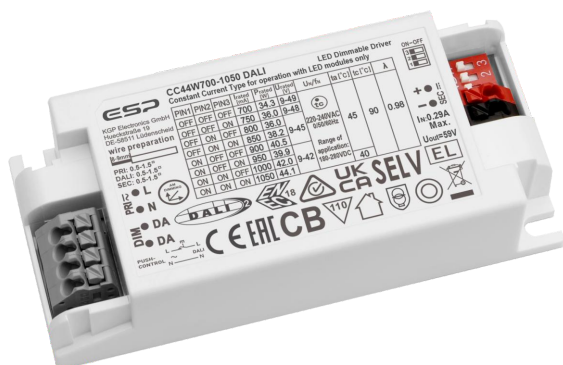




Constant Current Dimmable Driver

Model:CC44W700-1050 DALI



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (typ.)*	Output Voltage	No load Voltage
CC44W700-1050 DALI	700mA	0.23A	39.9W	6.30-34.30W	0.98	86%	9-49V	59V Max.
	750mA	0.24A	41.8W	6.75-36.00W		86%	9-48V	
	800mA	0.25A	41.9W	7.20-36.00W		86%	9-45V	
	850mA	0.26A	44.5W	7.65-38.25W		86%		
	900mA	0.27A	46.6W	8.10-40.50W		87%		
	950mA	0.27A	45.9W	8.55-39.90W		87%	9-42V	
	1000mA	0.28A	47.7W	9.00-42.00W		88%		
	1050mA	0.29A	50.1W	9.45-44.10W		88%		

* Test result @230V, 50Hz, Full Load.

1. Parameters

category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI-2 / Touch DIM
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	0/50/60Hz, Range:0/47-63Hz
	Overvoltage protection	2h@380VAC, 48h@320VAC
	Input Current	≤0.29A (230VAC, full load)
	Input Power	≤50.1W (230VAC, full load)
	Power Factor	≥0.98 (230VAC, full load)
	THD	≤7% (230VAC, full load)
	Standby Power Consumption	≤0.45W Dim to off, 230VAC
	Inrush Current	≤9.4A/2.3us (230VAC, full load)

	Connected quantity of 10A Breaker Connected quantity of 16A Breaker Connected quantity of 20A Breaker	20pcs/type A ; 33pcs/type B ; 53pcs/type C 33pcs/type A; 53pcs/type B ; 85pcs/type C 41pcs/type A; 66pcs/type B ; 106pcs/type C
Output	Output Voltage Range	9-49VDC@700mA, 9-48VDC@750mA 9-45VDC@800-900mA 9-42VDC@950-1050mA
	No Load Voltage	59VDC Max.
	Output Current	700-1050mA (Factory set current of 700mA)
	Max. Output Power	44.1W
	Efficiency	≥88% 230VAC, full load@max current
	Output LF current ripple (< 120 Hz)	±3% (Imax-Imin) / (Imax+Imin)
	Current Accuracy	±5%
	PSTLM	≤ 1
	SVM	≤ 0.4
	Starting Time (AC mode)	≤0.8S (230VAC, full load, by DALI system)
	Starting Time (DC mode)	≤0.4S
	Switching over time (AC/DC)	≤0.4S
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length: 20m, same port of DALI)
	PUSH-button	Max parallel connections qty for Push-dim 15
	DALI function	DALI dimming (Max. lead wire length : 300m) logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 1%-100%
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery (not be hot swap)
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	< 700μA, I/P to O/P @230V input
Environment	Ta/Operation Temperature	-20℃ .+45℃@700-1000mA ; -20℃ .+40℃@1050mA
	Ts/Storage Temperature	-20℃ .+90℃
	Tc/Enclosure Temperature	90℃
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in / Independent
	PRI Wire preparation	PVC,VDE certificated,0.5-1.5 [□] ,with 8mm tin
	SEC Wire preparation	PVC,VDE certificated,0.5-1.5 [□] ,with 8mm tin
	DALI Wire preparation	PVC,VDE certificated,0.5-1.5 [□] / 8-9mm
	Dimension	97.5*44*23mm (L*W*H)

Standards	Certification	CE/ENEC/SAA/UKCA/EAC/CB
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017; EN62384:2006/A1:2009; AS 61347.2.13:2018; AS/NZS61347.1:2016; BS EN61347-1:2015/A1:2021; BS EN61347-2-13:2014/A1:2017; IEC 61347-1:2015+A1:2017; IEC 61347-2-13:2014+A1:2016;
	EMC Standards	AS/NZS CISPR 15:2011; AS CISPR 15:2017; BS EN IEC 55015:2019+A11:2020; EN 61547:2009; BS EN IEC 61000-3-2:2019; BS EN 61000-3-3:2013+A1:2019;
	Performance	EN62384
	DALI performance	EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2, including part 251, 252, 253)
	Surge	L/N-Ground:4kV; L-N:2kV
Others	RoHS	complied to 2011/65/EU
	Life Time	15000h T _c =95℃
		50000h T _c =90℃
		75000h T _c =85℃
		100000h T _c =80℃
	Warranty	5years, F.R. <10000ppm

Remark:

- 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
- 2.LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
3. Please make sure T_c under Lifetime condition when long term operate under DC input.
4. DC emergency (DCemDim):Default 15%, EOFx range = 1 .. 100% (EOFx = DCemDIM level)
5. During the PUSH DIM test, the number of parallel connections must be less than 15PCS.

2. Label

wire preparation
8-9mm

PRI: 0.5-1.5°
DALI: 0.5-1.5°
SEC: 0.5-1.5°

12 ● L
PRI ● N

DIM ● DA
● DA

PUSH-CONTROL
L ~ L DALI
N ~ N

ESP **CC44W700-1050 DALI** LED Dimmable Driver
Constant Current Type for operation with LED modules only

PIN1	PIN2	PIN3	I _{rated} [mA]	P _{rated} [W]	U _{rated} [V]	U _N /f _N	t _a [°C]	t _c [°C]	λ
OFF	OFF	OFF	700	34.3	9-49	220-240VAC 0/50/60Hz	45	90	0.98
OFF	OFF	ON	750	36.0	9-48				
OFF	ON	OFF	800	36.0					
OFF	ON	ON	850	38.2	9-45				
ON	OFF	OFF	900	40.5	9-42	Range of application: 180-280VDC	40		
ON	OFF	ON	950	39.9					
ON	ON	OFF	1000	42.0					
ON	ON	ON	1050	44.1					

ON-OFF
3
2
1

+ ● L
- ● SEC

In: 0.29A Max.
U_{out} = 59V

AM DIMMING

DALI 2

UK SELV EL

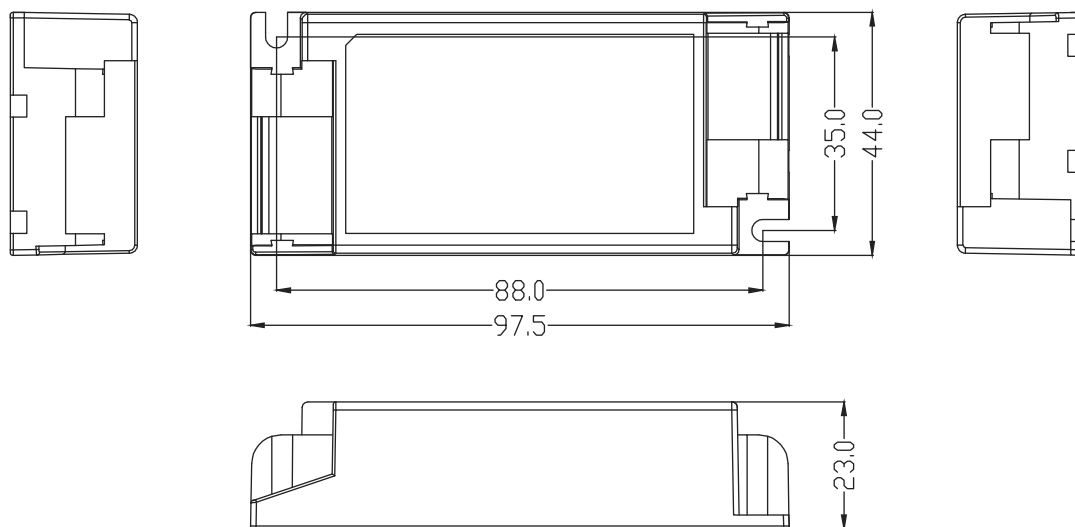
CE ENEC CB 110

3. Output Current Setting

Output Current	1	2	3
700mA	-	-	-
750mA	-	-	ON
800mA	-	ON	-
850mA	-	ON	ON
900mA	ON	-	-
950mA	ON	-	ON
1000mA	ON	ON	-
1050mA	ON	ON	ON

4. Dimension

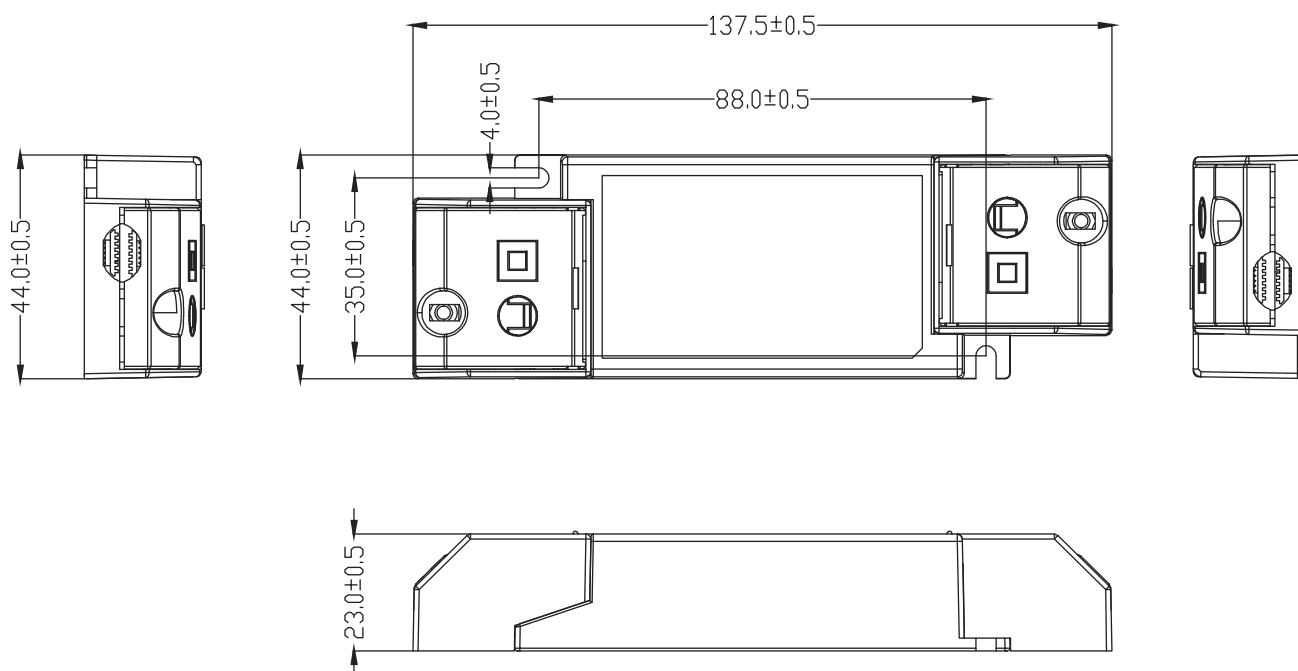
Built in type:



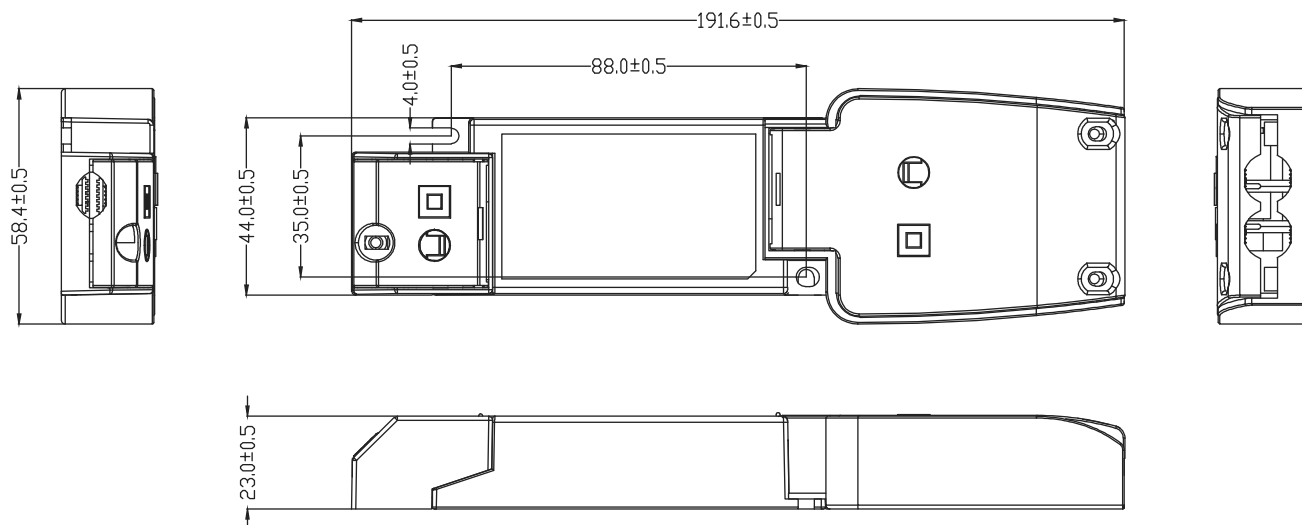
Compatible Small Strain reliefs:SR_CC21_30_44

Compatible Large Strain reliefs:SR_CC21_30_44_5POL

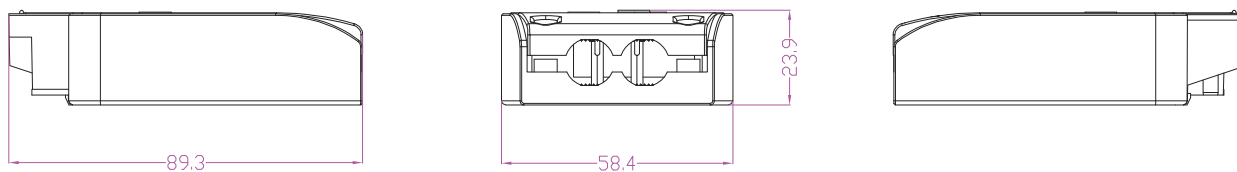
Small Strain reliefs



Large Strain reliefs



Large side cover specifications



Tolerance for dimensions ± 0.1 mm

Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 57.4-59.4 x 22.9-24.9 mm

Wire size: 0.5 - 2.5 mm²

Ambient temperature range: -25□+45 °C

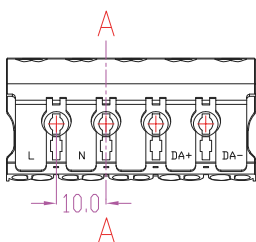
Storage temperature range: -40□+90 °C

Assembly temperature range: +5...+30 °C

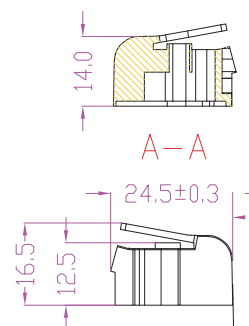
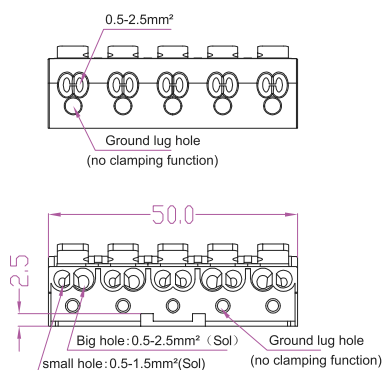
Do not store in wet or humid environment!

* Unless otherwise stated in the driver datasheet (for independent installation).
Note! T_c max temperature of the driver shall not be exceeded.

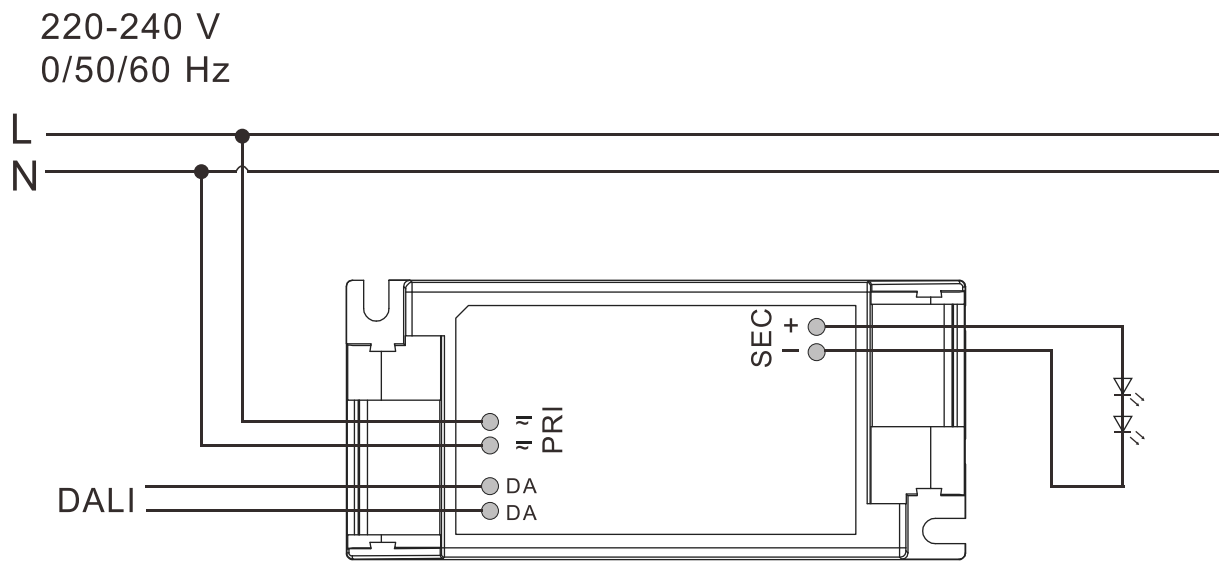
Terminal



5 - pole connector for DA / CC
drivers with LC-SRB-LOOP

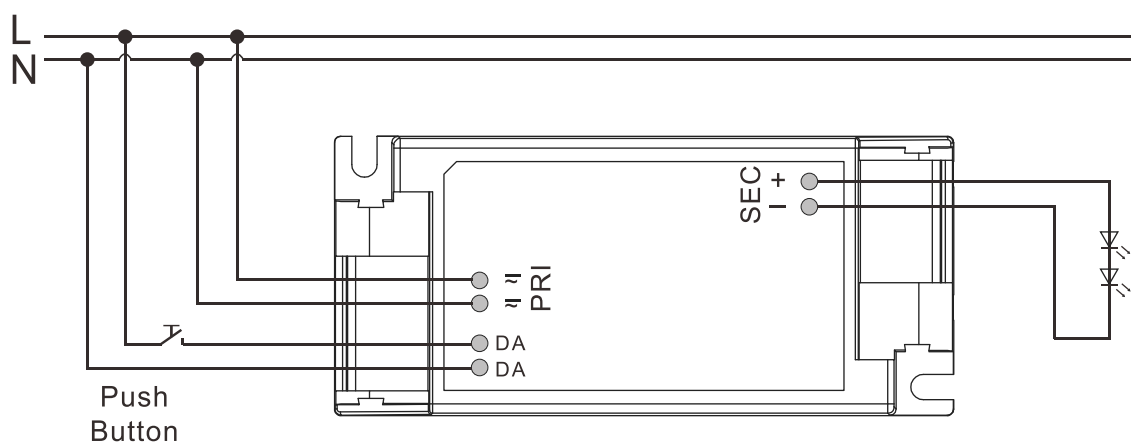


5. Wiring Diagram



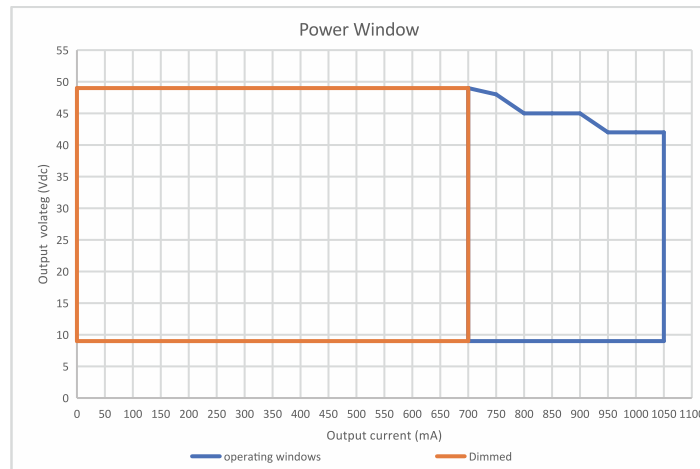
Push Dimming

220-240 V
0/50/60 Hz

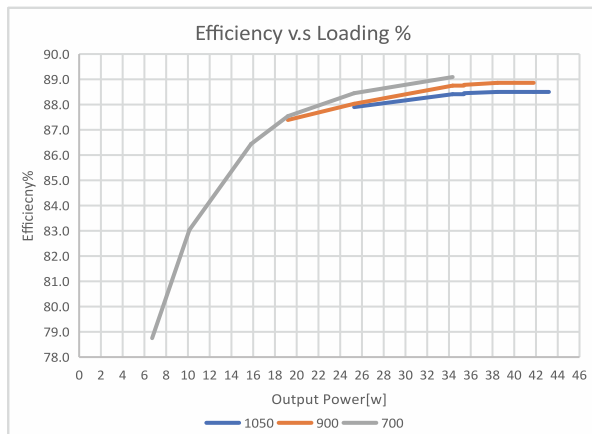


6. Electrical values

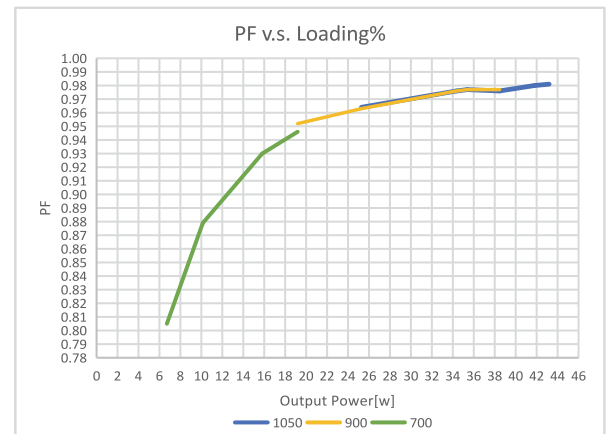
1. Operating power windows



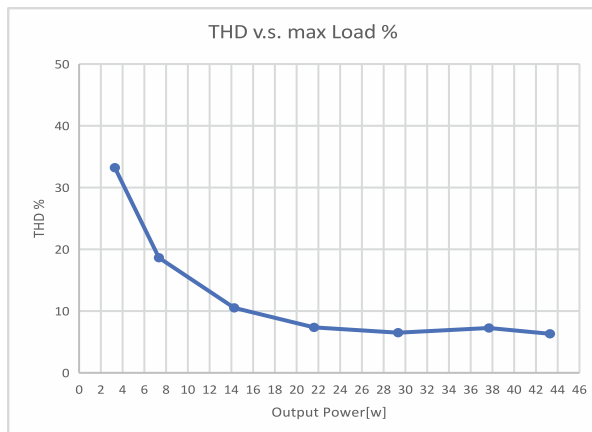
2. Efficiency v.s. Load



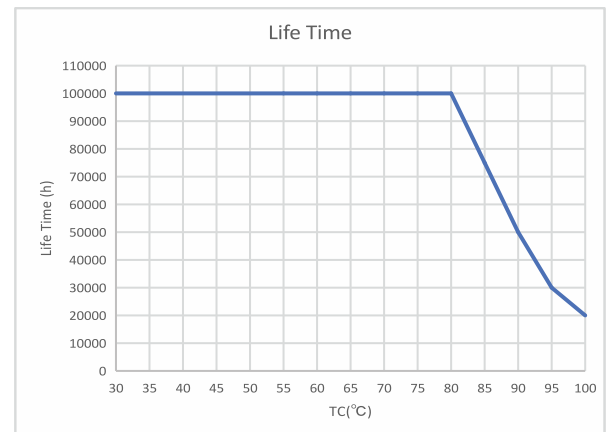
3. PF v.s. Load



4. THD v.s. Load



5. Life time



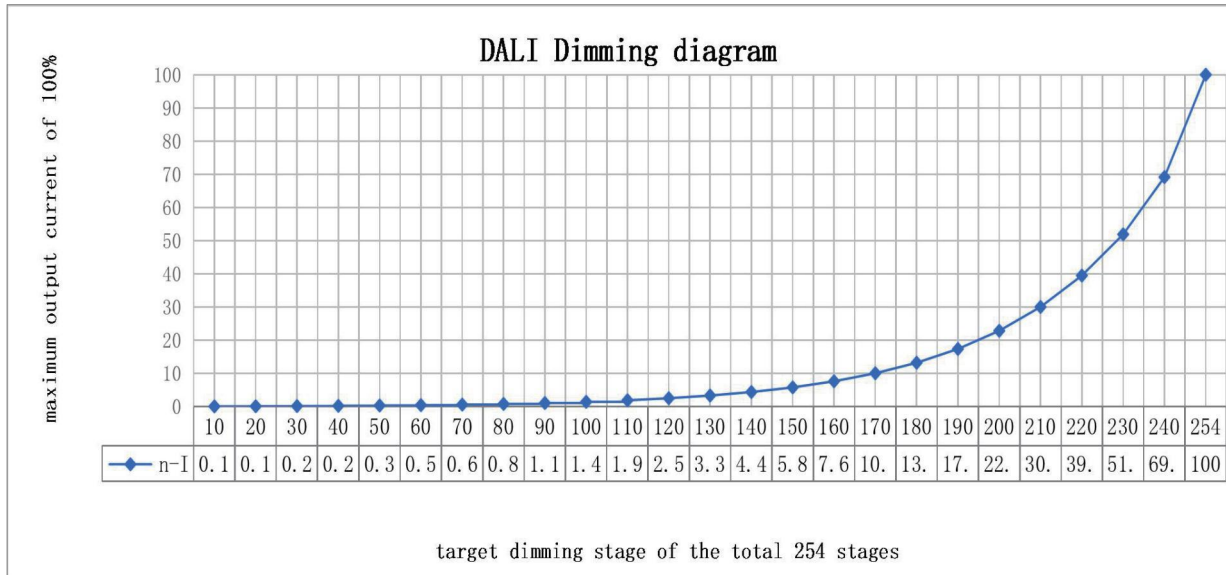
7. DALI dimming curve

formula for DALI dimming.

$$X(n)=10^{\{[(n-1)/(253/3)]-1\}},$$

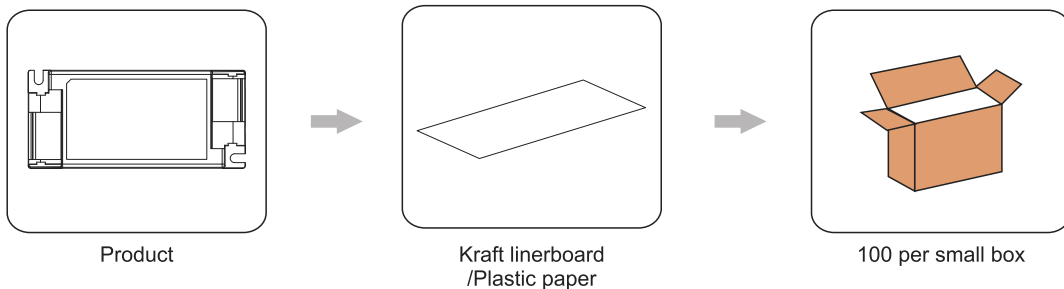
Here, n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current



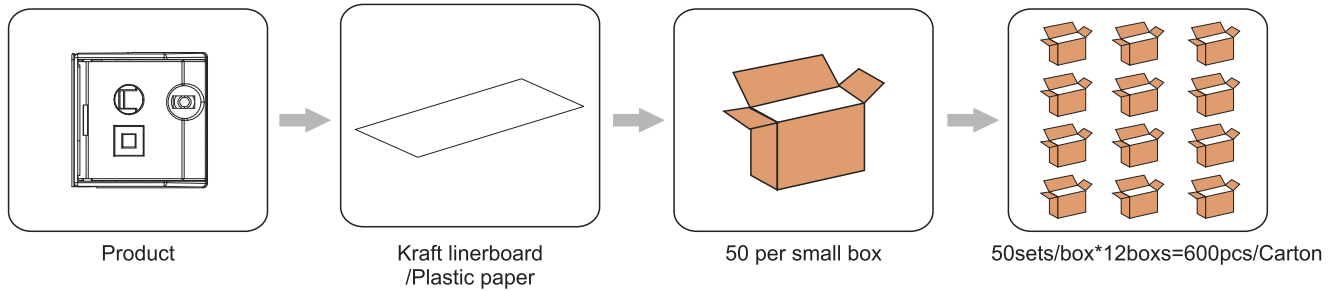
8. Packing information

Built in type



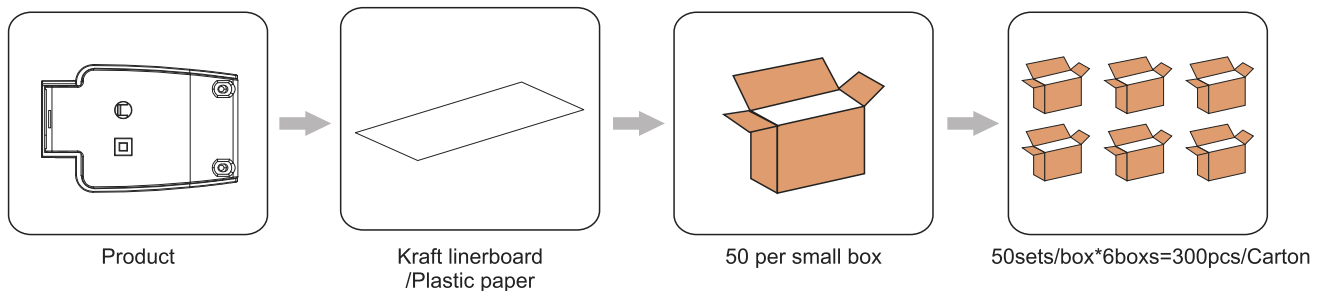
Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
398*230*130	100	0.127	12.77	13.12

Small Strain reliefs



Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
500*195*245	600	0.009	5.64	7.20

Large Strain reliefs



Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
375*315*385	300	0.047	14.25	15.81

9. Push Dim :

9.1 On / off:

Short push (120ms-600ms) on the switch

Stepless dimming: long push (> 0.6sec) on the switch

9.2 Power-on memory function

When the LED driver is powered on, it will restore the memory before the LED driver is powered off. (brightness remembers the brightness after the last dimming is stable, and the brightness during dimming is not memorized)

9.3 Light on/off

If the light is on, the light will be off after a short press. If the light is off, the light will be on after a short press. The time range of short press is 120-600mS.

9.4 PUSH Dimming

Press and hold the push switch for a long time, the light will enter the dimming state, if the previous time is dimming, it will automatically turn to dimming the next time. After releasing the reset button, the dimming stops and the current illuminance is maintained. The dimming range is 1%-100%. The default is to dim when the power is first long-press. If the brightness of the power-on is the maximum brightness, the first long-press is to dim. (Long press 0.6-3S to start dimming.)

9.5 Forced synchronization

Long press for 10 seconds to turn on all the lights and turn on the same brightness (50%), and continue to quickly short press will not change. After a short period of time without short press operation, the module exits the synchronization mode, and the short press restores the switch function.

9.6 PUSH Dimming rate

Long press the push switch 10S to switch the dimming rate to 3S, Long press the push switch 20S to switch the dimming rate to 6S, and it can also be changed by MAGIC or production software.

10. REVISION HISTORY

Date	Revision	Remark
2023.11.01	V0.01	Modify fonts, update images, Packing information, Life Time, Parameters(Control Method, Remark)
2024.04.15	V0.02	Label, Packing information, Electrical values, Dimension, update images