

CC23W100-700 IOT NFC

Constant Current Dimmable Driver

Model:CC23W100-700 IOT NFC



Model	Item Code	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
CC23W100-700 IOT NFC	124041	100-700mA	≤0.16A	26.6W	0.25-23.10W	≥ 0.93	87%	2.5-46Vdc	60Vdc

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output current setting	Near field communication (NFC)
	Dimming Type	Bluetooth
	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	≤0.16A (230VAC, full load)
	Input Power	≤26.6W (230VAC, full load)
	Power Factor	≥0.93 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	Standby Power Consumption	≤0.5W Dim to off, 230VAC
	Inrush Current	≤7.9A/2.6us (230VAC, full load)
	Connected quantity of 10A Breaker Connected quantity of 13A Breaker Connected quantity of 16A Breaker Connected quantity of 20A Breaker	24pcs/type A ; 39pcs/type B ; 63pcs/type C 32pcs/type A ; 51pcs/type B ; 82pcs/type C 39pcs/type A ; 63pcs/type B ; 101pcs/type C 49pcs/type A ; 79pcs/type B ; 126pcs/type C

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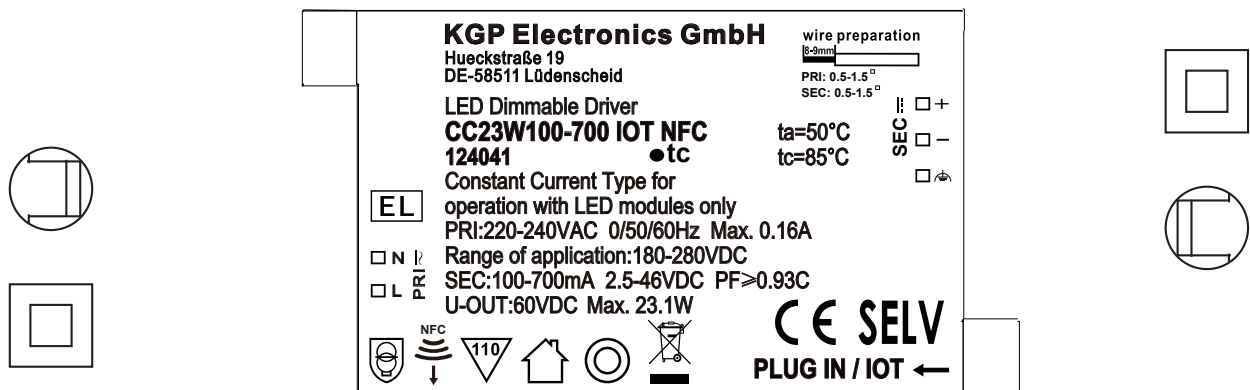
Output	Output Voltage Range	2.5-46VDC@100-500mA, 2.5-42VDC@550mA, 2.5-38VDC@600mA, 2.5-35VDC@650mA 2.5-33VDC@700mA
	No Load Voltage	60VDC Max.
	Output Current	100-700mA (by NFC setting, Factory set current of 100mA)
	Max. Output Power	23.1 W
	Efficiency	≥87% @500mA, 230VAC
	Output LF current ripple (< 120 Hz)	±3% (Imax-Imin) / (Imax+Imin)
	Current Accuracy	±5%
	PSTLM	≤ 1
	SVM	≤ 0.4
	Starting Time (AC mode)	≤0.5S (230VAC, full load)
Control Method	Dimming distance	30M
	Dimming range	1%-100%
	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.
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 L/N to PE
	Leakage current	< 700μA, I/P to O/P @230V input
Environment	Ta/Operation Temperature	-20....+50℃
	Ts/Storage Temperature	-20....+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□ / 8-9mm
	SEC Wire preparation	0.5-1.5□ / 8-9mm
	SEC Wire length	0-0.8±0.05m (The EMC test results were achieved at approximately 0.8 meters (the length required by the standard). If there are any data differences, please test according to the length required by the standard)
	Dimension	97*43*22.8mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017;
	Performance	EN 62384
	Surge	L/N-Ground:2kV; L-N:1kV

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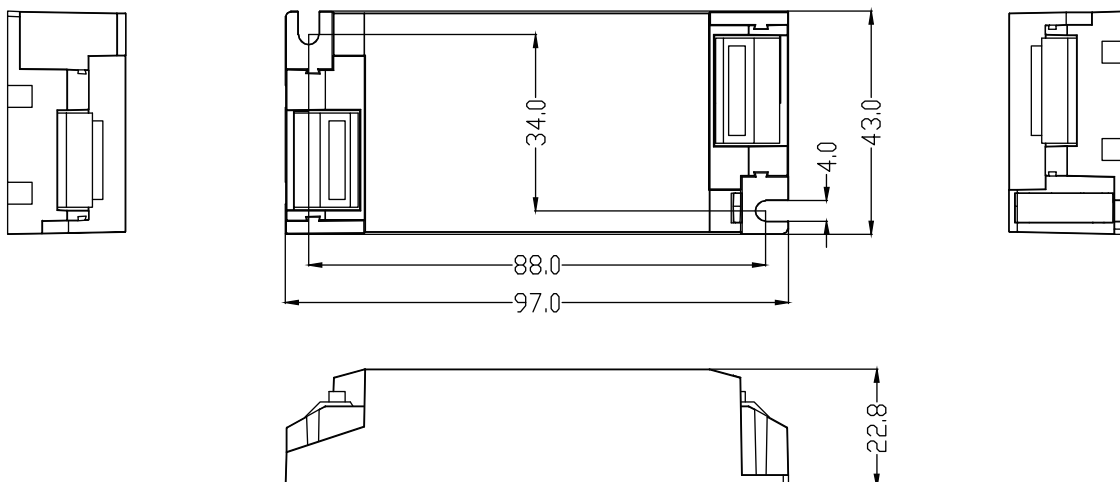
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h Tc=85°C
		75000h Tc=80°C
		100000h Tc=75°C
	Warranty	5years, F.R. <10000ppm
Remark: 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature. 2.LED Driver is a component of the luminaires. Luminaires and wire layout will affect the EMC, please check the EMC with end products again.		

Distance	15m	30m	50m
Cable selection	0.5mm ²	0.75mm ²	1.0mm ²

2. Label



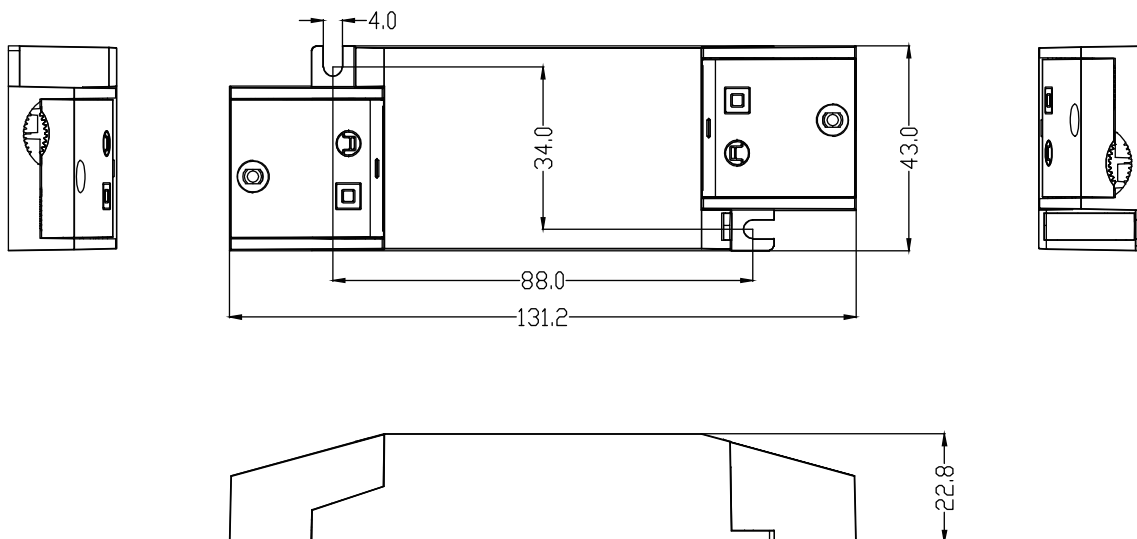
3. Dimension (Unit: mm)



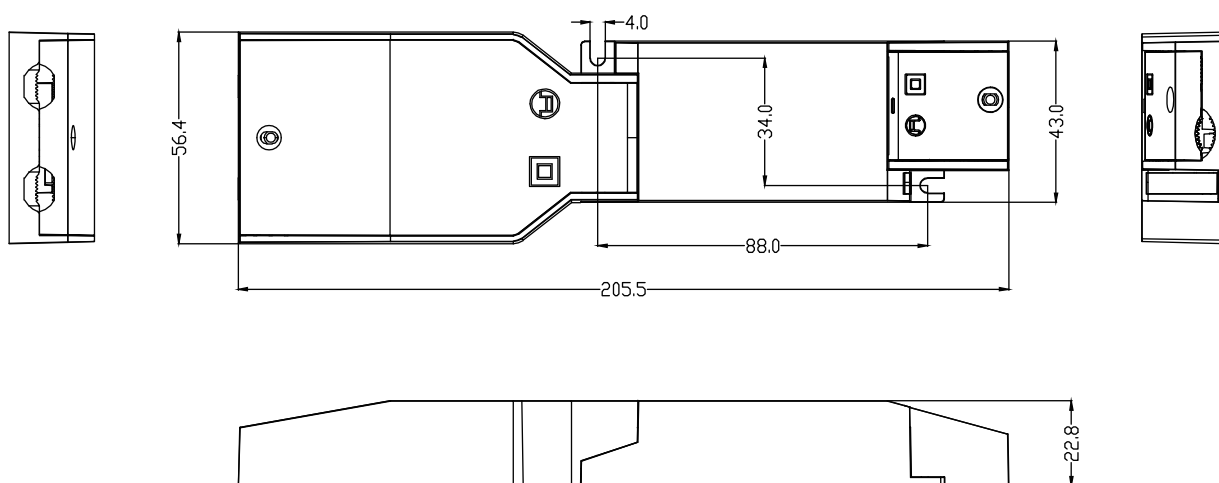
Compatible Small Strain reliefs:SR_CC15-23-36-44 IOT

Compatible Large Strain reliefs:SR_CC15-23-36-44 IOT_3POL

Small Strain reliefs

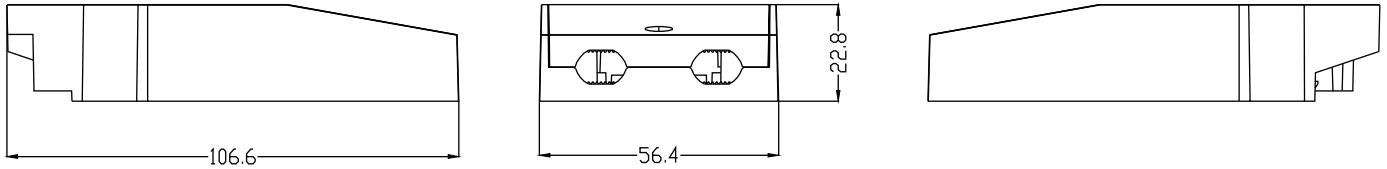


Large side cover



CC23W100-700 IOT NFC

Large side cover specifications



Tolerance for dimensions ± 0.1 mm

Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 55.4-57.4 x 21.8-23.8 mm

Wire size: 0.5 - 2.5 mm²

Ambient temperature range: -25...+45 °C

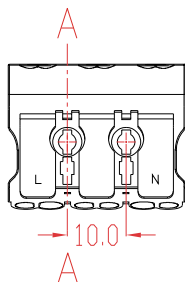
Storage temperature range: -40...+85 °C

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

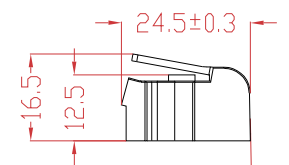
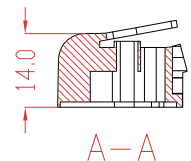
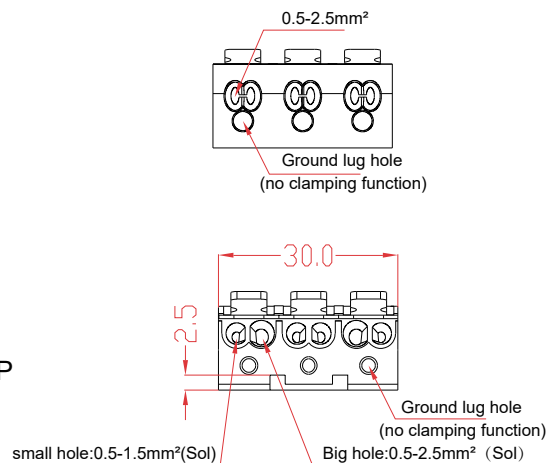
Do not store in wet or humid environment!

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

Terminal

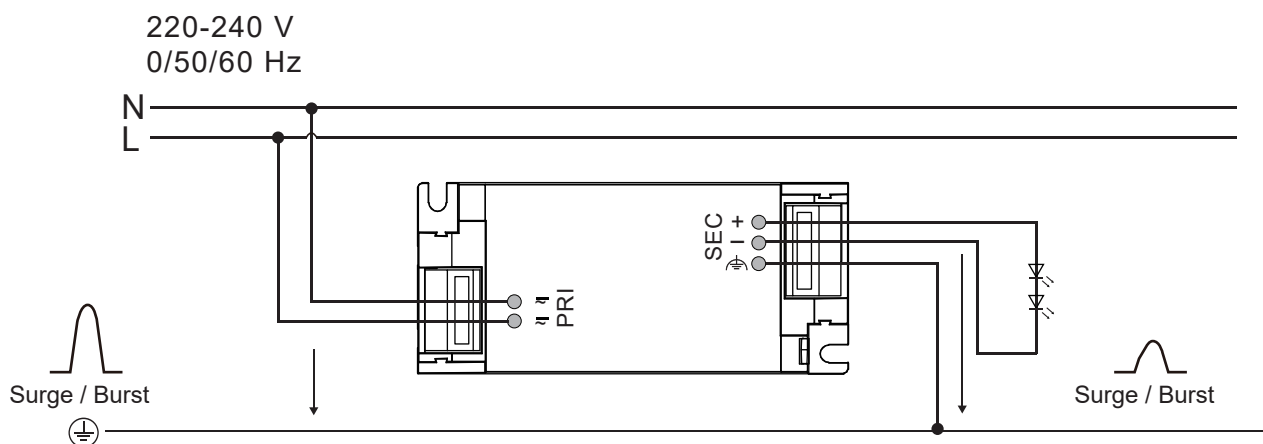
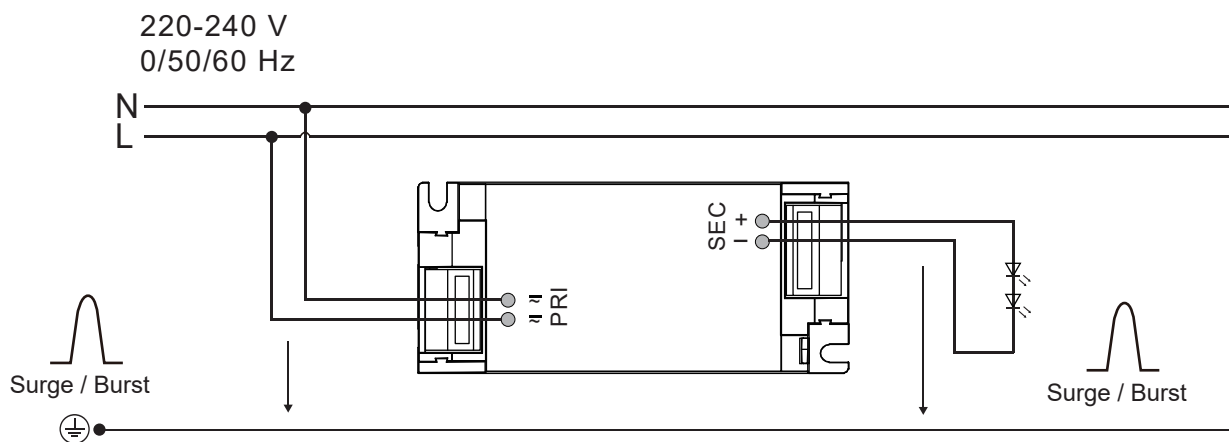


3 - pole connector for CC drivers with LC-SRB-LOOP



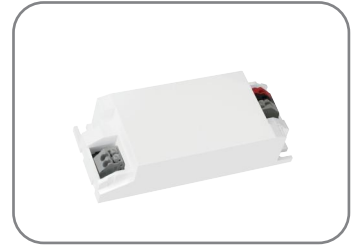
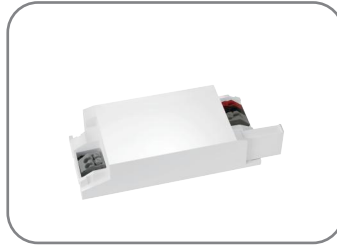
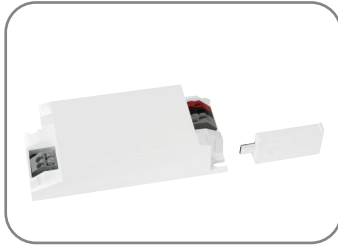
4. Wiring Diagram

Figure: Voltage peaks for LED driver without earthing (Above) and with earthing (Below)



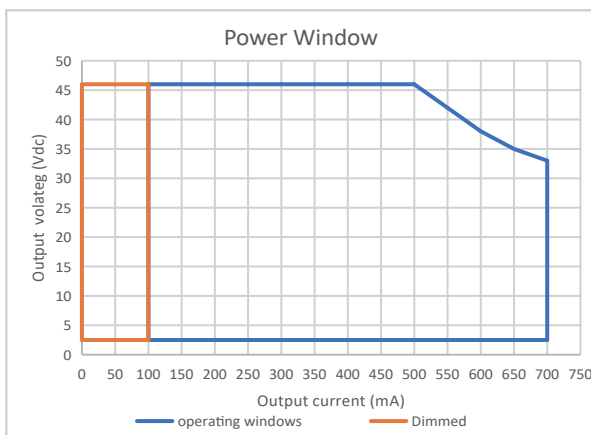
5. Module Model

Module Model	Photo	Color	Size
CC-CASAMBI CC-Matter		White	34.6x19.2x5.6mm

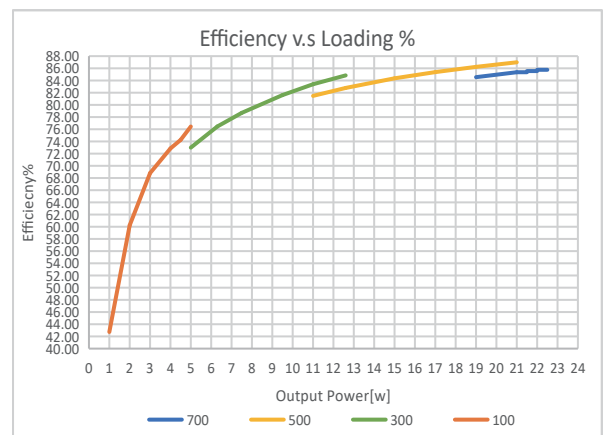


6. Output Power Window

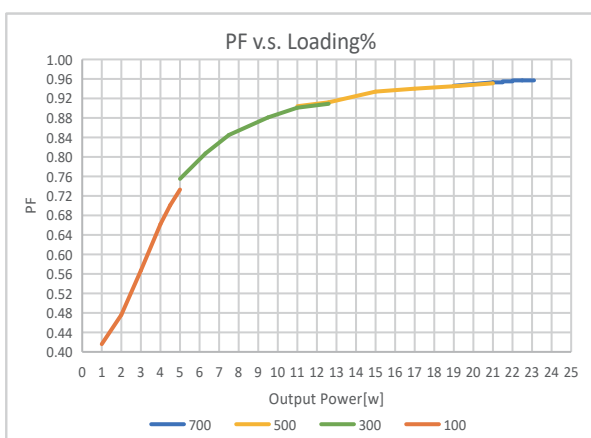
1. Operating power windows



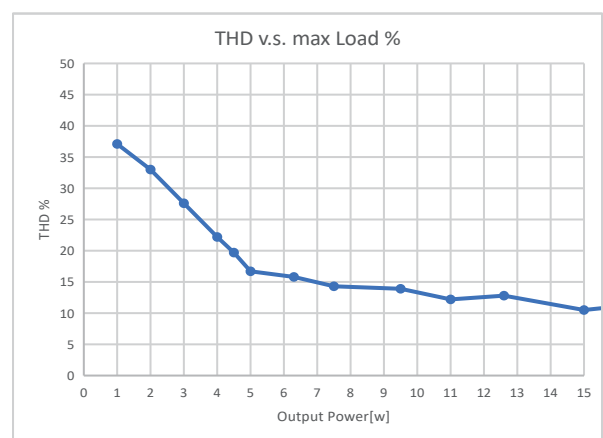
2. Efficiency v.s. Load



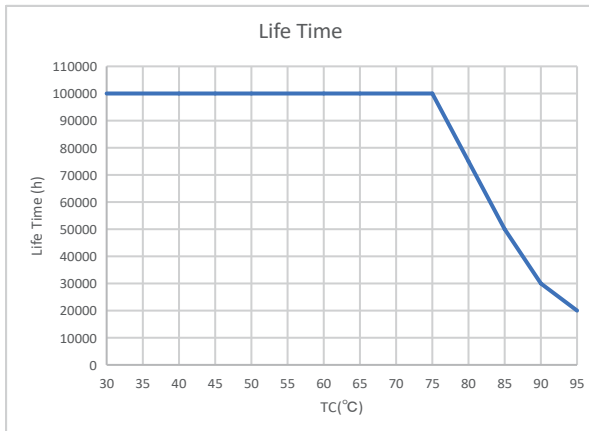
3. PF v.s. Load



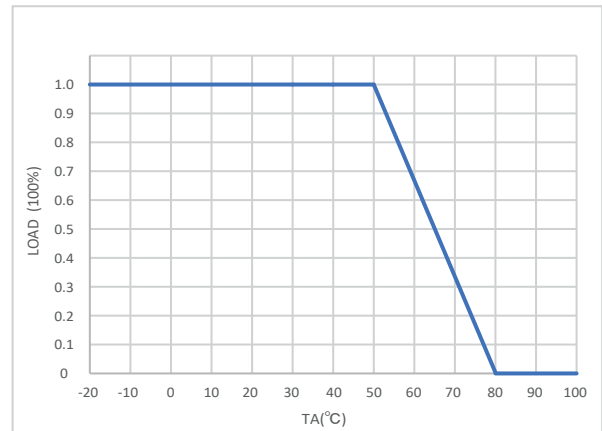
4. THD v.s. Load



5. Life time



6. Derating



7. Function of the earth terminal:



The earth connection is conducted as protection earth (PE). The LED Driver can be earthed via earth terminal or metal housing (if device has metal housing). If the LED Driver will be earthed, protection earth (PE) has to be used. There is no earth connection required for the functionality of the LED Driver. Earth connection is recommended to improve following behaviour.

- Electromagnetic interferences (EMI)
- LED glowing at standby

In general, it is recommended to earth the LED Driver if the LED module is mounted on earthed luminaire parts respectively heat sinks and thereby representing a high capacity against earth.

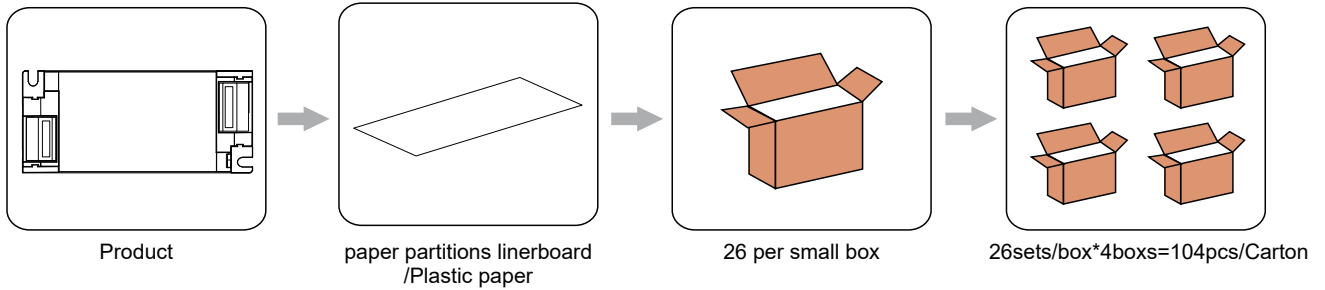
Avoiding residual LED glow on standby

Residual LED glow on standby may occur as a result of capacitive leakage currents from the LED module onto earthed luminaire parts (such as the heat sink). This mainly affects high-efficiency LED systems with large surface areas installed in luminaires with protection class 1.

The topology has been improved so that residual LED glow can be virtually eliminated by earthing the devices.

8. Packing information

Built in type



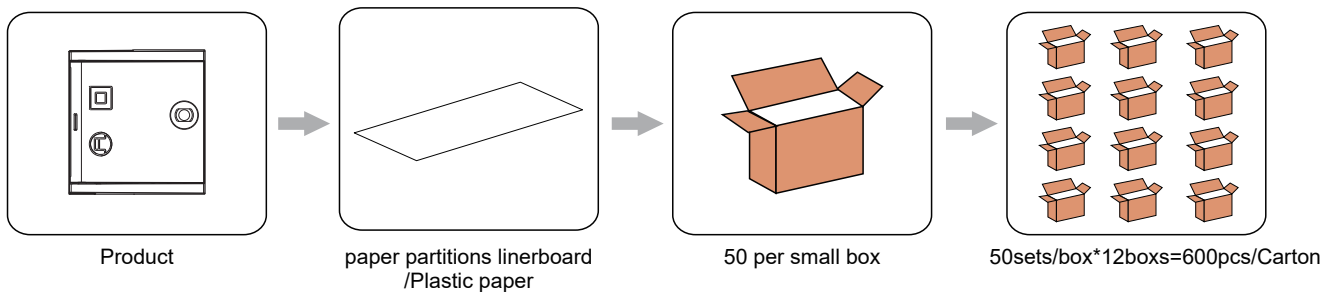
Inner box

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
223*146*103	26	0.085	2.23	2.35

Outer box

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
310*235*230	104	0.085	8.91	9.87

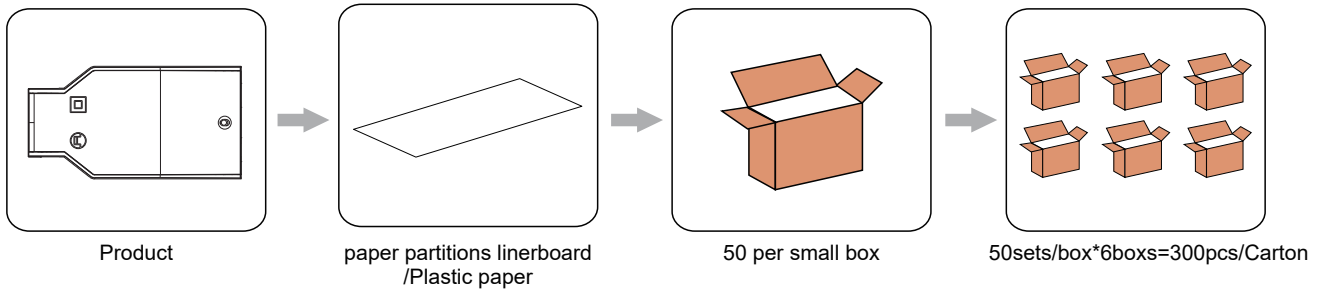
Small Strain reliefs



Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
500*195*245	600	0.007	4.26	5.56

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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	0.041	12.34	13.9

9. Ordering Data

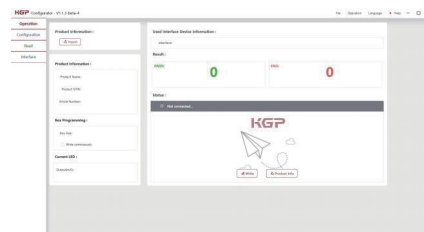
Model No.	Item Code
CC23W100-700 IOT NFC	124041
SR_CC_15-23-36-44 IOT	154081
SR_CC_15-23-36-44 IOT_3POL	154065

10. 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 KGP NFC reader within few seconds.



Product	Description	Interface	Matching antenna	Zhaga approval	Usage
 ID CPR30+	Desktop programmer	USB	Integrated	Yes	Single Programming on Desktop
 ID ISC.PR101-USB	Handheld programmer	USB	Integrated	Yes	Single Programming by Handheld
 ID ISC.MR102-USB	Middle range programmer, for connecting external antenna	USB	RF-MANT12786 	Yes	Single Programming on Product line
 ID ISC.LR1002-E	Long range programmer, for connecting external antenna	USB,RS232,TCP/IP	ID ISC.ANT310/310 	Yes	Multi Programming System

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DE-58511 Lüdenscheid

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.

iPhone

ICON



Main



Download method

1.Scan the QR code to download



2.On your iPhone, search for KGP NFC in APP Store to download it



KGP NFC

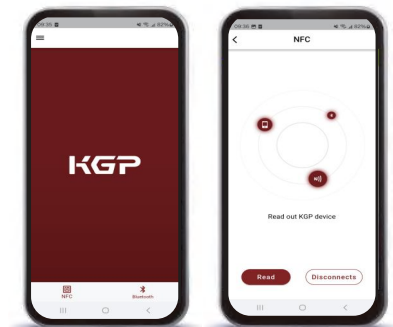
iPhone smartphones with NFC can be downloaded and used directly

Android

ICON



Main



Download method

1.Scan the QR code to download



Android smartphones with NFC can be downloaded and used directly

An iPhone/Android 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

11. REVISION HISTORY

Date	Revision	Remark
2025.01.18	V0.01	Label, NFC current setting, update images
2025.02.10	V0.02	Packing information
2025.08.05	V0.03	Parameters (SEC Wire length) ,Ordering Data
2025.08.29	V0.04	Parameters (Efficiency)