LED Driver

High-bay 75 W Programmable Driver

Constant Current LED Driver
Wide Operating Range up to 1.4 A – Programmable

Features & Benefits

- Output Current Range: Max 1.4 A (adjustable via programmer)
- Output Voltage Range: 27 ~ 54 Vdc
- Output Power Range: Max 75 W
- Dimming Control: 0-10 V
- Input Voltage: 100 ~ 277 Vac, 50/60 Hz
- Safety: UL / cUL (UL 8750, UL Class 2), EN61347
- EMI: FCC Part 15 Class B
- Protections: Short Circuit, Over Temperature, Over Voltage (No Load Protection)
- t_a Range: -40 ~ +60 °C
- Expected lifetime: 50,000 hours at t_a = 75 °C
- Long lasting & high reliability
- Slim metal housing
- Easy setting current

Applications

- Indoor High-bay lighting
- Parking lot lighting

Table of Contents

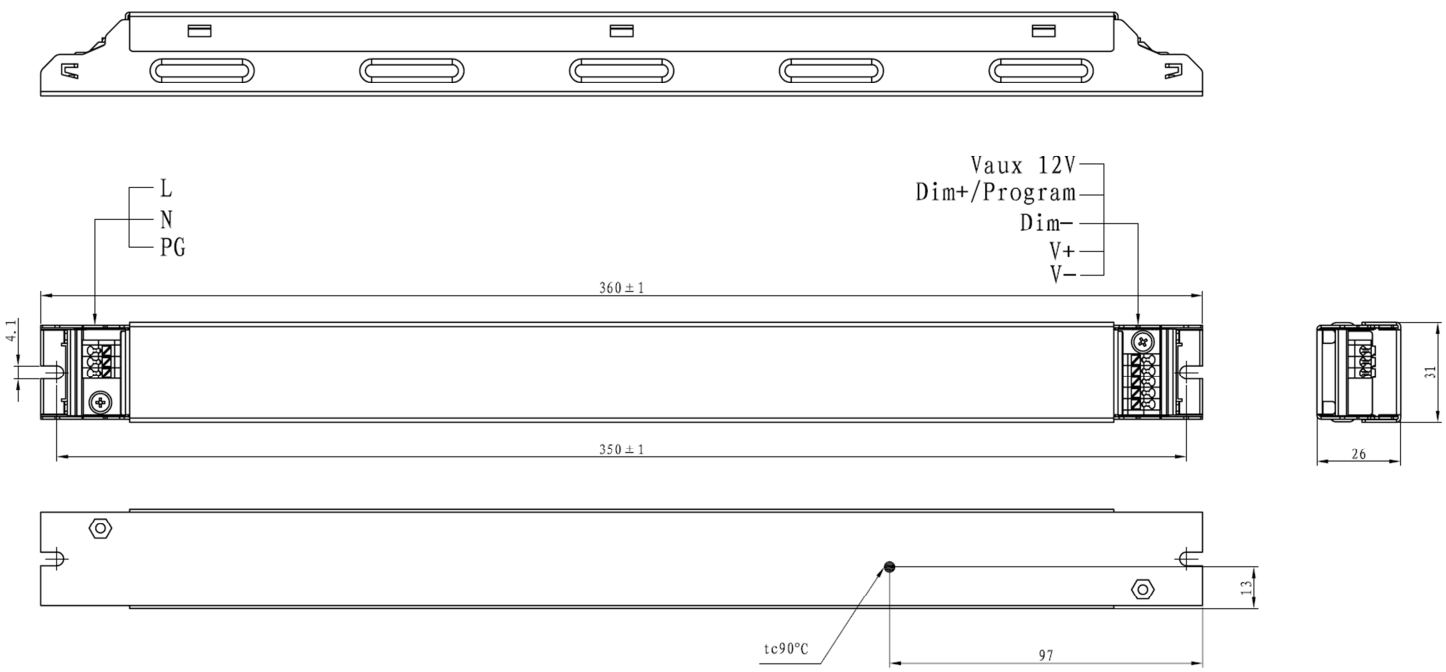
1. Characteristics

Article		Symbol	Specification			Unit	Note
			Min.	Typ.	Max.		
INPUT SPECIFICATIONS							
Nominal Voltage		Vin		100 ~ 277		Vac	Full input range, no range switching
Voltage Range			90		304	Vac	
Nominal Frequency		fin		50 / 60		Hz	
Frequency Range			47		63	Hz	
Input Current	At 110 Vac	Iin			1	A	At full load
	At 277 Vac	Iin			0.4	A	At full load
Total Harmonic Distortion		THD			20	%	At 110-277 Vac
Power Factor		PF	0.9			-	At 110-277 Vac
Efficiency		η		85 88		%	At full load, 110 Vac, 60 Hz At full load, 277 Vac, 60 Hz
Protection Class				2		-	
In-rush Current					65	A_{pk}	@ 277Vac input, 25℃ Cold start.
OUTPUT SPECIFICATIONS							
Nominal Voltage		Vo		27 ~ 54		Vdc	at Io = Max 1.4 A
Max. Voltage					60	Vdc	Open circuit, No-load protection
Nominal Current		Io			1.4	A	±5 %, Can be programmable
Nominal Power		Po			75	W	At Io = Max 1.4A, Vo = 54 V
Turn-on Delay Time		Td			1	s	At full load, 100 Vac input

Article		Symbol	Specification			Unit	Note
			Min.	Typ.	Max.		
DIMMING SPECIFICATIONS							
Dimming Control				0-10 V			See Dimming Specification section
ENVIRONMENTAL SPECIFICATIONS							
Ambient Temperature		ta	-40		60	℃	
Case Temperature		tc			90	℃	Type TL 90℃ / 73℃
Storage Temperature		ts	-40		85	℃	
Storage Humidity			10		95	%	Not condensing
Surge Transient Protection	L / N				±4	kV	According to IEC/EN 61547
	LN / GND				±6	kV	
IP Rating				20		-	Suitable for indoor environment
Expected Lifetime (e-cap)			50,000			h	At t_c = 75 ℃, full load, 120-277 Vac
MTBF			250,000			h	At t_a = 25 ℃, full load,
Dimensions		L x W x H		14.1 x 1.2 x 1.0		inch	
				360 x 31 x 26		mm	
Net Weight				300		g	± 15 g

2. Outline Drawing & Dimension

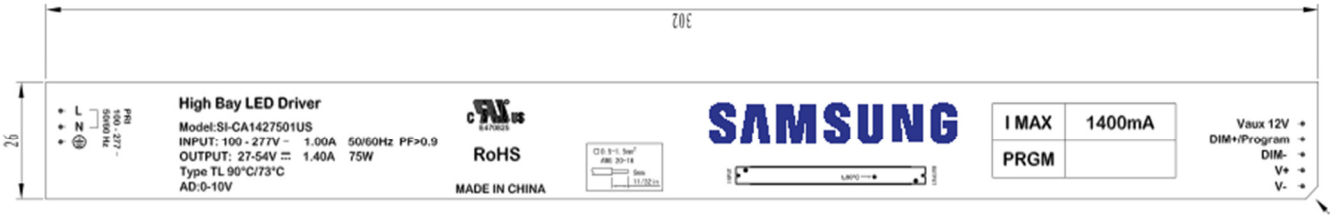
Dimension (mm)



PIN	SYMBOL	COLOR	DESCRIPTION	CONNECTOR
1	L	Black	Live	PHOENIX CONTACT
2	N	White	Neutral	
3	PG	GREEN	GND	

PIN	SYMBOL	COLOR	DESCRIPTION	CONNECTOR
1	Vaux 12V	Yellow	Auxiliary 12V	PHOENIX CONTACT
2	Dim+/Program	PURPLE	External Dimming Input Port(0~10V)	
3	Dim-	GREY	External Dimming Input Port(Ground)	
4	V+	RED	LED output +	
5	V-	BLUE	LED output -	

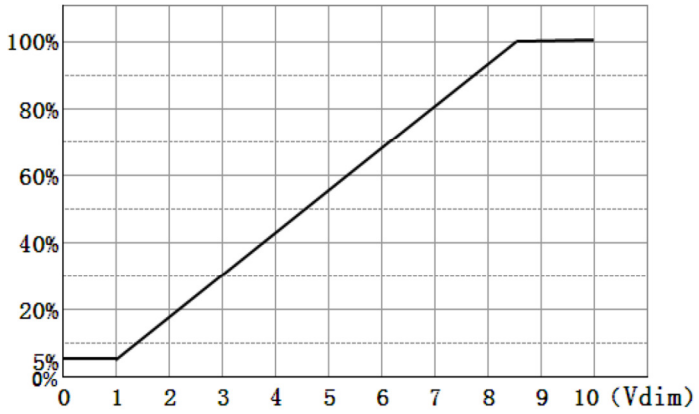
3. Label Structure



4. Current Setting

1) Control Type : 0-10V

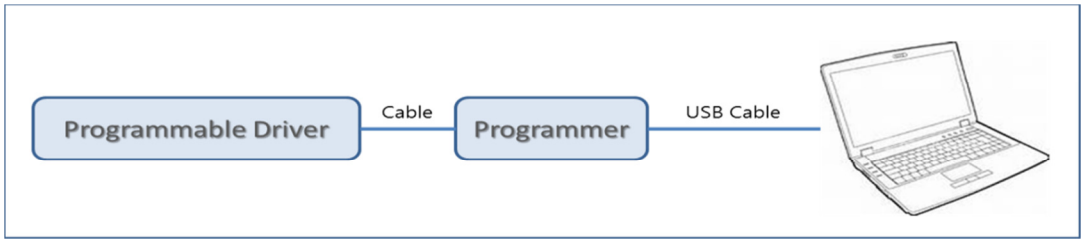
ARTICLE	SYMBOL	UNIT	MIN	TYP.	MAX	REMARKS
Dimming	Range	Vdc	0	-	10	
	Dim. MIN	Vdc	-	-	1	0 ~ 1V Constant
	Dim. MAX	Vdc	-	-	8.5	



2) Programmable current setting

The programmable driver can be programmed by using the special PC S/W and the programmer module.

Application guide for programmer is located SAMSUNG LED homepage.



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