



### Constant Current Driver

Model: CC21W150-500  
 CC30W350-700  
 CC44W700-1050



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
CC21W150-500	150mA	0.06A	9.0W	3.0-6.7W	0.70	75%	20-45V	55V
	200mA	0.07A	12.0W	3.0-9.0W	0.70	80%	15-45V	
	250mA	0.09A	14.5W	3.8-11.2W	0.75	83%		
	300mA	0.10A	17.0W	4.5-13.5W	0.80	83%		
	350mA	0.11A	19.5W	5.3-15.7W	0.85	85%		
	400mA	0.12A	21.5W	6.0-18.0W	0.88	86%		
	450mA	0.14A	24.0W	6.8-20.2W	0.92	87%		
	500mA	0.15A	26.5W	7.5-22.5W		87%		
CC30W350-700	350mA	0.11A	18.9W	5.25-15.7W	0.92	82%	15-45V	55V
	400mA	0.12A	21.6W	6.00-18.0W				
	450mA	0.13A	24.0W	12.1-20.2W	0.95	85%		
	500mA	0.14A	27.3W	13.5-22.5W		87%		
	550mA	0.15A	30.0W	14.8-24.7W				
	600mA	0.16A	31.8W	16.2-27.0W				
	650mA	0.17A	34.0W	17.5-29.2W				
700mA	0.18A	36.2W	18.9-31.5W					
CC44W700-1050	700mA	0.18A	36.5W	10.5-31.5W	0.95	88%	15-45V	55V
	750mA	0.19A	39.5W	11.25-33.7W				
	800mA	0.20A	42W	12-36.0W				
	850mA	0.21A	44.5W	12.75-38.2W				
	900mA	0.22A	44W	13.5-37.8W		89%	15-42V	
	950mA	0.23A	46.0W	14.25-39.9W				
	1000mA	0.24A	48.5W	15-42.0W				
	1050mA	0.25A	50W	15.75-44.0W				

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

**1. Parameters**

Category	Item	Technical Norm
Features	Output Type Add: Output feature	Constant Current Insulated output (SELV)
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Rated Input Voltage ( perf. range )	202-254VAC, 186-250VDC
	Range of Input Voltage (oper. safety)	198-264VAC or 170-276VDC
	Frequency	0/50/60Hz perf.range: 47-63Hz, oper..safety: 45-66Hz
	Input Current	≤0.25A (CC44W700-1050 230VAC full load) ≤0.18A (CC30W350-700 230VAC full load) ≤0.15A (CC21W150-500 230VAC full load)
	Input Power	≤50W (CC44W700-1050) ≤36.2W (CC30W350-700) ≤26.5W (CC21W150-500)
	Power Factor	≥0.95 (CC44W700-1050 230VAC full load ) ≥0.95 (CC30W350-700 230VAC full load) ≥0.92 (CC21W150-500 230VAC full load)
	THD	@21W ≤20% (230VAC, full load) @30W/44W ≤15% (230VAC, full load)
	Inrush Current	≤25A/160us (CC44W700-1050 230VAC full load) ≤20A/370us (CC30W350-700 230VAC full load) ≤15A/47us (CC21W150-500 230VAC full load)
Output	Current Accuracy	@(150mA, 200mA) ±10% (@ 202-254VAC ) @(250mA, 300mA) ±6% (@ 202-254VAC ) @(350-1050mA) ±5% (@ 202-254VAC )
	Max. Output Power	44W (CC44W700-1050) 31.5W (CC30W350-700) 22.5W (CC21W150-500)
	Started Delay Time	≤0.5S (230VAC, any load)
	Current Ripple	±5% (Imax-Imin) / (Imax+Imin)
	PstLM	≤1 (across entire operating window)
	SVM	≤0.4 (across entire operating window)
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	I/P to O/P , 3kVac/1min
	Insulation resistance	>100M ohm @ 500VDC
	Touch current	< 250 μ Ap, I/P to O/P or I/P @230V input per IEC 60598-1:2015+A1:2018
Environment	Ta/Operation Temperature	-20...+40°C (@ CC44W700-1050) -20...+45°C (@ CC30W350-700) -20...+50°C (@ CC21W150-500)
	Ts/Storage Temperature	-40....+85°C

	Tc (Max)/Enclosure Tc point Temperature	85 °C (CC44W700-1050) 80 °C (CC30W350-700) 80 °C (CC21W150-500)
	Humidity operational/storage	10%...65%/10%...85%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in & Independent
	PRI Wiring connection	0.75-1.5□(solid core and stranded 8-10mm) With K33 end cap & built-in type. 0.5-2.5□(solid core and stranded 8-10mm) With R45 loop-through end cap.
	SEC Wiring connection	0.5-1.5□(solid core and stranded 8-10mm)
	Dimension	Independent:137.6*44*25.5mm (L*W*H) Built in:97.8*44*25.5mm(L*W*H)
Standards	Certification	CE/ENEC/RCM/EAC/UKCA
	Safety Standards	EN61347-1:2015,EN61347-2-13:2014/A1:2017,E N62493:2015,AS 61347.2.13:2018,AS/NZS 61347.1:2016 Inc A1
	EMC Standards	EN55015:2019/A11:2019,EN61000-3-2:2019,EN61000-3-3:2013/A1:2019,EN61547:2009
	Performance	EN62384
	Surge	L-N: 2kV 1.2/50us per IEC61000-4-5
Others	RoHS	Complied to 2011/65/EU
	Life Time	100kh @Tc = 70°C, max. failures= 10% (CC44W700-1050) 100kh @Tc = 67°C, max. failures= 10% (CC30W350-700) 100kh @Tc = 60°C, max. failures= 10% (CC21W150-500)
	Warranty	5years , F.R. <10000ppm
	Noise	≤ 20dB @Background noise ≤15dB, distance = 30cm
	<p>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 theEMC with end products again.</p>	

### 2. Connected quantities of different current Breaker

#### CC21W150-500

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current (A)	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B	57	74	85	114	142	@230VAC	15	130us	
TYPE C	57	74	85	114	142				
TYPE D	57	74	85	114	142				

#### CC30W350-700

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current (A)	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B	30	39	48	60	75	@230VAC	20	134us	
TYPE C	40	52	71	80	100				
TYPE D	40	52	71	80	100				

#### CC44W700-1050

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current (A)	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B	21	27	40	42	52	@230VAC	25	132us	
TYPE C	28	36	51	56	70				
TYPE D	28	36	51	56	70				

### 3. Label

**KGP CC21W150-500** Constant Current LED Power Supply

KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

PIN1	PIN2	PIN3	I <sub>rated</sub> [mA]	P <sub>rated</sub> [W]	U <sub>rated</sub> [V]	U <sub>N</sub> /f <sub>N</sub> [V/Hz]	I <sub>N</sub> [A]	t <sub>a</sub> [°C]	t <sub>c</sub> [°C]	λ
OFF	OFF	OFF	150	6.7	20-45	220-240V 50/60Hz	0.06	-20...50	85	0.70C
ON	OFF	OFF	200	9.0	0.07		0.70C			
OFF	ON	OFF	250	11.2	0.09		0.75C			
ON	ON	OFF	300	13.5	0.10		0.80C			
OFF	OFF	ON	350	15.7	0.11		0.85C			
ON	OFF	ON	400	18.0	0.12		0.88C			
OFF	ON	ON	450	20.2	0.14		0.92C			
ON	ON	ON	500	22.5	0.15		0.92C			

Engineer sample

PRI ~

L N

SEC ---  
U<sub>out</sub>=55V  
LED Only

EL

OFF-ON

1 2 3

05

CE ENEC SELV

wirepreparation

3mm wire 0.5-1.5

M M

Made in China

**KGP CC30W350-700** Constant Current LED Power Supply

KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

PIN1	PIN2	PIN3	I <sub>rated</sub> [mA]	P <sub>rated</sub> [W]	U <sub>rated</sub> [V]	U <sub>N</sub> /f <sub>N</sub> [V/Hz]	I <sub>N</sub> [A]	t <sub>a</sub> [°C]	t <sub>c</sub> [°C]	λ
OFF	OFF	OFF	350	15.7	220-240V 50/60Hz	15-45	0.11	-20...45	80	0.92C
ON	OFF	OFF	400	18.0			0.12			0.92C
OFF	ON	OFF	450	20.2			0.13			0.95
ON	ON	OFF	500	22.5			0.14			0.95
OFF	OFF	ON	550	24.7			0.15			0.95
ON	OFF	ON	600	27.0			0.16			0.95
OFF	ON	ON	650	29.2			0.17			0.95
ON	ON	ON	700	31.5			0.18			0.95

Engineer sample

PRI ~

L N

SEC ---  
U<sub>out</sub>=55V  
LED Only

EL

OFF-ON

1 2 3

05

CE ENEC SELV

wirepreparation

3mm wire 0.5-1.5

M M

Made in China

**KGP CC44W700-1050** Constant Current LED Power Supply

KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

PIN1	PIN2	PIN3	I <sub>rated</sub> [mA]	P <sub>rated</sub> [W]	U <sub>rated</sub> [V]	U <sub>N</sub> /f <sub>N</sub> [V/Hz]	I <sub>N</sub> [A]	t <sub>a</sub> [°C]	t <sub>c</sub> [°C]	λ
OFF	OFF	OFF	700	31.5	220-240V 50/60Hz	15-45	0.18	-20...45	85	0.95
ON	OFF	OFF	750	33.7			0.19			0.95
OFF	ON	OFF	800	36.0			0.20			0.95
ON	ON	OFF	850	38.2			0.21			0.95
OFF	OFF	ON	900	37.8			0.22			0.95
ON	OFF	ON	950	39.9			0.23			0.95
OFF	ON	ON	1000	42.0			0.24			0.95
ON	ON	ON	1050	44.1			0.25			0.95

Engineer sample

PRI ~

L N

SEC ---  
U<sub>out</sub>=55V  
LED Only

EL

OFF-ON

1 2 3

05

CE ENEC SELV

wirepreparation

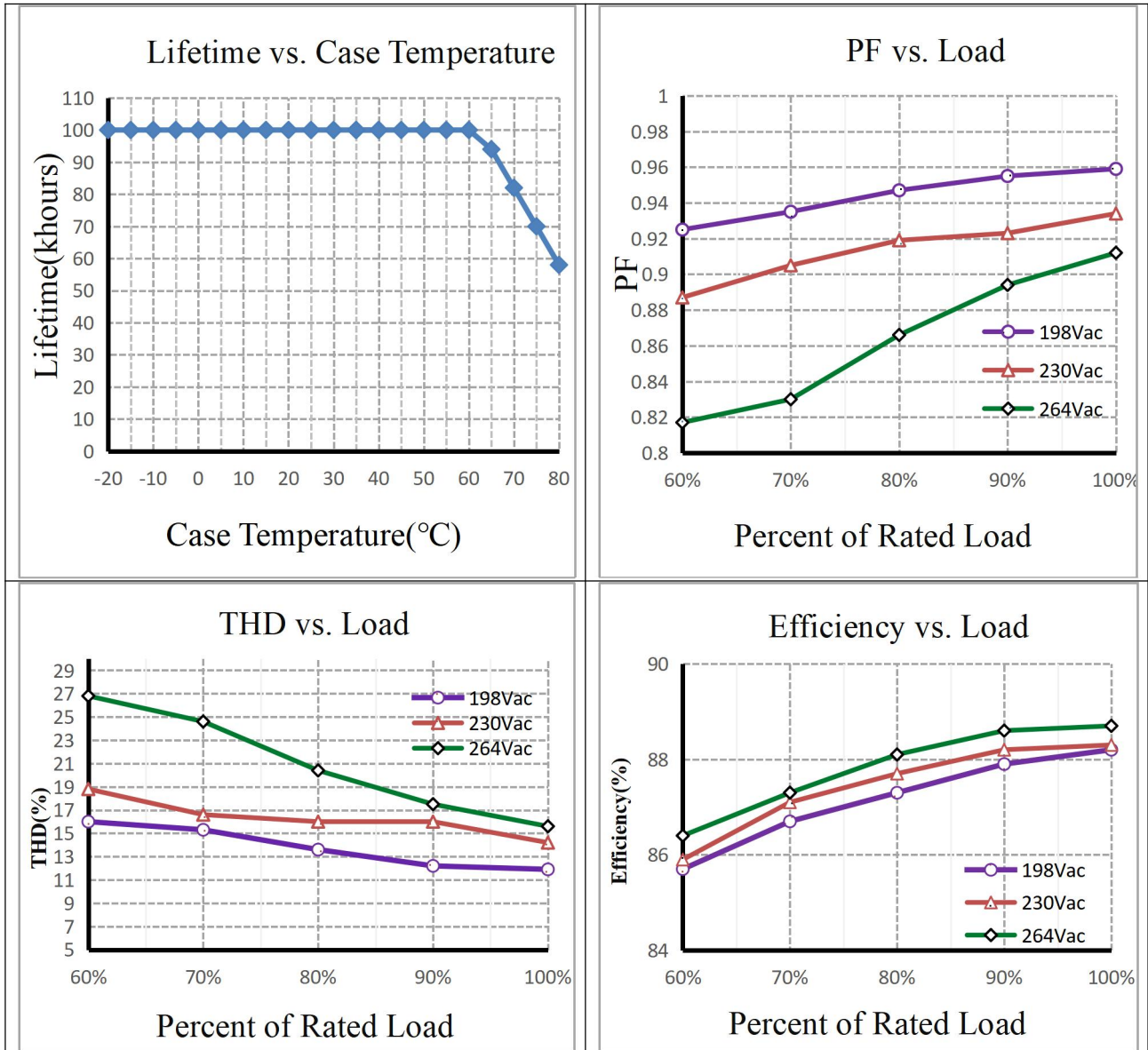
3mm wire 0.5-1.5

M M

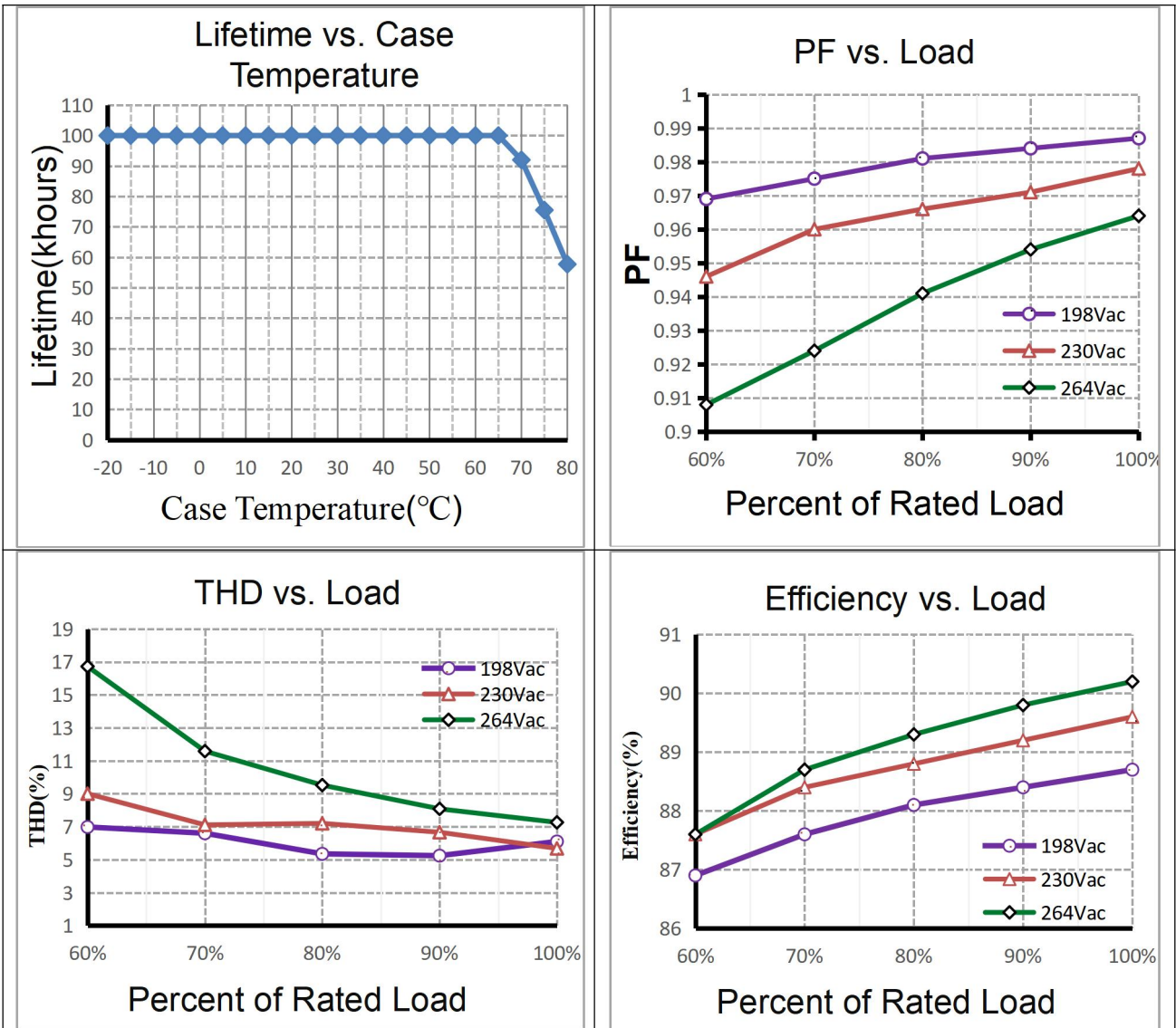
Made in China

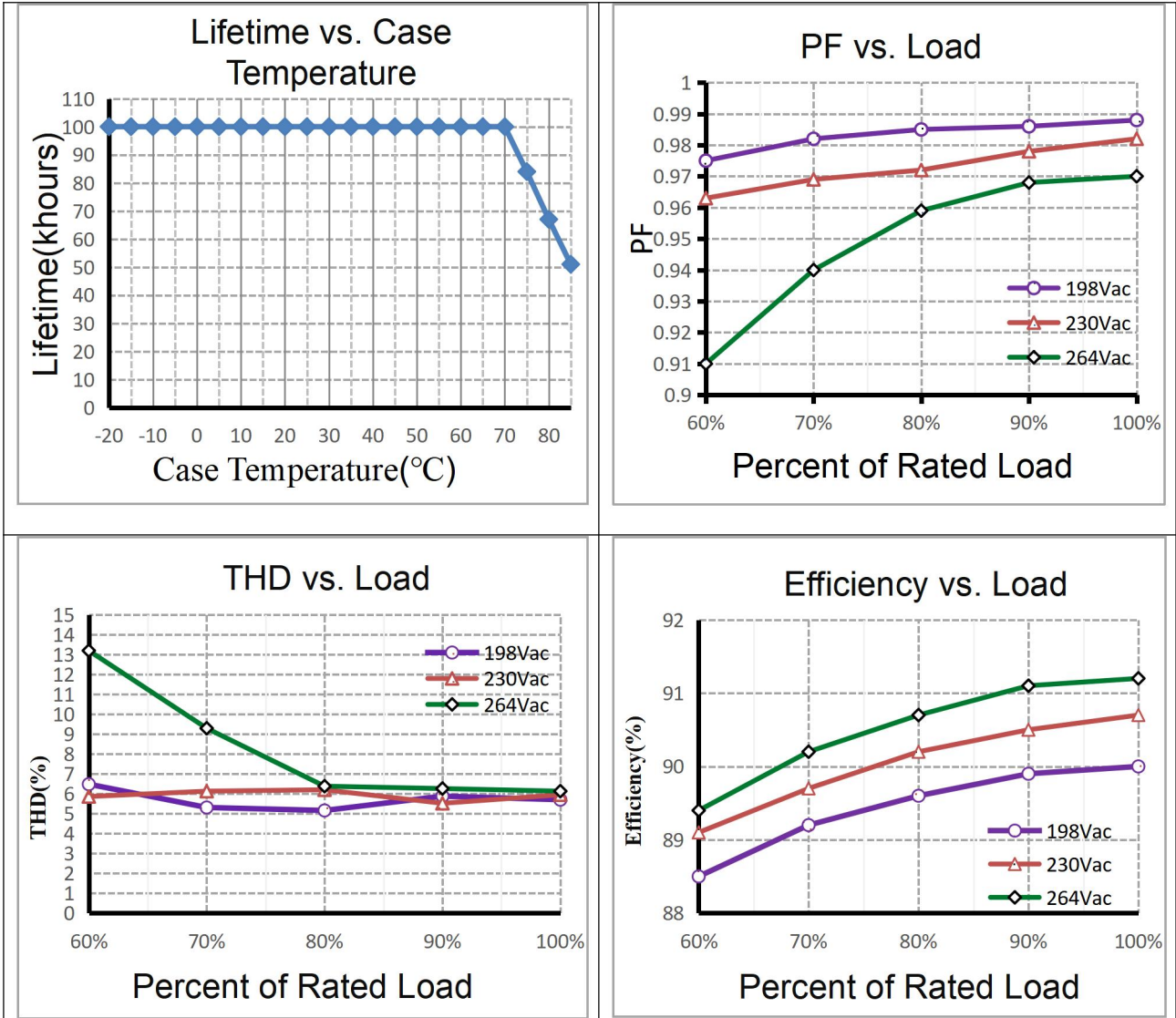
## 4. Electrical values

### CC21W150-500



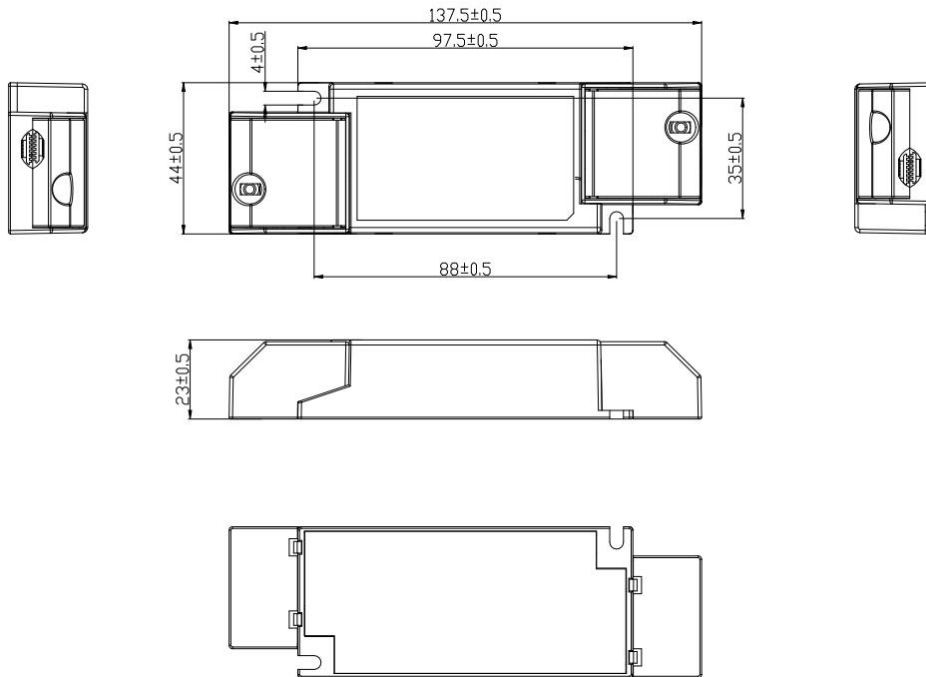
CC30W350-700



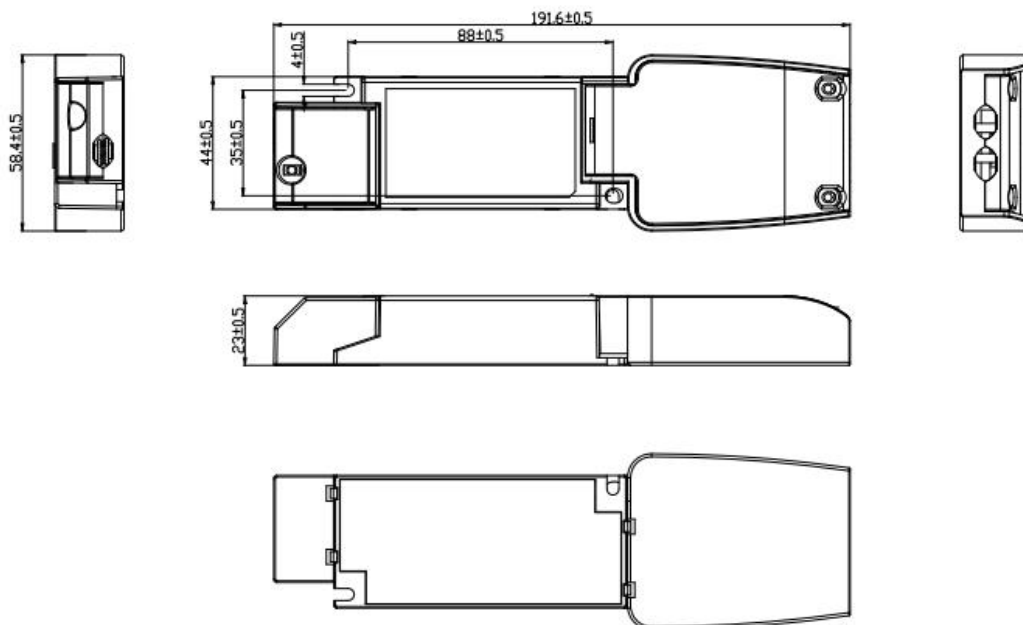


### 5. Dimensions (Unit: mm)

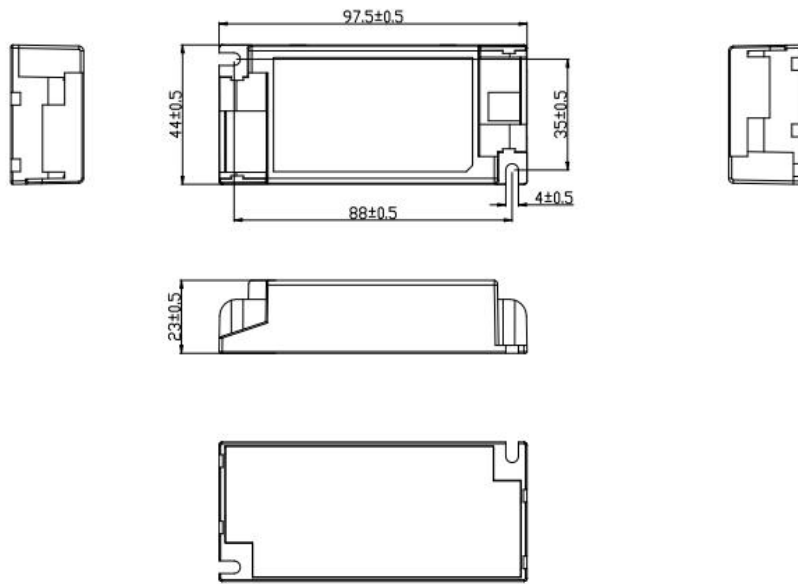
#### Independent version (K33 input and output end caps)



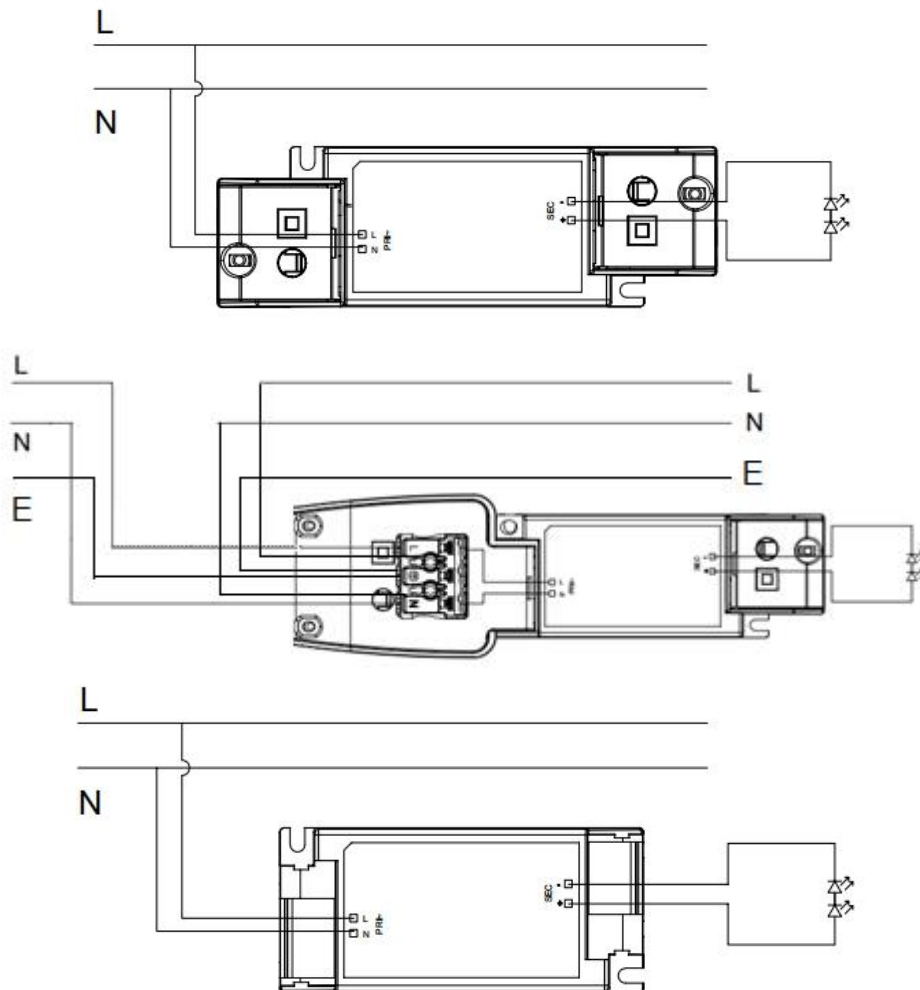
#### Independent version with R45 mains loop-through (L+N+E) and K33 output end cap



### Built-in version



### 6. Wiring Diagram



### 7. Packing information

#### Independent version

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	CC21W150-500	457*250*220	80	0.088	7.04	7.74
	CC30W350-700		80	0.09	7.2	7.9
	CC44W700-1050		80	0.105	8.4	9.1

#### Independent version with mains loop-through (L+N+E)

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	CC21W150-500	457*250*220	80	0.123	9.84	10.54
	CC30W350-700		80	0.125	10	10.7
	CC44W700-1050		80	0.14	11.2	11.9

#### Built-in version

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	CC21W150-500	457*250*220	110	0.068	7.48	8.18
	CC30W350-700		110	0.070	7.7	8.4
	CC44W700-1050		110	0.085	9.35	10.05

### 8. End caps for the independent version with and without mains loopthrough:

Type	Big end cap (mains loopthrough)		Small end cap, no mains loopthrough	
	Input end caps	Output end caps	Input end caps	Output end caps
	R45	K33	K33	K33

### 9. 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 3 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.)

## 10. REVISION HISTORY

DATE	VER	REMARK
2024-10-18	V1.0	Initial release.