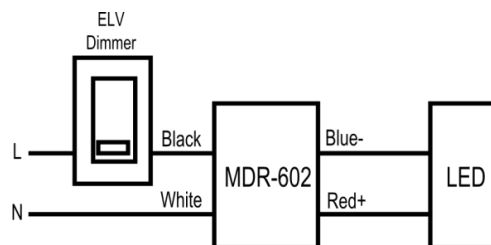
Protection

- 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

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		Nominal LED voltage
Input Current	A	-	-	0.18A@120VAC 0.08A@277VAC	
Inrush Current	A			4 A peak	According to IEC 60555
Total Harmonics Distortion (THD)				< 20%	At nominal input voltage and nominal LED voltage
Efficiency		-	> 82%	-	Efficiency is measured after driver has thermally stabilized + full load
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				

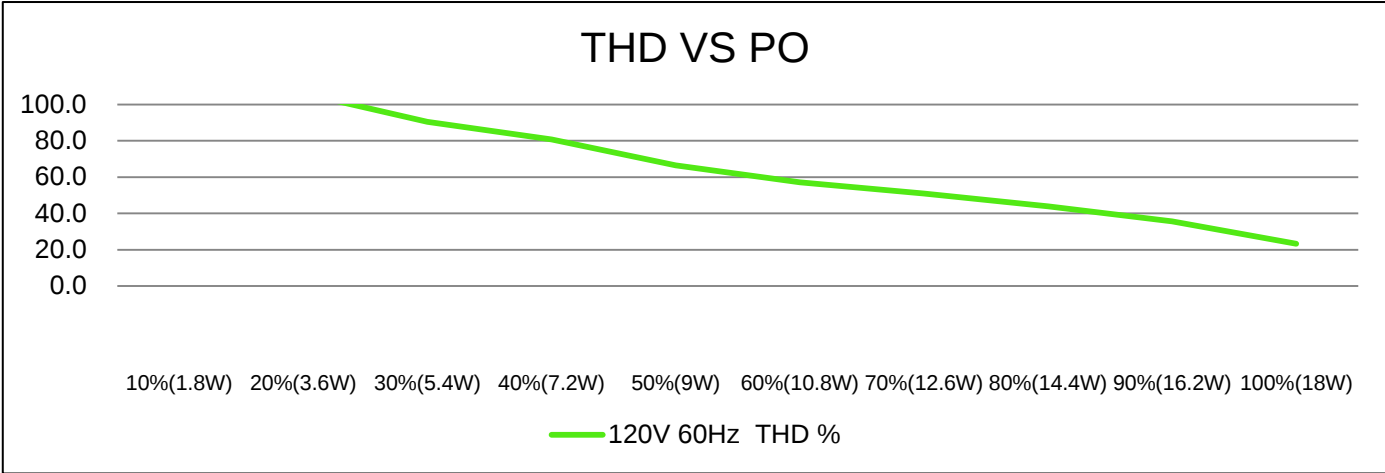
2. Output - specification

	Units	Minimum	Typical	Maximum	Notes
Output Voltage(Volt)	Vdc	24		30	
Output Current(Iout)	mA		600		Adjustable current setting; please refer to the current setting table
Output Current Tolerance	%		±3		
Output Ripple Current	< 50% peak-to-peak of 600mA				≤ 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	%	3%		100%	Please refer to Dimmer compatibility list
Star-up Time	ms		150		With nominal LED voltage and without dimmer attached
			200		With nominal LED voltage, with an recommended dimmer attached(see dimmer compatibility list) and at the full dimming conduction angle
Isolation	Meet UL1310/UL8750 for class 2 isolation power supply				
Operation Case Temperation	°C	-30°C		85°C	

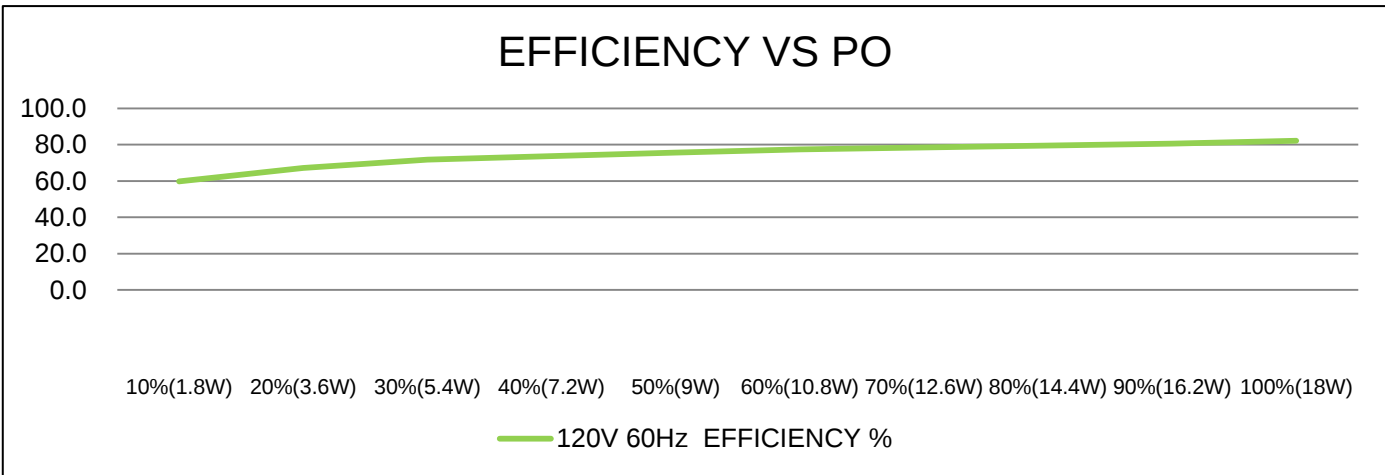
3. EMC / Protection / Compliance

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	±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) :

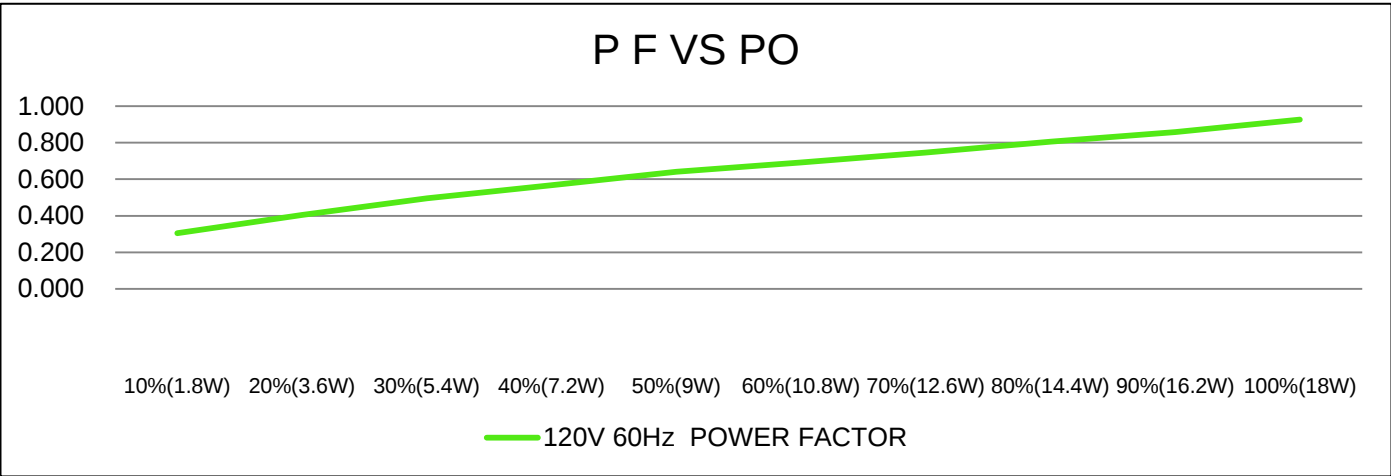


Efficiency of the driver VS Power Output (W) :

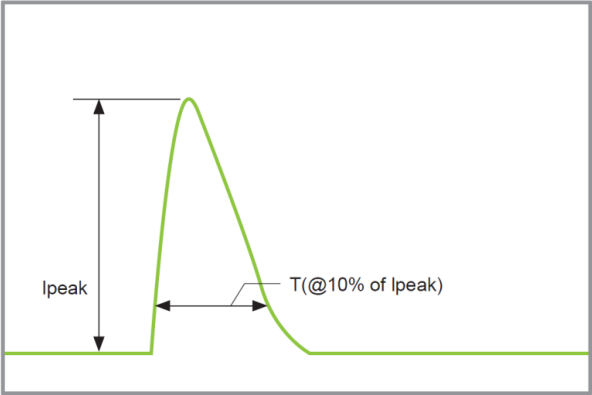


Electrical Specifications

Efficiency of the driver VS Power Output (W) :



Inrush Current Information



MDR-602-600-18-O1			
Vin	Ipeak	T(@50% of Ipeak)	Input Capacitance
120 V	4.2A	52μs	26.25μF/ 0.297μF
277 V	8.2A	64μs	8.12μF/ 0.297μF

