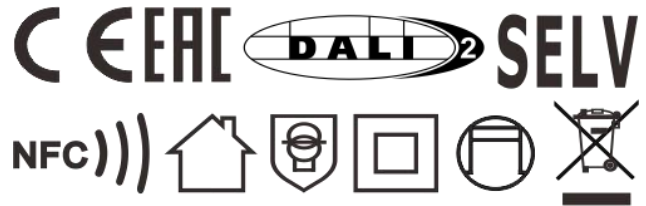


**Constant Current Dimmable Driver**

**Model: C80C1200-2100N-D**



Model	Output Current (*Typical)	Input Current	Input Power	Output Power Range	PF	Efficiency (typ.)*	Output Voltage	No load Voltage
C80C1200-2100N-D	1200mA	0.37A	71W	3-62.4W	≥0.95	90%	2.5-52V	70V Max.
	1250mA	0.38A	74W	3.13-65W		90%		
	1300mA	0.40A	77W	3.25-67.6W		90%		
	1350mA	0.41A	80W	3.38-70.2W		90%		
	1400mA	0.43A	83W	3.5-72.8W		90%		
	1450mA	0.44A	86W	3.63-75.4W		90%		
	1500mA	≤0.47A	91W	3.75-78W		90%		
	1550mA			3.875-80.6W		90%		
	1600mA			4-80W		90%		
	1650mA			4.12-79.2W		90%		
	1700mA			4.25-79.9W		90%		
	1750mA			4.375-80.5W		90%		
	1800mA			4.5-79.2W		90%		
	1850mA			4.625-79.55W		90%		
	1900mA			4.75-79.8W		90%		
	1950mA			4.875-79.95W		90%		
	2000mA	5-80W	90%					
	2050mA	5.125-79.95W	90%					
	2100mA	5.25-79.8W	90%					

\* Test result @230V, 50Hz, Full Load. Current setting @ 1mA-steps (NFC)

**1. Parameters**

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI-2 / Push DIM
	Output current setting	Near field communication (NFC)
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC or 180-280VDC
	Frequency	50/60Hz
	Input Current	≤0.47A (230VAC, full load)
	Input Power	≤91W (230VAC, full load)
	Power Factor	≥0.97 (230VAC, full load)
	THD	≤10% (230VAC, full load)
	Standby Power Consumption	≤0.5W @230VAC (DIM to off )
Output	Output Voltage	2.5-52VDC@ 1200-1500mA
		2.5-44VDC@ 1500-1800mA
		2.5-38VDC@ 1800-2100mA



	No Load Voltage (Uout)	70VDC Max.
	Output Current	1200- 2100mA (by NFC setting)
	Max. Output Power	79.8W
	Efficiency	≥90% (230VAC , full load@max current)
	Output LF current ripple (≤120 Hz)	±5% (Imax-Imin) / (Imax+Imin )
	Output PstLM (at full load)	≤ 1
	Output SVM (at full load)	≤0.4
	Current Accuracy	±5%
	Starting Time (AC mode)	≤1S (230VAC , full load, by DALI system)
Control Method	PUSH dimming	PUSH dimming (Max. lead wire length: 20m,same port of DALI)
	PUSH-button	Max parallel connections qty for Push-dim 15 PCS
	DALI function	DALI dimming (Max. lead wire length: 300m) Logarithm or linear dimming curve selectable 251,252,253 EL(EMI not evaluated),CLO,Corridor mode.
	Dimming range	DALI dimming: 1%-100%, Dim to off
Protection	NFC current setting	The output current can be set within the total value range in 1-mA-steps. Output current is mean value. Setting is by KGP's software APP/APK/PC with FEIG equipment or mobile phone.
	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
Environment	Leakage current	< 250μA, I/P to O/P or I/P to PE @230V input
	Ta/Operation Temperature	-25 ... +50℃
	Ts/Storage Temperature	-25 ... +85℃
	Tc/Enclosure Temperature	90℃
	Humidity	10%.... 90%RH
	Atmosphere	86- 108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Build-in & Independent
	PRI Wire preparation	0.5- 1.5 □ / 8-9mm
	SEC Wire preparation	0.5- 1.5 □ / 8-9mm
	DALI Wire preparation	0.5- 1.5 □ / 8-9mm
	Dimension	Built in:157.8*56*30mm (L*W*H) Independent-Small side cover :196.8*56*30mm (L*W*H) Independent-Large side cover :251.1*56*30mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN 61347-1:2015/A1:2021,EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 EN 62493:2015 AS61347.2.13:2018 AS/NZS61347.1:2016 Inc A1 BS EN 61347-1:2015/A1:2021,BS EN IEC 62384:2020 BS EN 61347-2-13:2014/A1:2017,BS EN 62493:2015
	EMC Standards	EN IEC 55015:2019, EN IEC 55015:2019/A11:2020



		EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021, EN 61547:2009
	Performance	EN62384:2020
	Surge	L-N/2KV
Others	RoHS	2011/65/EU
	Life Time	50000H @Ta
	Warranty	5years , F.R. < 10000ppm
	Audible Noise	<22dB @ 20cm distance, 15dB background

Remark:

- 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C 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 Tc under Lifetime condition when long term operate under DC input.  
Light output level in DC operation: (factory default = 100 %, EOFi = 15%).
- 4.During the PUSH DIM test, the number of parallel connections must be less than 15PCS.

## 2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B	14	18	22	28	35	@230VAC	43	200uS	
TYPE C	22	29	36	45	56				
TYPE D	36	46	57	71	89				

## 3. Label

**KGP**

■ N  
■ L  
■ DA  
■ DA  
PRI~

PUSH-CONTROL

**LED Dimmable Driver**  
**C80C1200-2100N-D**  
Constant Current Type for LED only

U<sub>N</sub>= 220-240VAC  
I<sub>N</sub>= 0.45A Max.  
f<sub>N</sub>= 50/60Hz  
PF≥0.95  
ta:50°C

I<sub>out</sub>= 1200-2100mA  
U<sub>out</sub>= 2.5-52VDC  
P<sub>out</sub>= 79.8W Max.  
No load= 70VDC Max.  
Current Setting by NFC, step 1 mA

•tc:90°C

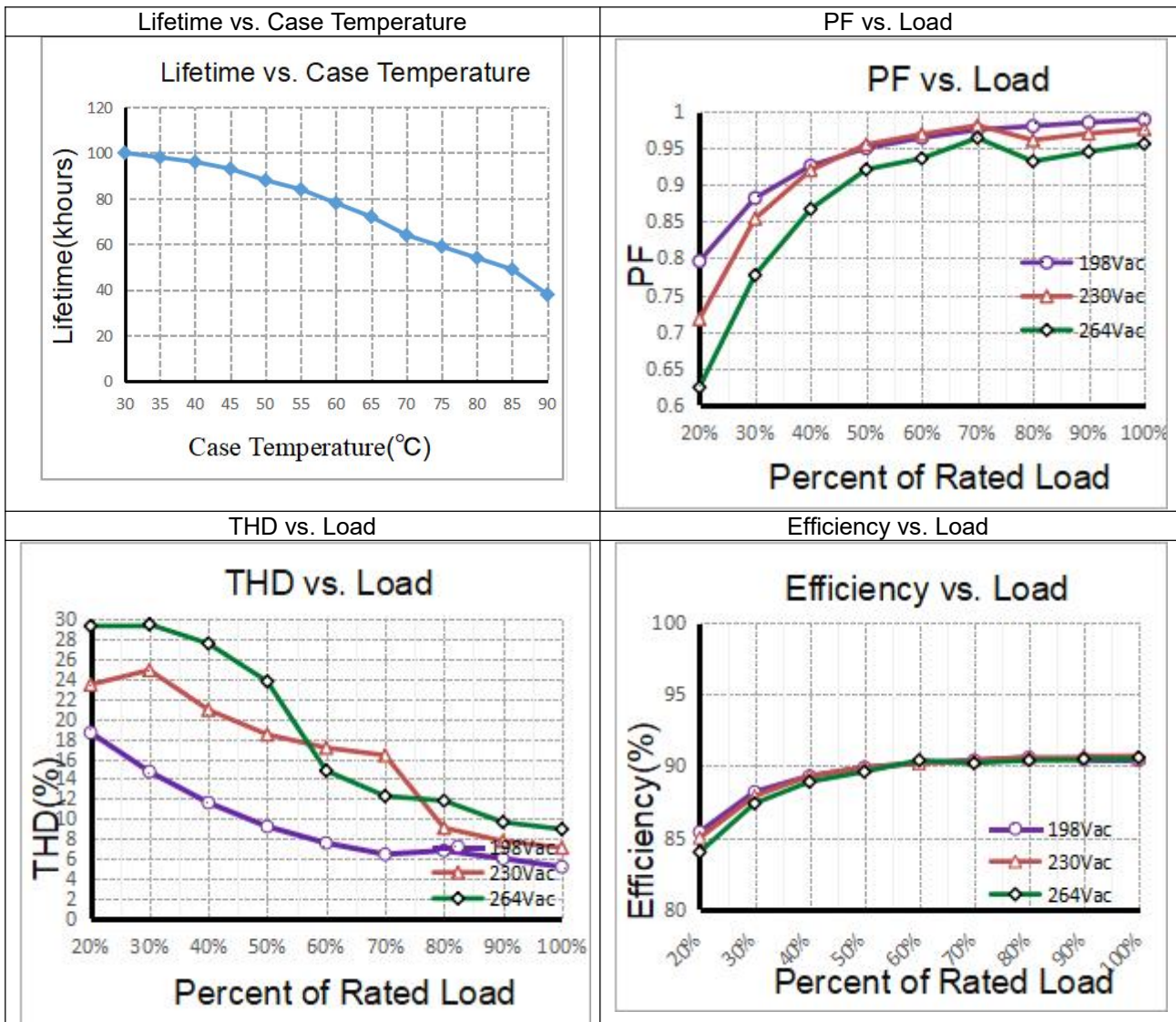
wire preparation  
8mm

PRI: 0.75 -1.5°  
SEC: 0.5 -1.5°

SEC + ■  
SEC - ■

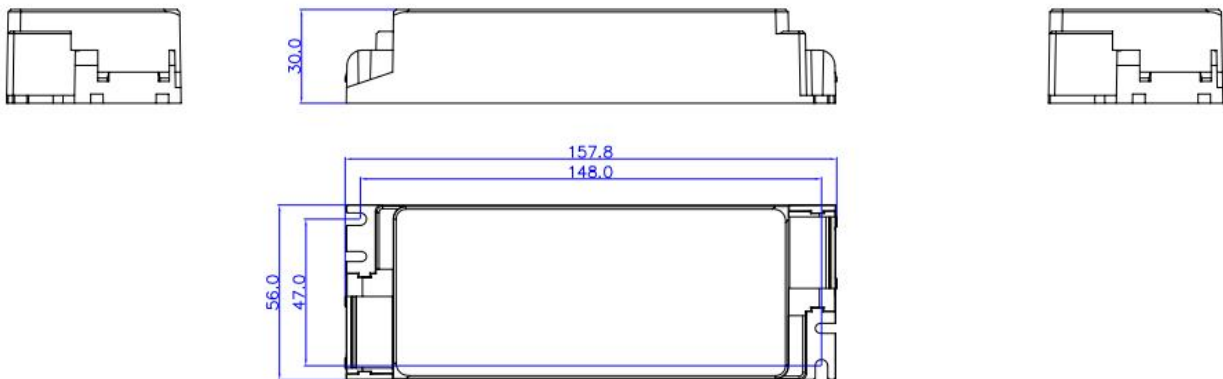


#### 4. Electrical values

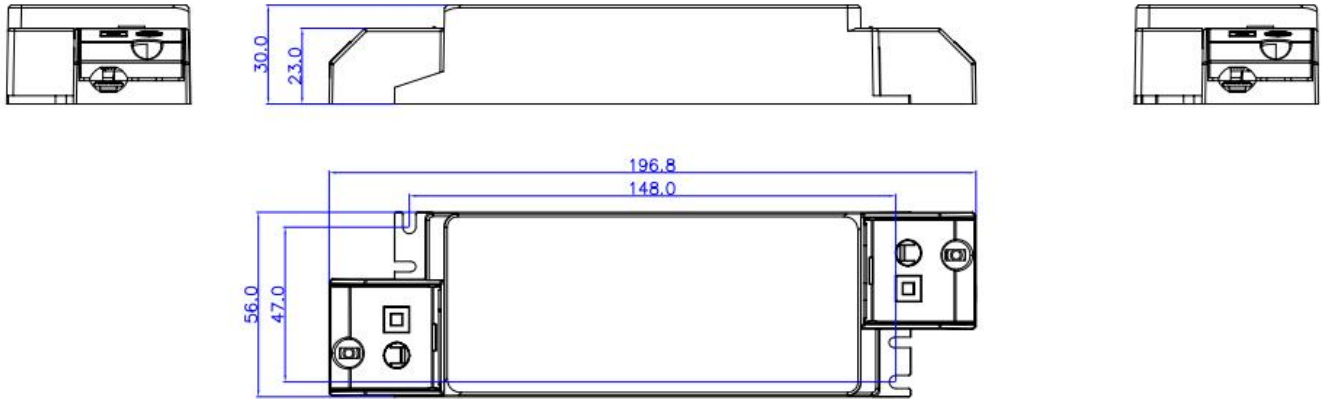


#### 5. Dimension ( Unit: mm)

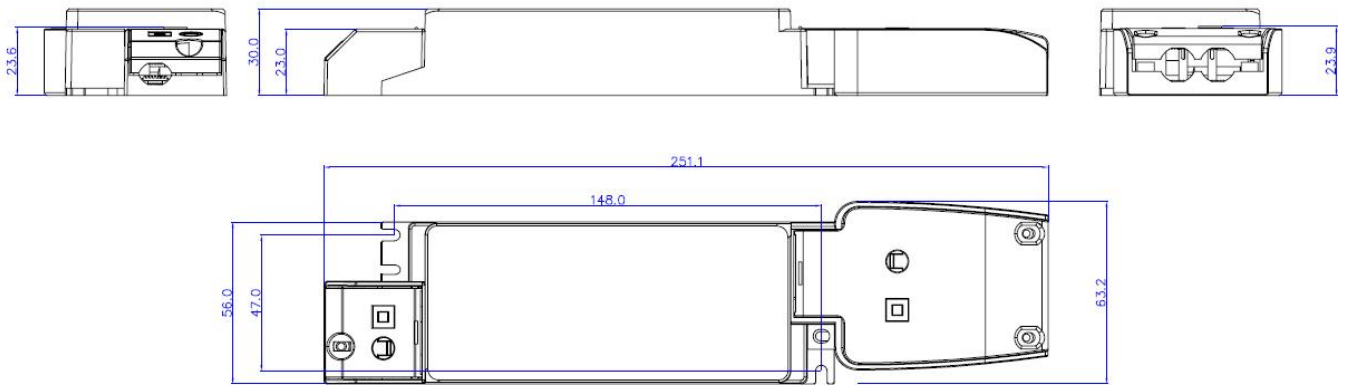
SC (A) :



**Small side cover(B)**

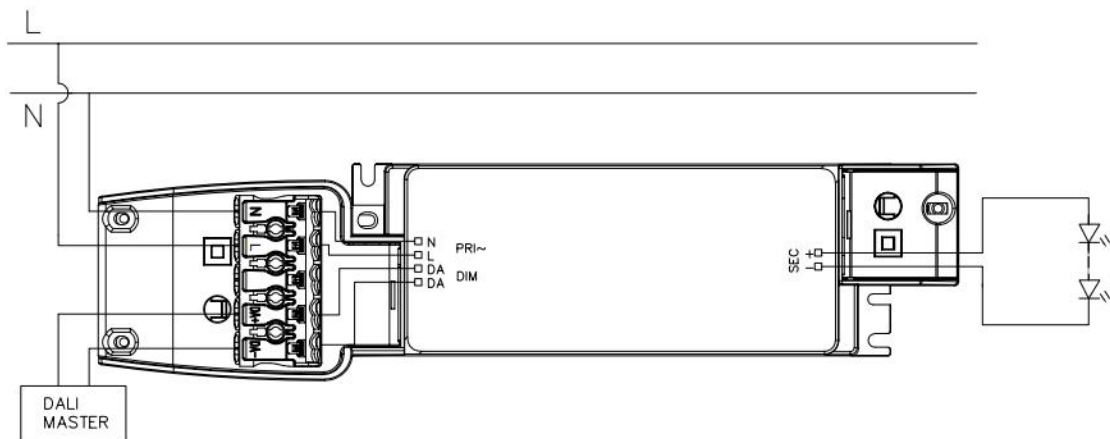


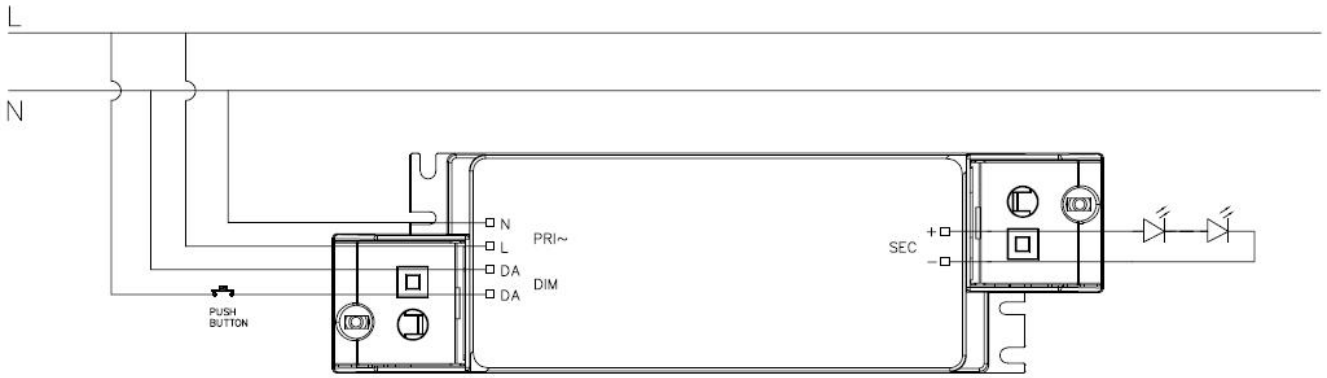
**Large side cover(C):**



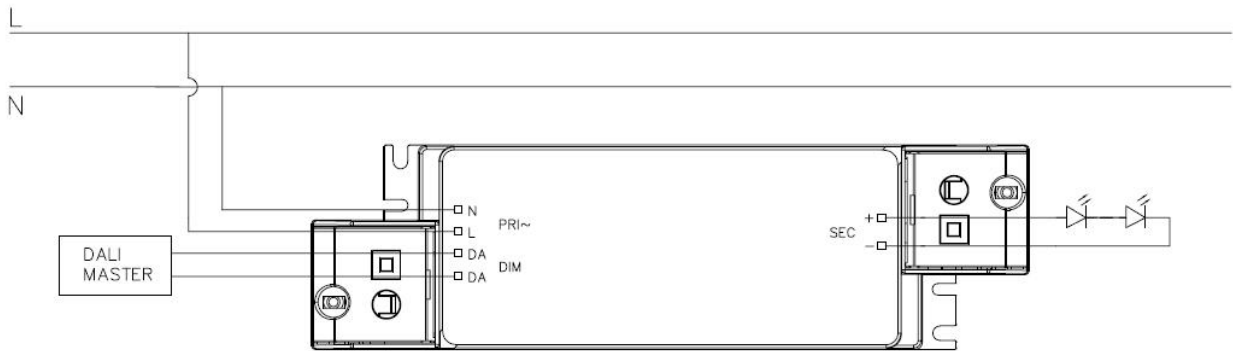
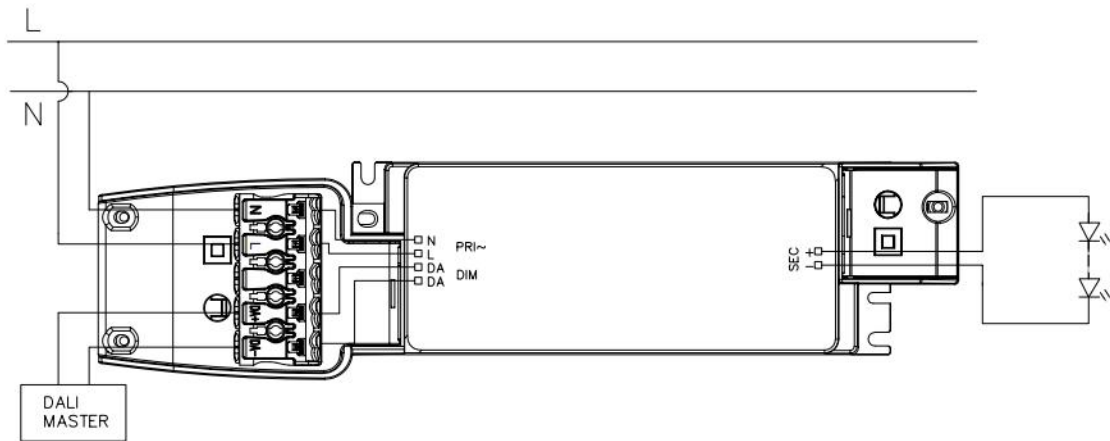
**6. Wiring Diagram**

**Fig. A: Push Dimming**





**Fig. B: DALI Dimming**



**7. DALI dimming curve**

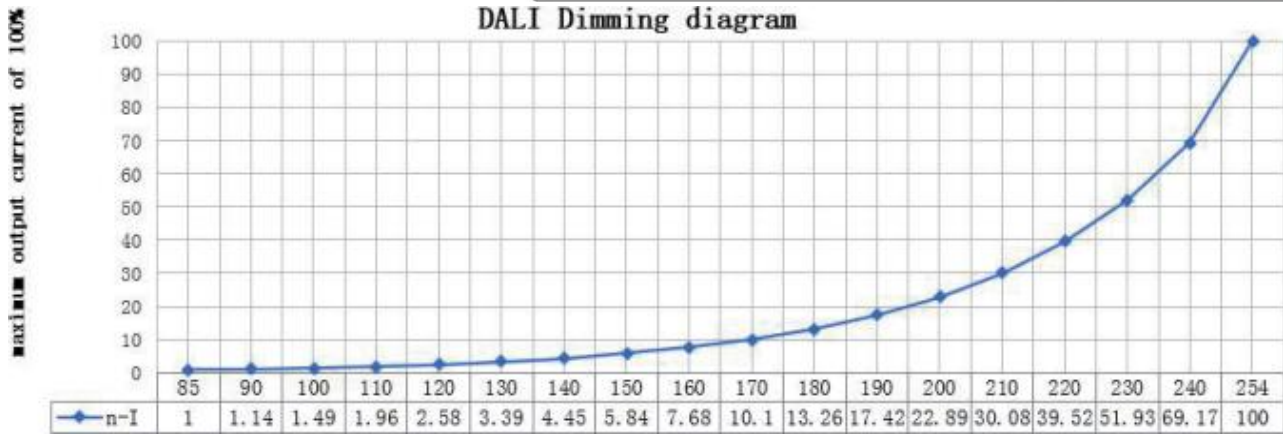
formula for DALI dimming.

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

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

### SC(A)

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	C80C1200-2100N-D	310*225*175mm	30	0.35	10.5	11.2

### Small side cover(B)

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	C80C1200-2100N-D	310*225*175mm	20	0.37	7.4	8.1

### Large side cover(C)

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	C80C1200-2100N-D	310*225*175mm	20	0.405	8.1	8.8

## 9.Revision History

Date	Revision	Remark
2024-03-21	V1.0	preliminary version

