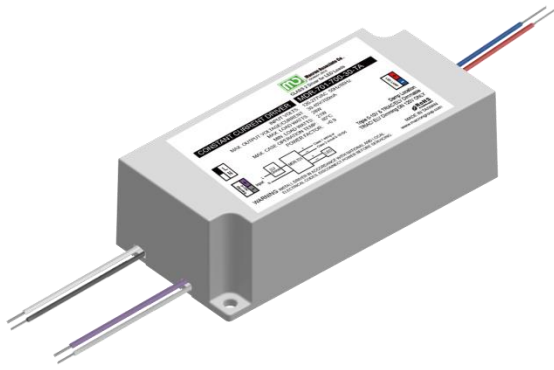




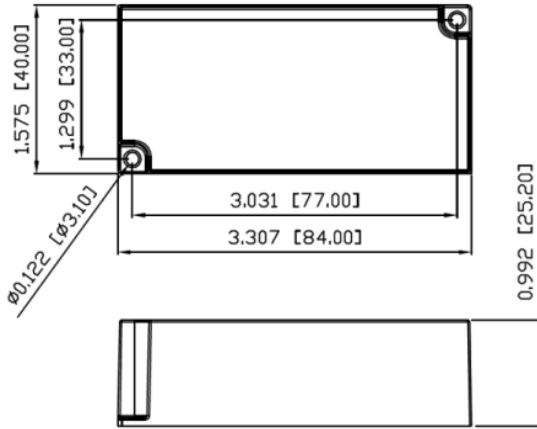
## MDR-851-700-15-TA

### ■ Features

- ✓ DALI Control
- ✓ Compact size
- ✓ Low profile
- ✓ Constant Current Output
- ✓ Active Power Factor
- ✓ Class II compliance
- ✓ 5 Year Warranty
- ✓ Ultra Slow Ripple



### ■ Mechanical and Thermal



\* Dimension in Inch / metrics

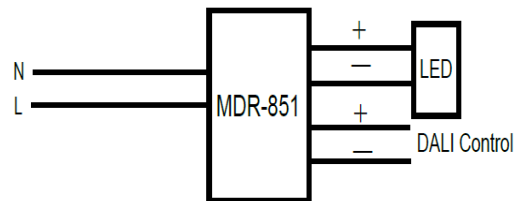
### ■ Protection

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

### ■ 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	220	230	240	
Input Frequency Range	Hz	50	60	63	
Input Power	W		17		
Power Factor(PF)		0.9	>0.9		Nominal LED voltage
Input Current	A	-	-	0.07A@230VAC	
Inrush Current	A			4 A peak	According to IEC 60555
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				

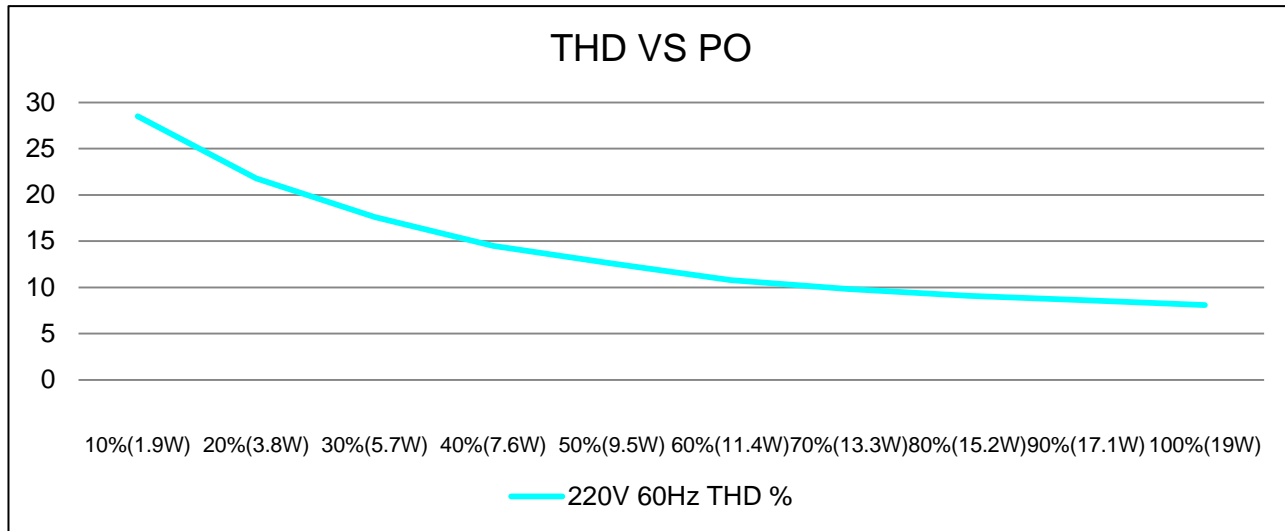
## 2. Output - specification

	Units	Minimum	Typical	Maximum	Notes
Output Voltage(Volt)	Vdc	15		20	
Output Current(Iout)	mA		700		Adjustable current setting; please refer to the current setting table
Output Current Tolerance	%		±3		
Output Ripple Current	< 30% peak-to-peak of 700mA				≤ 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	%	1%		100%	Please refer to Dimmer compatibility list
Star-up Time	ms		850		With nominal LED voltage and without dimmer attached
			900		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 Temperature	°C	-30°C		85°C	

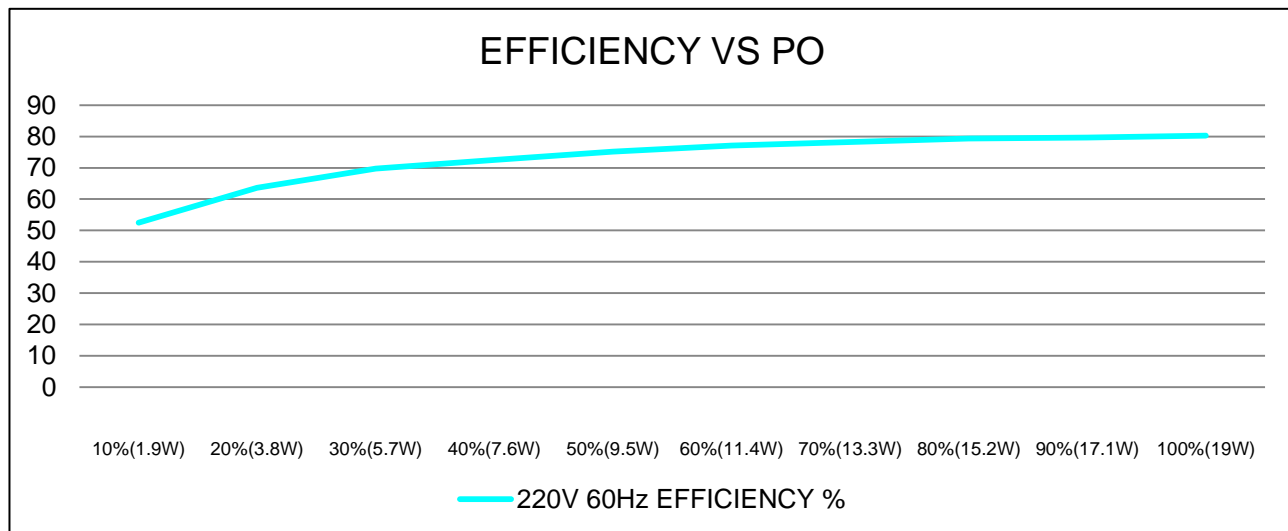
## 3. EMC / Protection / Compliance

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) :

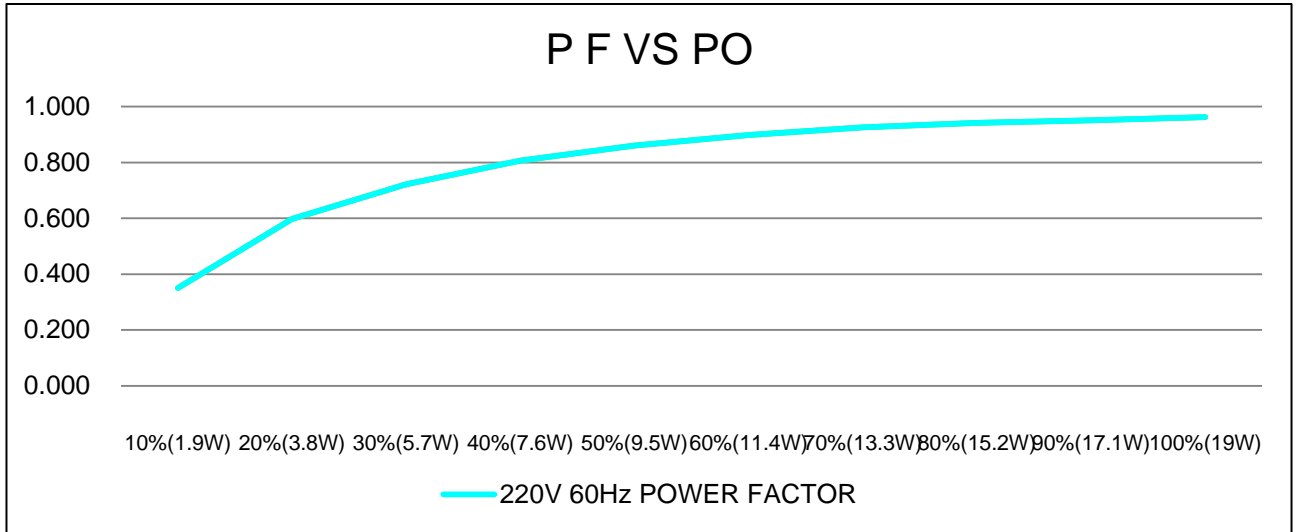


## Efficiency of the driver VS Power Output (W) :



## Electrical Specifications

Efficiency of the driver VS Power Output (W) :



Macron Associate Co. – Power Supply Team

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

TEL: 886-4-22708357 FAX: 886-4-22767307 Email: [macron@macrongroup.com](mailto:macron@macrongroup.com)