



Specification

Constant Current LED Driver

Model: GS-50C-56B

Spec: 50W LED Driver

Version: V1.0

DISTECSA S.A.S.
CL 55 CR 46 46, ITAGUI, Colombia

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GS-50C-56B

Product Feature

- ▶ Isolation scheme, High PF, Low THD
- ▶ Constant current output
- ▶ Low ripple current
- ▶ Efficiency > 89%
- ▶ Isolated Dimming: 0/1-10V, PWM, Resistance
- ▶ Lightning Protection: DM 4KV
- ▶ Warranty for 5 years
- ▶ Protections: SCP, OCP, OVP and OTP
- ▶ Suffix "**", B for dimming, H for auxiliary power 12V



SELV



Input Characteristics

Item	Min.	Typ.	Max.	Remark
Input Voltage Range	100Vac		277Vac	
Frequency	47Hz	50/60	63Hz	
Input Current		0.6A		100Vac, full load
Power Factor		0.99		120Vac/50Hz, full load
	0.92			100-277Vzc/50Hz, 70-100%load
THD		6%		230Vac/50Hz, full load
		9%		100-277Vac/50Hz, 100%load
Input Power			58W	



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Output Characteristics

Item	Min.	Typ.	Max.	Remark
Rated Output Current		1.3A		
Output Voltage Range	36V		56V	
Open-Circuit Voltage		60V		
Rated Output Power			50W	
Efficiency		88%		120Vac@42Vdc
		89%		230Vac@42Vdc
Current Accuracy	-5%		5%	
Run-up Time		≤ 1S		120Vac@42Vdc
Line Regulation		< 3%		Rated output voltage
Load Regulation		< 3%		Rated input voltage



Specification Constant Current LED Driver



Other Performance

	Item	Min.	Typ.	Max.
0-10V Dimming (Optional)	Max Voltage	0V		12V
	DIM Range	10%		100%
	DIM Voltage	1V		10V
PWM Dimming (Optional)	PWM High Level	3.0V		10.2V
	PWM Low Level	0V		0.7V
	PWM Frequency	400Hz		10KHz
	PWM Duty	10%		100%
Resistor Dimming (Optional)	DIM Resistance	2K Ω		20K Ω
	DIM Range	10%		100%
Dim to off	Turn off Voltage	3%	5%	7%
	Turn on Voltage	5%	7%	9%



Specification Constant Current LED Driver



Environmental Requirements

Item	Min.	Typ.	Max.	Remark
Tc	-40°C	25°C	90°C	
Life Time		50000H		100%load@Tc75°C
Tst	-40°C	25°C	80°C	
Operating Humidity	10%RH		90%RH	Non-condensing
Store Humidity	5%RH		95%RH	
Pressure	70KPa		106KPa	

Safety&EMC

Item		Standard	Remark
Safety Standard		UL8750	
		EN61347-2-13: 2014	
		EN61347-1:2008+A1:2011+A2:2013	
Hi-Pot	(I/O)	1600Vac	Reinforced insulation
	(I/S)	1600Vac	Basic insulation
	(O/S)		
Insulation Resistance			
CE&RE		EN55015:2013+A1:2015	
Surge		EN61000-4-5	L-N: 4KV

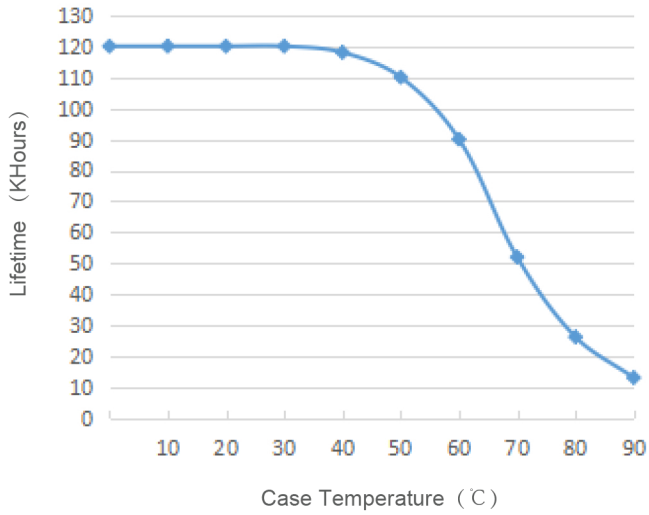


Specification Constant Current LED Driver

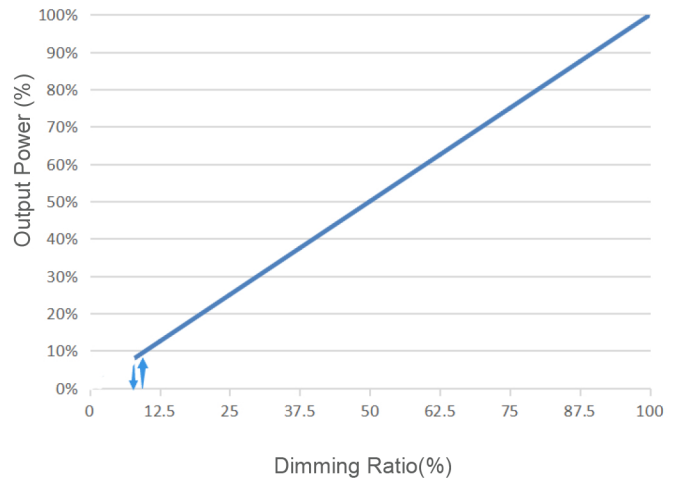


Characteristic Curve

Lifetime(Khours) VS Case Temperature



Output Power VS Dimming



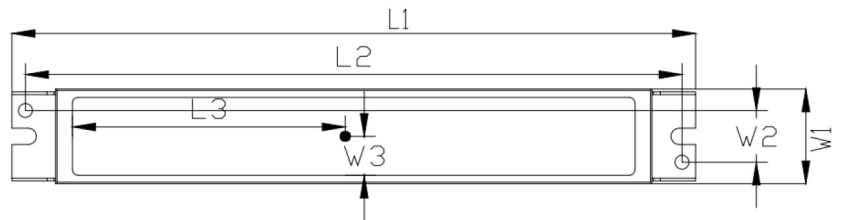
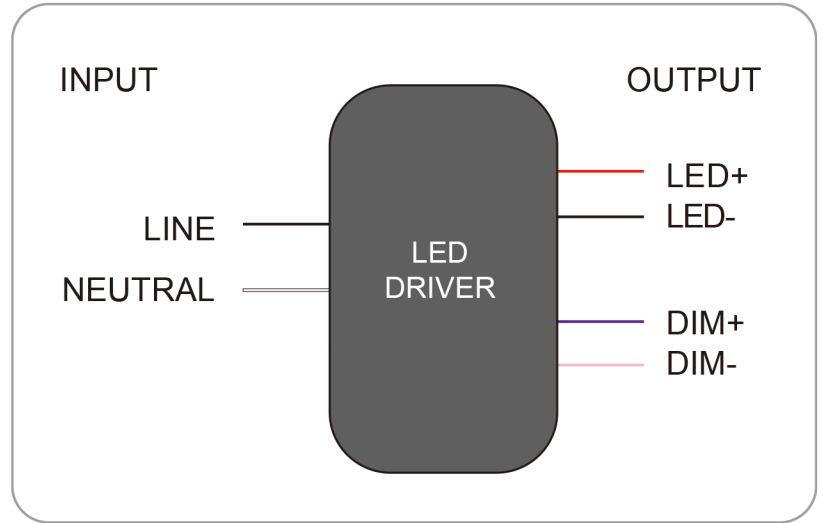
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2D Structure

Name Description	Standard Code	mm(In.)
Overall Length	L1	243(9.57)
Overall Width	W1	34(1.34)
Mounting Hole Length	L2	233.4(9.19)
Mounting Hole Width	W2	21(0.83)
TC Point Length	L3	97(3.82)
TC Point Width	W3	13(0.51)

Wiring Diagram



Structure

Item	Typ.	Remark
Weight	500g	
Size	L243mm*W34mm*H27mm	L*W*H
Input Wire	1015/2*18AWG/L: Black/N: White	
Output Wire	1015/2*18AWG/V+: Red/V-: Black	
Dim Wire/AUX Wire	1569/2*22AWG/DIM+: Purple/DIM-: Pink	

