



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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LED Driver

High-bay 96 W Programmable Driver SI-CA2029601US



Constant Current LED Driver Wide Operating Range up to 2.0A – Programmable



Features & Benefits

- Output Current Range: Max 2.0 A (adjustable via programmer)
- Output Voltage Range: 24 ~ 48 Vdc
- Output Power Range: Max 96 W
- Dimming Control: 0-10 V
- Input Voltage: 110 ~ 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 $t_c = 75$ °C
- Long lasting & high reliability
- Slim metal housing
- Easy setting current

Applications

- Indoor High-bay lighting
- Parking lot lighting

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1. Characteristics

Article	Symbol	Specification			Unit	Note
		Min.	Typ.	Max.		

INPUT SPECIFICATIONS

Nominal Voltage	V _{in}	100 ~ 277			Vac	Full input range, no range switching
Voltage Range		90		304	Vac	
Nominal Frequency	F _{in}	50 / 60			Hz	
Frequency Range		47		63	Hz	
Input Current	At 110 Vac	I _{in}		1.3	A	At full load
	At 277 Vac	I _{in}		0.45	A	At full load
Total Harmonic Distortion	THD			0	%	At 120-277 Vac
Power Factor	PF	0.9			-	At 120-277 Vac
Efficiency	η		85		%	At full load, 110 Vac, 60 Hz
			88		%	At full load, 277 Vac, 60 Hz
Protection Class			2		-	
In-rush Current				65	A _{pk}	@ 277Vac input, 25°C Cold start.

OUTPUT SPECIFICATIONS

Nominal Voltage	V _o	24 ~ 48			Vdc	at I _o = Max 2.0 A
Max. Voltage				60	Vdc	Open circuit, No-load protection
Nominal Current	I _o			2.0	A	±5 %, Can be programmable
Nominal Power	P _o			96	W	At I _o = Max 2.0 A, V _o = 48 V
Turn-on Delay Time	T _d			1	s	At full load, 100 Vac input

Article	Symbol	Specification			Unit	Note
		Min.	Typ.	Max.		

DIMMING SPECIFICATIONS

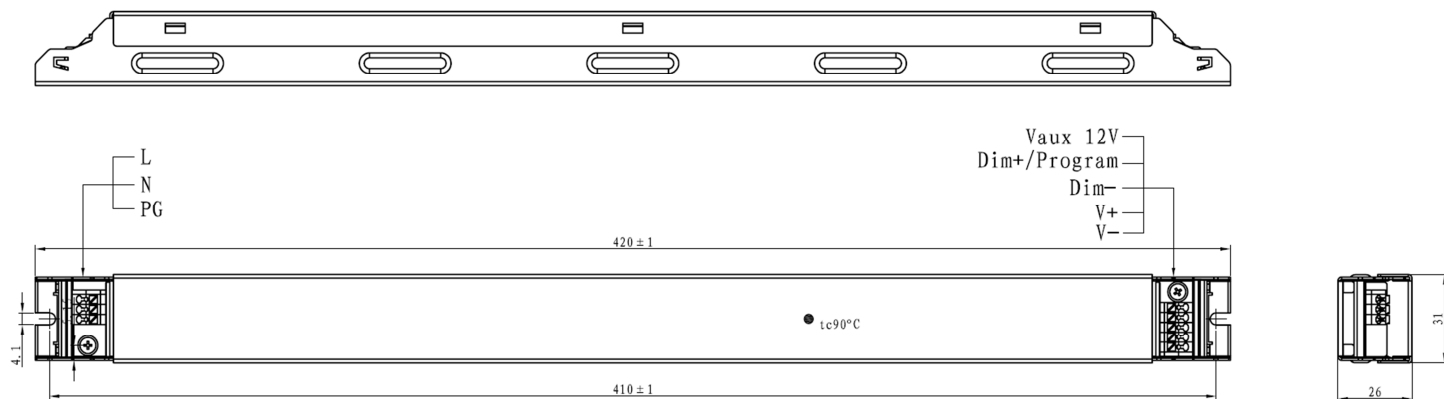
Dimming Control		0-10 V				See Dimming Specification section
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ENVIRONMENTAL SPECIFICATIONS

Ambient Temperature	t_a	-40		60	°C	
Case Temperature	t_c			90	°C	Type TL 90°C / 65°C
Storage Temperature	t_s	-40		85	°C	
Ambient 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 $t_c = 75^\circ\text{C}$, full load, 120-277 Vac
MTBF		250,000			h	At $t_a = 25^\circ\text{C}$, full load
Dimensions	L x W x H	16.5 x 1.2 x 1.0			inch	
		420 x 31 x 26			mm	
Net Weight		400			g	± 20 g

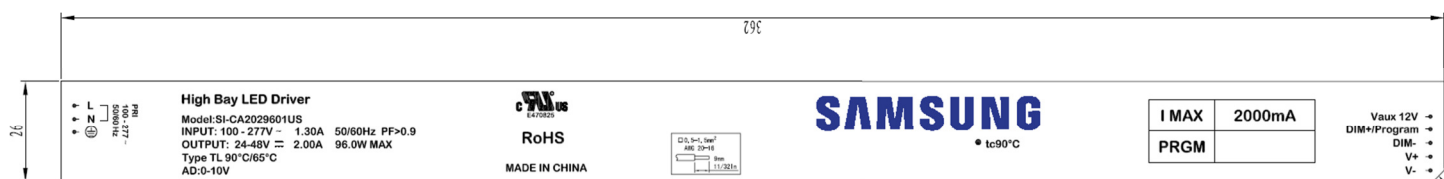
2. Outline Drawing & Dimension

Dimension (mm)



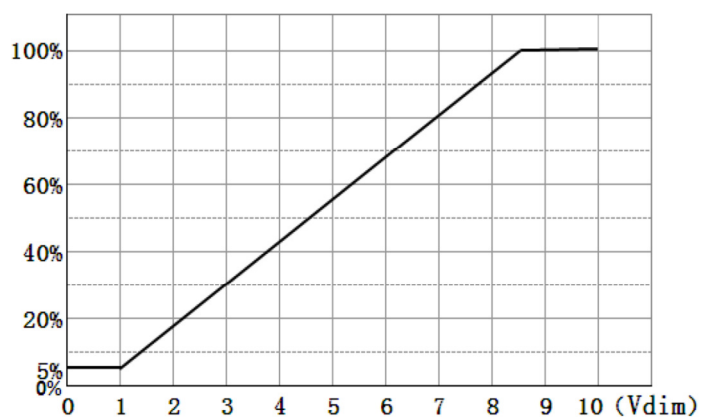
Pin	Symbol	Color	Description	Connector
INPUT CONNECTOR				
1	L	Black	Live	PHOENIX CONTACT
2	N	White	Neutral	
3	PG	Green	Ground	
OUTPUT CONNECTOR				
1	Vaux 12V	Yellow	Auxiliary 12V	PHOENIX CONTACT
2	Dim+/Program	Purple	External Dimming Input Port(0~10V)	
3	Dim-	Grey	External Dimming Input Port(Ground)	
4	V+	Red	LED output +	
5	V-	Blue	LED output -	

3. Label Structure



4. Current Setting

1) Control Type : 0-10V



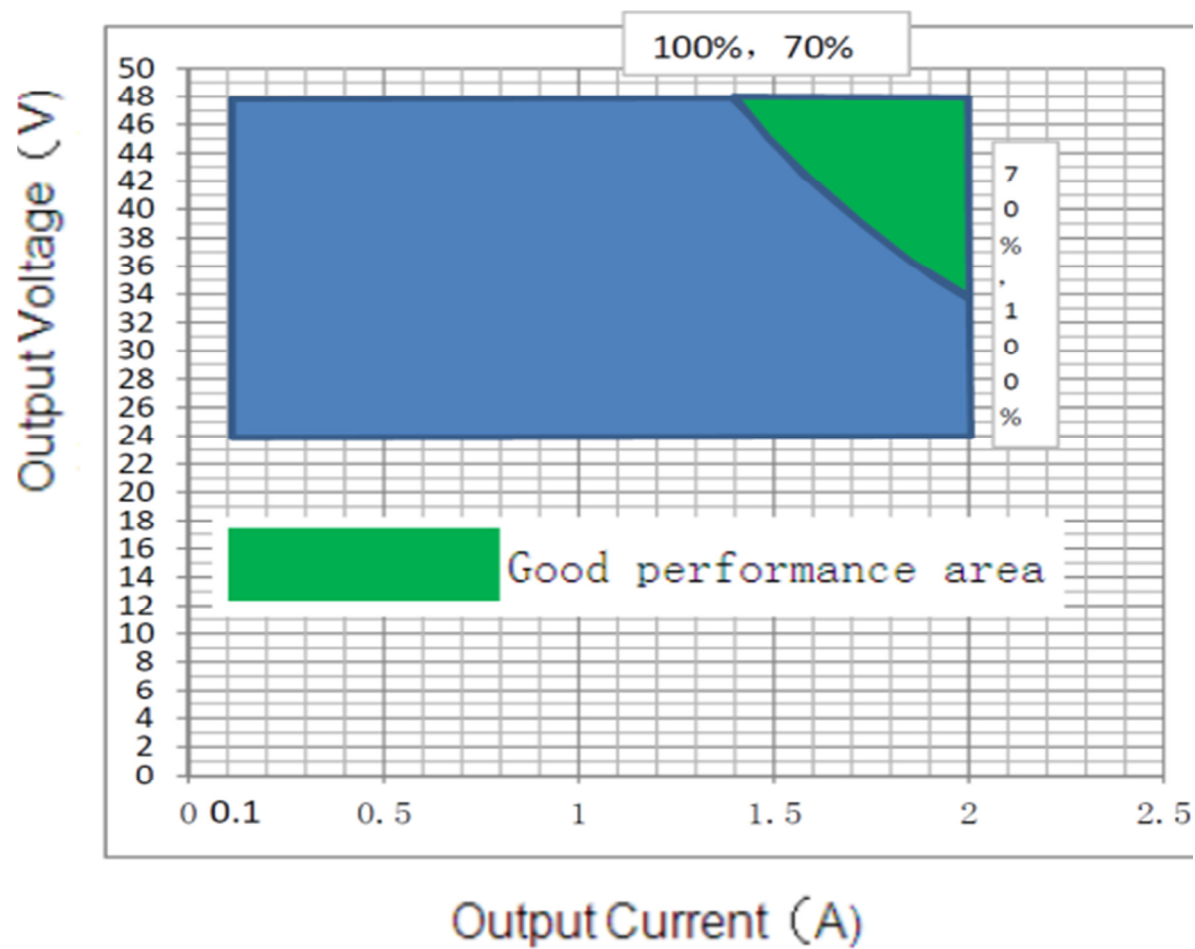
Article	Symbol	Unit	Min	Typ	Max	Remark
Dimming	Range	Vdc	0	-	10	
	Dim. MIN	Vdc	-	-	1	0~1V Constant
	Dim. MAX	Vdc	-	-	8.5	

2) Programmable current setting

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



3) Operating Window



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