

# AAB045-C1050

LED control (constant current mode)



**Product Features:**

- Output mode: constant current
- Degree of protection: IP20
- Insulation class: Class II
- DALI-2+pushDIM dimming is supported
- DIP switch for 7 levels of output current selectable
- High power factor, high efficiency, harmonics as low as 10%
- Boot time<0.7s
- Dimming range 0.1%-100%, output current accuracy 5%
- It has short-circuit and over-current protection
- Flicker-free compliant with ErP energy efficiency certification
- Meets the standby power consumption requirements of ErP energy efficiency certification, and the standby power consumption < 0.5W
- SELV and Class II designs for use outside luminaires
- The input and output cables are separated from the end cap design, and the crimping line is more secure



Technical data

Electrical Specifications

category	project	Technical Indicators
Output parameters	Output mode	Constant current
	Rated output current	550/600/650/700/750/800/850/900/950/1000/1050mA
	Rated output voltage	9-42V
	Rated output power	44Wmax
	Current regulation mode	DIP
	Current low-frequency ripple	±2%
	Current accuracy	±5%
	Linear regulation	±5%
	Load regulation	±5%; and @100mA ±7% 9-30V/30-42V
	No-load output voltage	46-50V
	Flicker-free performance (typical)	Strobe percentage(IEEE 1789)=0.378% Flicker index(IEEE 1789)=0.001

# Product datasheet

## Technical data

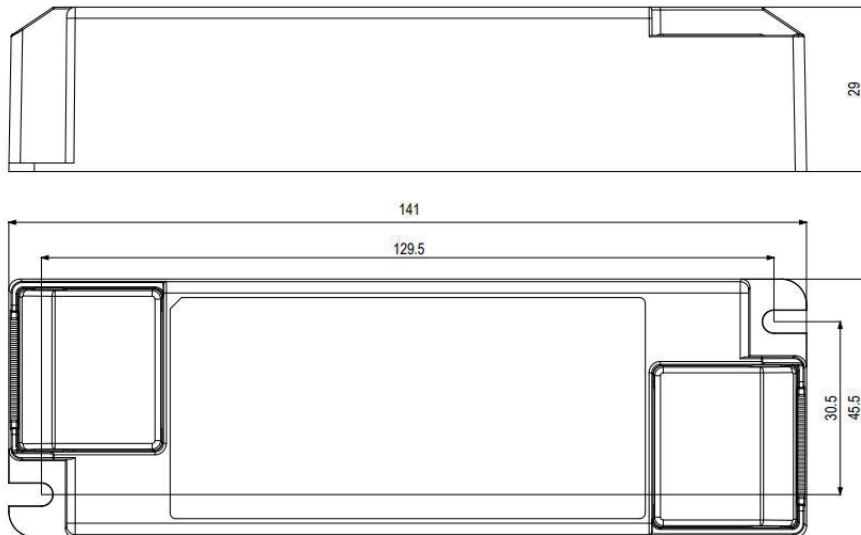
category	project	Technical Indicators
Enter the parameters	Rated operating voltage	220-240VAC 220-240VDC
	Limit voltage range	198-264VAC 198-264VDC
	Resistant to input high voltage	<305 VAC, 1 h
	Input current	<0.28A (230V AC & The output is fully loaded)
	Operating frequency	50-60Hz
	Power factor/phase shift factor	PF>0.9 (230V AC & The output is fully loaded), DF=0.9 (230V AC & The output is fully loaded)
	Total harmonic distortion	<15% (230V AC & The output is fully loaded)
	Conversion Efficiency (Typical)	>88% (230V AC & The output is fully loaded)
	Start-up inrush current	<10A
	Start/switch/shutdown time	<0.7s(AC The lights are on),<0.7s(DC The lights are on),<0.3s(AC/DC handoff),<0.5s(Turn off the lights)
	Switch life	> 50,000 次
	Power consumption	fully loaded(Pmax):44W, Standby:<0.5W
	Protection & Security	Short-circuit protection
Overload protection		N/A
Pressure-resistant		I/P-O/P: 3.75kV & 5mA & 60S
lightning strike		L-N:2KV
Leakage current		<0.7mA (230V AC & fully loaded)
Insulation resistance		I/P-O/P: 100MΩ/500Vdc/25℃/70% RH
Control interface	DALI Dimming interface	Voltage range: 9.5-22.5V, typical 16V, Interface current consumption:1.8mA
	PushDIM Dimming interface	Voltage range:220-240V 47/63Hz
	1-10V 2in1 Dimming interface	N/A
	Auxiliary power supply	N/A
	Dimming range	0.1-100%
	Dimming drive mode	PWM(Pulse dimming)
Emergency	Central emergency lighting system	Yes (normal dimming with DC input)
	Stand-alone emergency lighting system	In the tank
Environment & Life	Operating temperature	Ta= -25-50℃
	Enclosure temperature	Tc=85℃
	Operating humidity	5-85% RH, No condensation
	Storage temperature/humidity	-40-+85℃, 5-85% RH, No condensation
	IP rating	IP20
	MTBF	500,000H,MIL-HDBK-217F(25℃)
	Service life	Up to 50,000 hours under normal use conditions
	Warranty	5 years
	Vibration resistant	10 ~ 500Hz, 5G 12 minutes/cycle, X、Y、Z axis 72 minutes each
	noise	<25dB(30cm, fully loaded)
	environmental protection	RoHS

# Product datasheet

## Technical data

category	project	Technical Indicators
Certifications and standards	Certified	CE, ENEC, UKCA, RCM, CCC, EL, DALI-2
	Safety standards	EN61347-1, EN61347-2-13, EN62384
	Electromagnetic compatibility standards	EN55015, EN61000-3-2, EN61000-3-3, EN61000-4-2,3,4,5,6,8,11, EN61547
	DALI-2	IEC 62386-101(DALI-2), IEC 62386-102(DALI-2), IEC 62386-207(DALI-2)
	EL	Compatible with IEC 61347-2-13 Annex Part J, compliant with EN 60598-2-22 Standard for emergency lighting fixtures, compatible with EN 50172 for central battery system applications
	RF	N/A
	remark	<p>1. Unless otherwise specified, all specifications are at an input voltage of 230VAC, Rated load, measured at 25°C ambient temperature.</p> <p>2. The driving power supply can not be installed in the lamp, when the driving power supply and the lamp are used together, Matching luminaires, EMC needs to be evaluated.</p>

## Dimensions (unit: mm)

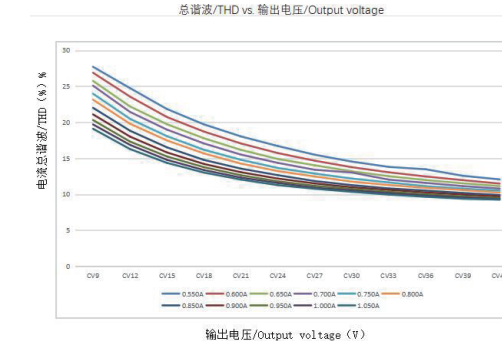
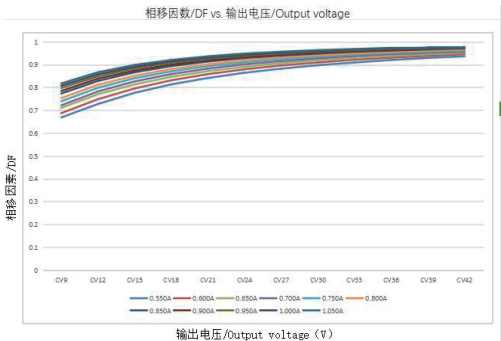
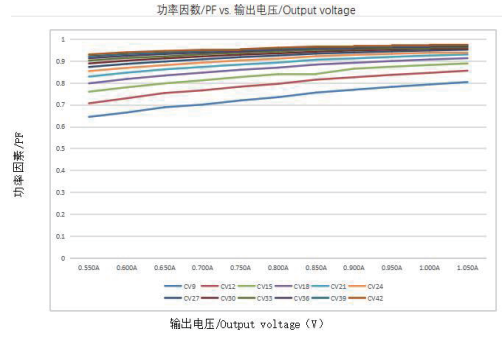
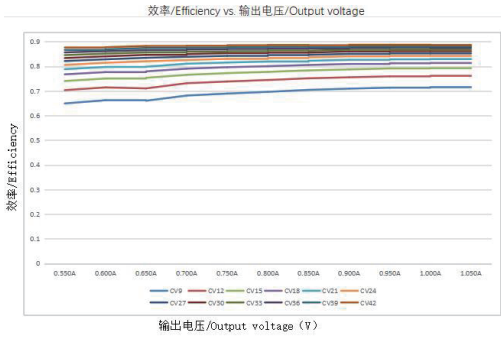


Inputs		
serial number	Functional definitions	color
1	DA	orange
2	DA	orange
3	ACN/DC-	blue
4	ACL/DC+	blue

Output		
serial number	Functional definitions	color
1	LED-	black
2	NO	black
3	LED+	red

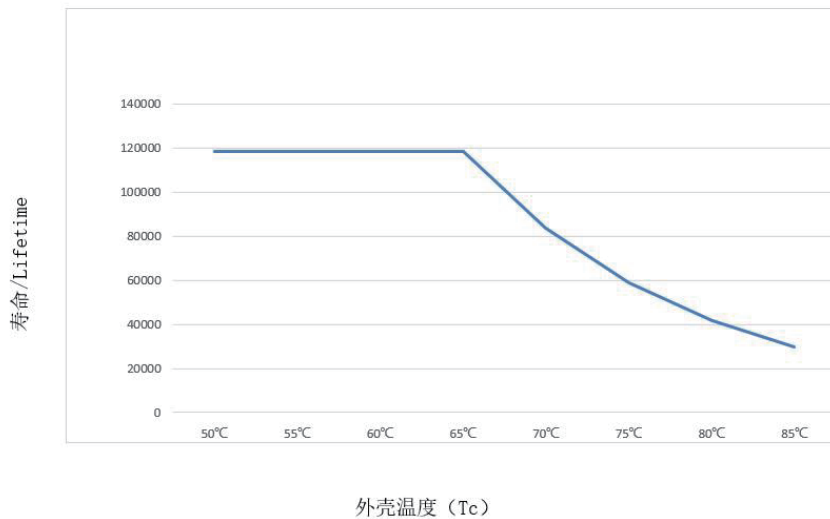
# Product datasheet

## Electrical curves



## Life curve graph

寿命/Lifetime vs. 外壳温度/Tc



# Product datasheet

label

**PAIRUI**  
Constant Current LED Driver  
LED控制装置 (恒流模式)

Model(型号): AAB045-C1050  
PRI(输入): 220-240VAC 0.28A  
50/60Hz PF: 0.35-0.95  
SEC(输出): 9-42VDC  
1050mA Max  
44W Max 50VDC Max  
ta:50°C tc:75°C

0.75-1.5"  
6...7mm

0.75-1.5"  
6...7mm

DA DA L N

PRI

pushDIM

SELV

CE CCC UK CA DALI

Made in China  
**TIANCHANG FUAN ELECTRONIC CO., LTD**  
Address: 286 Renmin East Road, Renhe Town,  
Tianchang City, 239331 Anhui, P.R. China

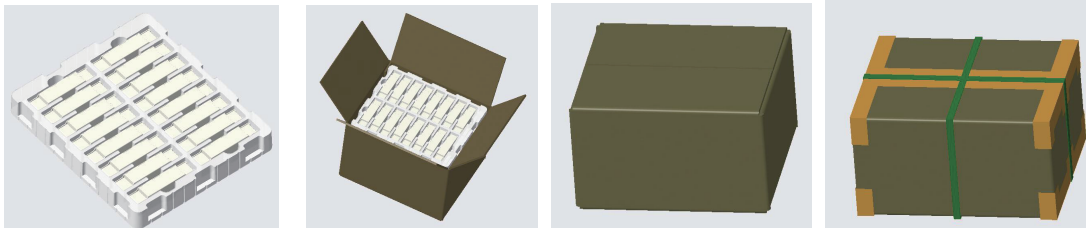
Irated	1	2	3	4
550mA	-	-	-	-
600mA	ON	-	-	-
650mA	-	ON	-	-
700mA	-	-	ON	-
750mA	-	-	-	ON
800mA	ON	-	-	ON
850mA	-	ON	-	ON
900mA	-	-	ON	ON
950mA	ON	-	ON	ON
1000mA	-	ON	ON	ON
1050mA	ON	ON	ON	ON

SEC LED+ LED-

输出功率 (W)	输出电流 (mA)	输出电压 (Vdc)	1	2	3	4
23.1	550	9-42	-	-	-	-
25.2	600	9-42	ON	-	-	-
27.3	650	9-42	-	ON	-	-
29.4	700	9-42	-	-	ON	-
31.5	750	9-42	-	-	-	ON
33.6	800	9-42	ON	-	-	ON
35.7	850	9-42	-	ON	-	ON
37.8	900	9-42	-	-	ON	ON
39.9	950	9-42	ON	-	ON	ON
42	1000	9-42	-	ON	ON	ON
44	1050	9-42	ON	ON	ON	ON

注意:  
1.默认出厂电流1050mA。  
2."-"设置是关闭状态。

## Packaging information



Carton size L*W*H(mm)	Quantity/ Carton	Net weight/pcs(g)	Net weight/carton(kg)	Gross weight/carton(kg)
385*332*229				