



Constant Current & Dimmable Driver
Model: CC15WXXXG1 Triac



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
CC15W300G1 Triac	300mA	≤0.1A	≤20W	9.6W-14.4W	0.92	83%	32-48V	≤59V
CC15W350G1 Triac	350mA	≤0.1A	≤20W	9.45-14.7W	0.92	83%	27-42V	≤59V
CC15W400G1 Triac	400mA	≤0.1A	≤20W	10.8-14.8W	0.92	83%	27-37V	≤52V
CC15W500G1 Triac	500mA	≤0.1A	≤20W	9.5-15W	0.92	80.5%	19-30V	≤45V
CC15W550G1 Triac	550mA	≤0.11A	≤20W	10.5-15.4W	0.92	78.5%	19-28V	≤45V
CC15W600G1 Triac	600mA	≤0.1A	≤18W	7.8-12.6W	0.92	73.5%	13-21V	≤35V
CC15W700G1 Triac	700mA	≤0.11A	≤20W	9.1-14.7W	0.92	75%	13-21V	≤35V

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	Phase dimming
	Dimming Range	5%-100%
	IP Grade	IP44
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC_stable
	Range of Input Voltage	198-264VAC_stable or 180-280VDC_stable
	Frequency	0/50/60Hz
	Input Current	≤0.11A (230VAC,full load)
	Input Power	≤20W (230VAC,full load)
	Power Factor	≥0.92 (230VAC,full load)
	THD	≤25%(230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
Output	Inrush Current	≤2.04A/10.2us (230VAC, full load)
	Output Voltage	32-48VDC@ 300mA,27-42VDC@ 350mA 27-37VDC@ 450mA,19-30VDC@ 500mA 19-28VDC@ 550mA,13-21VDC@ 600mA 13-21VDC@ 700mA
	Current Accuracy	±5%@350-700mA, ±10%@250mA
	Max. Output Power	15.4W
	Started Delay Time	≤1S (230VAC,full load)

	Efficiency	$\geq 73.5\%$ (230VAC, full load)	
	Current Ripple(< 120 Hz)	$\pm 5\%$ $(I_{max}-I_{min}) / (I_{max}+I_{min})$	
	PstLM	≤ 1	
	SVM	≤ 0.4	
Protection	Short Circuit Protection	Auto Recovery	
	Overload Protection	Auto Recovery	
	No-load Protection	Auto Recovery	
	Insulation voltage	I/P to O/P , 3.75KVac/5mA/1min	
	Insulation resistance	$> 100M \text{ ohm @ } 500VDC$	
	Leakage current	I/P to O/P $< 0.7mA$	
Environment	Ta/Operation Temperature	$-20 \dots +50^{\circ}C$	
	Ts/Storage Temperature	$-25 \dots +85^{\circ}C$	
	Tc/Enclosure Temperature	$85^{\circ}C$	
	Humidity	10%....90%RH	
	Atmosphere	86-108KPa	
Construction	Connection Method	Direct Lead	
	Installation	Build-in	
	PRI Wire preparation	0.5-1.5 [□]	
	SEC Wire preparation	0.3-1.5 [□]	
	Dimension	68.2X36.1X23mm (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	
		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
	Surge		L-N/ 1KV
	Others		RoHS
REACH		EU Regulation (EC) No 1907/2006	
Life Time		50000h @ Ta/Tc	
Warranty		5years , F.R. < 10000ppm	
Noise		$\leq 28dB @ \text{Background noise } \leq 18dB$, Interval $\geq 15cm$	

Remark:

- All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.
- LED Driver is a component of the luminaires. Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
- It is recommended that the control mode is back dimming for better effect.
- Do not install upside down.


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
JISIM	JP1101	T.B.D

3. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current(A)	Time (µs)
	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	294	382	471	588	735	@230VAC	2.04	10.2	
TYPE C	471	612	753	941	1176				
TYPE D	753	979	1205	1506	1882				

4. Label (For example)





KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid



LED Dimmable Driver
CC15W700G1 Triac


SEC $\overset{+}{\circ}$
BK \circ



UN=220-240VAC
IN=0.11A max.
fN=50/60Hz
PF≥0.92C
ta=50°C

Vout=13-21VDC
Iout=700mA const.
Pout=14.7W max.
Uout=35VDC
For LED modules only
Engineering Sample

tc=90°C ●








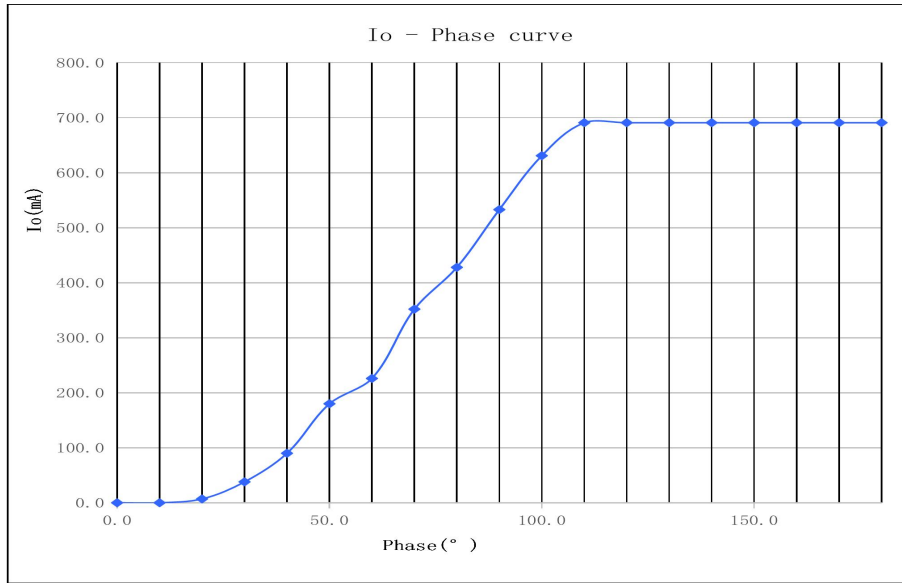



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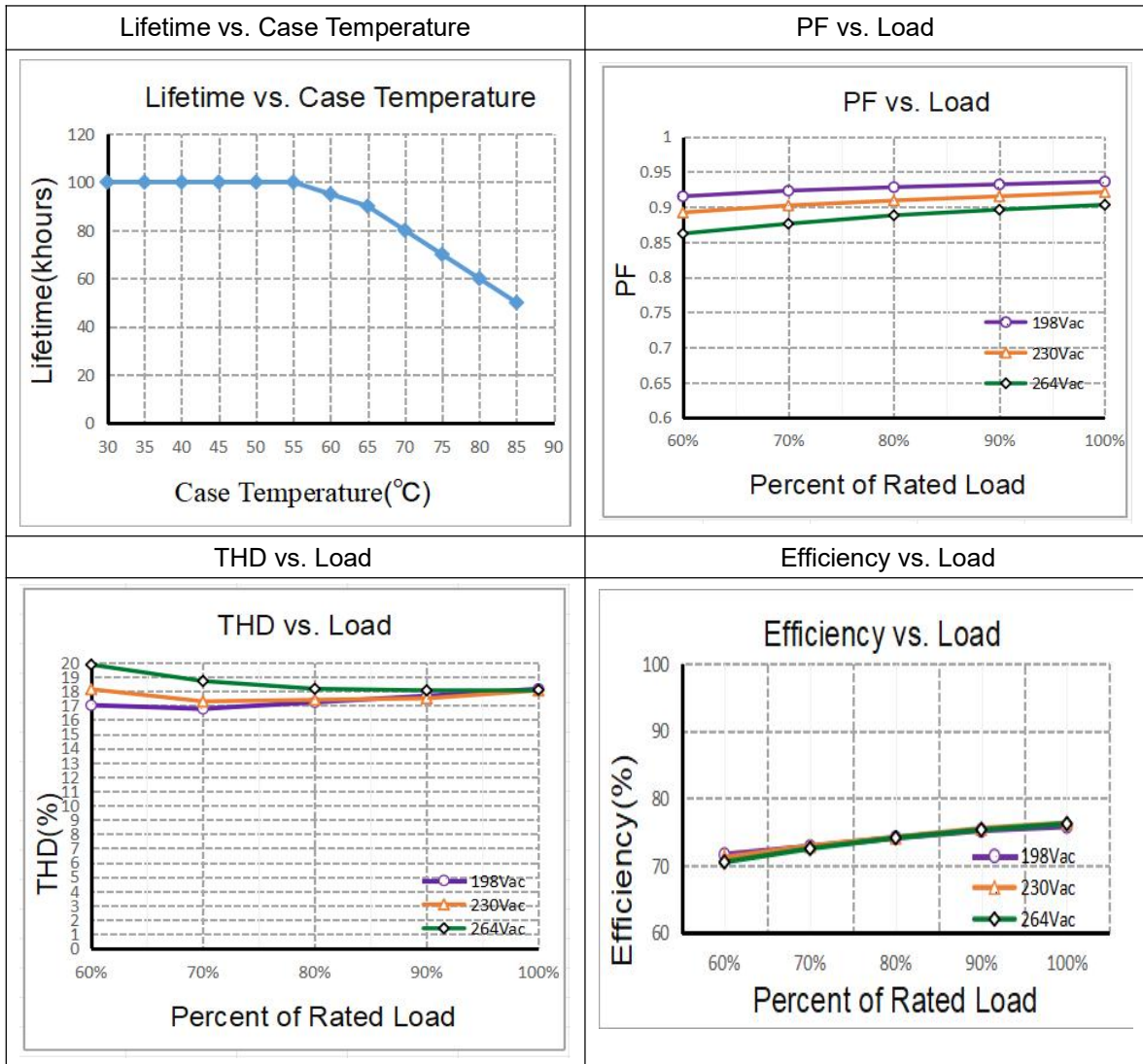
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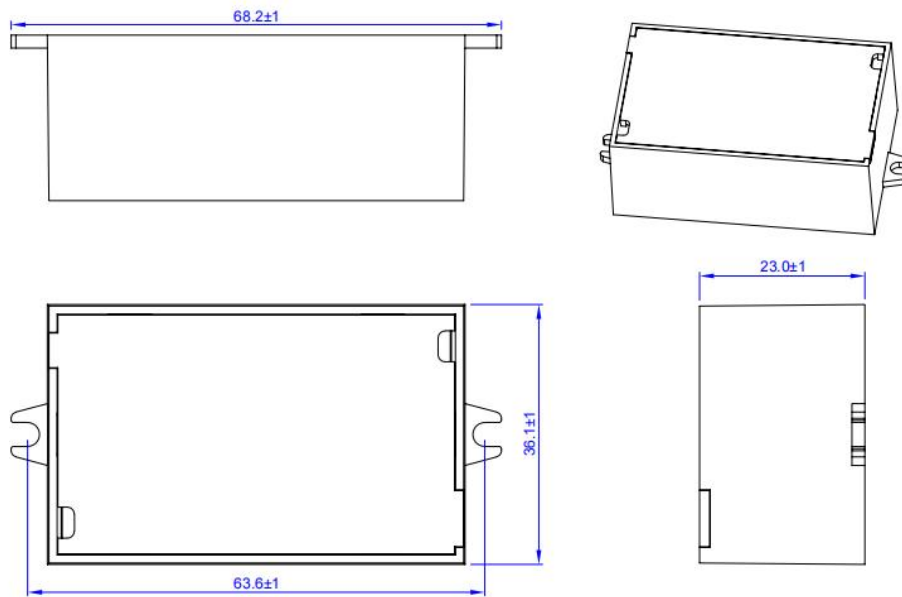
5. Dimming curve



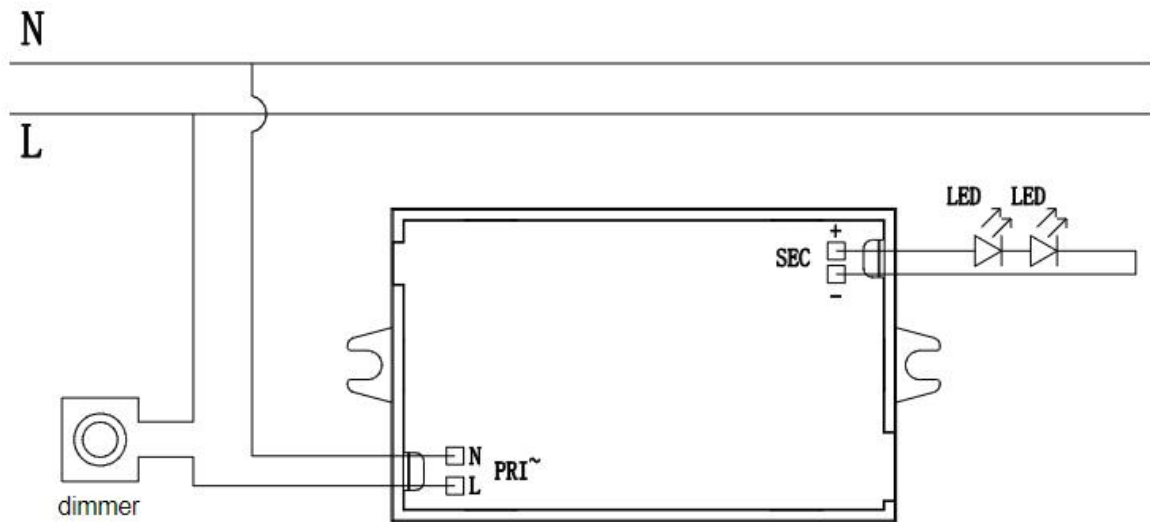
6. Electrical values



7. Dimension (Unit: mm)



8. Wiring Diagram



- Wiring type and cross section
- Input: Brown-blue wire, 150mm ,0.5mm²
- Output: Red-black wire, 140mm ,0.3mm²

9. 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	CC15WXXXG1 Triac	420*280*180	180	0.087	15.66	16.06

10. 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.

11. 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

12. REVISION HISTORY

DATE	REV.	REMARK
2025-01-03	V1.0	Initial release.