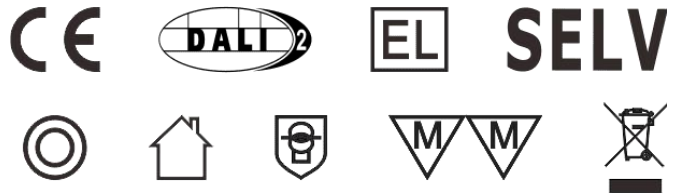




**Constant Current Dimmable Driver**

**Model:C44C300-1050D-D**



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (typ.)*	Output Voltage	No load Voltage
C44C300-1050D-D	300mA	0.11A	17W	2.70-14.70W	≥0.89	88%	9-49V	59V Max.
	350mA	0.12A	20W	3.15-17.15W	≥0.89	88.5%		
	400mA	0.13A	23W	3.60-19.60W	≥0.89	89.0%		
	450mA	0.14A	25W	4.05-22.05W	≥0.90	89.5%		
	500mA	0.15A	28W	4.50-24.50W	≥0.91	90.0%		
	550mA	0.16A	30W	4.95-26.95W	≥0.92	90.0%		
	600mA	0.17A	33W	5.40-29.40W	≥0.93	90.0%		
	650mA	0.18A	36W	5.85-31.85W	≥0.94	90.0%		
	700mA	0.19A	39W	6.30-34.30W	≥0.95	90.0%	9-48V	
	750mA	0.20A	41W	6.75-36.00w	≥0.95	90.0%		
	800mA	0.21A	41W	7.20-36.00w	≥0.97	90.0%	9-45V	
	850mA	0.22A	43W	7.65-38.25W	≥0.97	90.0%		
	900mA	0.23A	46W	8.10-40.50W	≥0.97	90.0%	9-42V	
	950mA	0.24A	45W	8.55-39.90W	≥0.97	90.0%		
	1000mA	0.25A	47W	9.00-42.00w	≥0.97	90.0%		
	1050mA	0.26A	50W	9.45-44.10W	≥0.97	90.0%		

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

**1.Parameters**

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI-2 / Push DIM
	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	≤0.26A(230VAC, full load)
	Input Power	≤50W (230VAC, full load)



	Power Factor	≥0.97 (230VAC, full load)
	THD	≤10% (230VAC, full load)
	Standby Power(dim to off)	≤0.5W @ 230VAC
Output	Output Voltage Range	9-49VDC@300-700mA
		9-48VDC@750mA
		9-45VDC@800-900mA
		9-42VDC@950-1050mA
	No Load Voltage	59VDC Max.
	Output Current	300-1050mA(Max. output)
	Max. Output Power	44.1W
	Efficiency	≥90% 230VAC, full load@max current
	Current Ripple (≤120HZ)	±5% (Imax-Imin)/(Imax+Imin)
	PSTLM	≤1
	SVM	≤0.4
	Current Accuracy	±5%
	Starting Time (AC mode)	≤1S (230VAC, full load, by DALI system)
Starting Time (DC mode)	≤1S	
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	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	< 250μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-25....+45℃@300-1000mA
		-25....+40℃@1050mA
	Ts/Storage Temperature	-25....+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%....90%RH
Atmosphere	86-108KPa	
Construction	Connection Method	Push-in Terminal
	Installation	Built in & Independent
	PRI Wire preparation	0.5 -1.5□
	SEC Wire preparation	0.5-1.5□
	Dimension	Built in:97.5*44*23mm (L*W*H) Independent-Small side cover :137.6*44*23mm (L*W*H) Independent-Large side cover :191.6*44*23mm



		(L*W*H)
Standards	Certification	CE
	Safety Standards	EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017,EN 62493:2015
	EMC Standards	EN IEC 55015:2019,EN IEC 55015:2019/A11:2020, EN 61547:2009,EN IEC 61000-3-2:2019, EN 61547:2009,EN IEC 61000-3-3:2013/A1:2019
	Performance	EN62384:2020
	Surge	L-N:2KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h @Ta
	Warranty	5years ,F.R. < 10000ppm
	Audible Noise	<22dB @ 20cm distance, 15dB background


Remark:

- All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.
  - LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
  - 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%).
- 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		9	12	15	18	23	@230VAC	65	200uS
TYPE C		15	19	24	30	37			
TYPE D		24	31	38	47	59			

### 3. Label




**C44C300-1050D-D LED Dimmable Driver**  
 Constant Current LED Power Supply tc:85°C ta:45°C (44.1W ta:40°C)  
 PRI:220-240VAC 50/60Hz 0.26A Max.  
 SEC:300-700mA 9-49VDC 800-900mA 9-45VDC  
 750mA 9-48VDC 950-1050mA 9-42VDC

Pout [W]	Iout [mA]	λ	1	2	3	4	Pout [W]	Iout [mA]	λ	1	2	3	4
14.7	300	0.89C	-	-	-	-	34.3	700	0.95	ON	-	-	-
17.2	350	0.89C	-	-	-	ON	36.0	750	0.95	ON	-	-	ON
19.6	400	0.89C	-	-	ON	-	36.0	800	0.95	ON	-	ON	-
22.1	450	0.90C	-	-	ON	ON	38.3	850	0.95	ON	-	ON	ON
24.5	500	0.91C	-	ON	-	-	40.5	900	0.97	ON	ON	-	-
27.0	550	0.92C	-	ON	-	ON	39.9	950	0.97	ON	ON	-	ON
29.4	600	0.93C	-	ON	ON	-	42.0	1000	0.97	ON	ON	ON	-
31.9	650	0.94C	-	ON	ON	ON	44.1	1050	0.97	ON	ON	ON	ON

wire preparation 8-9mm  
 PRI:0.5-1.5  
 DALI:0.5-1.5  
 SEC:0.5-1.5  
 PRI: ● L ● N  
 DIM: ● DA ● DA  
 PUSH CONTROL: L N E

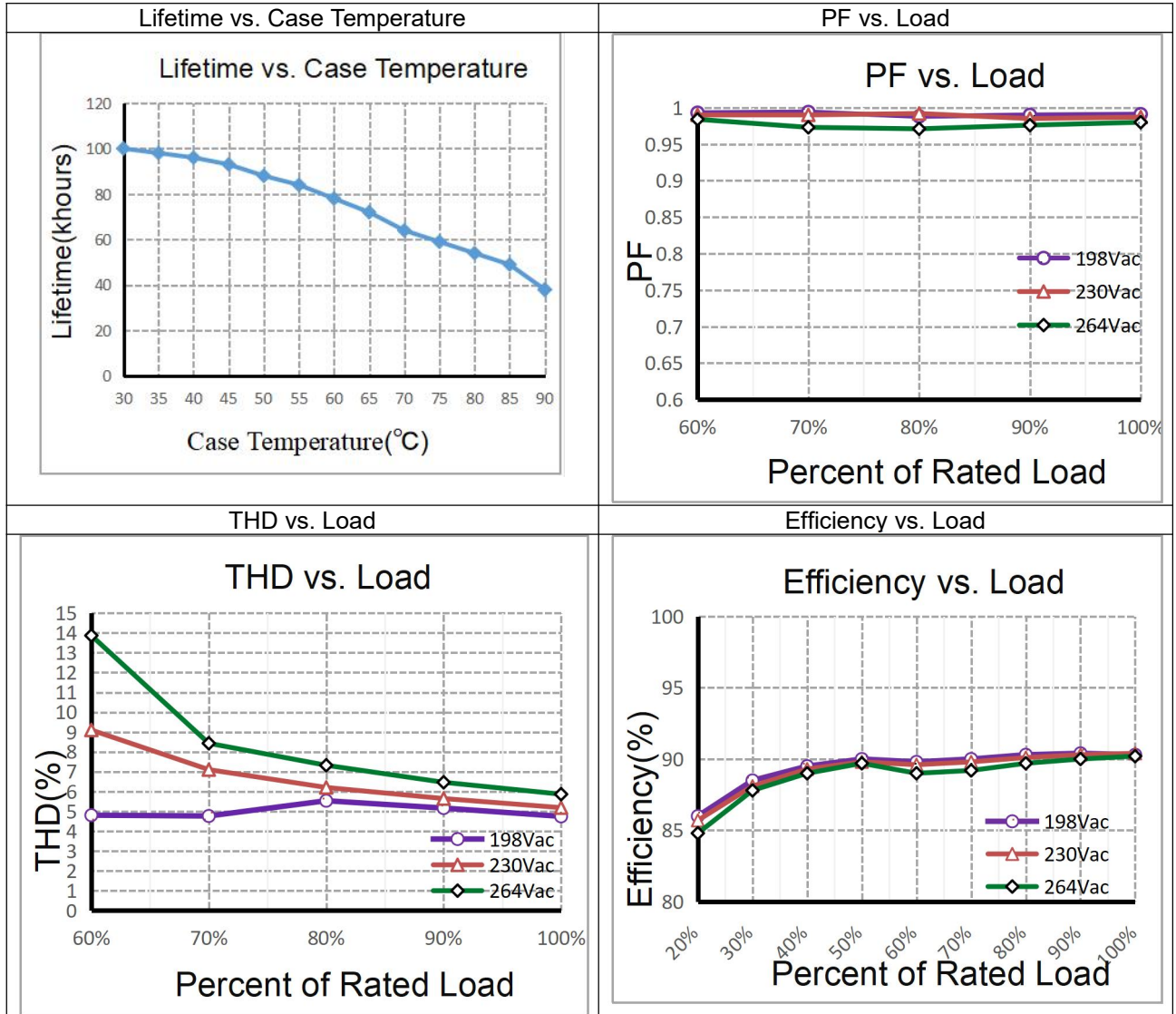
ON OFF 1 2 3 4

Uout:Max.59VDC For LED modules Only

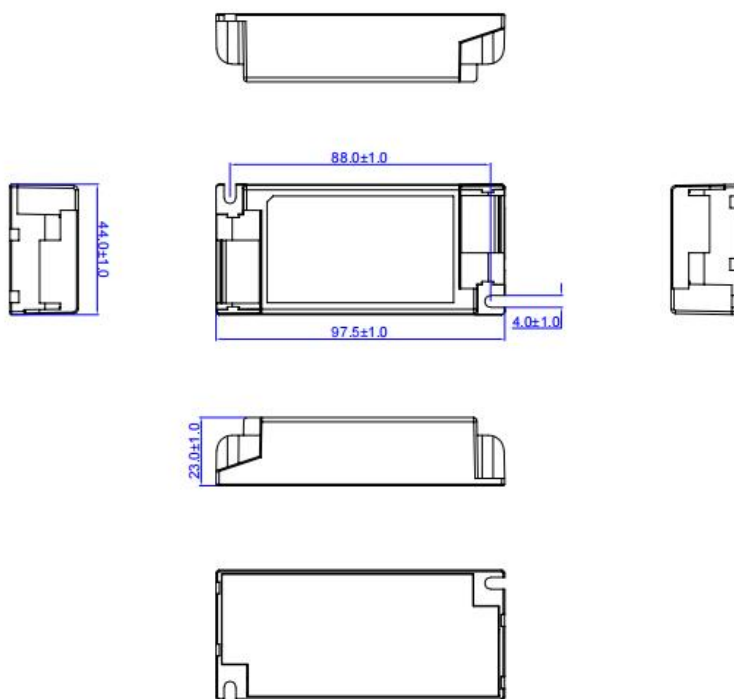




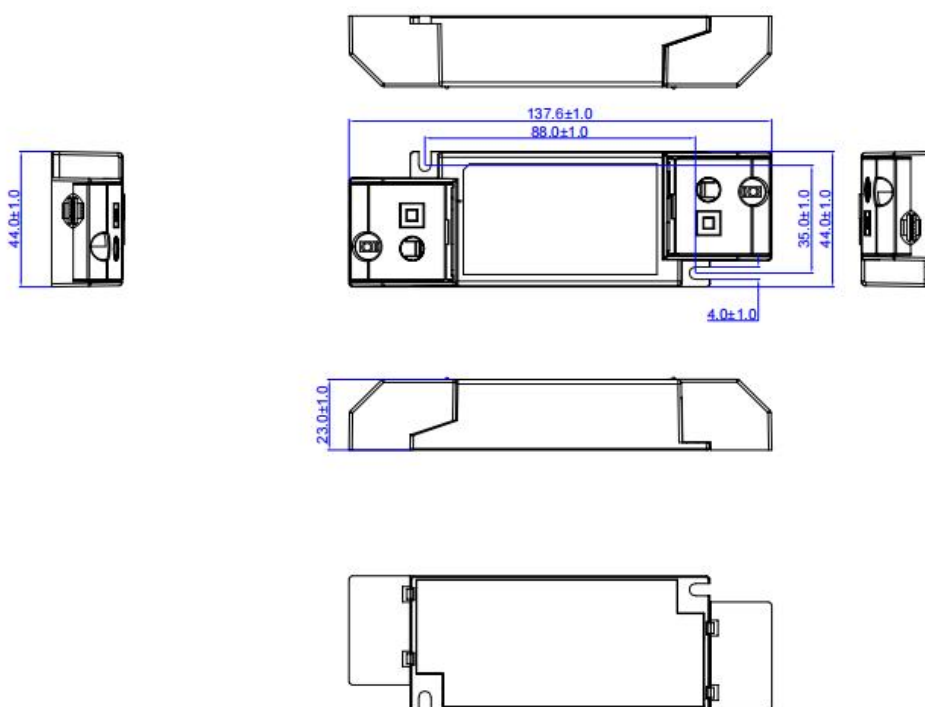
#### 4. Electrical values



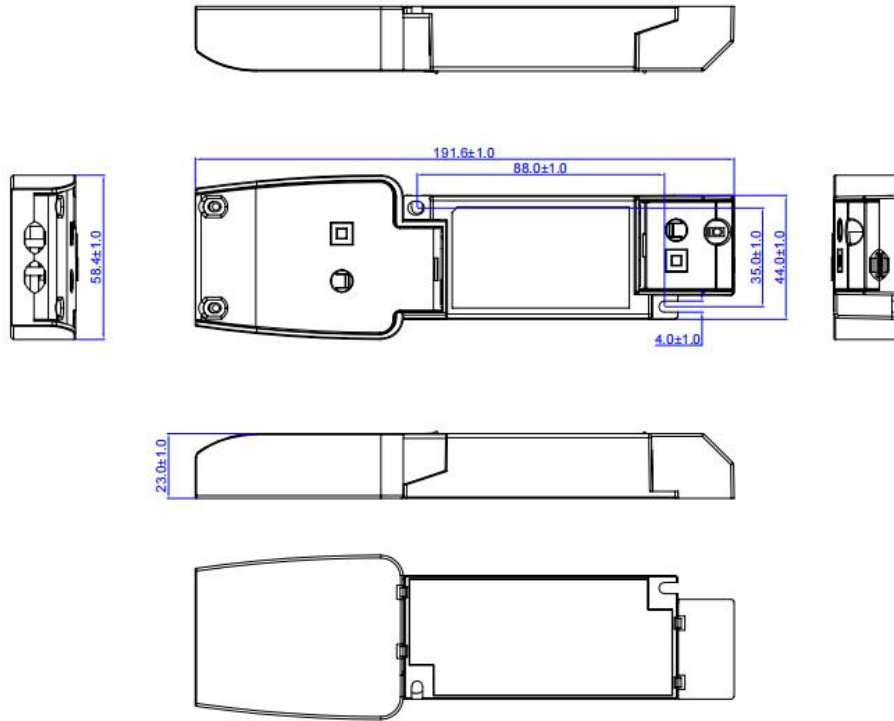
**5. Dimension  
SC (A) :**



**Small side cover(B) :**

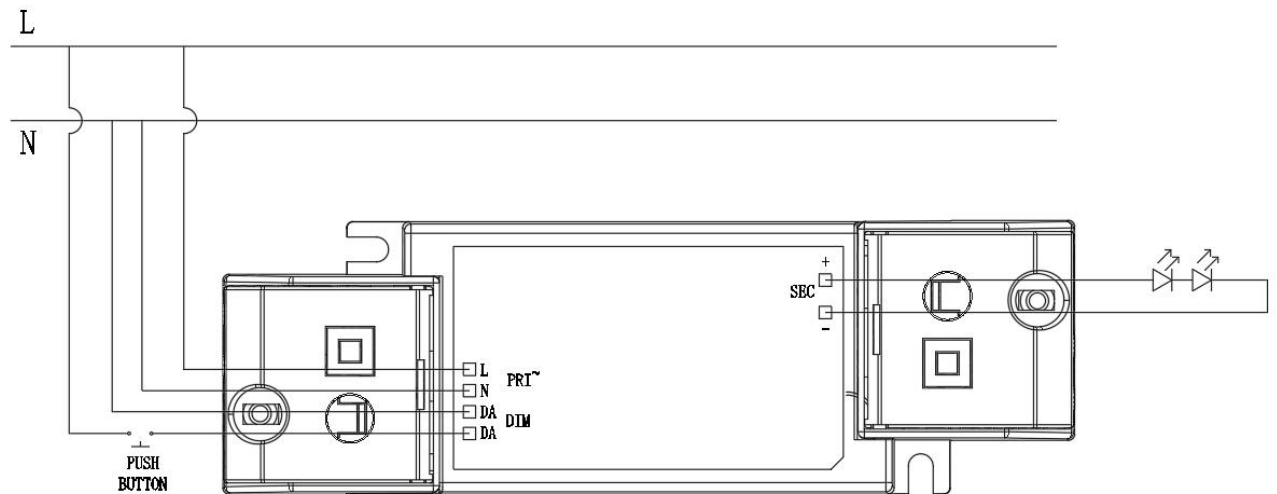


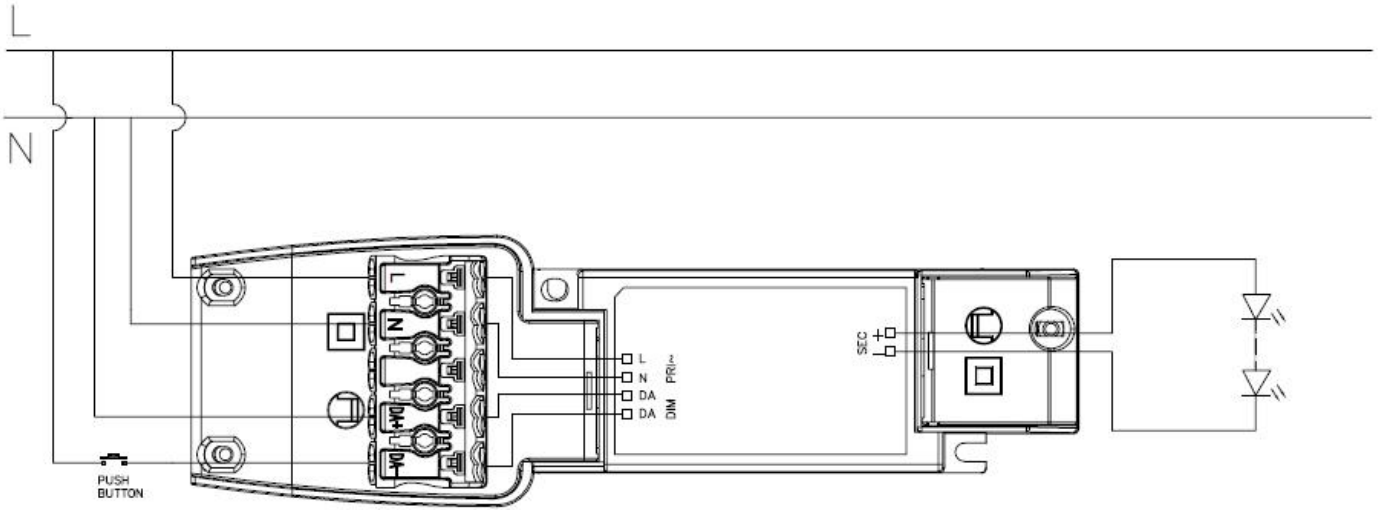
**Large side cover(C):**



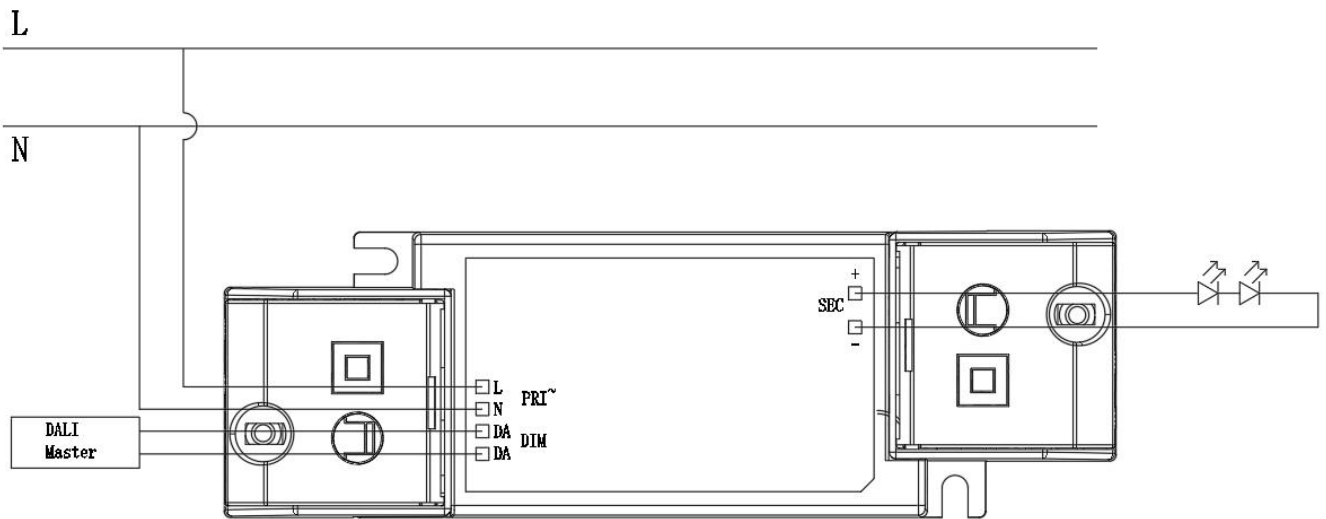
**6. Wiring Diagram**

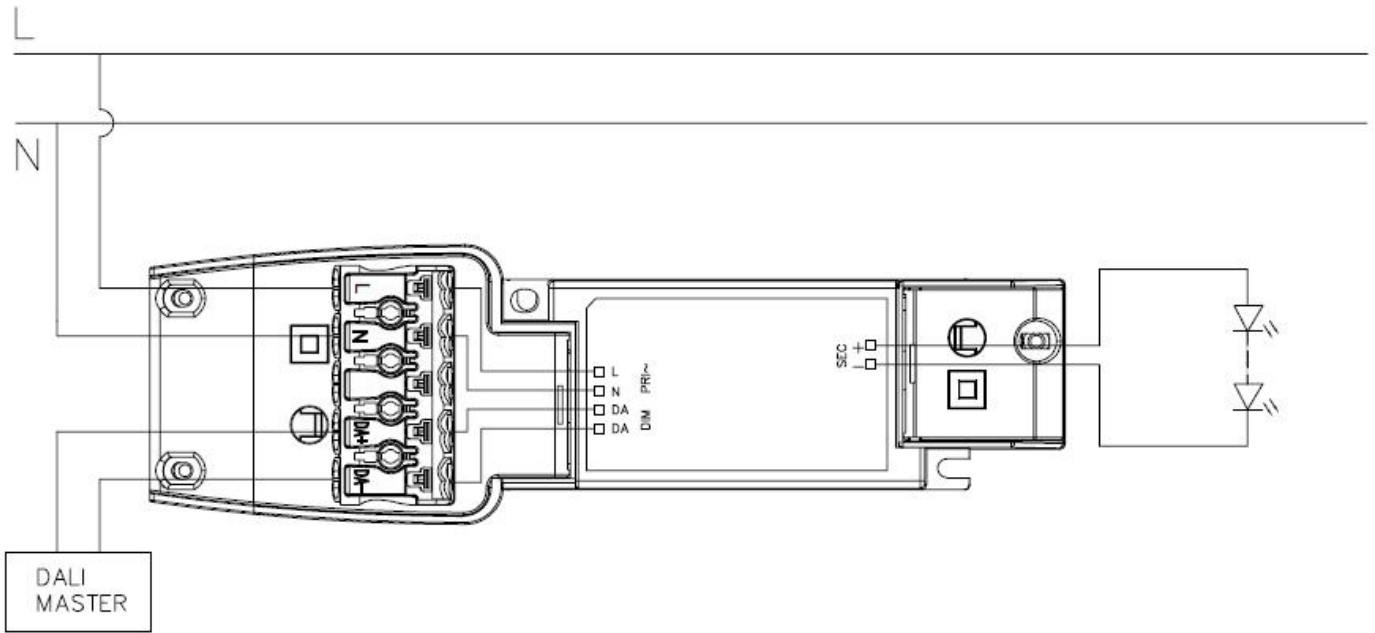
**Fig. A: Push Dimming**





**Fig. B: DALI Dimming**





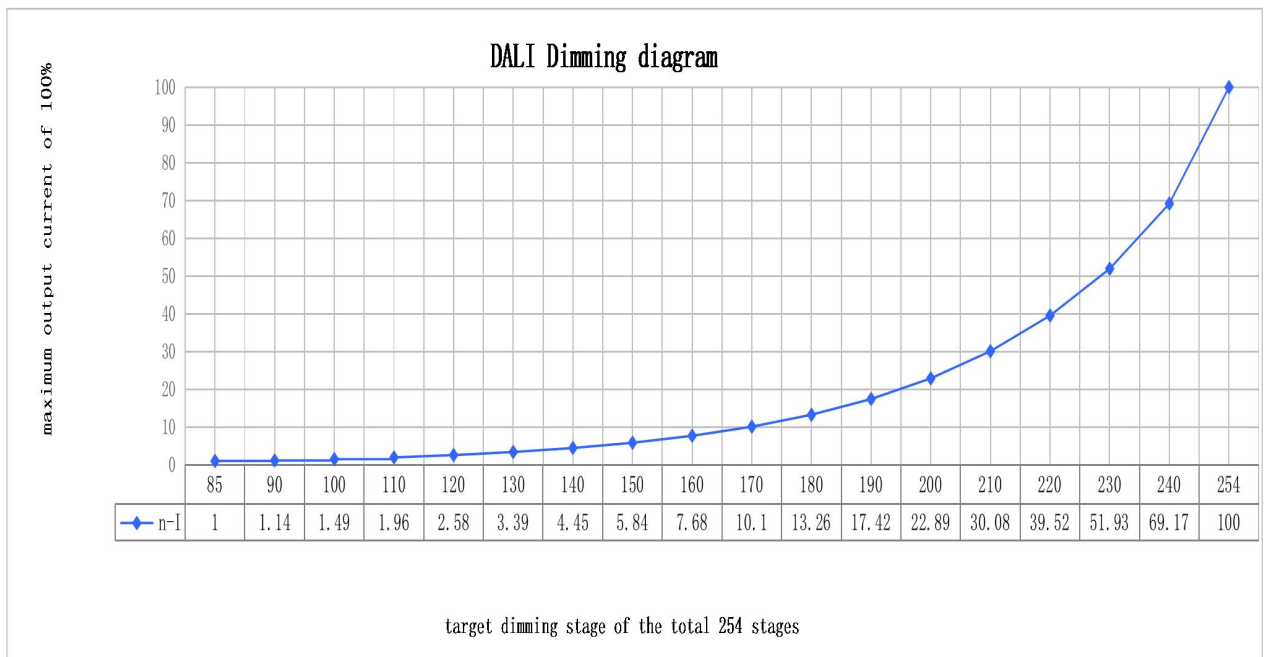
### 7. DALI dimming curve

formula for DALI dimming.

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

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

### 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	C44C300-1050D-D	447*240*200	110	0.126	13.53	14.23

### 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	C44C300-1050D-D	447*240*200	80	0.144	11.68	12.38

### 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	C44C300-1050D-D	447*240*200	80	0.1905	15.24	15.94

## 9. Revision History

Date	Revision	Remark
2023-10-26	V1.0	preliminary version
2024-02-22	V1.1	Update the label

