


Constant Current Dimmable Driver
Model: CC12W100-450CG Triac


Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
CC12W100-450CG Triac	100mA	≤0.09A	≤15W	0.8-4.2W	0.74C	≥67%	8-42V	≤59V
	150mA			1.2-6.3W	0.86C	≥74%	8-42V	
	200mA			1.6-8.4W	0.90C	≥78%	8-42V	
	250mA			2.0-10.5W		≥80%	8-42V	
	300mA			2.4-12W		≥81%	8-40V	
	350mA			2.8-11.9W		≥81%	8-34V	
	400mA			3.2-12W		≥81%	8-30V	
	450mA			3.6-12.15W		≥81%	8-27V	

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	Phase dimming
	Dimming Range	1%-100%
	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	≤0.09A (230VAC, full load)
	Input Power	≤15W(230VAC, full load)
	Power Factor	≥0.9(230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤2W @230VAC
Output	Output Voltage	8-42V
	Output Current:	100/150/200/250/300/350/400/450MA
	No Load Voltage	59VDC Max
	Max. Output Power:	12W
	Efficiency	≥81% (230VAC,full load)
	LF Current Ripple (< 120 Hz)	±5% (Imax-Imin)/(Imax+Imin) MAX
	Current Accuracy	±5%
	Started Delay Time	≤2S (230VAC,full load)

	PstLM	≤1
	SVM	≤0.4
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	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	-20...50°C
	Ts/Storage Temperature	-40...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	0.75-1.5□
	SEC Wire preparation	0.5-1.5□
	Dimension	Independent:122*41*23mm (L*W*H) Built in:88*41*23mm(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
	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 IEC 61547:2023
	Performance	EN62384:2020
	Surge	L-N/2KV
	RoHS	complied to 2011/65/EU
	Others	
	Life Time	50000h Ta /Tc
	Warranty	5years , F.R. < 10000ppm
	Noise	≤22dB@Background noise ≤18dB , Interval≥15cm

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.

2. Trailing Edge Dimmer list approved by KGP

Manufacturer	Model	Q'ty of parallel connection
Yikai	EU-200P	T.B.D
Berker	286710	T.B.D
Schneider	SBD200LED	T.B.D
Schneider	SBD315RC	T.B.D
Eltako	DTD55L-230V-wg	T.B.D
ETMAN	ETM321PV2	T.B.D
EUCHIPS	Walldin 106	T.B.D
EHMANN	LED-Dimmer T37-08	T.B.D
JISIM	JP1101	T.B.D
LTECH	E6P-TD1	T.B.D
EUCHIPS	WALLDIM108W	T.B.D

Leading & Trailing Edge Dimmer list only on request -/ or confirmed by KGP Electronics

3. Output Current Setting

Output Current	Dial 1	Dial 2	Dial 3
100mA	-	-	-
150mA	ON	-	-
200mA	-	ON	-
250mA	ON	ON	-
300mA	-	-	ON
350mA	ON	-	ON
400mA	-	ON	ON
450mA	ON	ON	ON

4. 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		43	56	69	86	107	@230VAC	14	10us
TYPE C		69	89	110	137	171			
TYPE D		110	143	176	219	274			

5. Label

KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid

LED Dimmable Driver
CC12W100-450CG Triac
Constant Current Type

SEC ■ +
SEC ■ -

$U_N=220-240VAC$ 50/60Hz $\lambda:\geq 0.92C$ $I_n\leq 0.09A$ 8mm

$U_{out}=\text{Max.}59VDC$ For LED modules only

1	2	3	I_o (mA)	P_o (W)	U_{out} (V)
-	-	-	100	4.2	8-42
ON	-	-	150	6.3	
-	ON	-	200	8.4	
ON	ON	-	250	10.5	8-40
-	-	ON	300	12	
ON	-	ON	350	11.9	8-34
-	ON	ON	400	12	8-30
ON	ON	ON	450	12.15	8-27

$t_a=-20\dots 50^\circ C$ $t_c=90^\circ C$

R,C

CE

N ■ PRI
L ■

8mm

PRI 0.75-1.5 □
SEC 0.5-1.5 □

SELV

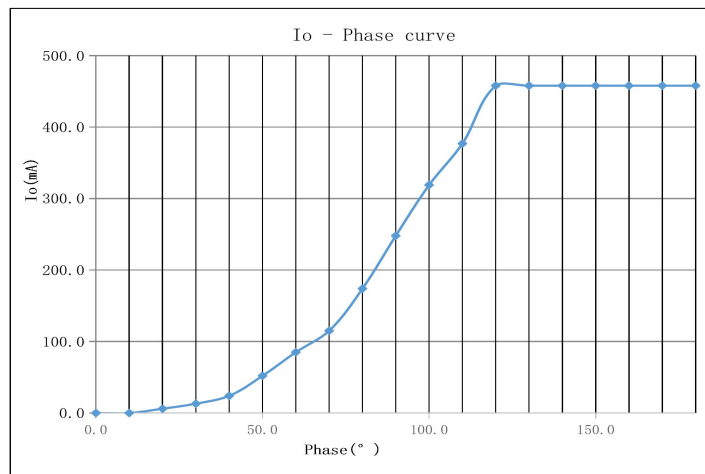
⊕

1 2 3

OFF ON NO

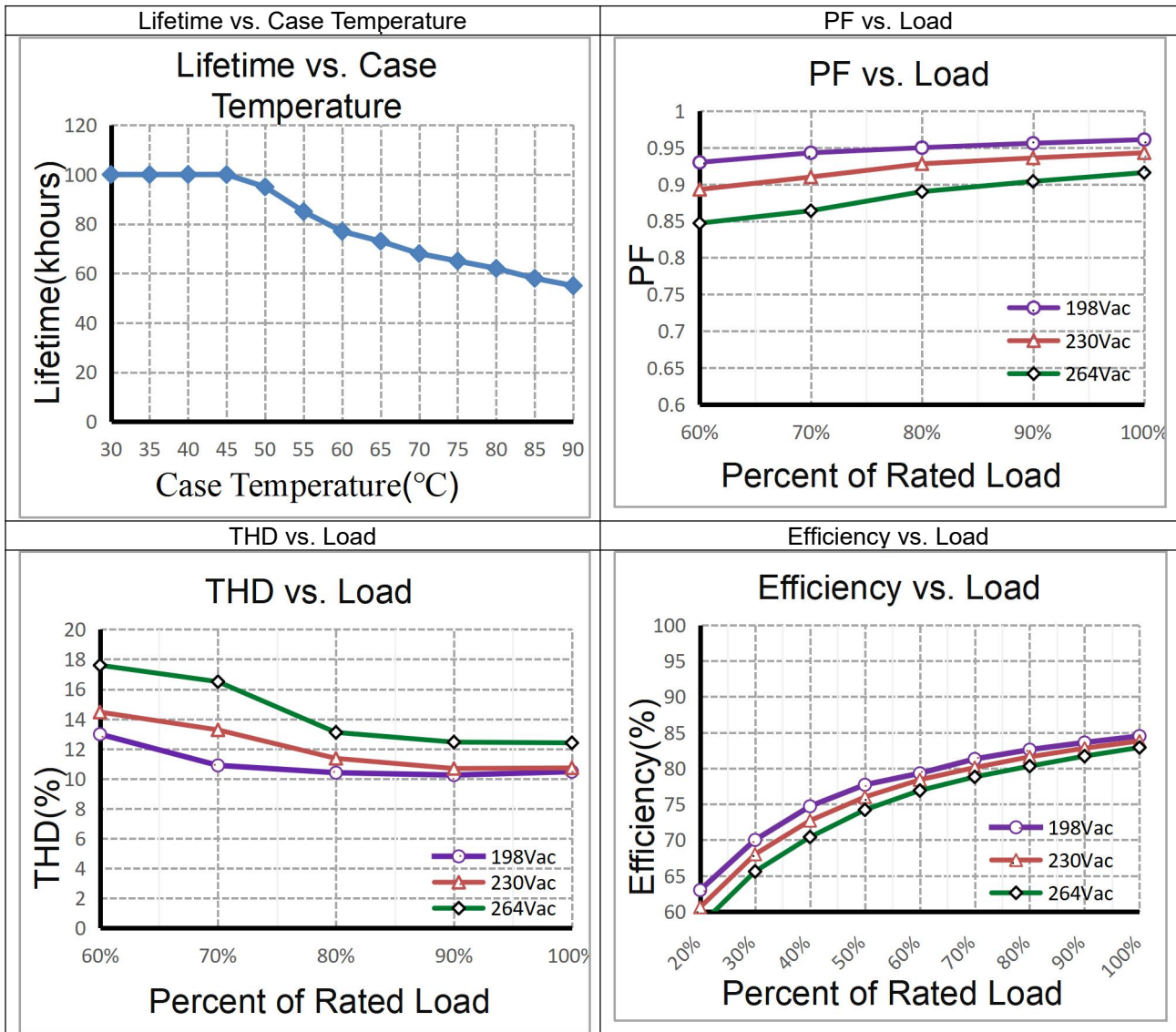
⊕

6. Dimming curve



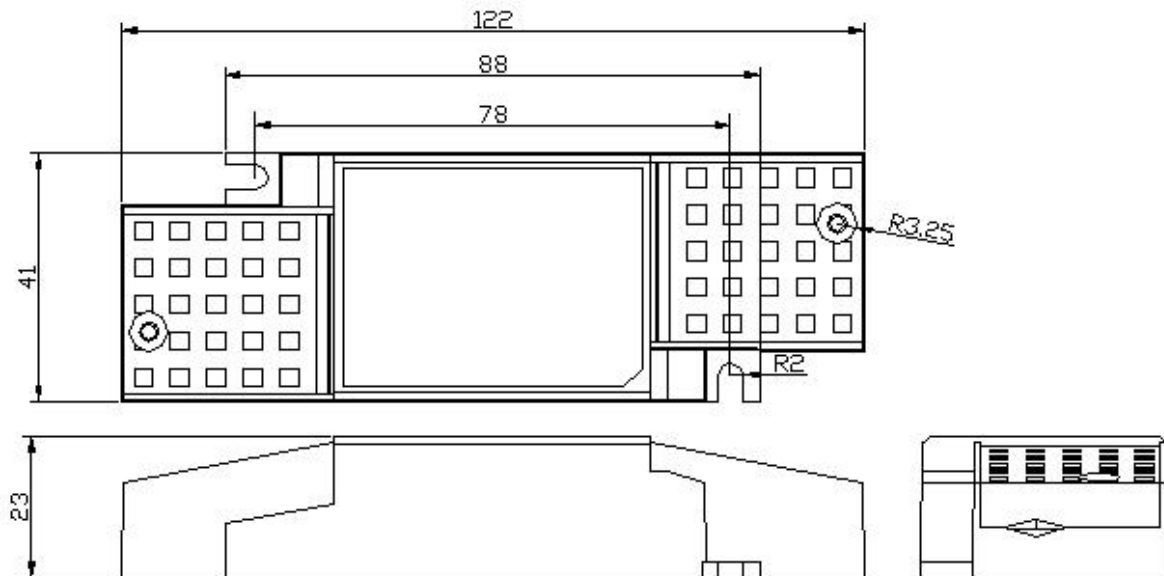
(Specific dimmer)

7. Electrical values

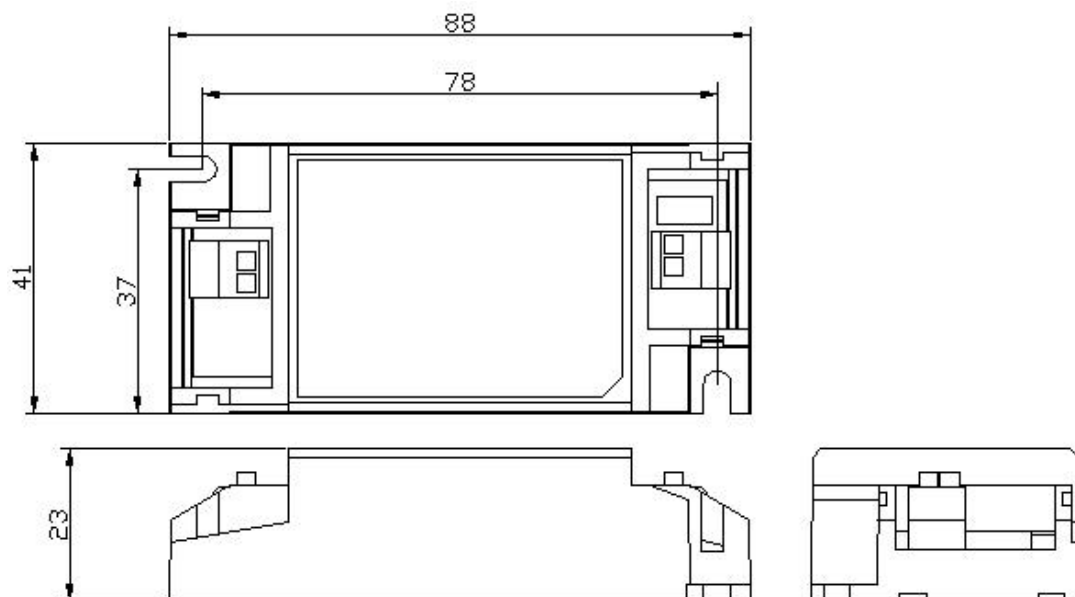


8. Dimension (Unit: mm)

Independent type:

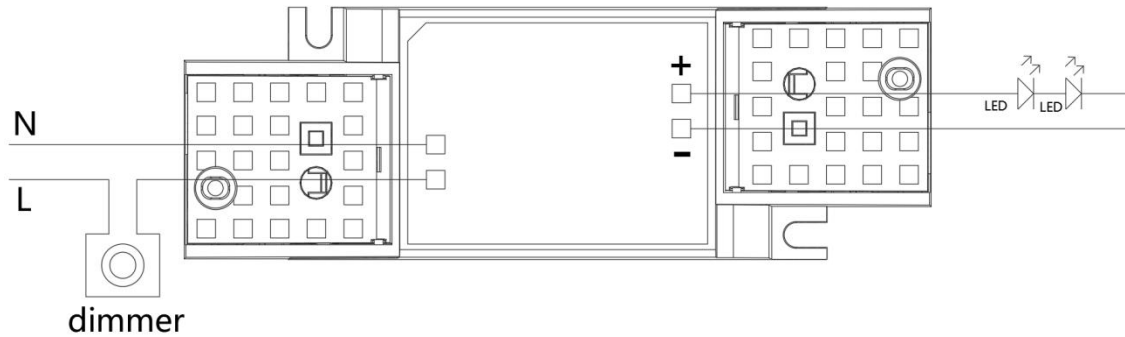


Built in type:

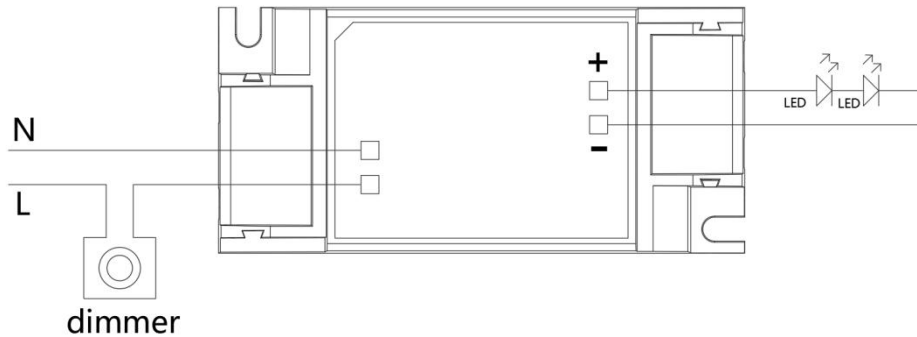


9. Wiring Diagram

Independent type:



Built in type:



10. Packing information

Independent type:

Packing way	Model	Colour	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	CC21W100-450CG Triac	White	447*240*200	80	0.078	6.24	6.94

Built in type:

Packing way	Model	Colour	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	CC21W100-450CG Triac	White	447*240*200	80	0.056	4.48	5.18

***The details shall be subject to the shipping package.**

11. 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

12. REVISION HISTORY

DATE	VER	REMARK
2024-09-29	V1.0	Initial release.