Constant Current Driver

Model:XC23W100-700 NFC
XC44W300-1050 NFC
XC70W350-1400 NFC

Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
XC23W100-700 NFC	100-700mA	≤0.14A	27W	0.25-23.00W	≥0.95	≥86%	2.5-46V	59V
XC44W300-1050 NFC	300-1050mA	≤0.26A	51W	2.70-44.10W	≥0.95	≥89%	9.0-49V	59V
XC70W350-1400 NFC	350-1400mA	≤0.40A	78W	3.50-70.00W	≥0.95	≥89.5%	10-50V	59V

*** Test result @230V, 50Hz, Full Load. Current setting@1mA-steps(NFC)**

1. Parameters

Category	Item		Technical Norm
Features	Output Type		Constant Current
	Output Features		Isolation
	IP Grade		IP67
	Insulation Class		Class II
Input	Rated Input Voltage		220-240VAC
	Range of Input Voltage		198-264VAC or 180-280VDC
	Frequency		0/50/60Hz
	Input Current		≤0.14A max@23W (230VAC,full load) ≤0.26A max@44W (230VAC,full load) ≤0.40A max@70W (230VAC,full load)
	Input Power		≤27W max@23W (230VAC,full load) ≤51W max@44W (230VAC,full load) ≤78W max@70W (230VAC,full load)
	Power Factor		≥0.95 @230VAC ,full load
	THD		≤10% @230VAC ,full load @23W,44W,70W
	No-load Power Consumption		≤0.5W @230VAC
	Inrush Current		≤15A/50uS @23W (230VAC,full load) ≤20A/50uS @44W,70W (230VAC,full load)
Output	Output Voltage Range	23W	2.5-46VDC @100-500mA 2.5-41VDC @501-550mA 2.5-38VDC @551-600mA

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			2.5-35VDC @601-650mA 2.5-32VDC @651-700mA
		44W	9.0-49VDC @300-750mA 9.0-45VDC @751-950mA 9.0-42VDC @951-1050mA
		70W	10-50VDC @350-1400mA
	No Load Voltage		59VDC Max.
	Output Current	23W	100-700mA (by NFC setting)
		44W	300-1050mA (by NFC setting)
		70W	350-1400mA (by NFC setting)
	Max. Output Power	23W	23.00W
		44W	44.10W
		70W	70.00W
	Efficiency	23W	≥86% (230V full load@max current)
		44W	≥89% (230V full load@max current)
		70W	≥89.5% (230V full load@max current)
	Current ripple(< 120 Hz)		±5% (Imax-Imin) / (Imax+Imin)
	PstLM		≤1
	SVM		≤0.4
	Current Accuracy		±5%
	Line Regulation		±5%
	Load Regulation		±5%
	Started Delay Time		≤0.5S (230VAC,full load)
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
	Leakage current		< 0.7mA, I/P to O/P
Environment	Ta/ Operation Temperature		-25 …+50℃
	Ts/ Storage Temperature		-40 …+85℃
	Tc/ Enclosure Temperature		+85℃
	Humidity		10%.... 90%RH
	Atmosphere		86- 108KPa
Construction	Connection Method		Cable
	Installation		Built-in & Independent
	PRI Wire preparation		⌀ 0.75mm² / 400mm
	SEC Wire preparation		⌀ 0.50mm² / 400mm
	Dimension	23W	103*47*26mm (L*W*H)
		44W	110*52*28.5mm (L*W*H)
		70W	109*69.5*32.5mm (L*W*H)
Standards	Certification		CE,TUV
	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
	EMC Standards	EN55015; EN61000-3-2 Class C; EN61000-3 EN 61547; EN 61000-4-2; EN 61000-4-5
	RED	EN 300 330 V2.1.1:2017 EN 301 489-1 V2.2.3:2019 EN 301 489-3 V2.3.2:2023 EN 62479:2010 EN 50663:2017
	Performance	EN62384
	Surge	2KV DIFF./4KV COMM
Others	RoHS	Complied to 2011/65/EU
	REACH	EU Regulation(EC)No 1907/2006
	Life Time	70000h @Tc< +85℃
	Warranty	5years
	Noise	<20dB @ 30cm distance, 18dB background

Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and +25℃ 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. Do not install upside down.

2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker@15W						Input Voltage	Inrush Current	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		40	52	64	80	100	@230VAC	15	50μs
TYPE C		64	83	102	128	160			
TYPE D		102	133	164	205	256			

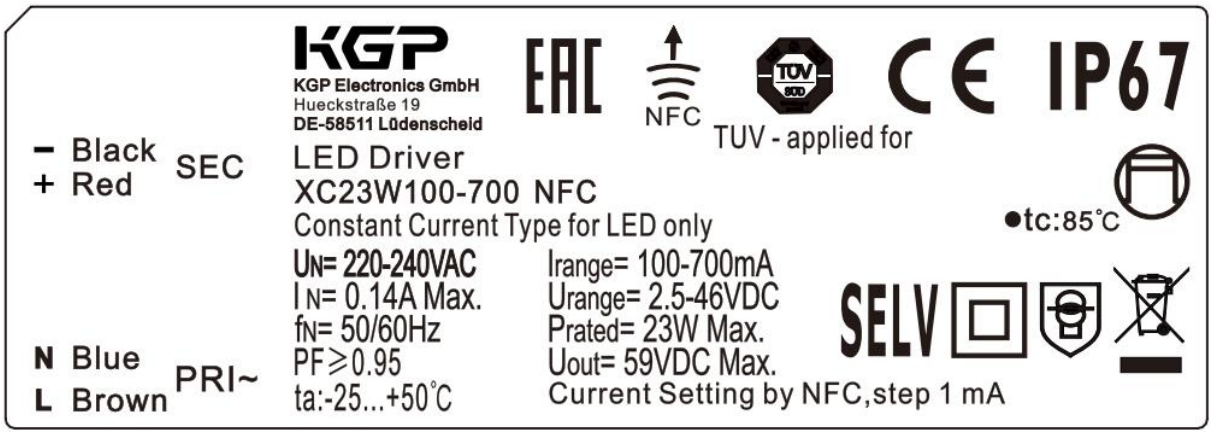
TYPE	Connected quantities of different current Breaker@23W						Input Voltage	Inrush Current	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		40	52	64	80	100	@230VAC	15	50μs
TYPE C		64	83	102	128	160			
TYPE D		102	133	164	205	256			

TYPE	Connected quantities of different current Breaker@44W						Input Voltage	Inrush Current	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		30	39	48	60	75	@230VAC	20	50μs
TYPE C		48	62	77	96	120			
TYPE D		77	100	123	154	192			

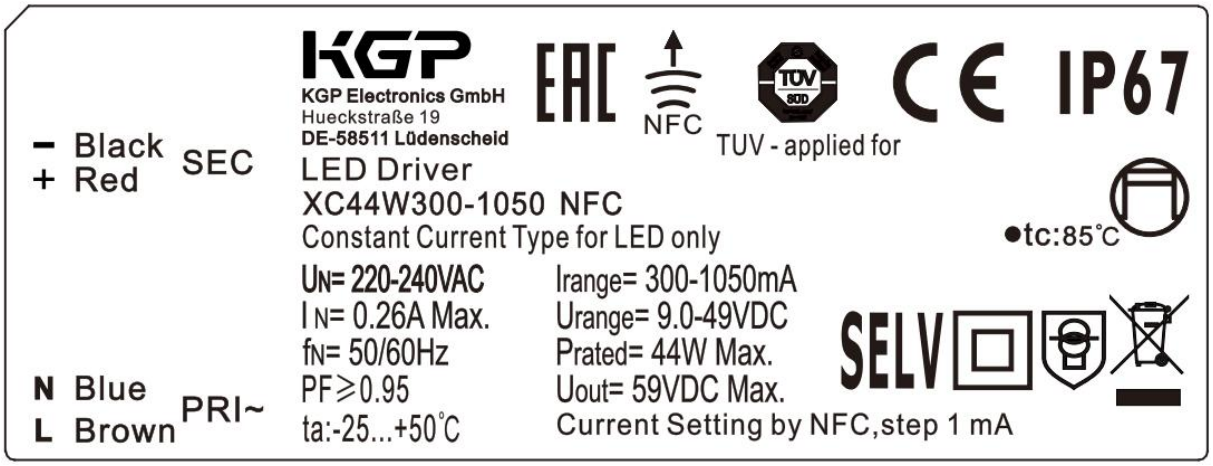
TYPE	Connected quantities of different current Breaker@70W						Input Voltage	Inrush Current	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		30	39	48	60	75	@230VAC	20	50μs
TYPE C		48	62	77	96	120			
TYPE D		77	100	123	154	192			

3. Label

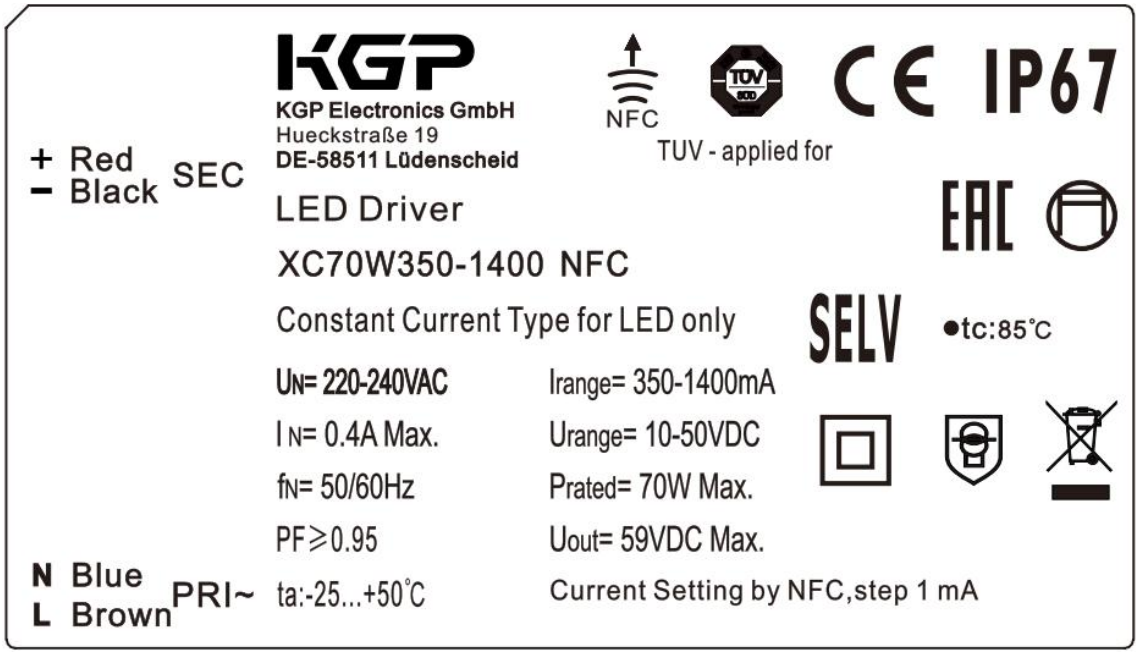
XC23W100-700 NFC



XC44W300-1050 NFC



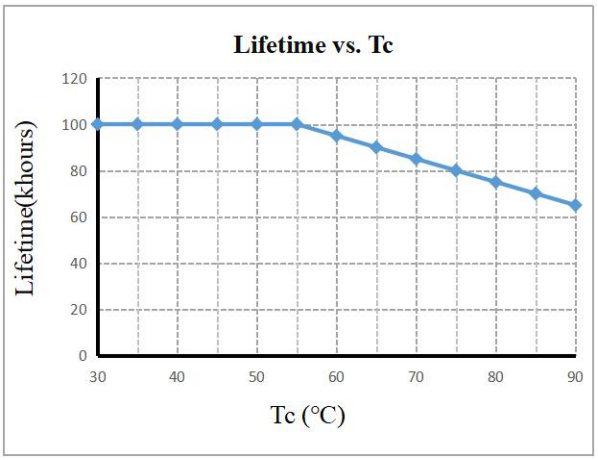
XC70W350-1400 NFC



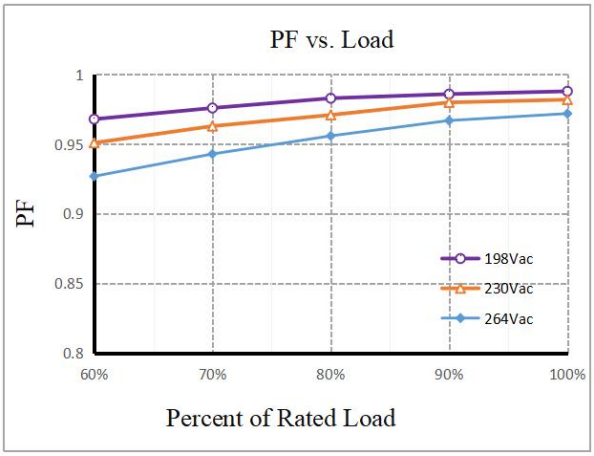
4. Electrical values

XC23W100-700 NFC

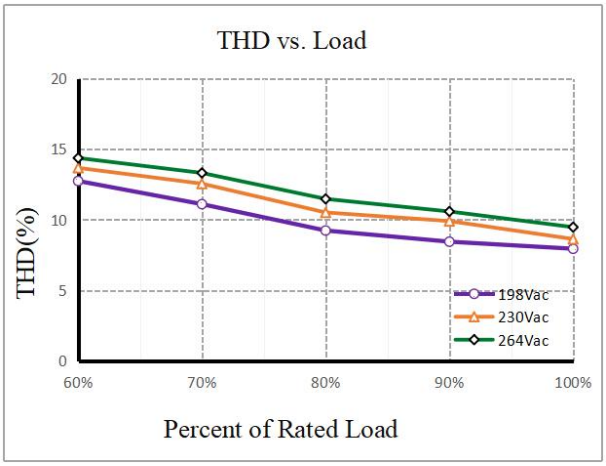
Lifetime vs. Case Temperature



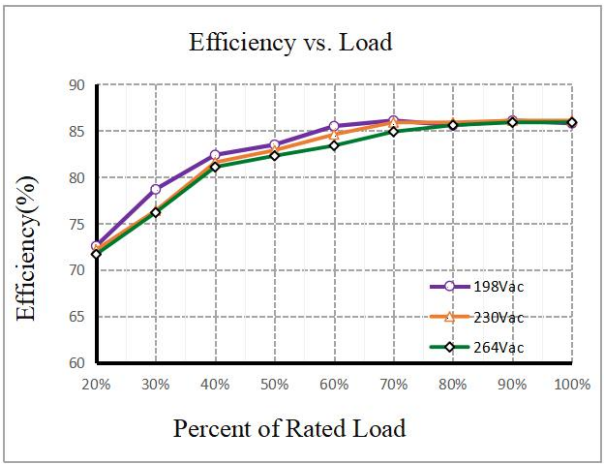
PF vs. Load



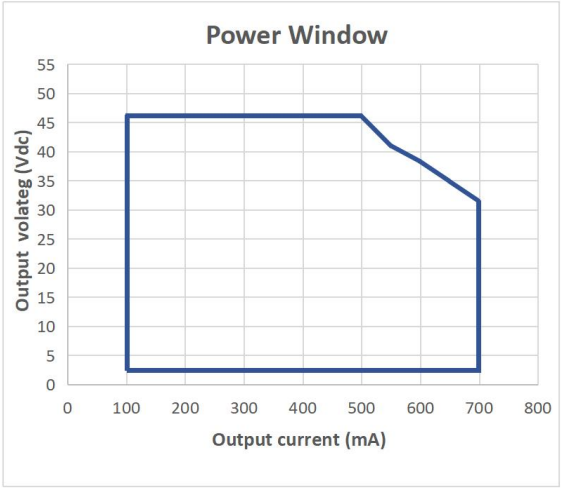
THD vs. Load



Efficiency vs. Load

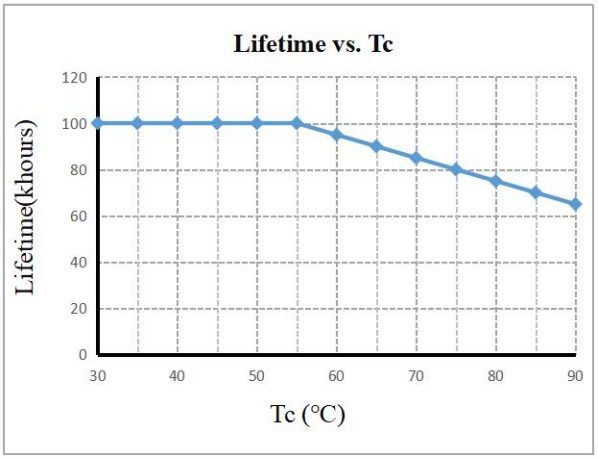


Output Power Window

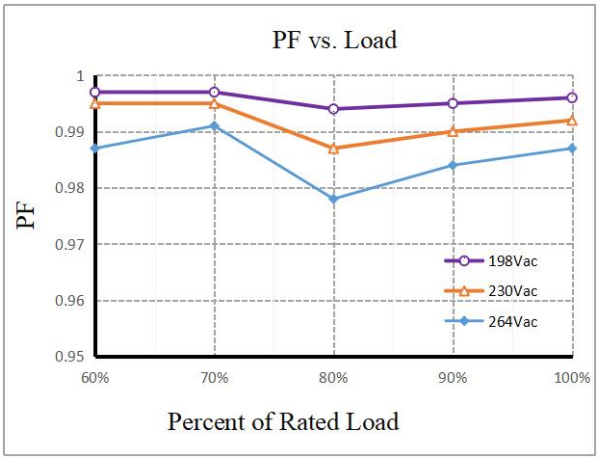


XC44W300-1050 NFC

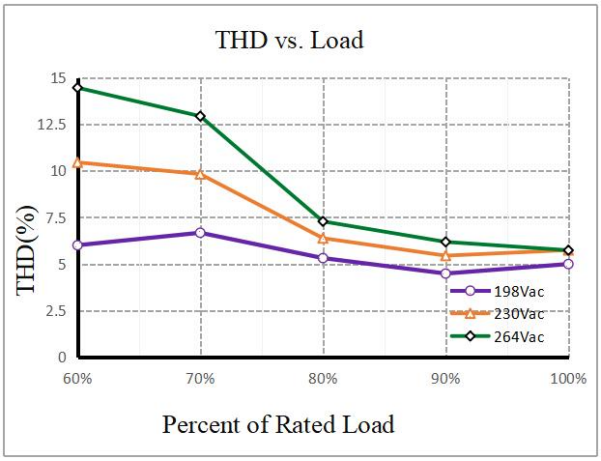
Lifetime vs. Case Temperature



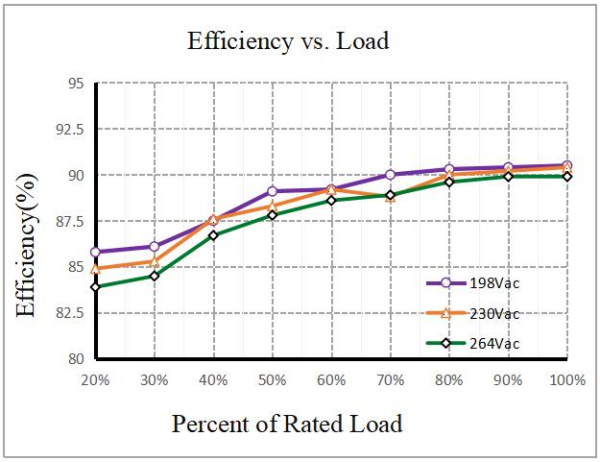
PF vs. Load



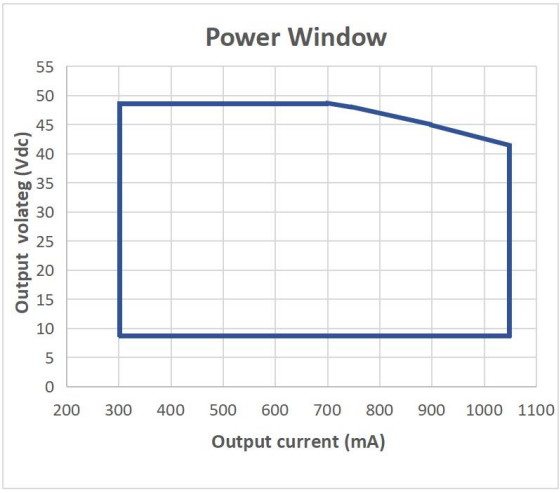
THD vs. Load



Efficiency vs. Load



Output Power Window



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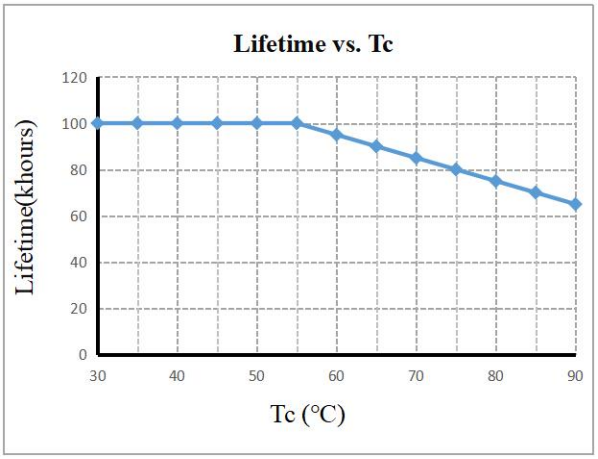
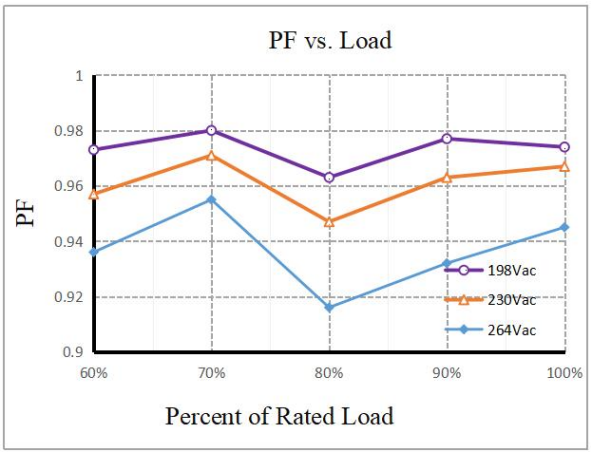
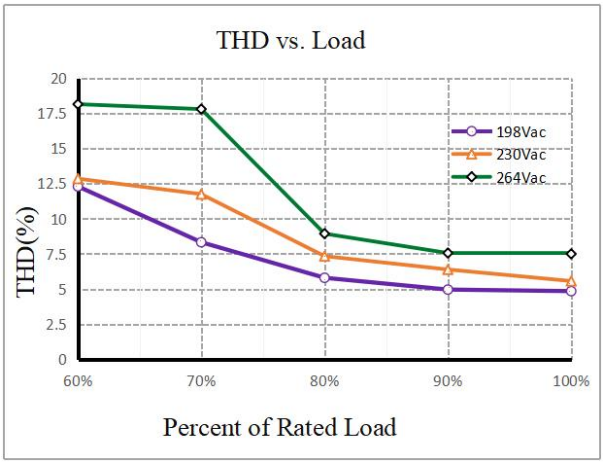
Lifetime vs. Case Temperature



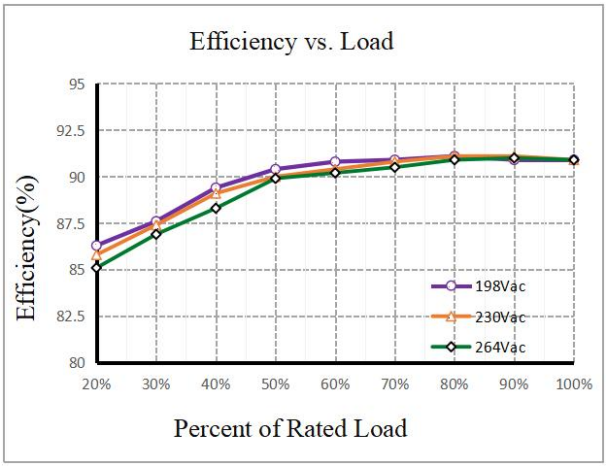
PF vs. Load



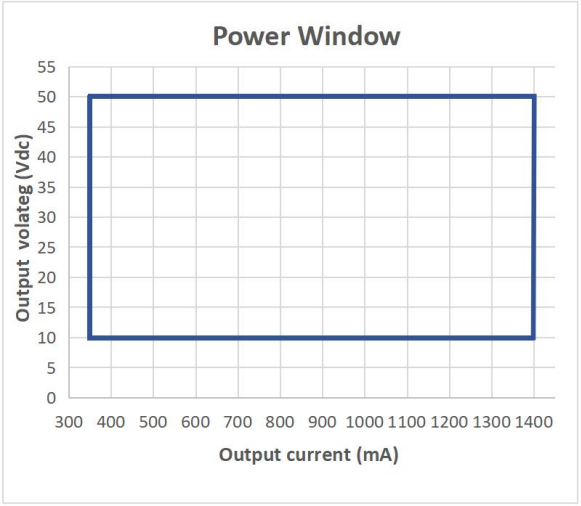
THD vs. Load



Efficiency vs. Load

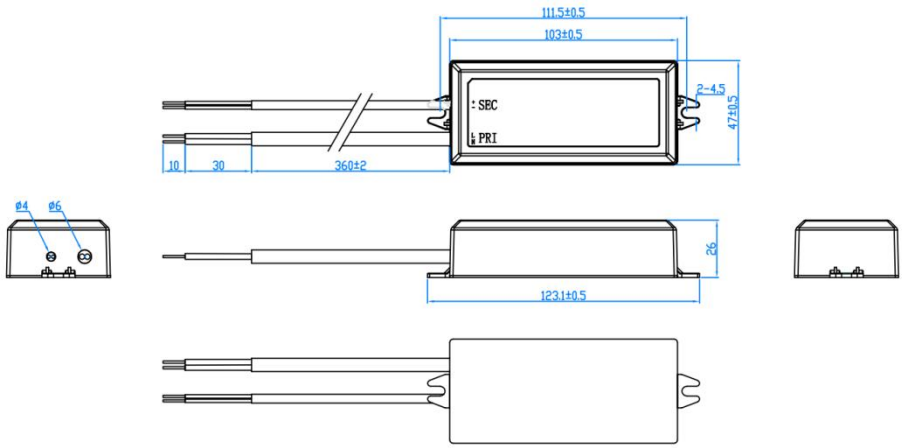


Output Power Window

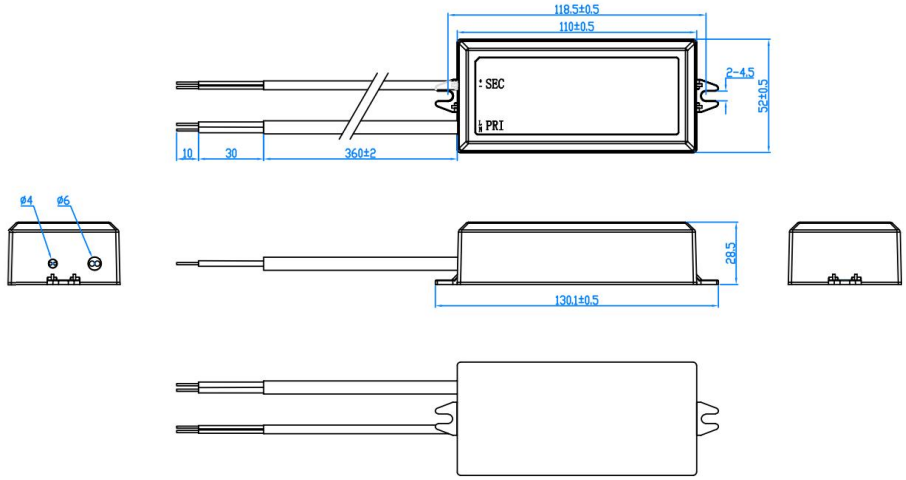


5. Dimension（Unit：mm）

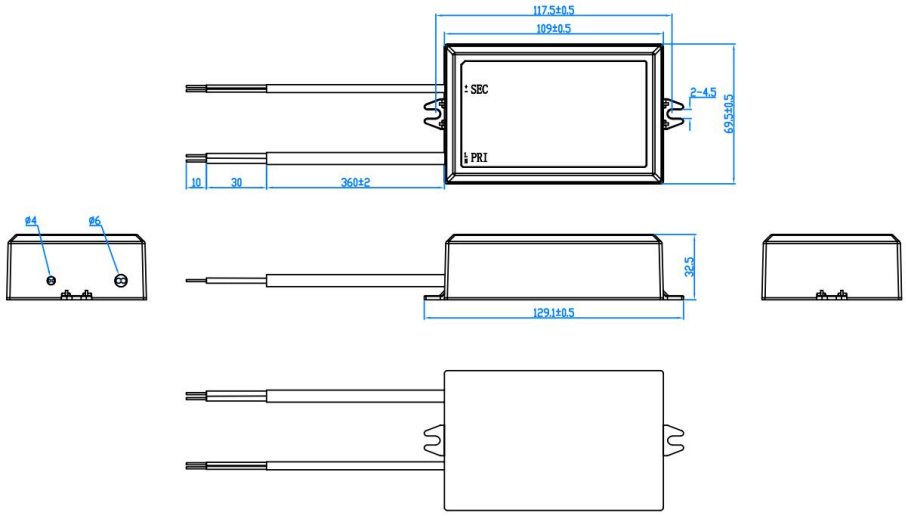
XC23W100-700 NFC



XC44W300-1050 NFC

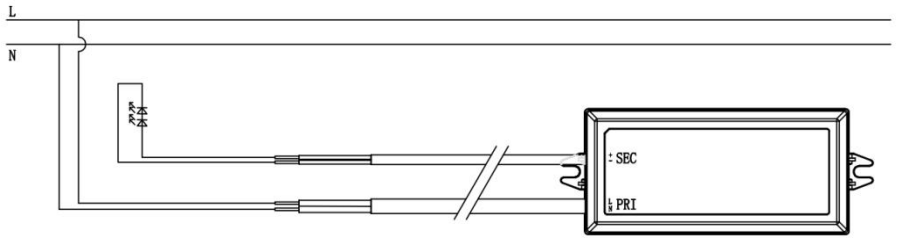


XC70W350-1400 NFC



6. Wiring Diagram

220-240Vac 50/60 Hz



7. Packing information

Packing way	Model	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
Industrial	XC23W100-700 NFC	345*310*158	100	0.21	8.6	9.2
Industrial	XC44W300-1050 NFC	345*310*158	100	0.29	11.4	12.0
Industrial	XC70W350-1400 NFC	440*345*155	80	0.42	12.7	13.3

8. Wiring instructions

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 0.5 m
- Secondary switching is not permitted（Except for constant voltage）
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)
- Hot plug-in is not supported due to residual output voltage of > 0 V up to mains voltage. Danger to life.
- When connecting an LED load, restart the device to activate the LED output.
- This can be done via mains reset or via interface (DALI, DSI, switch DIM).

9. Replace LED module

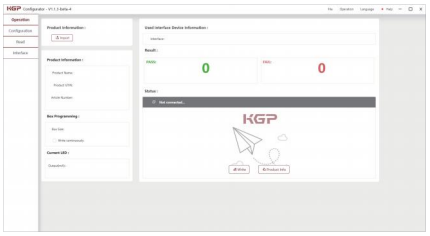
- Mains off
- Remove LED module
- Wait for 30 seconds
- Connect LED module again
- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

10. NFC instructions

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.PRH101-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 co to download

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

KGP NFC

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

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11. REVISION HISTORY

DATE	REV	Modification details
2024-11-08	V1.0	Initial release.
2025-01-24	V1.1	Update surge