Antron Electronics Co.,LTD
安雄電子股份有限公司

Junction Box LED Driver

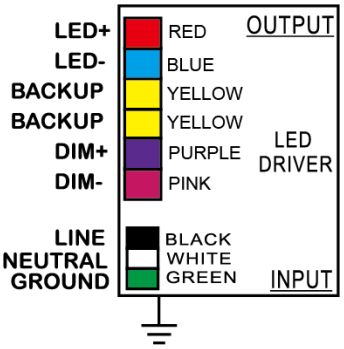
Model Name	MC1200S48DL
Output Mode	Constant Current
Input Voltage	120-347 Vac
Input Frequency	50/60 Hz
Dimming	3 in 1 (PWM,1-10V,Resistance) 1-100% Dimming
Surge Rating	2KV
Warranty	5 Years TC≦75℃ 3 Years 75℃≦TC≦90℃

Product Specification

ClassP Class2

Output Power (W)	Output Voltage (V)	Output Current (A)	Start Temp. (˚F/˚C)	Tcase Temp. (˚F/˚C)	Input Current (A)	Input Power (W)	Inrush Current (A)	THD (%)	Power Factor	Efficiency (%)
Max. 48	25-42	1.2	Min. -40/-40	Max. 194/90	0.48@120V 0.16@347V	55	Max. 35	Max. 20	Min. 0.9	Typ. 87

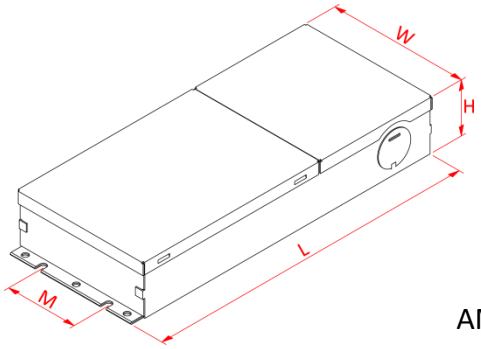
Wire Diagram



Maximum Wiring Distance (at full load) is 18AWG/18Feet

LED case should be grounded

Enclosure



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Enclosure	Inch	Cm
Length(L)	8.11	20.6
Width(W)	3.4	8.7
Height(H)	1.36	3.45
Mounting(M)	1.77	4.5

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Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	108V	120/277V	305V	
Input Current	-	-	0.5A RMS	@120Vac input with full load
Input Frequency	47Hz	60Hz	63Hz	
Leakage Current	-	-	0.7mA	@120Vac input
Turn On Time	-	-	1.0s	@120Vac input at full load
Hold Up Time	-	-	0.1s	@Nominal input and full load
Efficiency	85%	87%	89%	@277Vac input at full load
Standby Power	-	-	3W	
Current Total Harmonic	-	-	20%	

Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Voltage	25V	-	42V	
Output Current	-	1200mA	-	
No-Load Output Voltage	40V	50V	55V	
Rated Current	1140mA	1200mA	1260mA	
Rated Power	-	48W	-	
Line Regulation	-	-	±5%	
Output Current Ripple	-	±10%	-	

General Specifications

Parameter	Min.	Typ.	Max.	Notes
MTBF	-	100,000 Hours	-	@25℃ ambient temperature
Lifespan Time	75,000 Hours	-	-	In the range of specification required by normal use of the power supply at ambient temperature 55℃
Cold Start	-	-	1.0s	@-40℃

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Protection

Parameter	Description
Over Voltage	**Output current decade mode, recovers automatically after fault condition is removed.**
Short Circuit	**Hiccup mode, recovers automatically after fault condition is removed.**
Over Temperature	**Shut down o/p voltage, re-power on to recover.**

Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes
Operation Temperature	**-40℃**	**-**	**80℃**	
Storage Temperature	**-40℃**	**-**	**80℃**	
Humidity	**10%**	**-**	**90%**	
T-Case Temperature	**-**	**-**	**90℃**	

High Temperature Durability	Switch ON/OFF Test
Power storage environment at 80℃ 24hours, will not damage the electrical, mechanical properties and also not cause other adverse reactions.	Power at ambient temperature 25℃ 1s/on, 1s/off, last up to 10,000 cycles, will not damage the electrical mechanical properties and also not cause other adverse reactions.

Safety and EMC Compliance

Safety Standards	Withstand Voltage	Isolation Resistance	EMC Standards	
			EMI	**EMS**
UL 8750 UL1310	I/P-O/P: 2.0K Vac I/P-FG: 2.0K Vac O/P-FG: 0.5K Vac	I/P-O/P: I/P-FG: O/P-FG: 100Mohm/500VDC	FCC Part 15 class A UL8750 CSA C22.2 No. 250.13-14	FCC Part 15 class A UL 8750

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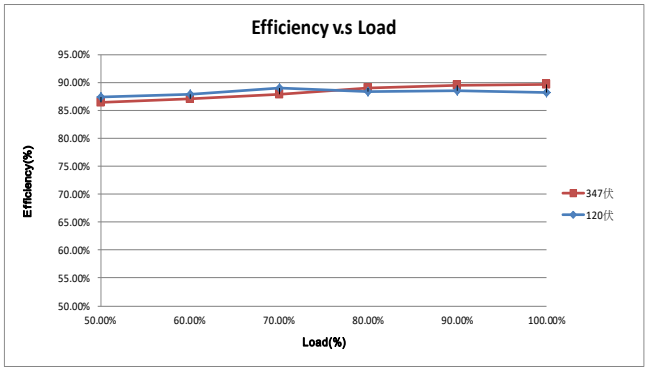
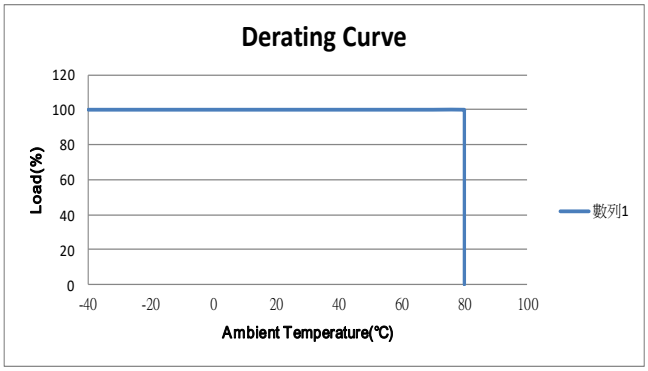
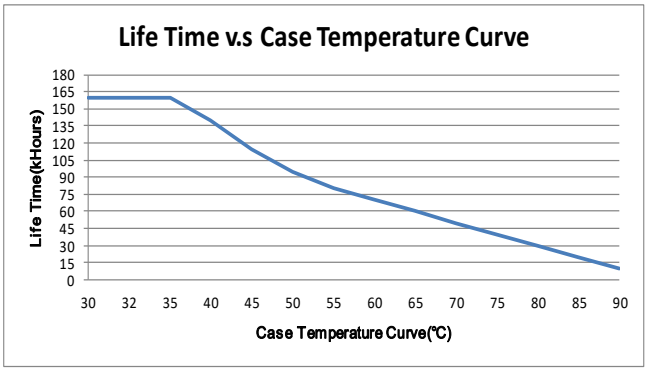
Efficiency V.S. Load



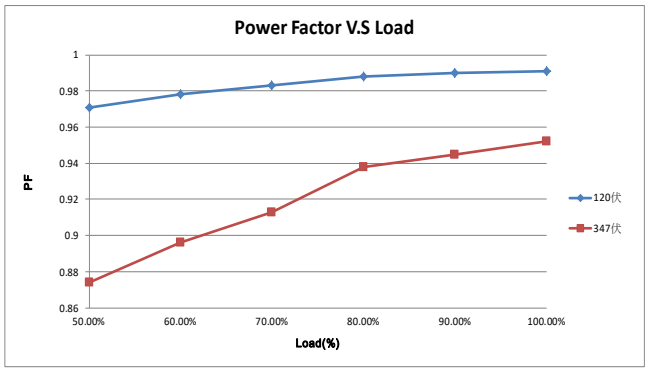
Derating Curve



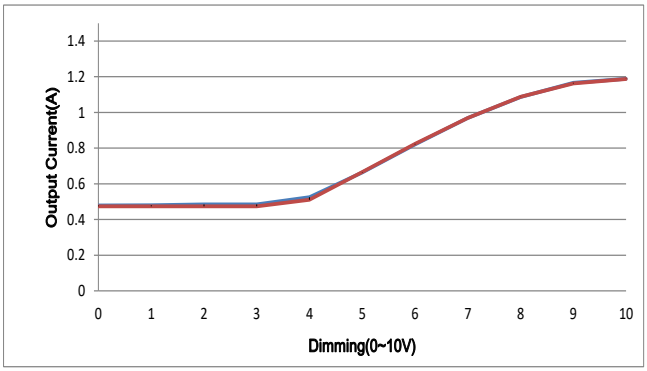
Life Time Curve



Power Factor V.S. Load



Dimming Characteristic



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