



Constant Current Dimmable Driver

Model: CC10WXXXG1 Triac



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
CC10W250G1 Triac	250mA	0.07A	≤12.8W	6.75-10W	0.92	80%	27-40V	59V
CC10W350G1 Triac	350mA	0.07A	≤12.8W	6.65-9.8W	0.92	78%	19-28V	50V
CC10W450G1 Triac	450mA	0.06A	≤12W	5.85-9W	0.92	78%	13-20V	30V
CC10W500G1 Triac	500mA	0.07A	≤12.8W	6.5-10W	0.92	78%	13-20V	30V
CC10W550G1 Triac	550mA	0.06A	≤10W	4.4-7.15W	0.9	73%	8-13V	22V
CC10W700G1 Triac	700mA	0.07A	≤12W	5.6W-9.1W	0.92	70%	8-13V	22V

* 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	≤0.06A (230VAC,full load)
	Input Power	≤12.8W (230VAC,full load)
	Power Factor	≥0.9 (230VAC,full load)
	THD	≤20%(230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
Output	Inrush Current	≤3.52A/13.2us (230VAC, full load)
	Output Voltage	27-40VDC@ 250mA,19-28VDC@ 350mA 13-20VDC@450mA,13-20VDC@500mA, 8-13VDC@ 550mA,8-13VDC@ 700mA
	Current Accuracy	±8%@350-500mA, ±10%@180mA-300mA
	Max. Output Power	10W
	Started Delay Time	≤1S (230VAC,full load)
Efficiency	≥70% (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 ohm @ 500VDC
	Leakage current	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-20....+50°C
	Ts/Storage Temperature	-25....+85°C
	Tc/Enclosure Temperature	85 °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	58.2X36X21.5mm (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	EN62384: 2020
	Surge	L-N/ 1KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h @ Ta/Tc
	Warranty	5years , F.R. < 10000ppm
	Noise	$\leq 28\text{dB}$ @Background noise $\leq 18\text{dB}$, Interval $\geq 15\text{cm}$

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. It is recommended that the control mode is back dimming for better effect.
4. 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	170	222	273	341	426	@230VAC	3.52	13.2	
TYPE C	273	355	436	545	682				
TYPE D	436	567	698	873	1091				

4. Label (For example)

KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid

LED Dimmable Driver
CC10W700G1 Triac

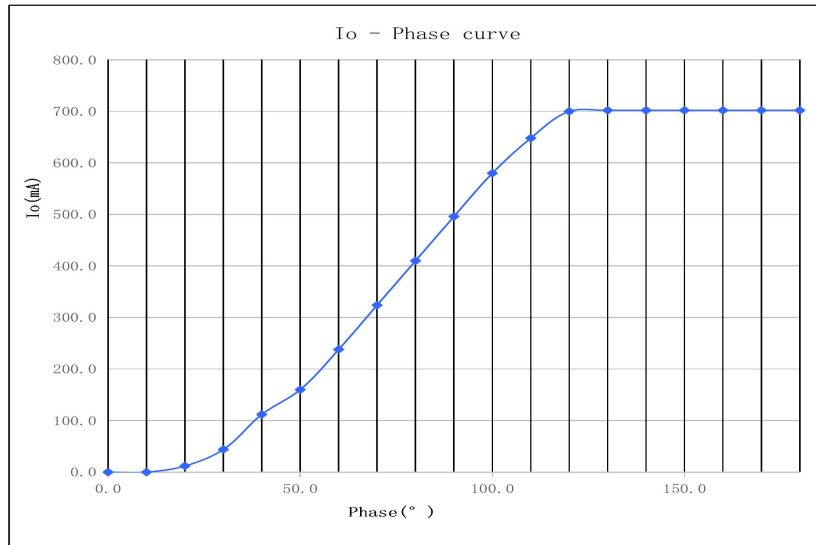
SEC RD +
BK I ○

$U_N=220-240VAC$ $V_{out}=8-13VDC$
 $I_N=0.07A \text{ max.}$ $I_{out}=700mA \text{ const.}$
 $f_N=50/60Hz$ $P_{out}=9.1W \text{ max.}$
 $PF \geq 0.92C$ $U_{out}=22VDC$
 $t_a=50^\circ C$ Engineering sample
 For LED modules only

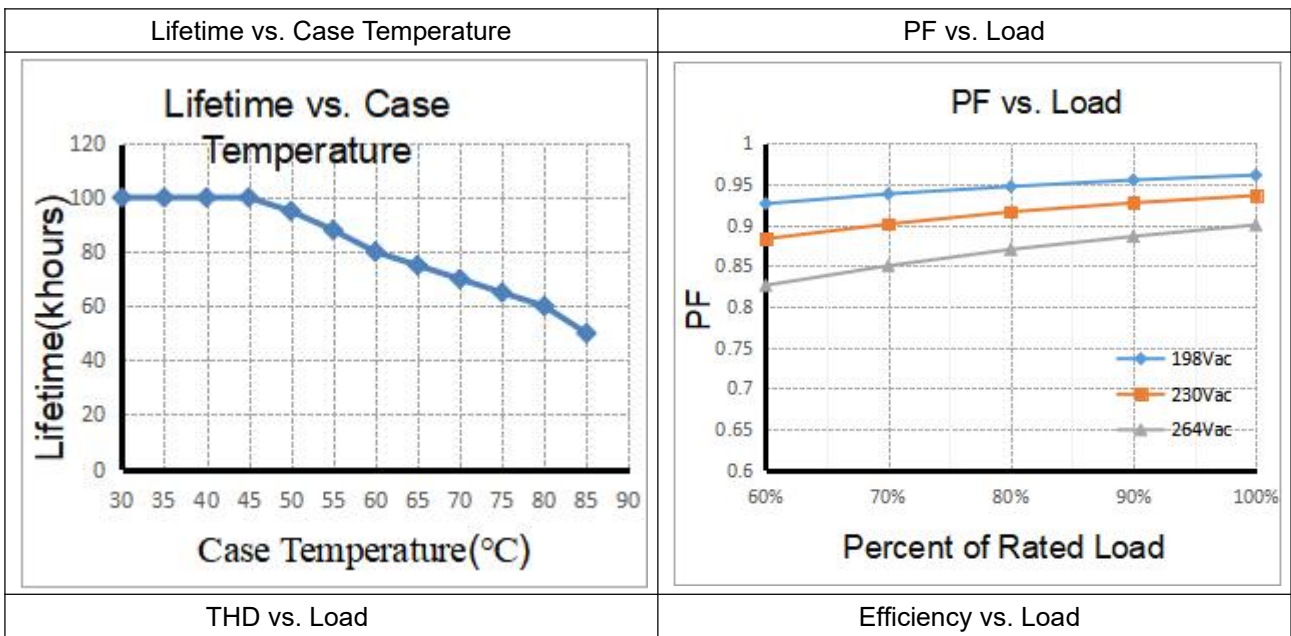
tc=85°C

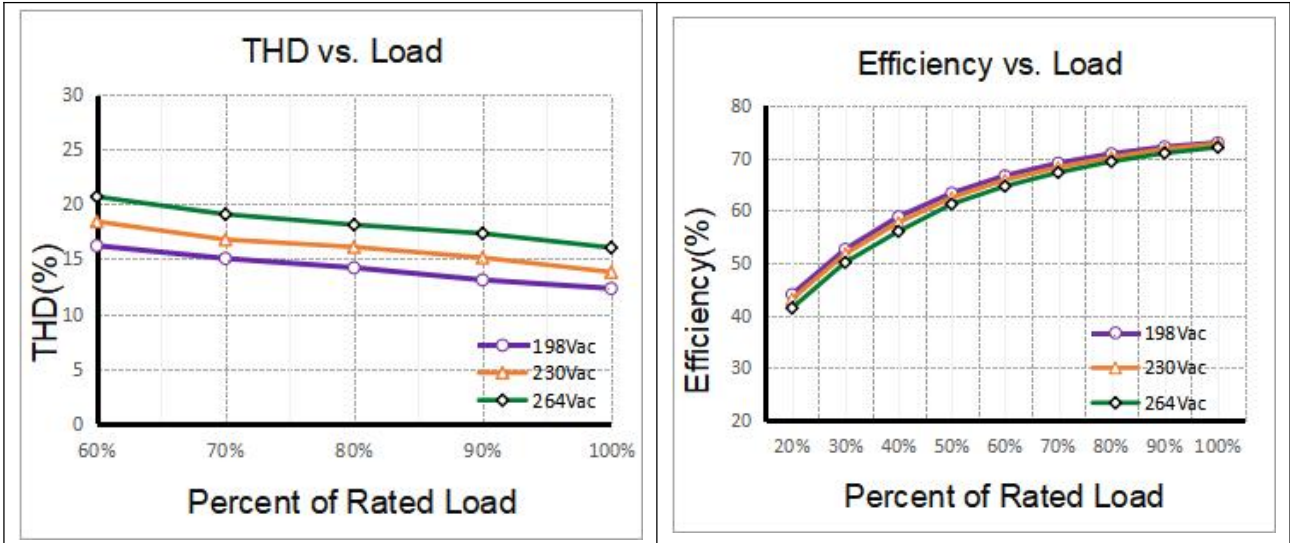
○ N BU PRI SELV ○ L BN

5. Dimming curve

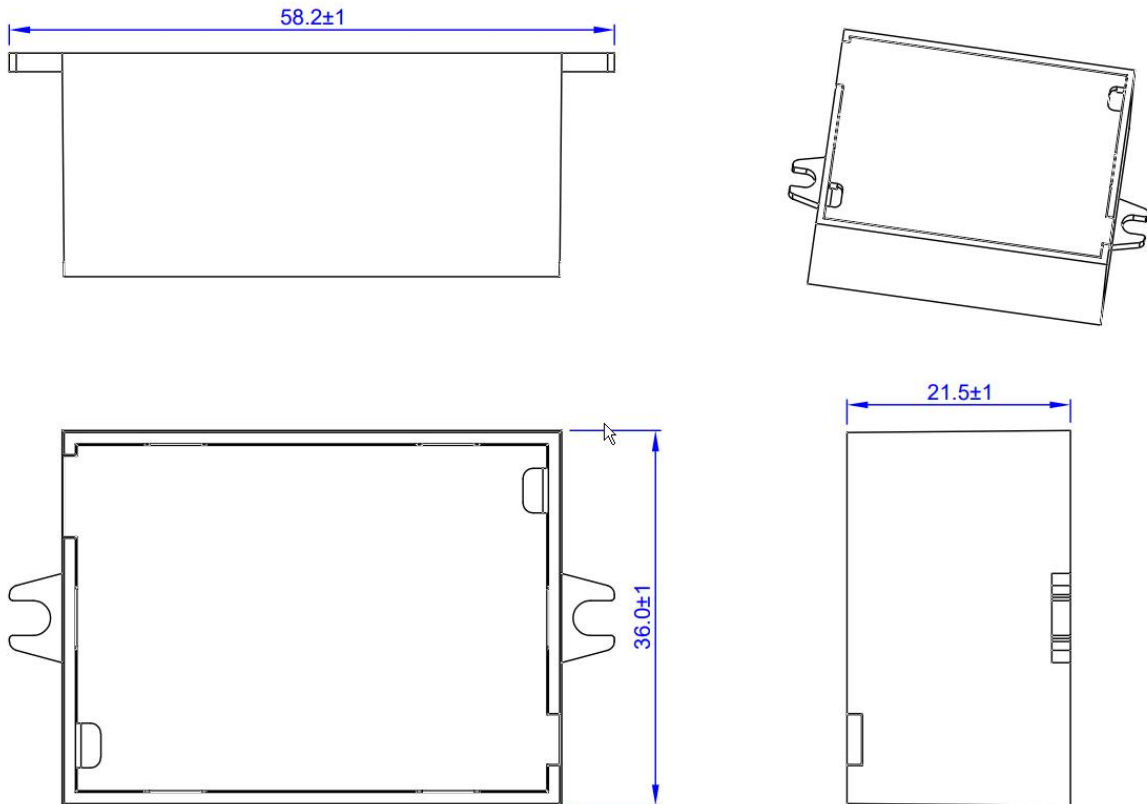


6. Electrical values

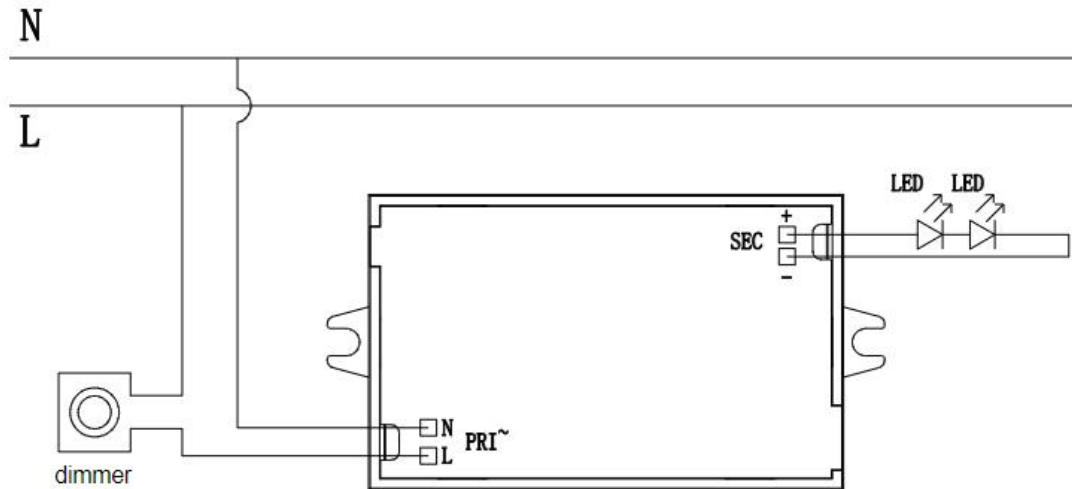




7. Dimension (Unit: mm)



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	CC10WXXXG1 Triac	410*270*160	180	0.068	12.24	12.64

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.