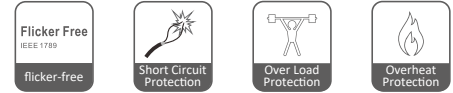
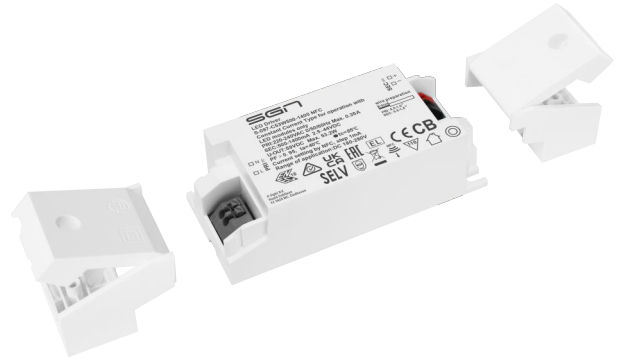


# Constant Current Driver

- 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-097-C53W500-1400 NFC	500-1400mA	≤0.35A	60.56W	1.25-53.20W	≥0.95	89%	2.5-44Vdc	59Vdc

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

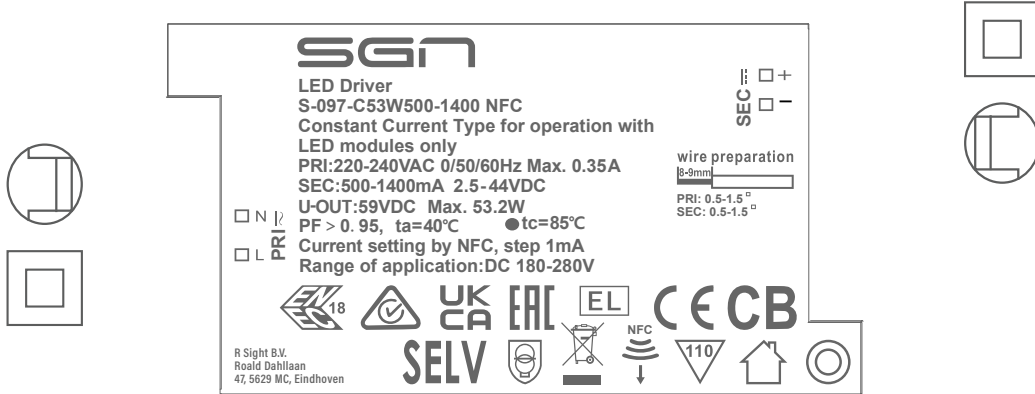
## Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output current setting	Near field communication (NFC)
	Output Features	Isolation
	IP Grade	IP20
	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	≤0.35A max
	Input Power	≤60.56W max
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤11% (230VAC, full load)
	No-load Ppwer Consumption	≤0.5W @230VAC (DALI system DIM to off)
	Inrush Current	≤10.1A/16us (230VAC, full load)
	Connected quantity of 10A Breaker	19pcs/type A ;30pcs/type B ; 49pcs/type C @ 230Vac
Connected quantity of 13A Breaker	25pcs/type A ;40pcs/type B ; 64pcs/type C @ 230Vac	
Connected quantity of 16A Breaker	30pcs/type A ;49pcs/type B ; 79pcs/type C @ 230Vac	
Connected quantity of 20A Breaker	38pcs/type A ;61pcs/type B ; 99pcs/type C @ 230Vac	
Output Voltage Range	Output Voltage Range	2.5-44VDC@500-1200mA ; 2.5-42VDC@1250mA ; 2.5-40VDC@1300mA 2.5-39VDC@1350mA ; 2.5-38VDC@1400mA
	No-load Voltage	59VDC Max.

<b>Output</b>	Output Current	500mA-1400mA (by NFC setting, Factory set current of 500mA)
	Max. Output Power	53.2W
	Efficiency	≥89% (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)	≤0.5S (230VAC, full load)
<b>Control Method</b>	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
	Leakage current	< 700μA, I/P to O/P @230V input
<b>Environment</b>	Ta/Operation Temperature	-20....+40 C
	Ts/Storage Temperature	-20....+85 C
	Tc/Enclosure Temperature	85 C
	Humidity	10%....90%RH
	Atmosphere pressure	86-108KPa
<b>Construction</b>	Installation	Built-in/Independent
	Dimension	97*43*30mm (L*W*H)
	SEC Wire preparation	PVC,VDE certificated,0.5-1.5 <sup>□</sup> ,with 8mm tin
	PRI Wire preparation	PVC,VDE certificated,0.5-1.5 <sup>□</sup> ,with 8mm tin
	DALI Wire preparation	PVC,VDE certificated,0.5-1.5 <sup>□</sup> / 8-9mm
<b>Standards</b>	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 61347-1-1:2015+A1:2017; IEC 61347-13:2014+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 IEC 61000-3-3:2013+A1:2019;
	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
<b>Others</b>	Surge	L/N-Ground:2kV; L-N:1kV
	RoHs	2011/65/EU
	Life Time	50000h Tc=85 C
		75000h Tc=80 C
100000h Tc=75 C		
Warranty	5years , F.R. < 10000ppm	
<b>Remark:</b>		
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.		

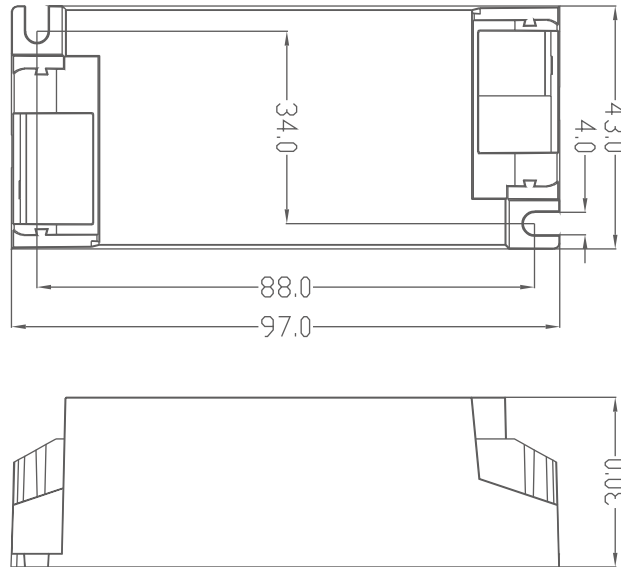
Distance	15m	30m	50m
Cable selection	0.5mm <sup>2</sup>	0.75mm <sup>2</sup>	1.0mm <sup>2</sup>

Label



Dimension

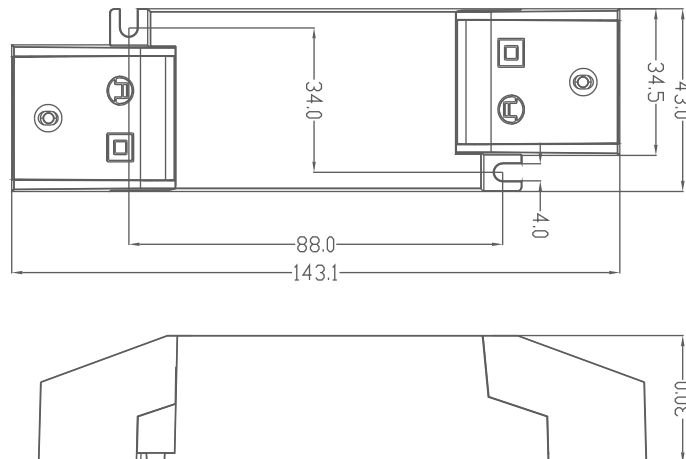
Built in type:



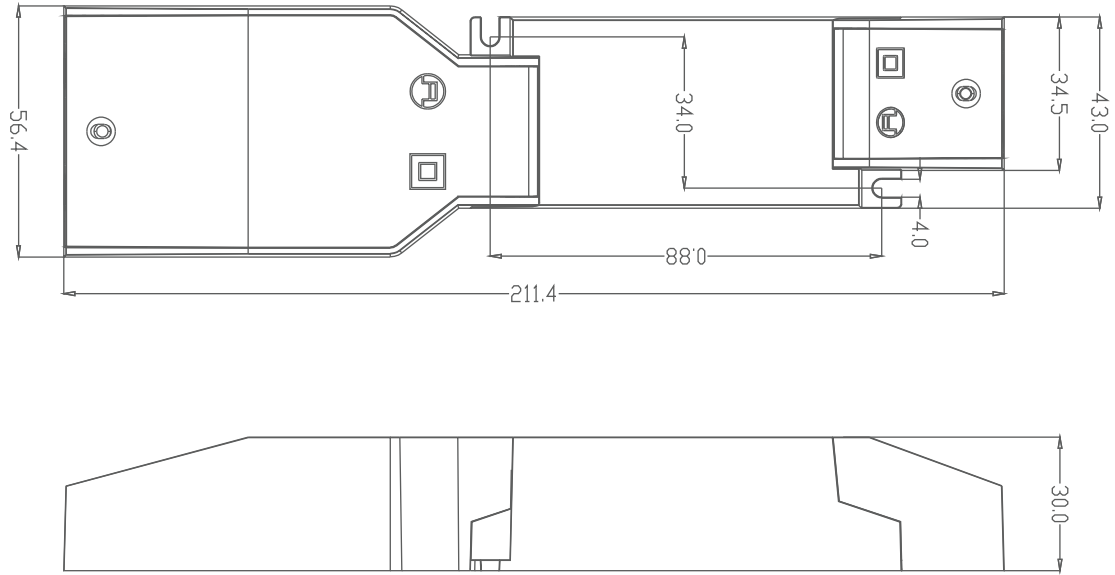
Compatible Small Strain reliefs: SR\_CC53-60

Compatible Large Strain reliefs: SR\_CC53-60\_3POL

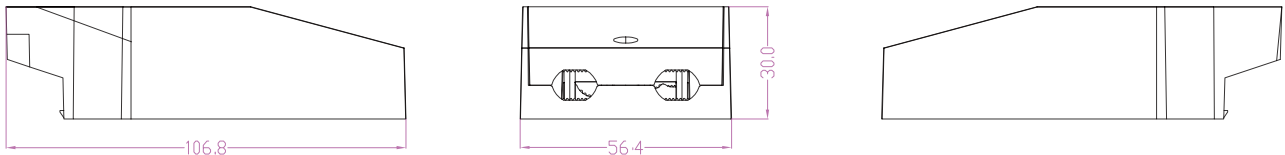
Small side cover



## Large side cover



## Large side cover specifications



Tolerance for dimensions  $\pm 0.1$  mm

## Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 55.4-57.4 x 20.0-22.0 mm

Wire size: 0.5 - 2.5 mm<sup>2</sup>

Ambient temperature range: -20...+50 °C

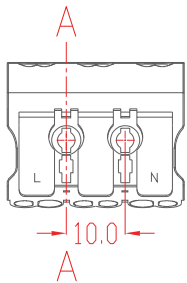
Storage temperature range: -20...+85 °C

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

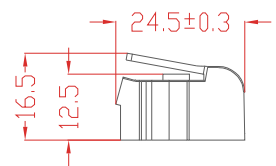
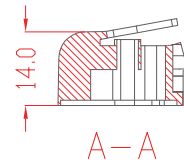
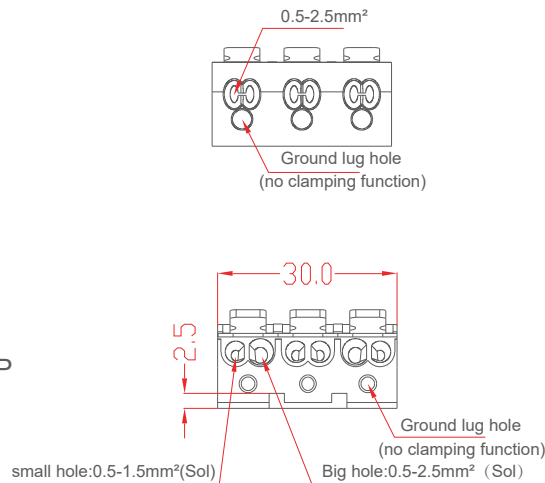
Do not store in wet or humid environment!

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

## Terminal

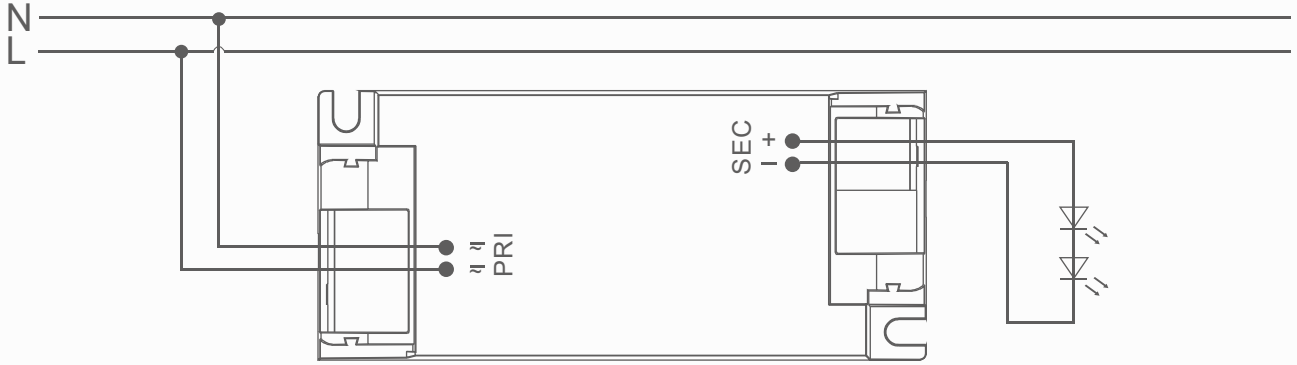


3 - pole connector for CC drivers with LC-SRB-LOOP



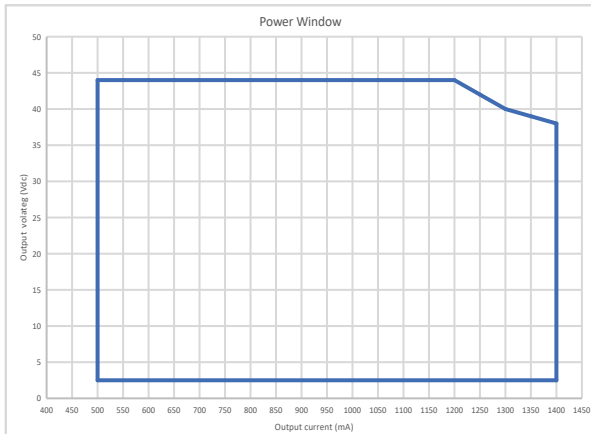
Wiring Diagram

220-240 V  
0/50/60 Hz

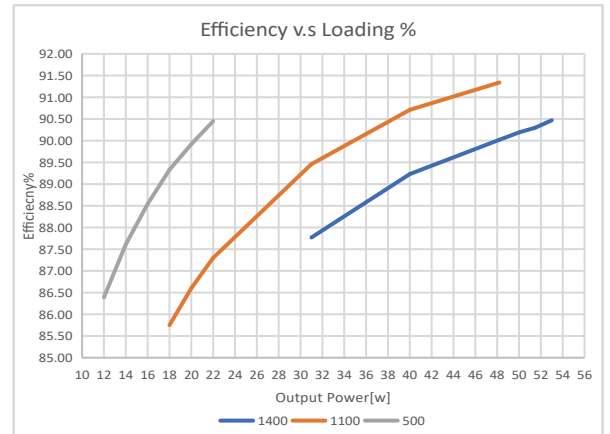


Electrical values

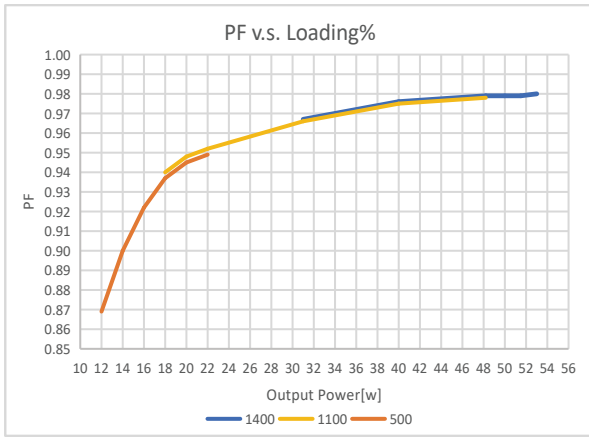
1. Operating power windows



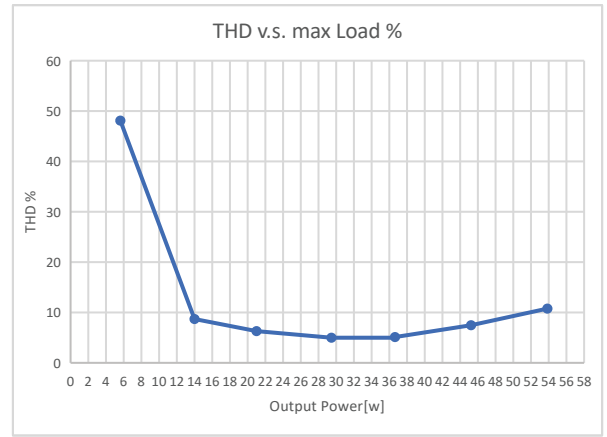
2. Efficiency v.s. Load



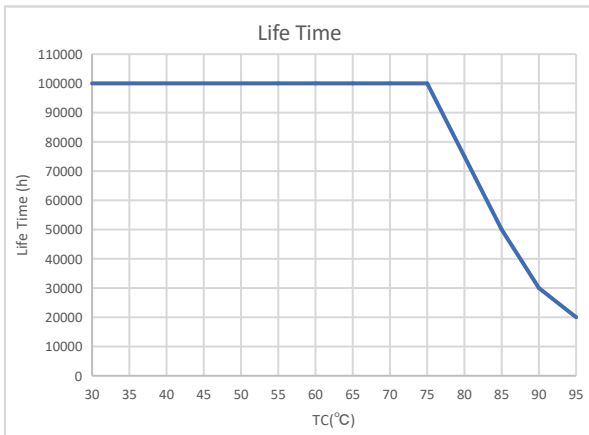
### 3. PF v.s. Load



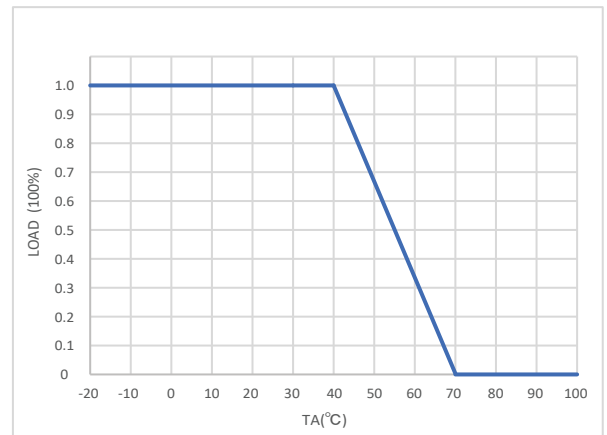
### 4. THD v.s. Load



### 5. Life time

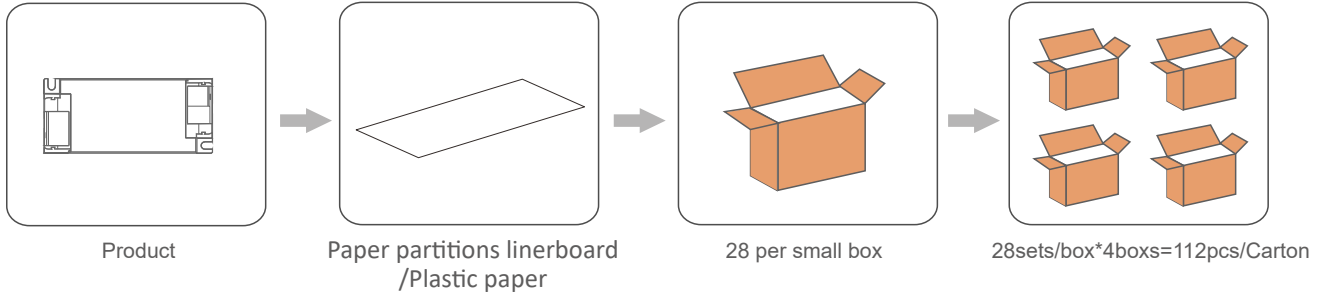


### 6. Derating



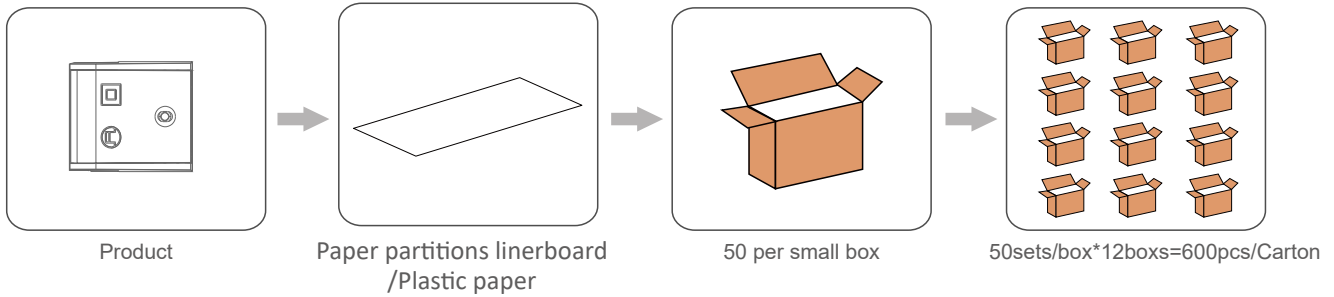
## Packing information

### Built in type



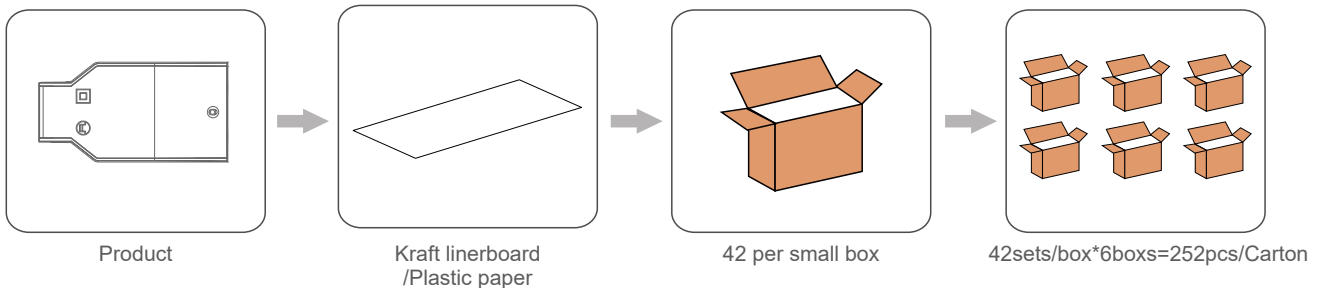
Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-097-C53W500-1400 NFC	410*233*225	112	0.151	16.96	19.36

### Small Strain reliefs



Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-097-C53W500-1400 NFC	460*430*170	600	0.012	7.20	8.76

### Large Strain reliefs



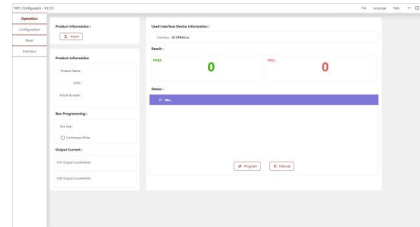
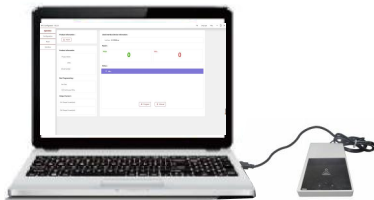
Model	Carton L*W*H(mm)	Pcs/- Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Cross weight/- Carton(kg)
S-097-C53W500-1400 NFC	375*315*385	252	0.068	17.13	18.69

## 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

## REVISION HISTORY

Date	Revision	Remark