



**Constant Voltage Dimmable Driver**

**Model:LV60W24 DALI**



Model	Output Current	Input Current	Input Power	Output Power Range	PF (230V Full Load)	Efficiency (230V Full Load)	Output Voltage
LV60W24 DALI	0-2500mA	0.35A	≤70W	0-60W	≥0.95	≥87%	24V

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

### 1. Parameters

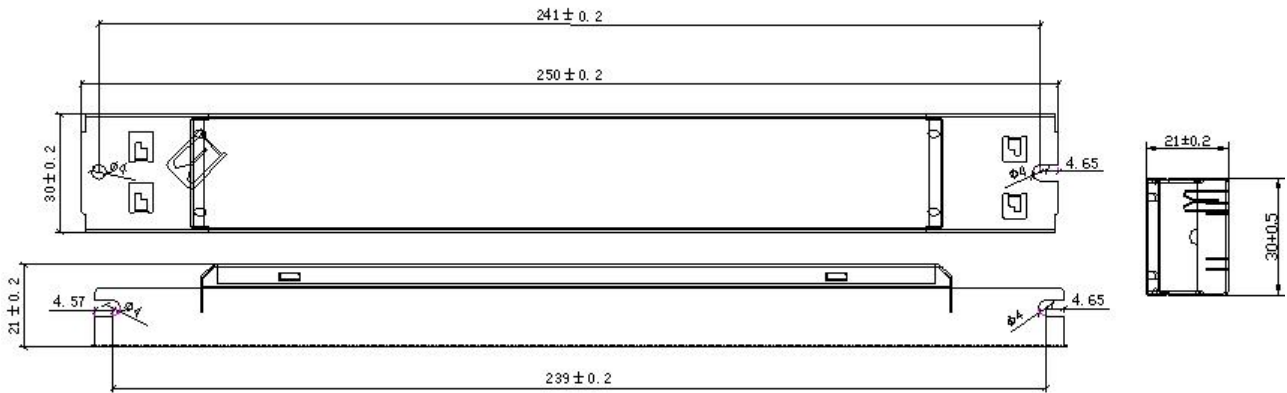
category	Item	Technical Norm
Features	Output Type	Constant Voltage
	Dimming Type	DALI
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class I
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	176-264VAC
	Range of DC Input Voltage	176-280VDC
	Frequency	50/60Hz
	Input Current	≤0.35A
	Input Power	≤70W
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC (DIM to off )
	Inrush Current	≤21A/280us (230VAC, full load)
Connected quantity of 16A Breaker	22pcs/type B ;38pcs/type C @ 230Vac	
Output	Output Voltage	24VDC+/-3%
	No Load Voltage	24.8VDC Max.
	Output Current	0-2500mA
	Max. Output Power	60W
	Efficiency	≥87% (230VAC, full load)
	Voltage Ripple	3% (Vmax-Vmin) / (Vmax+Vmin )
	Current Accuracy	N/A
	Start up Time	≤0.5S (230VAC, full load)

Method	DALI function	DALI dimming (Max. lead wire length: 300m) logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 1%-100% (1KHz)
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S, 1500V 5mA 60S between P-E
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	< 250µA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-25...+50 °C
	Ts/Storage Temperature	-40...+80 °C
	Tc/Enclosure Temperature	80 °C
	Humidity	10%...90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Build-in
	PRI Wire preparation	0.75-1.5 <sup>□</sup>
	SEC Wire preparation	0.75-1.5 <sup>□</sup>
	Dimension	250*30*21mm (L*W*H)
Standards	Certification	ENEC/CE/SAA
	Safety Standards	EN61347-1:2015, EN61347-2-13:2014/A1:2017, EN62493:2015, AS61347.2.13:2018, AS/NZS 61347.1:2016 Inc A1
	EMC Standards	EN55015:2013/A1:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN61547:2009
	Performance	EN62384
	Surge	L-N/1KV (L/N)-PE/2KV
Others	RoHS	2011/65/EU
	Life Time	50000h @Ta / Tc
	Warranty	5years , F.R. < 10000ppm
<p>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.</p>		

### 2. Label

<input type="checkbox"/> N <input type="checkbox"/> ⊕ <input type="checkbox"/> L <b>wire preparation</b> 	<b>KGP</b> KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	<b>LED Dimmable Driver</b> <b>LV60W24 DALI</b> Input Voltage:220-240Vac Input Frequency:50/60Hz Power Factor(λ):≥0.95 P <sub>range</sub> =0-60W I <sub>in</sub> :≤0.35A		U <sub>rated</sub> =24Vdc I <sub>range</sub> =0-2500mA T <sub>c</sub> :80°C T <sub>a</sub> :-25to+50°C For LED modules only		SEC <input type="checkbox"/> + I <input type="checkbox"/>
						DA <input type="checkbox"/> DA <input type="checkbox"/>

### 3. Dimension (Unit: mm)



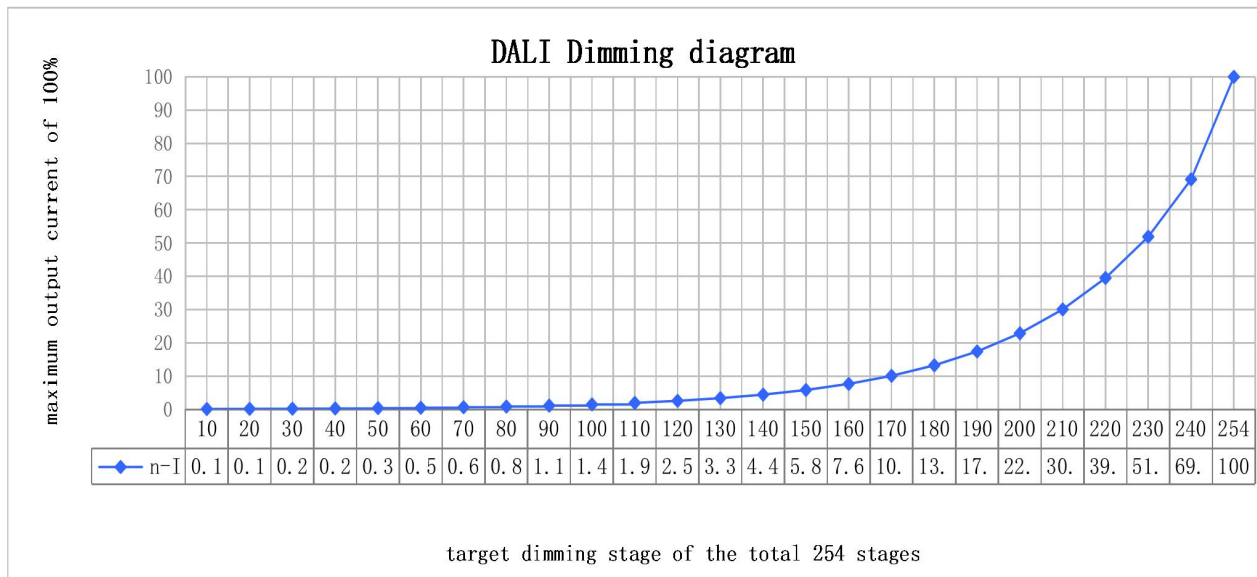
### 4. DALI dimming curve

#### 4.1 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.

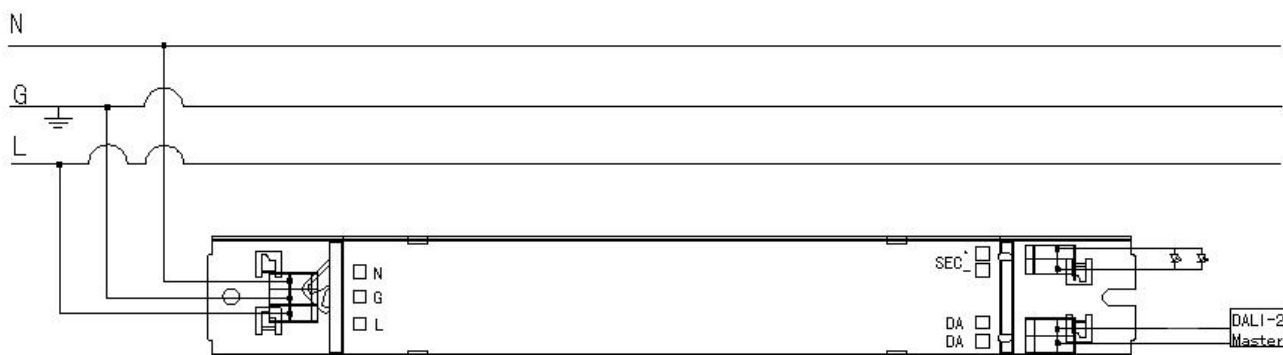
X(n) means the percent of the maximum output current



### 5.Packing information

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
410*270*190	60	0.23	13.8	14.36

### 6.Wiring Diagram



**Fig. A:LV60W24 DALI**