

**Constant Current Dimmable Driver**

**Model:CCXXWXXX-XXXCG DALI**



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
CC14W200-350CG DALI	200mA	0.06A	10.7W	5.6-8W	0.80	82%	28-40V	55V
	250mA	0.07A	13.0W	7.0-10.0W	0.80	83%		
	300mA	0.09A	15.5W	8.4-12.0W	0.85	83%		
	350mA	0.10A	17.6W	9.8-14W	0.90	84%		
CC20W350-500CG DALI	350mA	0.10A	17.6W	9.8-14W	0.85	84%		
	400mA	0.11A	20.0W	11.2-16W	0.90	84%		
	450mA	0.13A	22.5W	12.6-18W	0.92	85%		
	500mA	0.14A	25.0W	14-20W	0.92	85%		
CC32W500-800CG DALI	500mA	0.14A	25.0W	14-20W	0.90	84%		
	600mA	0.17A	30.0W	16.8-24W	0.92	85%		
	700mA	0.19A	34.2W	19.6-28W	0.92	86%		
	800mA	0.21A	39.0W	22.4-32W	0.95	86%		
CC40W850-1000CG DALI	850mA	0.23A	41.0W	23.8-34W	0.92	86%		
	900mA	0.24A	43.5W	25.2-36W	0.92	87%		
	950mA	0.25A	45.5W	26.6-38W	0.95	87%		
	1000mA	0.26A	48.0W	28-40W	0.95	87%		

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

### 1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI 2
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC or 230-280VDC
	Range of Input Voltage	198-264VAC
	Frequency	50/60Hz
	Input Current	≤0.26A(230VAC, full load)
	Input Power	≤48W(230VAC, full load)
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15%(230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC (Dim to off)

Output	Max. Output Power	40W
	Current Ripple (<120Hz)	$\pm 5\%$ $(I_{max}-I_{min})/(I_{max}+I_{min})$
	PstLM	$\leq 1$
	SVM	$\leq 0.4$
	Current Accuracy	$\pm 5\%$
	Started Delay Time	$\leq 0.5S(230VAC,full\ load)$
Control Method	PUSH dimming terminal	PUSH dimming terminal (Max. lead wire length: 20m,same port of DALI)
	DALI function	DALI dimming (Max. lead wire length: 300m) logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 1%-100% , Dim to off .
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	< 250 $\mu$ A, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-20...+50°C
	Ts/Storage Temperature	-40...+85°C
	Tc/Enclosure Temperature	75°C@(CC14W200-350CG ,CC20W350-500CG) 85°C@(CC32W500-800CG ,CC40W850-1000CG)
	Humidity	10% 90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Build-in & Independent
	PRI Wire preparation	0.75-1.5□
	SEC Wire preparation	0.5-0.75□
	Dimension	Independent:137.6*44*25.5mm (L*W*H) Built in:97.8*44*25.5mm(L*W*H)
Standards	Certification	CE ENEC SAA
	Safety Standards	EN61347-1:2015/A1:2021,EN61347-2-13:2014/A1:2017,EN62384:2006/A1:2009,AS6134 7.2.13:2018,AS/NZS61347.1:2016 IncA1
	EMC Standards	EN IEC 55015:2019/A1:2020,EN IEC 61000-3-2:2019,EN61000-3-3:2013/A1:2019,EN61547:2009
	Performance	EN62384
	Surge	L-N/2KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h Ta /Tc
	Warranty	5years , F.R. < 10000ppm
	Noise	$\leq 24dB$ @Background noise $\leq 18dB$ , Interval $\geq 15cm$

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. Connected quantities of different current Breaker**
**CC14W200-350CG DALI**

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		60	78	96	120	150	@230VAC	10	216us
TYPE C		96	125	154	192	240			
TYPE D		154	200	246	307	384			

**CC20W350-500CG DALI**

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		40	52	64	80	100	@230VAC	15	256us
TYPE C		64	83	102	128	160			
TYPE D		102	133	164	205	256			

**CC32W500-800CG DALI**

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		30	39	48	60	75	@230VAC	20	440us
TYPE C		48	62	77	96	120			
TYPE D		77	100	123	154	192			

**CC42W850-1000CG DALI**

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		27	35	44	55	68	@230VAC	22	300us
TYPE C		44	57	70	87	109			
TYPE D		70	91	112	140	175			

### 3. Label

**KGP CC14W200-350CG DALI**  
Constant Current LED Dimmable Driver

KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

SEC = Uout=55V LED Only

OFF-ON

PIN1	PIN2	In rated (mA)	Rated (V)	Ureg (V)	U <sub>v</sub> / f <sub>v</sub>	I <sub>v</sub> (A)	t <sub>a</sub> (°C)	t <sub>c</sub> (°C)	λ
OFF	OFF	200	8	28-40	220-240V 50/60Hz	0.06	-20...+50	75	0.8C
ON	OFF	250	10			0.07			
ON	ON	300	12			0.09			
ON	ON	350	14			0.1			

■ DA ■ N ■ L ■ PRI ~

CE ENEC DALI SELV UK CA

9mm PRI 0.75-1.5°C SEC 0.5-1.5°C

**KGP CC20W350-500CG DALI**  
Constant Current LED Dimmable Driver

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OFF-ON

PIN1	PIN2	In rated (mA)	Rated (V)	Ureg (V)	U <sub>v</sub> / f <sub>v</sub>	I <sub>v</sub> (A)	t <sub>a</sub> (°C)	t <sub>c</sub> (°C)	λ
OFF	OFF	350	14	28-40	220-240V 50/60Hz	0.1	-20...+50	75	0.85C
ON	OFF	400	16			0.11			0.9C
ON	ON	450	18			0.13			0.92C
ON	ON	500	20			0.14			

■ DA ■ N ■ L ■ PRI ~

CE ENEC DALI SELV UK CA

9mm PRI 0.75-1.5°C SEC 0.5-1.5°C

**KGP CC32W500-800CG DALI**  
Constant Current LED Dimmable Driver

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SEC = Uout=55V LED Only

OFF-ON

PIN1	PIN2	In rated (mA)	Rated (V)	Ureg (V)	U <sub>v</sub> / f <sub>v</sub>	I <sub>v</sub> (A)	t <sub>a</sub> (°C)	t <sub>c</sub> (°C)	λ
OFF	OFF	500	20	28-40	220-240V 50/60Hz	0.14	-20...+50	85	0.9C
ON	OFF	600	24			0.17			0.92C
ON	ON	700	28			0.19			0.95
ON	ON	800	32			0.21			

■ DA ■ N ■ L ■ PRI ~

CE ENEC DALI SELV UK CA

9mm PRI 0.75-1.5°C SEC 0.5-1.5°C

**KGP CC40W850-1000CG DALI**  
Constant Current LED Dimmable Driver

KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

SEC = Uout=55V LED Only

OFF-ON

PIN1	PIN2	In rated (mA)	Rated (V)	Ureg (V)	U <sub>v</sub> / f <sub>v</sub>	I <sub>v</sub> (A)	t <sub>a</sub> (°C)	t <sub>c</sub> (°C)	λ
OFF	OFF	850	34	28-40	220-240V 50/60Hz	0.23	-20...+50	85	0.92C
ON	OFF	900	36			0.24			0.95
ON	ON	950	38			0.25			
ON	ON	1000	40			0.26			

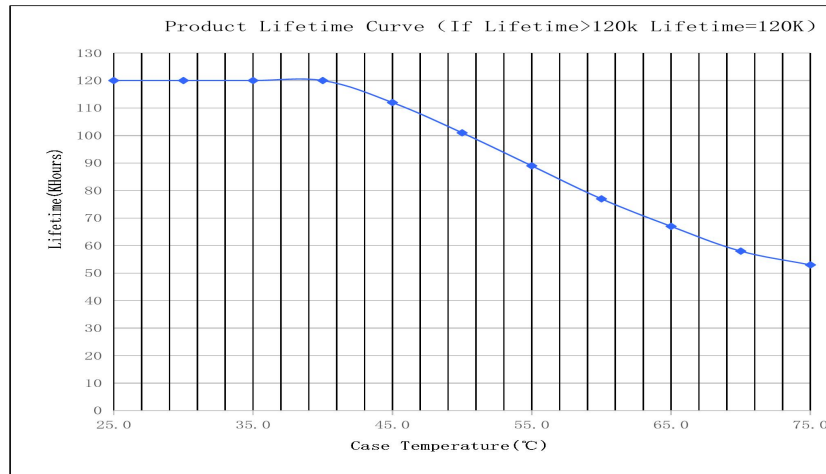
■ DA ■ N ■ L ■ PRI ~

CE ENEC DALI SELV UK CA

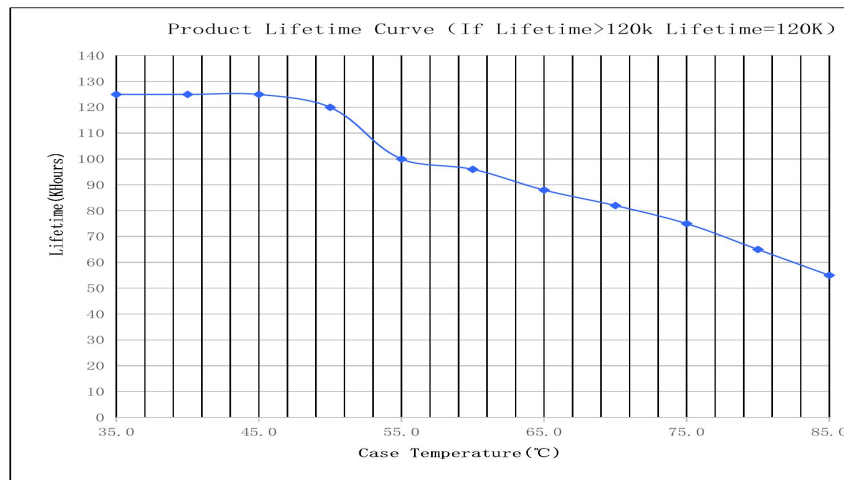
9mm PRI 0.75-1.5°C SEC 0.5-1.5°C

### 4. Lifetime curve

CC14W200-350CG , CC20W350-500CG



CC32W500-800CG , CC40W850-1000CG



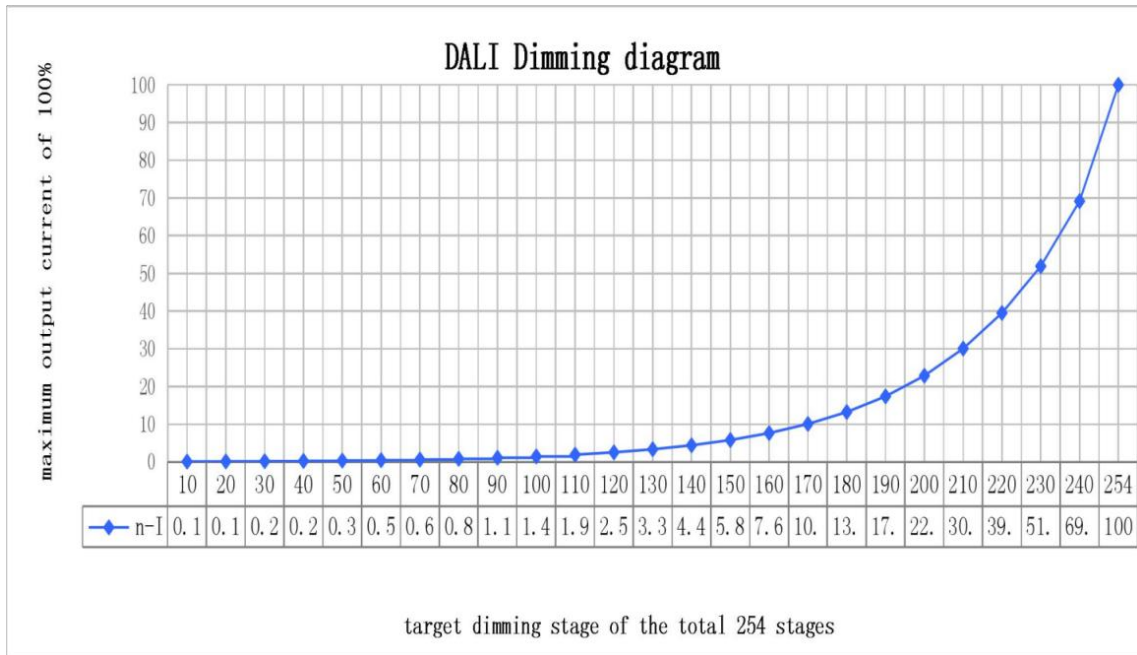
### 5. DALI dimming curve

3.1 formula for DALI dimming.

$$X(n) = 10^{\left\{ \left[ \frac{(n-1)}{253/3} \right] - 1 \right\}}$$

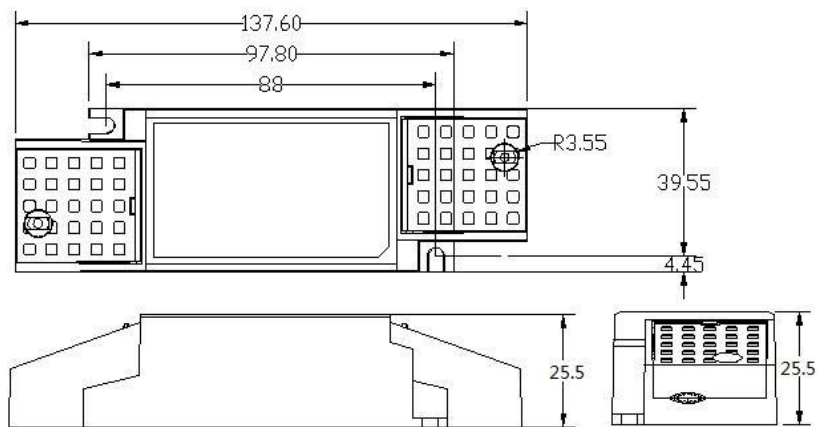
Here, n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current

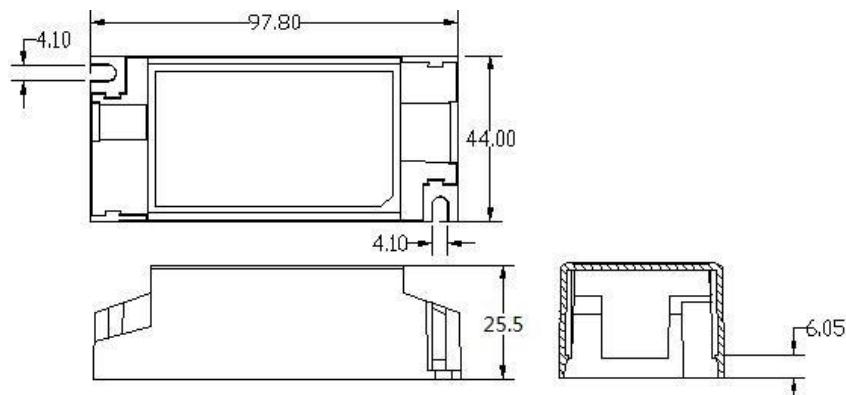


### 6. Dimension (Unit: mm)

Independent type:



Built in type:

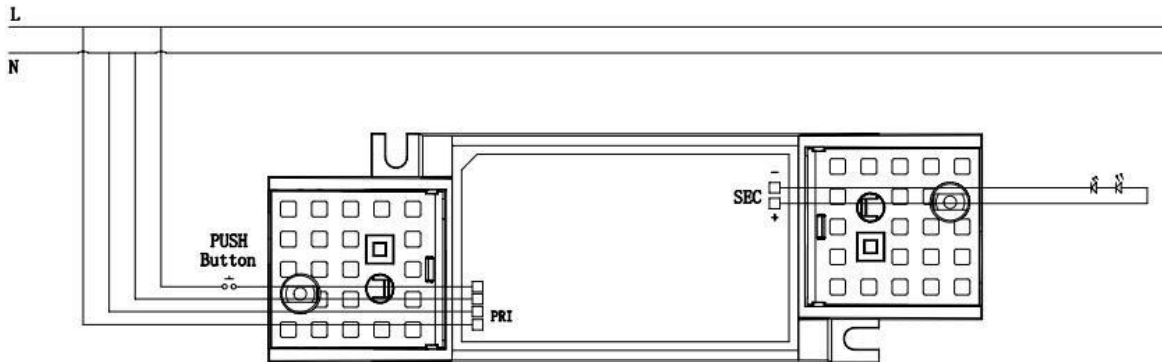


### 7. Packing information

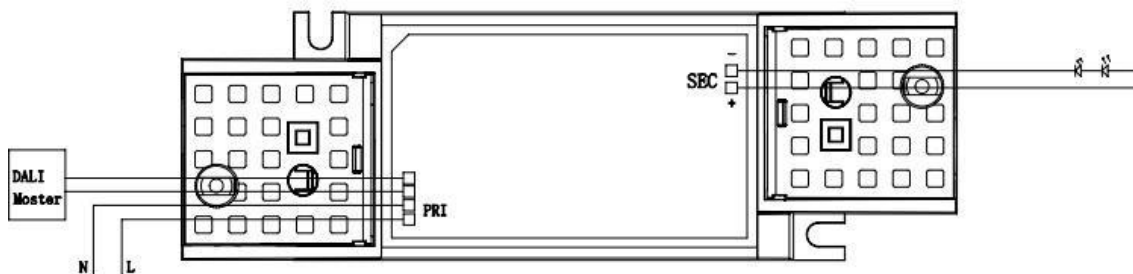
Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
457*250*220	80	0.12	9.6	10.6

### 8. Wiring Diagram

**Fig. A: Push Dimming**



**Fig. B: DALI Dimming**



### 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