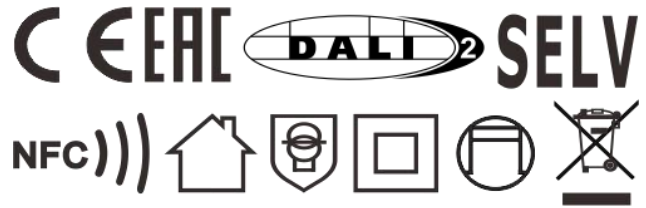


Constant Current Dimmable Driver

Model:CC80W1200-2100CG DALI NFC



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
CC80W1200-2100CG DALI NFC	1200-2100mA	≤0.47A	≤91W	3-79.8W	≥0.95	90%	2.5-52V	70V

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

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 max
	Input Power	≤91W max
	Power Factor	≥0.95 (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%

CC80W1200-2100CG DALI NFC

	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
	Leakage current	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-25 ... +50°C
	Ts/Storage Temperature	-25 ... +85°C
	Tc/Enclosure Temperature	90°C
	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
	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=50°C
	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 ²	2.5mm ²	2.5mm ²	4mm ²	4mm ²			
TYPE B		14	18	22	28	35	@230VAC	43	200µs
TYPE C		22	29	36	45	56			
TYPE D		36	46	57	71	89			

3. Label



KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid

LED Dimmable Driver
CC80W1200-2100CG DALI NFC
Constant Current Type for LED only

U_N= 220-240VAC
I_N= 0.45A Max.
f_N= 50/60Hz
PF≥0.95
ta:50°C

I_{out}= 1200-2100mA
U_{out}= 2.5-52VDC
P_{out}= 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 - ■

■ N
■ L
■ DA
■ DA
PRI~



PUSH-CONTROL

L ~ DALI
N ~

CE

©





SELV

NFC



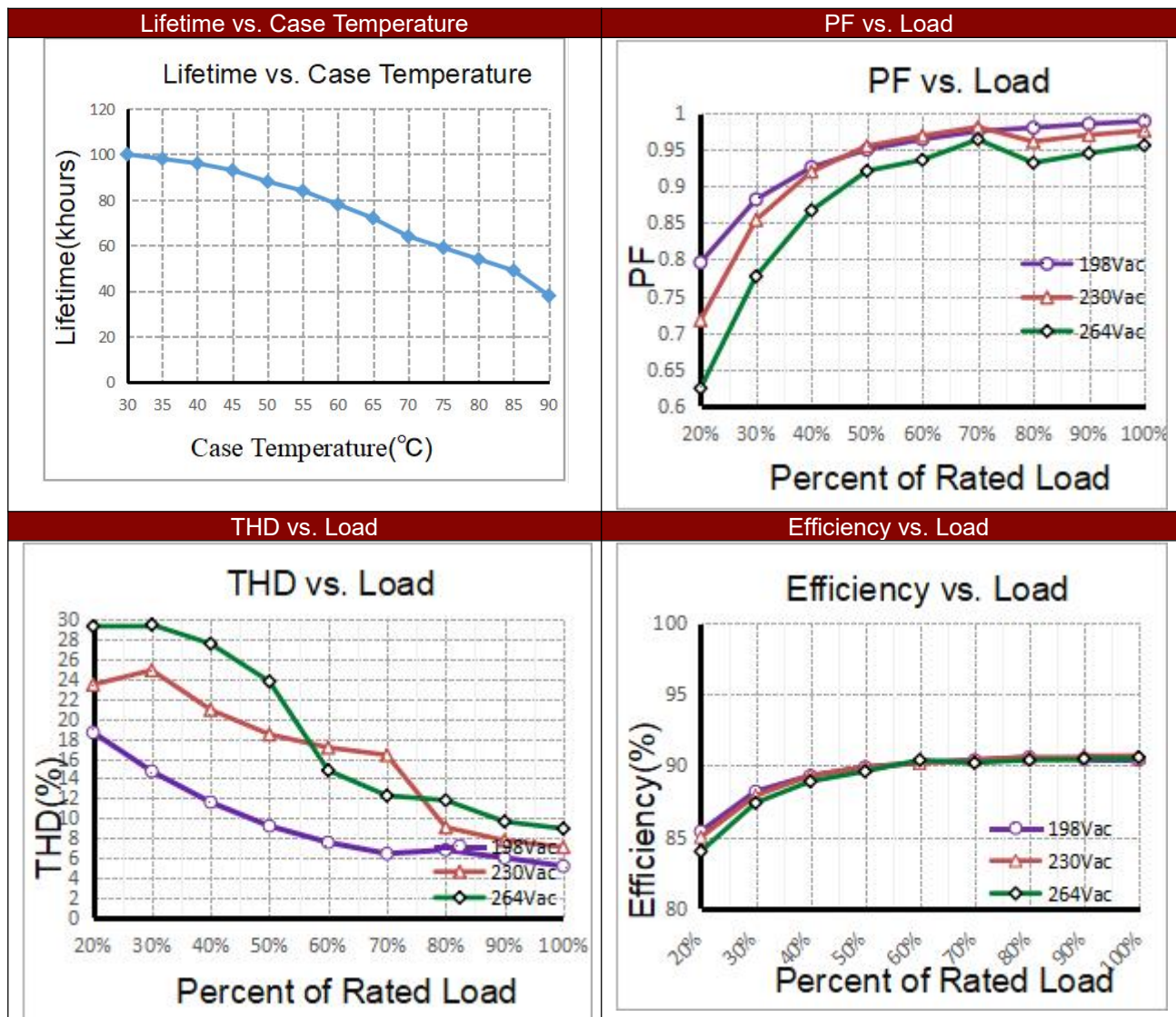


8mm

PRI:0.75-1.5°
SEC:0.5-1.5°

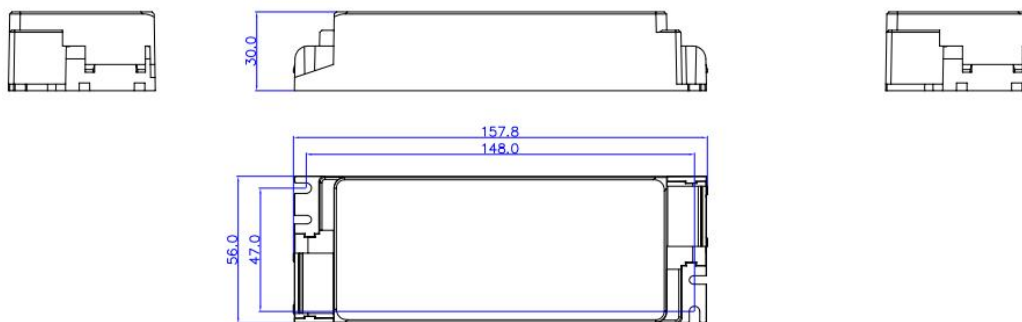
SEC + ■
SEC - ■

4. Electrical values

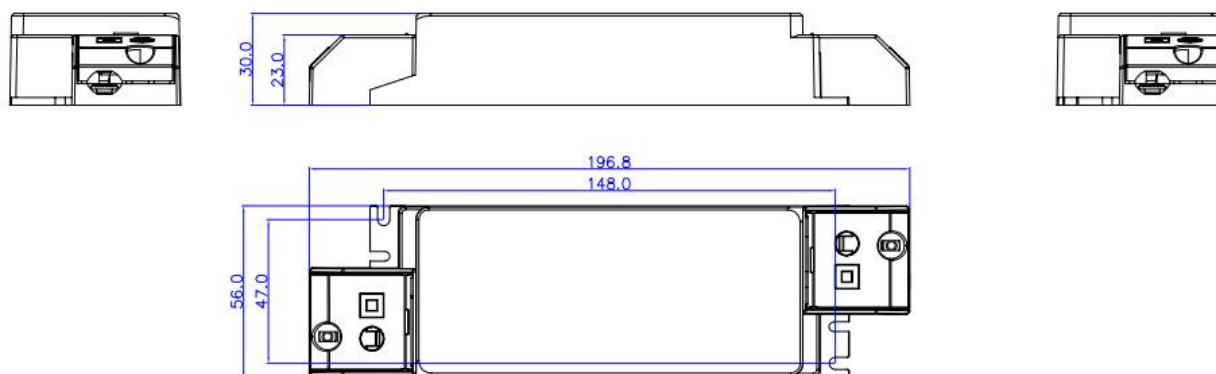


5. Dimension (Unit: mm)

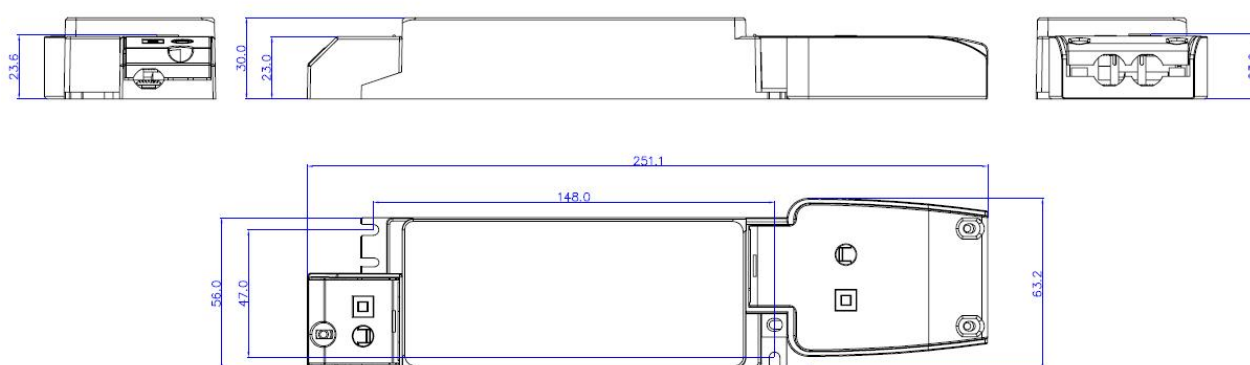
SC (A) :



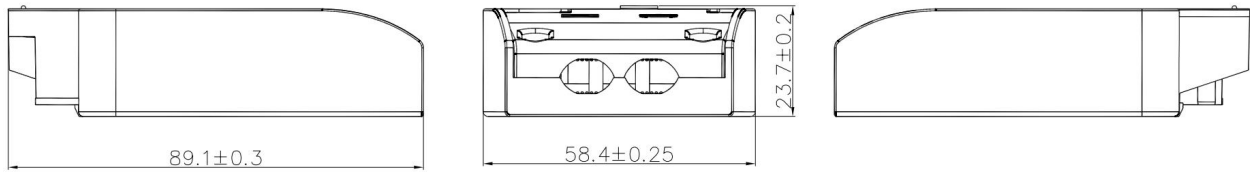
Small side cover(B)



Large side cover(C):



Large Strain reliefs specifications



Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 58.15-58.65 x 23.5-23.9

mm Wire size: 0.5 - 2.5 mm²

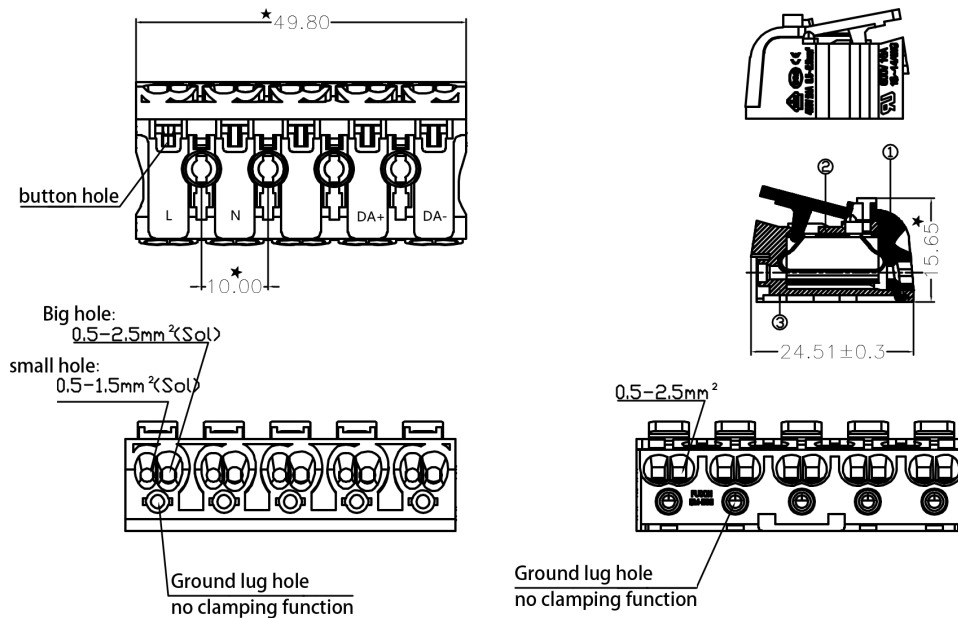
Ambient temperature range: -20...+50 °C

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

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

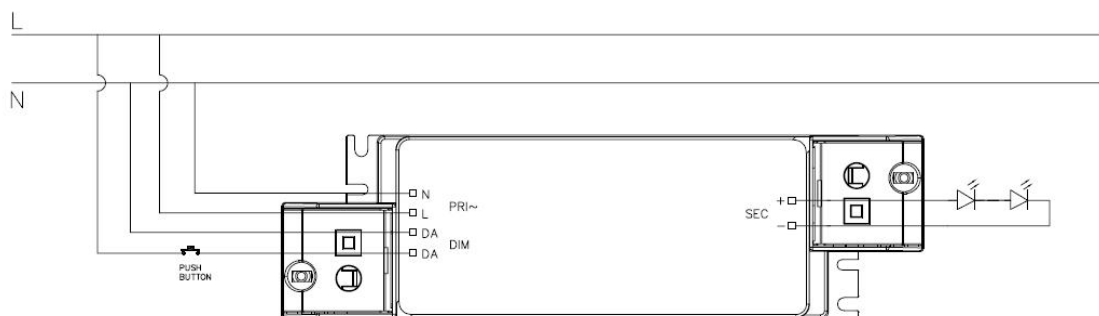
Do not store in wet or humid environment!

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



6. Wiring Diagram

Fig. A: Push Dimming



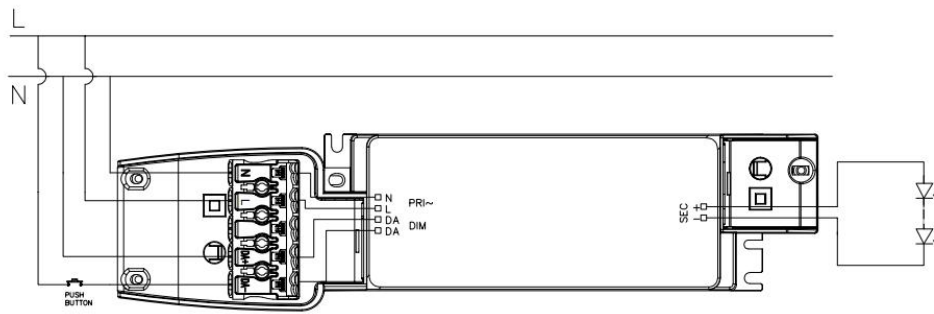
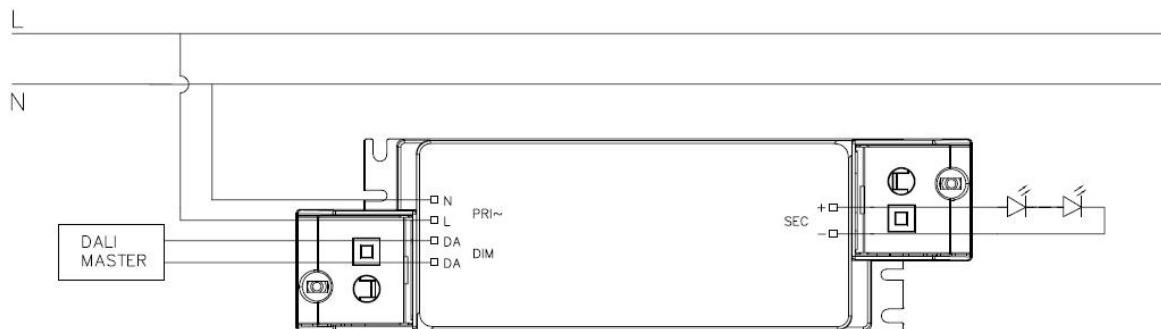


Fig. B: DALI Dimming



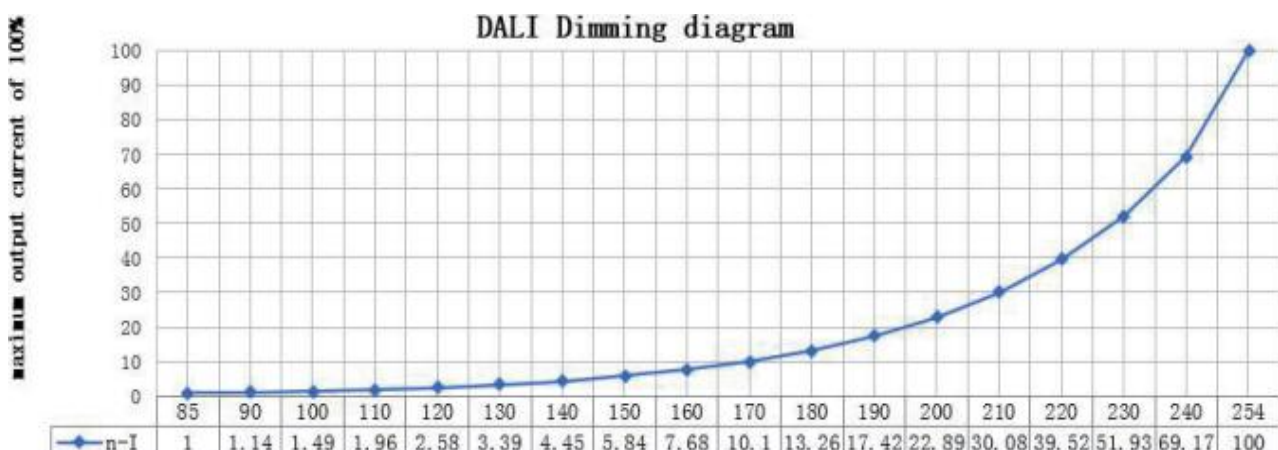
7. DALI dimming curve

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	CC80W1200-2100CG DALI NFC	310*225*175mm	30	0.35	10.5	11.2

Small side cover(B)

Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
457*250*220mm	480	0.01	4.8	5.3

Large side cover(C)

Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
457*250*220mm	130	0.049	6.37	7.0

4. 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

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



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



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

10.Revision History

Date	Revision	Remark
2024-03-21	V1.0	preliminary version
2024-09-22	V1.1	Add NFC current setting and Large Strain reliefs specifications