

Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
LC100W250-1050 DALI NFC	250-1050mA	≤0.62A	107.5W	13.50-100.00W	≥ 0.95	95%	54-240Vdc	260Vdc

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

1. Parameters

category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	Amplitude (DALI-2)
	Output current setting	Near field communication (NFC)
	Output Features	Non-Isolation
	IP Grade	IP20
	Insulation Class	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	≤0.62A max
	Input Power	≤107.5W max
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤7% (230VAC, full load)
	Standby Power Consumption	≤0.45W @230VAC (DALI system DIM to off)
	Inrush Current	≤20A/30us (230VAC, full load)
	Connected quantity of 10A Breaker	9pcs/type A ;15pcs/type B ;25pcs/type C@ 230Vac
	Connected quantity of 13A Breaker	12pcs/type A ;20pcs/type B ;32pcs/type C@ 230Vac
	Connected quantity of 16A Breaker	15pcs/type A ;25pcs/type B ;40pcs/type C@ 230Vac
	Connected quantity of 20A Breaker	19pcs/type A ;31pcs/type B ;50pcs/type C@ 230Vac

Output	Output Voltage	54-240V
	U-OUT (working voltage)	< 260V
	Output Current	250-1050mA (by NFC setting, Factory set current of 250mA)
	Max. Output Power	100W
	Efficiency	≥95% (230VAC, full load)
	Output current ripple (< 100 Hz)	<1% (Imax-Imin) / (Imax+Imin)
	Current Accuracy	±5%
	Output PstLM (at full load)	≤1
	Output SVM (at full load)	≤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
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length: 20m, same port of DALI)
	PUSH-button	Max parallel connections qty for Push-dim 15
	DALI function	DALI dimming (Max. lead wire length: 300m) logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 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	1500V 5mA 60S between P-E
	Insulation resistance	>100M ohm @ 500VDC L/N to PE
	Leakage current	< 700μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-25....+50°C
	Ts/Storage Temperature	-25....+85°C
	Tc/Enclosure Temperature	85°C
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built -in
	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	280*29.4*21mm (L*W*H)

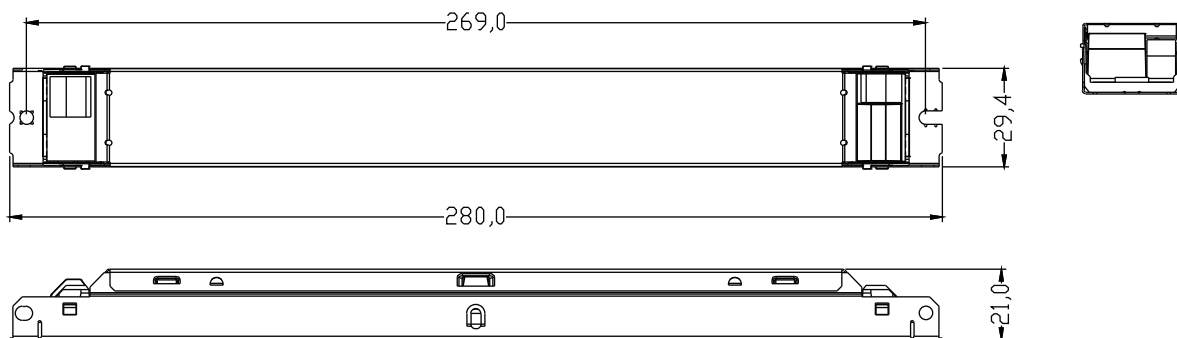
Standards	Certification	CE/ENEC/SAA/UKCA/CB
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017; EN62384:2006/A1:2009; AS 61347.2.13:2018; AS/NZS61347.1:2016; BS EN61347-1:2015/A1:2021; BS EN61347-2-13:2014/A1:2017; IEC 61347-2-13:2014; IEC 61347-1:2015
	EMC Standards	AS/NZS CISPR 15:2011; AS CISPR 15:2017 ;
	Performance	EN 62384
	DALI performance	EN 62386-101 (DALI-2) EN 62386-102 (DALI-2) EN 62386-207 (DALI-2, including part 251, 252, 253)
	Surge	L-N/1KV (L/N)-PE/2KV
Others	RoHS	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. 3.During the PUSH DIM test, the number of parallel connections must be less than 15PCS.		

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

2. Label

☐ L ☐ N ☐ ☐ DA ☐ DA	KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheld	LC100W250-1050 DALI NFC Constant Current Type for operation with LED modules only Input Voltage:220-240VAC Input Frequency:0/50-60Hz Range of application DC 180-280V Output:250-1050mA 54-240VDC	LED Dimmable Driver Constant Current Type for operation with LED modules only Power Factor: ≥ 0.95 I _{in} : ≤ 0.62A Prange=13.5-100W U _{out} :260VDC Max.100W Tc:85°C Ta:50°C	 	wire preparation Input: 0.5-1.5" DALI: 0.5-1.5" Output: 0.5-1.5"	Output + ☐ - ☐ NFC)))
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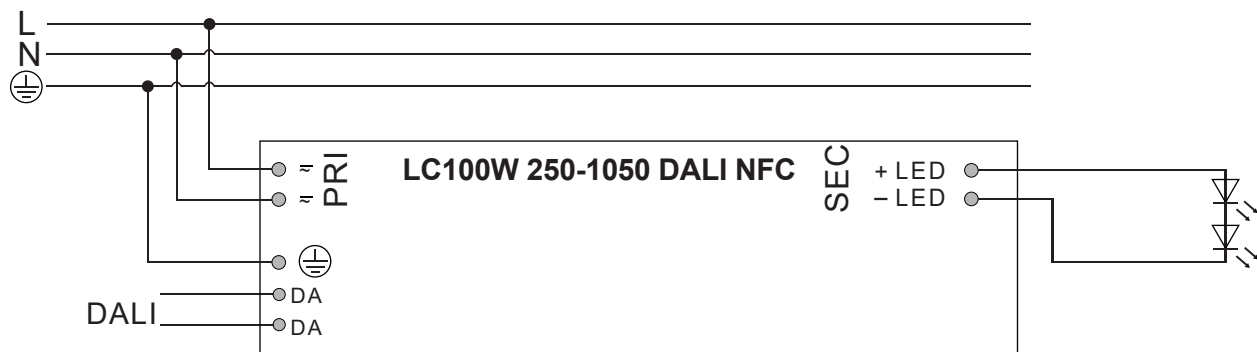
3. Dimension (Unit: mm)



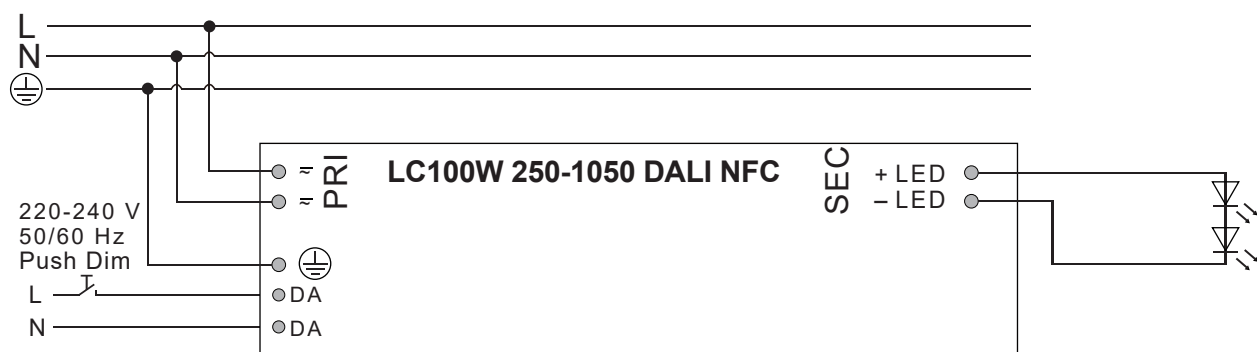
4. Installation / wiring

Circuit diagram

220-240 V
0/50/60 Hz



220-240 V
0/50/60 Hz

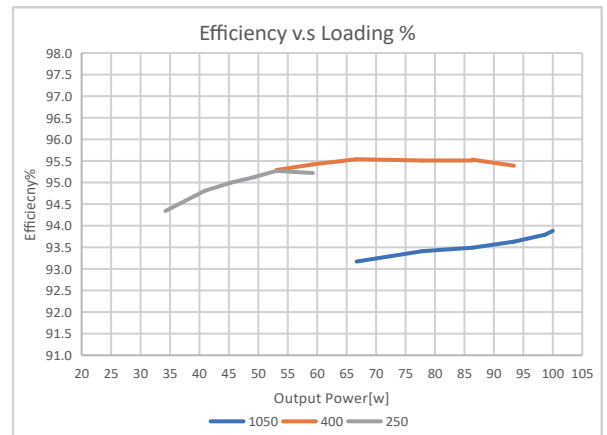


5. Electrical values

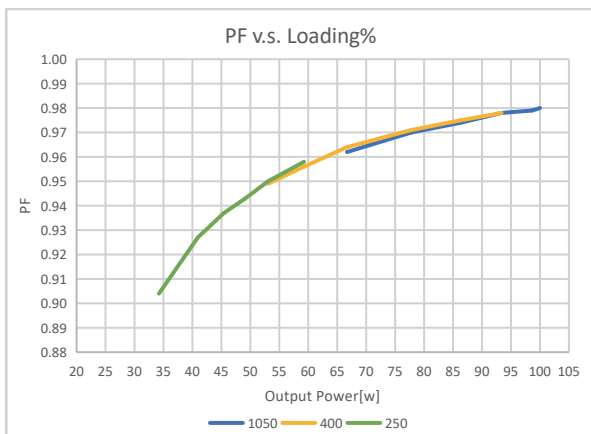
1. Operating power windows



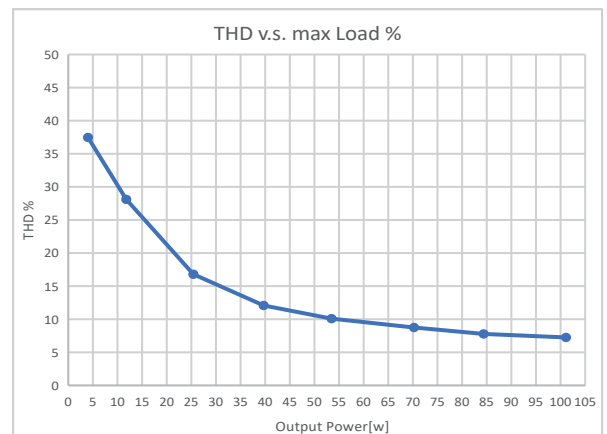
2. Efficiency v.s. Load



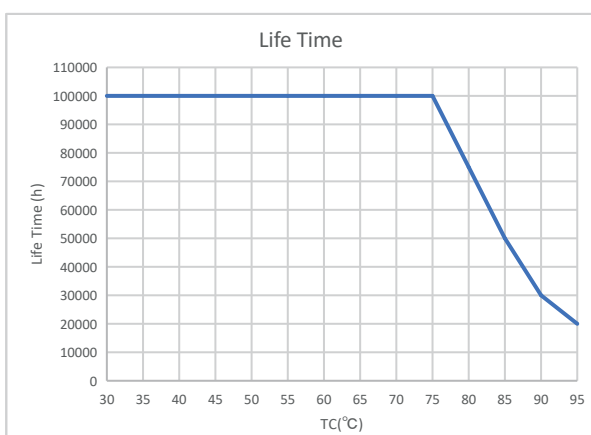
3. PF v.s. Load



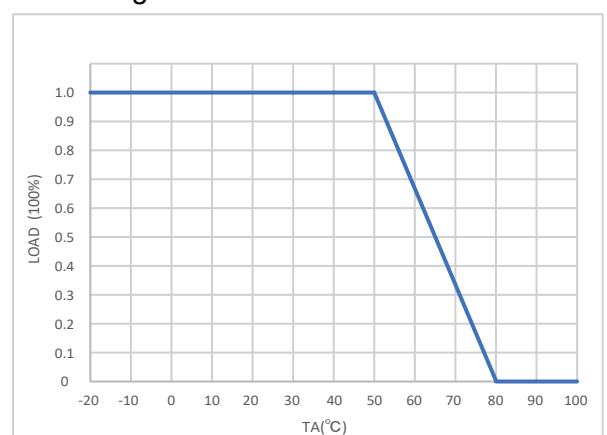
4. THD v.s. Load



5. Life time



6. Derating



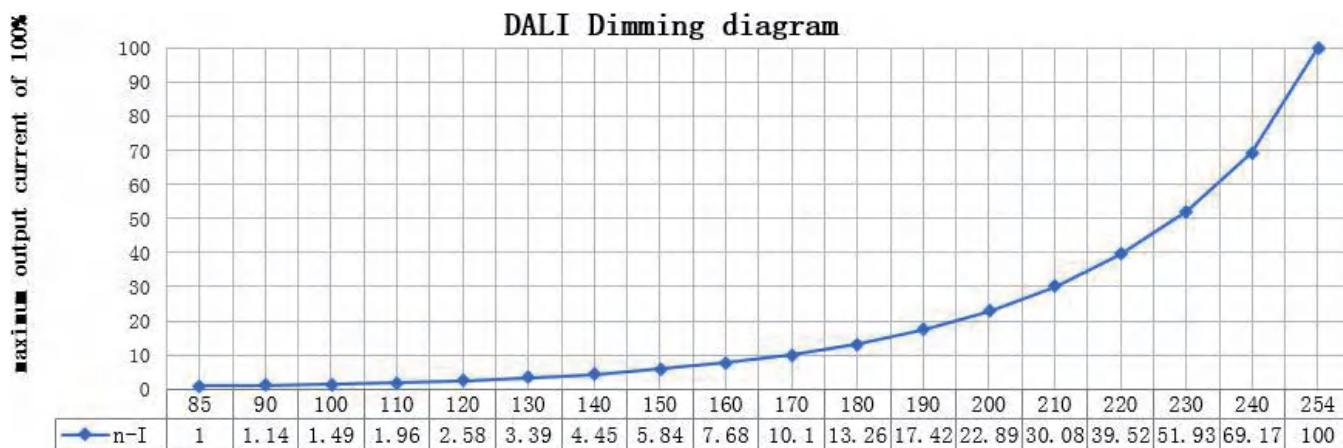
6. DALI dimming curve

formula for DALI dimming.

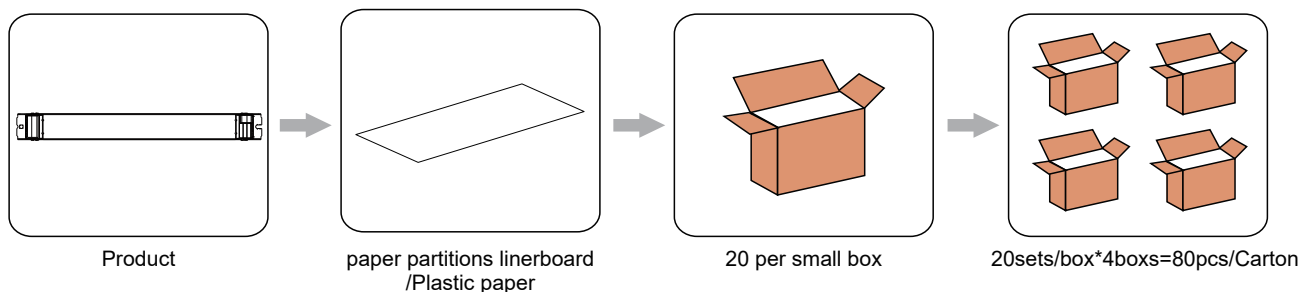
$$X(n)=10^{\{[(n-1)/(253/3)]-1\}},$$

Here, n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current



7. Packing information



Inner box

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
290*155*110	20	0.193	3.86	3.97

Outer box

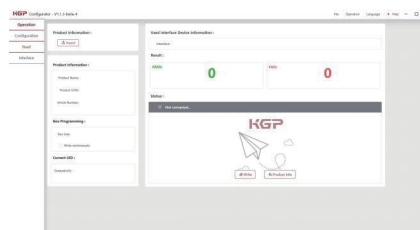
Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
325*303*240	80	0.193	15.44	16.37

8. 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.

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

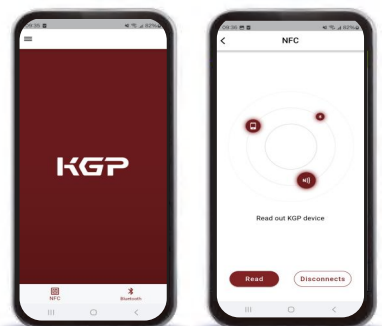
iPhone smartphones with NFC can be downloaded and used directly

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

9. Push Dim :

9.1 On / off:

Short push (120ms-600ms) on the switch

Stepless dimming: long push (> 0.6sec) on the switch

9.2 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 brightness during dimming is not memorized)

9.3 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.

9.4 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.)

9.5 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.

9.6 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.

10. REVISION HISTORY

Date	Revision	Remark
2023.08.29	V0.01	Modify fonts, add NFC content, Inrush Current, update images
2023.09.11	V0.02	Parameters(Inrush Current, Control Method, Remark)
2023.11.02	V0.03	Packing information, update images, Label
2024.04.15	V0.04	Label, Packing information, Electrical values, Dimension, update images
2024.09.15	V0.05	Label, Packing information, Parameters, update images
2024.12.02	V0.06	Label, Parameters, Electrical values, update images
2025.01.20	V0.07	Label, NFC current setting, update images
2025.02.10	V0.08	Packing information, Dimming Type