# MDR-513-700-20-L8

# U. 1 SNO.

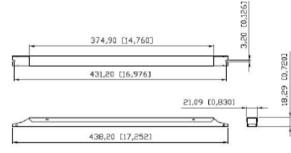
#### Features

- Constant Current Output
- 0-10V Dimming
- Class 2 Compliance
- Damp Location
- 5 Year Warranty
- Hot Wire Protection
- Supporting DIM TO OFF Capability

Max. Case Operation Temp.

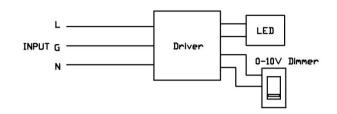
- Soft-ON

Mechanical and Thermal			
Dimensions	L16.976" X W0.83" X H0.72"		
Weight	223g		
Lead Wire Length	n Terminals		



\*Dimension in Metric(Inch)

# Wiring Diagram



#### **Protection**

-Auto-reset electronic short circuit

-Overload protection

-Class 2

**80**°C

-Inherent Thermal Protection

-Hot Wire 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



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# 1. Input – specification

	Units	Minimum	Typical	Maximum	Notes
Input Voltage Range(Vin)	Vac		347		
Input Frequency Range	Hz	50	60	63	
Input Power	W		29		
Power Factor(PF)		0.9	>0.9		Nominal LED voltage
Input Current	A	-	-	0.08	
Inrush Current	А			10 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	20		30	
Output Current(lout)	mA		700		Adjustable current setting; please refer to the current setting table
Output Current Tolerance	%		±3		
	< 20% peak-to-peak of 700mA				${\leq}20\%$ pk-to-pk of the rated output current for all models with Vout max ${\geq}32V$
Output Ripple Current					${\leq}50\%$ 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	%	1%		100%	Please refer to Dimmer compatibility list
Star-up Time			100		With nominal LED voltage and without dimmer attached
	ms		150		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		80C	

#### 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) Electrical Fast Transient Surge	IEC61000-4-2	6 kV contact discharge, 8 kV air discharge, level 3		
		IEC61000-4-4	$\pm 2$ kV on AC power port for 1 minute, $\pm 1$ kV on signal/control lines	
	Surge	IEC61000-4-5	$\pm 1 kV$ line to line/ $\pm 2 kV$ line to earth on AC power port, $\pm 0.5 kV$ for outdoor cables	
Transient Protection	Ring Wave		ANSI/IEEE c62.41-1-2002 & c62.41-2-2002 category A, 2.5kV ring wave	