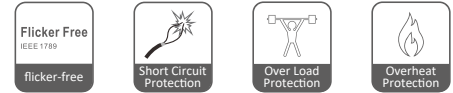


## Constant Current Dimmable Driver

- The housing is made from V0 flame retardant PC materials from COVESTRO.
- Small size and light weight. Wide range of applicable lamps.
- Class 2 LED driver, Safety Extra Low Voltage (SELV).
- Innovative thermal management technology intelligently protects the life of the LED driver.
- Overheat, overload, short circuit protection and automatic recovery.
- Up to 50,000-hour life time.
- 5-year warranty (AiSHi capacitor).



The certification icon represents on-going certification applications only, and final certification qualification is subject to actual products.



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Typical Efficiency	Output Voltage	No load Voltage
S-088-C44W150-1050 DALI NFC	150-1050mA	≤0.25A	49.8W	0.37-44.10W	≥0.96	88.5%	2.5-45Vdc	59Vdc

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

## Parameters

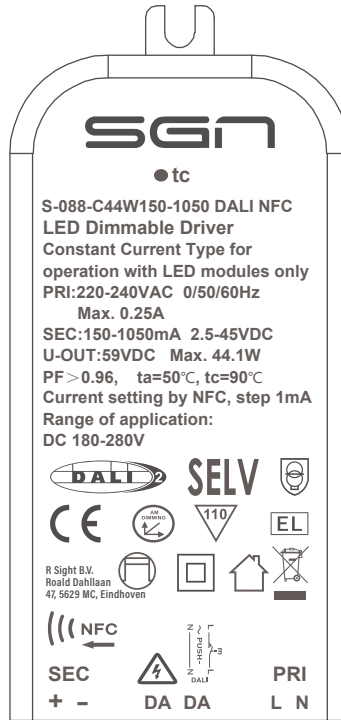
Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI 2/ Touch DIM
	Output current setting	Near field communication (NFC)
	Output Features	Isolation
	IP Grade	IP68
	Insulation Class	Class II(compatible Class I)
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	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	≤0.25A max
	Input Power	≤49.8W max
	Power Factor	≥0.96 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	Standby Power Consumption	≤0.45W @230VAC (DALI system DIM to off)
	Inrush Current	≤9.4A/2.6us (230VAC, full load)
	Connected quantity of 10A Breaker	20pcs/type A ; 33pcs/type B ; 53pcs/type C @ 230Vac
Connected quantity of 13A Breaker	27pcs/type A ;43pcs/type B ; 69pcs/type C @ 230Vac	
Connected quantity of 16A Breaker	33pcs/type A; 53pcs/type B ; 85pcs/type C@ 230Vac	
Connected quantity of 20A Breaker	41pcs/type A; 66pcs/type B ; 106pcs/type C @ 230Vac	
	Output Voltage Range	2.5-45VDC@150-900mA 2.5-42VDC@950-1050mA
	No-load Voltage	59VDC Max.

<b>Output</b>	Output Current	150-1050mA (by NFC setting, Factory set current of 150mA)
	Max. Output Power	44.1W
	Efficiency	≥88.5% (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	
<b>Control Method</b>	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length:20m,same port of DALI)
	DALI function	DALI dimming (Max. lead wire length:300m) logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 1%-100%
	PUSH-button	Max parallel connections qty for Push-dim 15
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 SGN's software APP/APK/PC with FEIG equipment or mobile phone.	
<b>Protection</b>	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 L/N to PE
	Leakage current	< 700μA, I/P to O/P @230V input
<b>Environment</b>	Ta/Operation Temperature	-20....+50 C
	Ts/Storage Temperature	-20....+90 C
	Tc/Enclosure Temperature	90 C
	Humidity	10%....90%RH
	Atmosphere pressure	86-108KPa
<b>Construction</b>	Connection Method	Wire
	Installation	Independent
	PRI Wire preparation	500mm
	SEC Wire preparation	500mm
	DALI Wire preparation	320mm
	Dimension	88*45*25mm (L*W*H)
<b>Standards</b>	Certification	CE
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017;
	DALI performance	EN 62386-101 (DALI-2),EN 62386-102 (DALI-2) EN 62386-207 (DALI-2, including part 251, 252, 253)
	Performance	EN 62384
Surge	L-N:2kV	
<b>Others</b>	RoHs	2011/65/EU
	Life Time	50000h Tc=90 C
		75000h Tc=85 C
		100000h Tc=80 C
Warranty	5years, F.R. < 10000ppm	

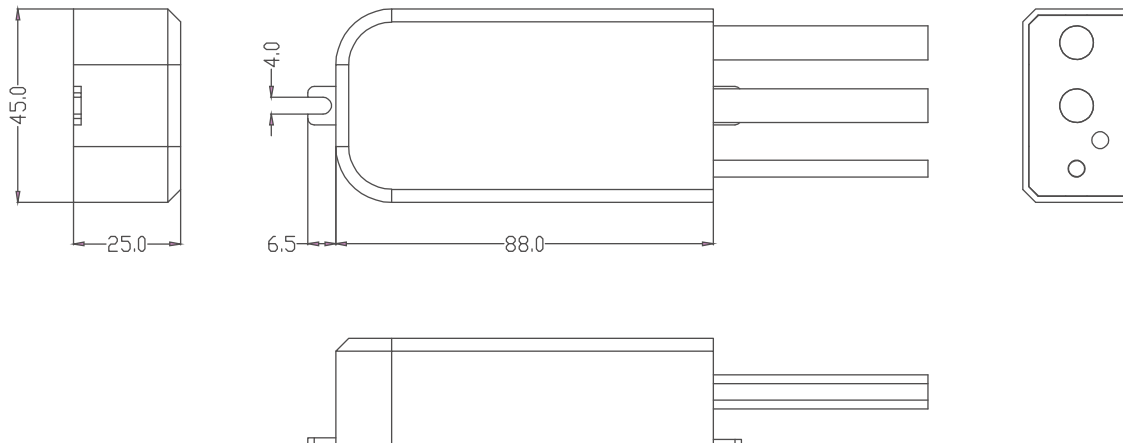
**Remark:**

- 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.
- DC emergency (DCemDim):Default 15%, EOFx range = 1 .. 100% (EOFx = DCemDIM level).
- During the PUSH DIM test,the number of parallel connections must be less than 15PCS.

## Label

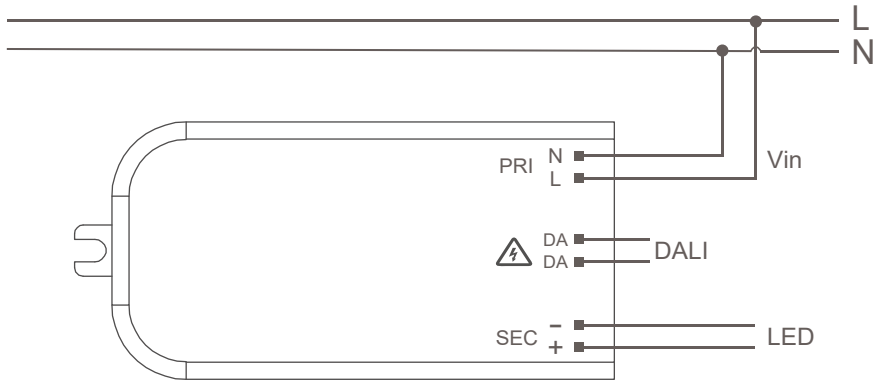


## Dimension

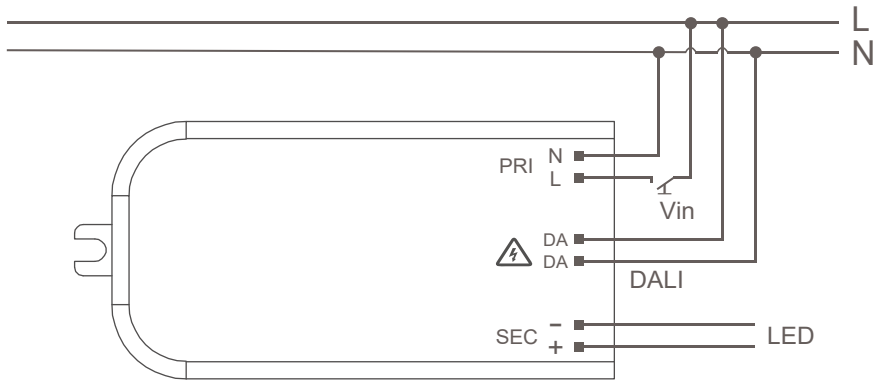


Wiring Diagram

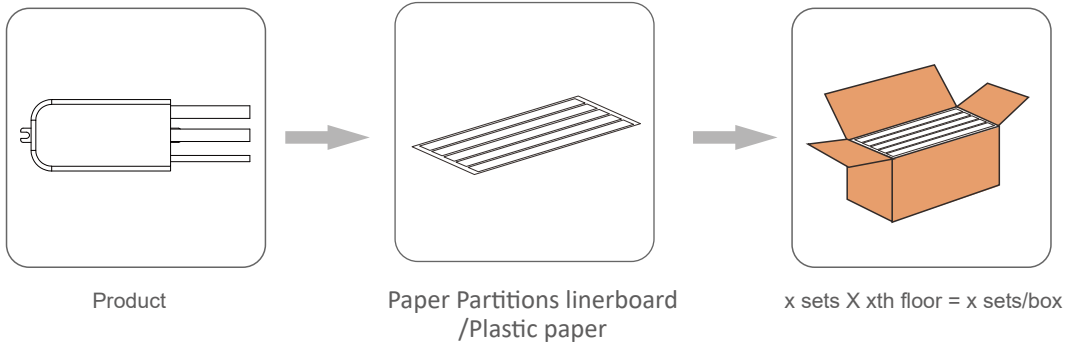
DALI Dimming



Push Dimming



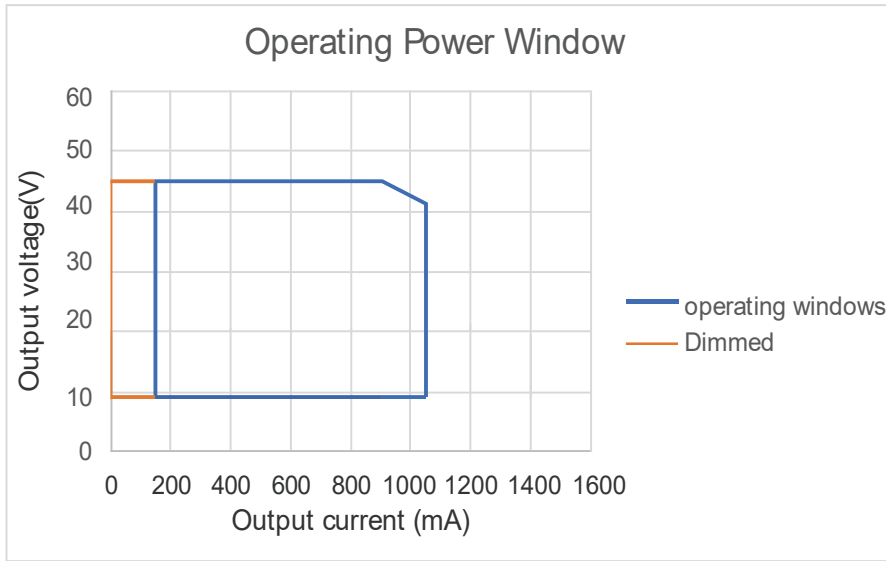
Packing information



Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-088-C44W150-1050 DALI NFC	T.B.D	T.B.D	T.B.D	T.B.D	T.B.D

Electrical values

1. Operating power windows



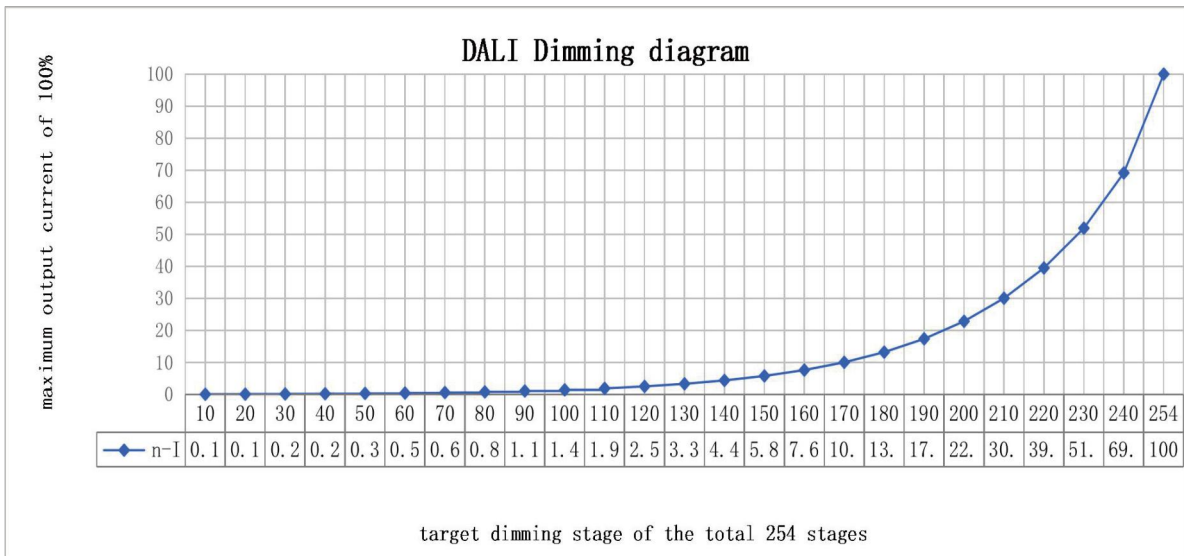
DALI dimming curve

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

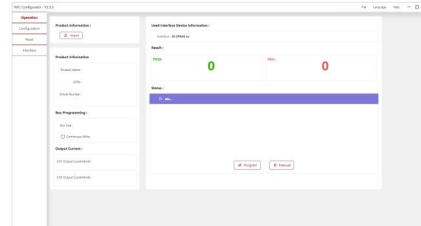
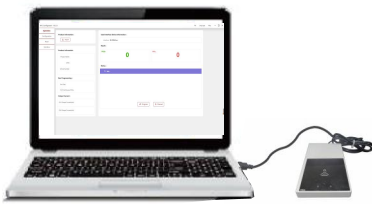


## NFC current setting

NFC Reader (optional)

Feature:

Easily on-line read a output current from a driver or write a new current data to a driver throughout SGN NFC reader within few seconds.



Product	Description	Interface	Matching antenna	Zhaga approval	Usage
<p>ID CPR30+</p>	Desktop programmer	USB	Integrated	Yes	Single Programming on Desktop
<p>ID ISC.PRH101-USB</p>	Handheld programmer	USB	Integrated	Yes	Single Programming by Handheld
<p>ID ISC.MR102-USB</p>	Middle range programmer, for connecting external antenna	USB	<p>RF-MANT12786</p>	Yes	Single Programming on Product line
<p>ID ISC.LR1002-E</p>	Long range programmer, for connecting external antenna	USB,RS232,TCP/IP	<p>ID ISC.ANT310/310</p>	Yes	Multi Programming System

## APP NFC

### Feature:

Quickly check output current of a LED driver simply via iPhone smart phone, as well as, correct or setup a new current data immediately with no extra equipment at any job site.

### ICON



### Main




### Download method

1.Scan the QR code to download



iPhone smartphones with NFC can be downloaded and used directly

An iPhone smartphone without NFC requires the following devices to use it

Product	Description	Interface	Matching antenna	Zhaga approval	Usage
 ID ECCO Smart HF-BLE	Handheld wireless programmer	USB,Bluetooth LE V4.2 & V5.0	Integrated	Yes	Handheld programming, installation and maintenance work

## Push Dim :

### 1.On / off:

Short push (120ms-600ms) on the switch,Stepless dimming: long push (> 0.6sec) on the switch.

### 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 bright ness during dimming is not memorized)

### 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.

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.)

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.

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.

**REVISION HISTORY**

Date	Revision	Remark