



**Constant Current Dimmable Driver**

**Model: CC20W300-650CG Triac**



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
CC20W300-650CG Triac	300mA	≤0.13A	≤25.5W	2.4-12.6W	0.92C	≥82%	8-42V	≤59V
	350mA			2.8-14.7W	0.92C		8-42V	
	400mA			3.2-16.8W	0.92C		8-42V	
	450mA			3.6-18.9W	0.94C		8-42V	
	500mA			4.0-20W	0.95		8-40V	
	550mA			4.4-19.8W	0.95		8-36V	
	600mA			4.8-19.8W	0.95		8-33V	
	650mA			5.2-19.5W	0.95		8-30V	

\* 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	≤0.15A (230VAC, full load)
	Input Power	≤25.5W(230VAC, full load)
	Power Factor	≥0.95(230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤2W @230VAC
Output	Output Voltage	8-42V
	Output Current:	300/350/400/450/500/550/600/650MA
	No Load Voltage	59VDC Max
	Efficiency	≥82% (230VAC,full load)
	Max. Output Power:	20W
	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
300mA	-	-	-
350mA	ON	-	-
400mA	-	ON	-
450mA	ON	ON	-
500mA	-	-	ON
550mA	ON	-	ON
600mA	-	ON	ON
650mA	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 <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
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** LED Dimmable Driver +  
-

KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid

**CC20W300-650CG Triac** +  
-



Constant Current Type

U<sub>N</sub>=220-240VAC 50/60Hz λ: ≥0.95 I<sub>n</sub> ≤0.13A 8mm

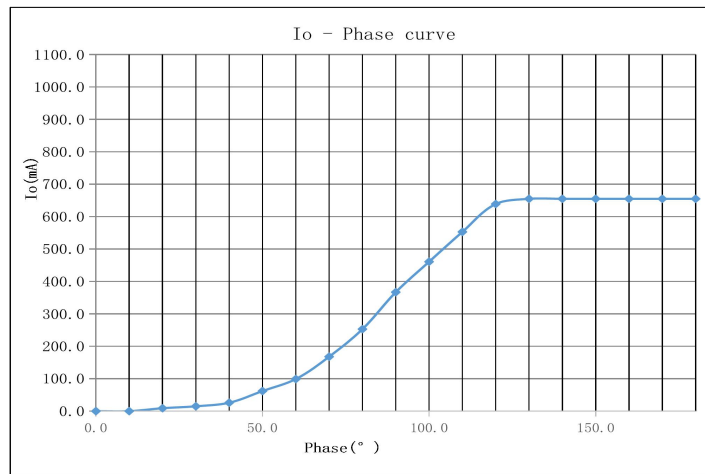
U<sub>out</sub>=Max.59VDC For LED modules only PRI 0.75-1.5  
SEC 0.5-1.5

1	2	3	I <sub>o</sub> (mA)	P <sub>o</sub> (W)	U <sub>out</sub> (V)
-	-	-	300	12.6	8-42
ON	-	-	350	14.7	
-	ON	-	400	16.8	8-40
ON	ON	-	450	18.9	
-	-	ON	500	20	8-36
ON	-	ON	550	19.8	
-	ON	ON	600	19.8	8-33
ON	ON	ON	650	19.5	

ta=-20...50°C tc=90°C

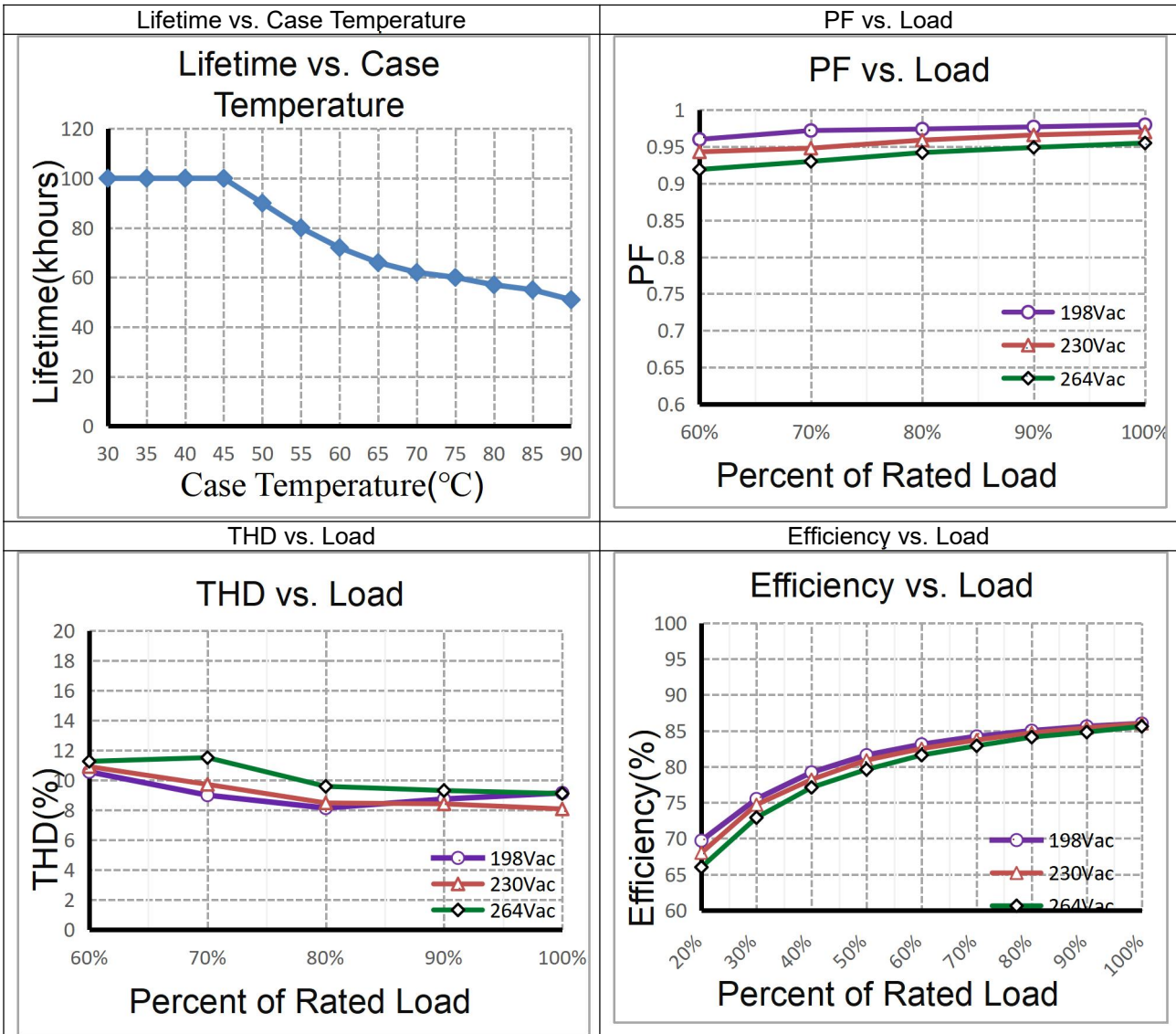



### 6. Dimming curve



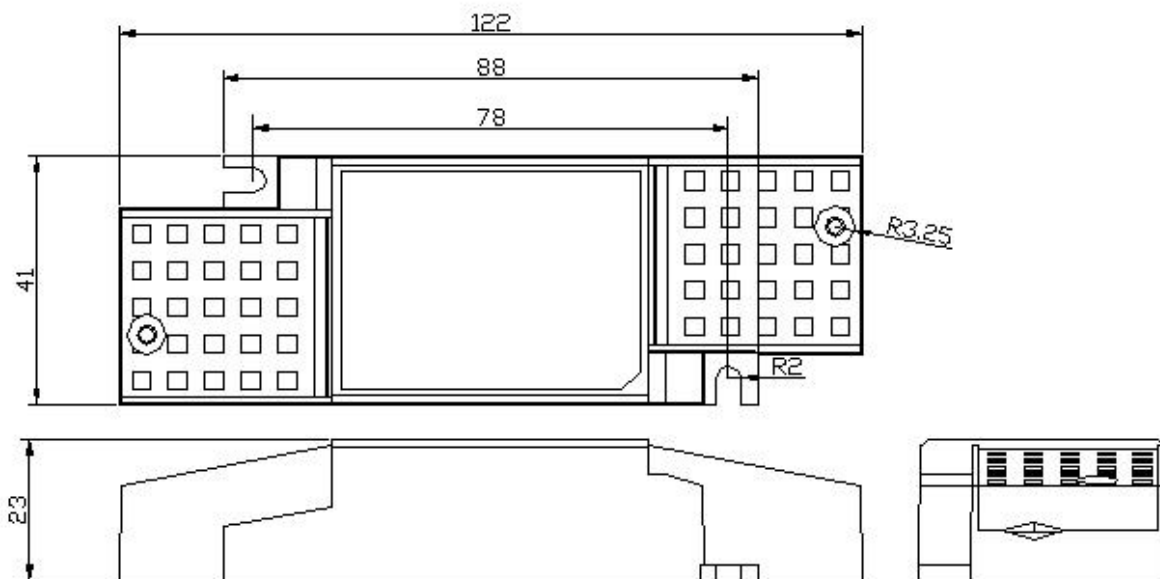
(Specific dimmer)

### 7. Electrical values

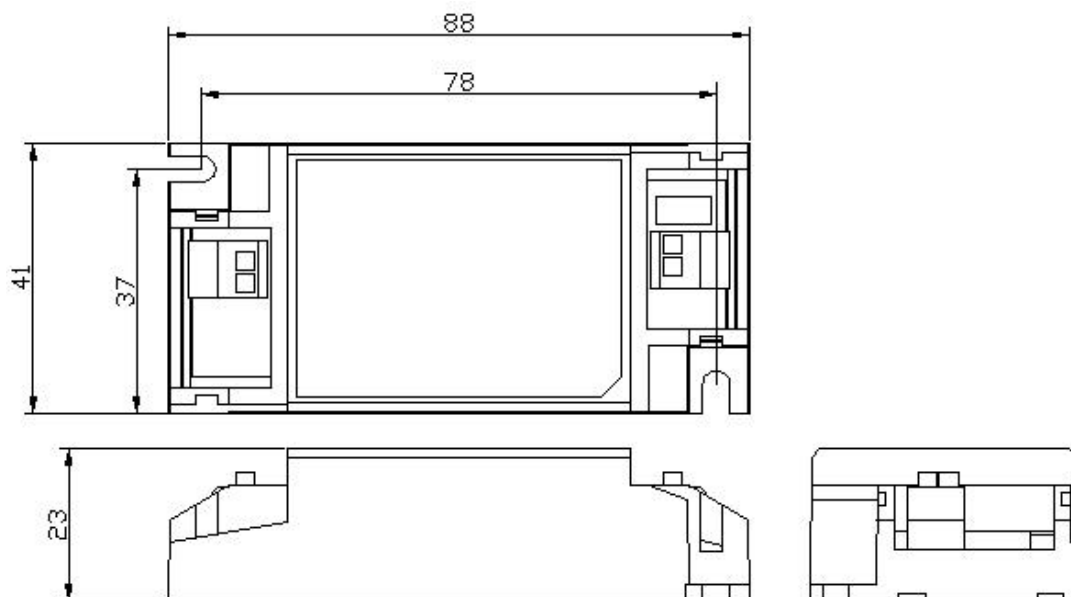


### 8. Dimension (Unit: mm)

Independent type:

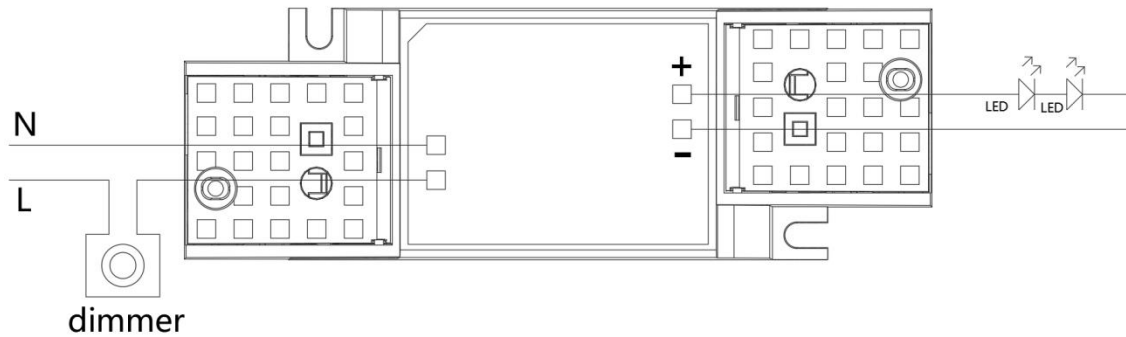


Built in type:

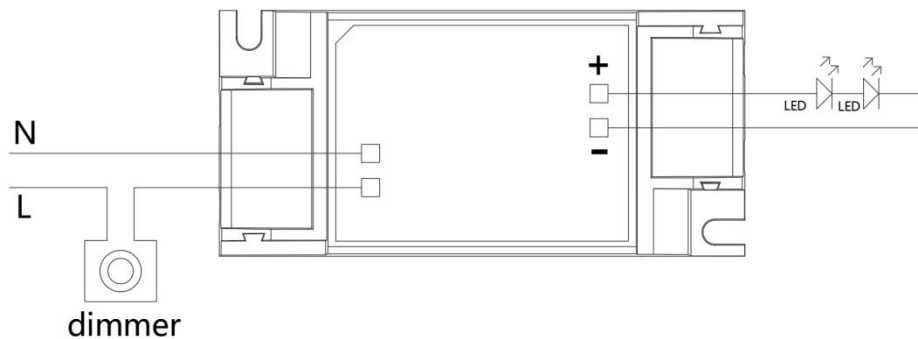


### 9. Wiring Diagram

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	CC20W300-650CG Triac	White	447*240*200	80	0.102	8.16	8.86

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	CC20W300-650CG Triac	White	447*240*200	80	0.08	6.4	7.1

**\*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.