LV150W24 DALI

Constant Voltage Dimmable Driver

Model:LV150W24 DALI

Model	Output Current	Input Current	Input Power	Output Power Range	PF (230V Full Load)	Efficiency (230V Full Load)	Output Voltage
LV150W24 DALI	6250mA	≤0.85A	≤165W	0-150W	≥0.95	≥92%	24V

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Voltage
	Dimming Type	DALI-2
	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	≤0.85A
	Input Power	≤165W
	Power Factor	≥0.95 (230VAC，full load)
	THD	≤20% (230VAC，full load)
	No-load Power Consumption	≤0.5W @230VAC（Dim to off）
	Inrush Current	≤78.6A/206us (230VAC，full load)
Output	Output Voltage	24VDC+/-5%
	No Load Voltage	26VDC Max.
	Output Current	0-6250mA
	Max. Output Power	150W
	Efficiency	≥92% (230VAC，full load)
	Voltage Ripple	2% (Vmax-Vmin) / (Vmax+Vmin)
	PstLM	≤1
	SVM	≤0.4
	Current Accuracy	N/A
	Started Delay Time	≤0.65S (230VAC，full load)
Control Method	PUSH dimming terminal	PUSH dimming terminal (Max. lead wire length：20m,same port of DALI）

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	DALI function	DALI dimming (Max. lead wire length：300m）logarithm or linear dimming curve selectable
	PUSH-button	Max parallel connections qty for Push-dim 15PCS.
	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	< 250 μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-25….+50℃
	Ts/Storage Temperature	-40….+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Build-in
	PRI Wire preparation	0.75-1.5□
	SEC Wire preparation	0.75-1.5□
	Dimension	360*40*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; IEC 62386-101 ; BS EN 62386-102 ;BS EN 62386-207
	Surge	L-N/1KV（L/N)-PE/2KV
Others	RoHS	2011/65/EU
	Life Time	50000h @Ta / Tc
	Warranty	5years , F.R. < 10000ppm
Remark: 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ 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.		

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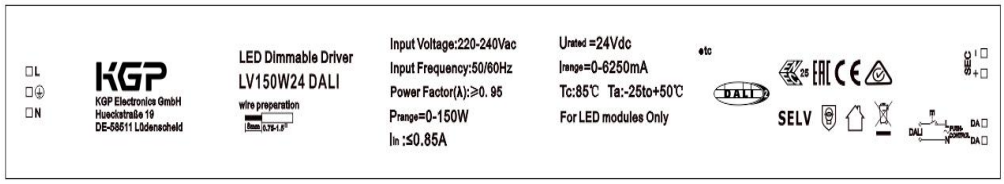
2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current（A）	Time（μs）
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		7	9	11	14	17	@230VAC	78.6	206
TYPE C		11	15	18	23	29			
TYPE D		23	30	37	46	57			

3. Label



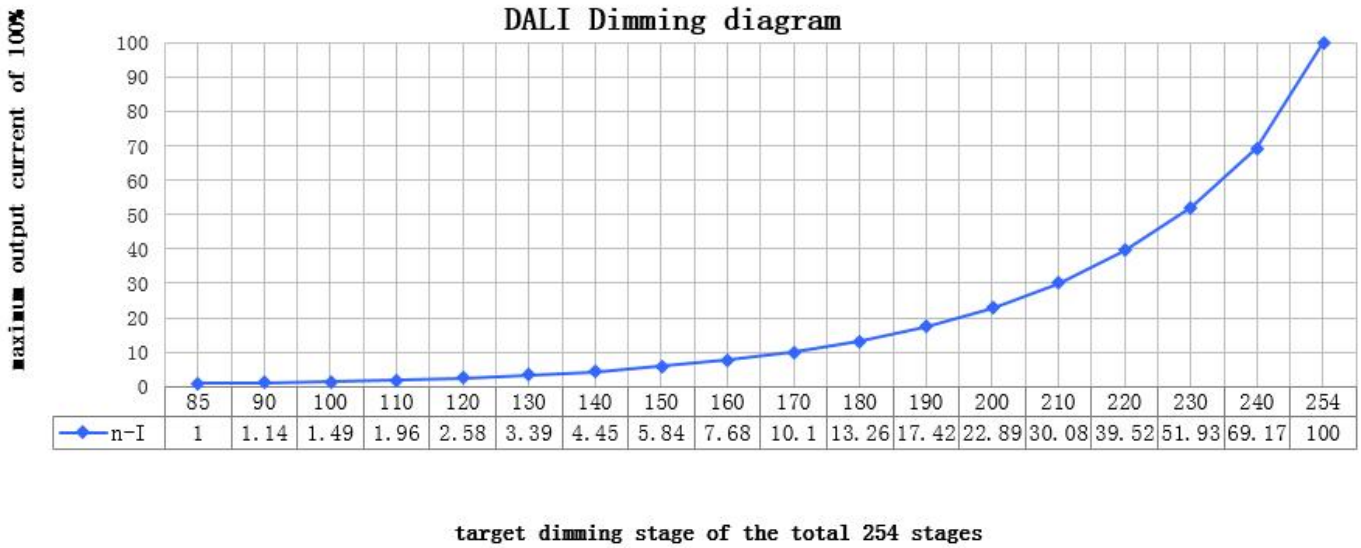
4. DALI dimming curve

4.1 formula for DALI dimming.

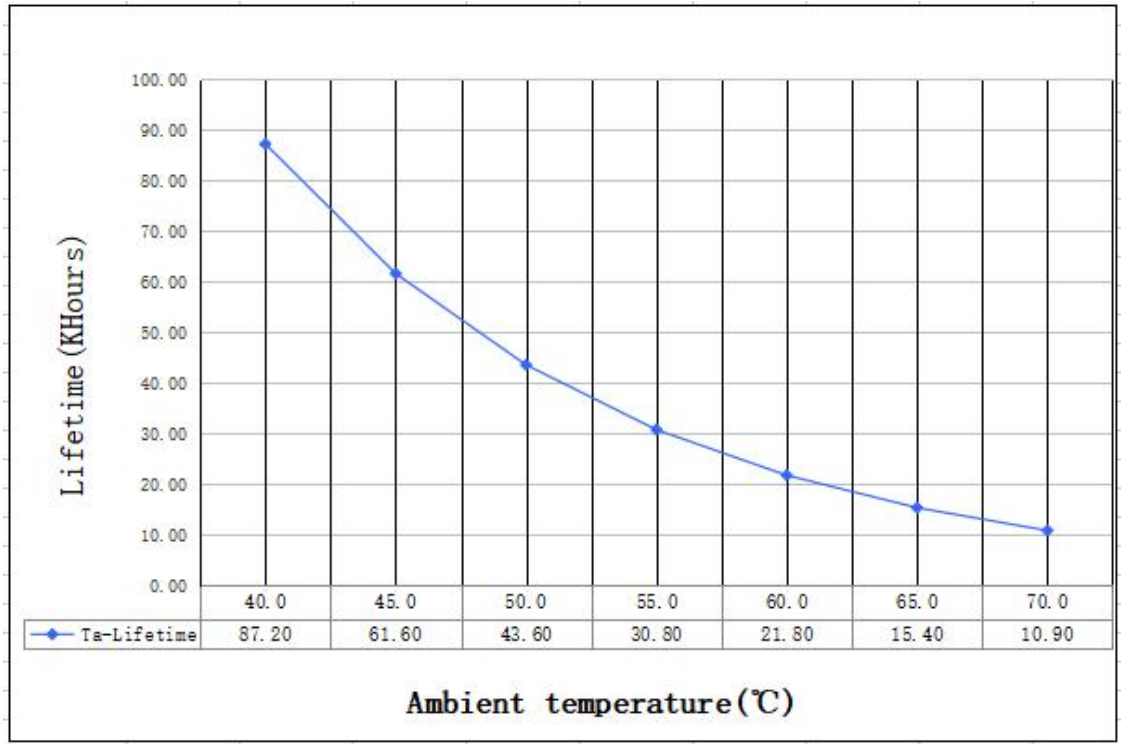
X(n)=10^{[(n-1)/(253/3)]-1},

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

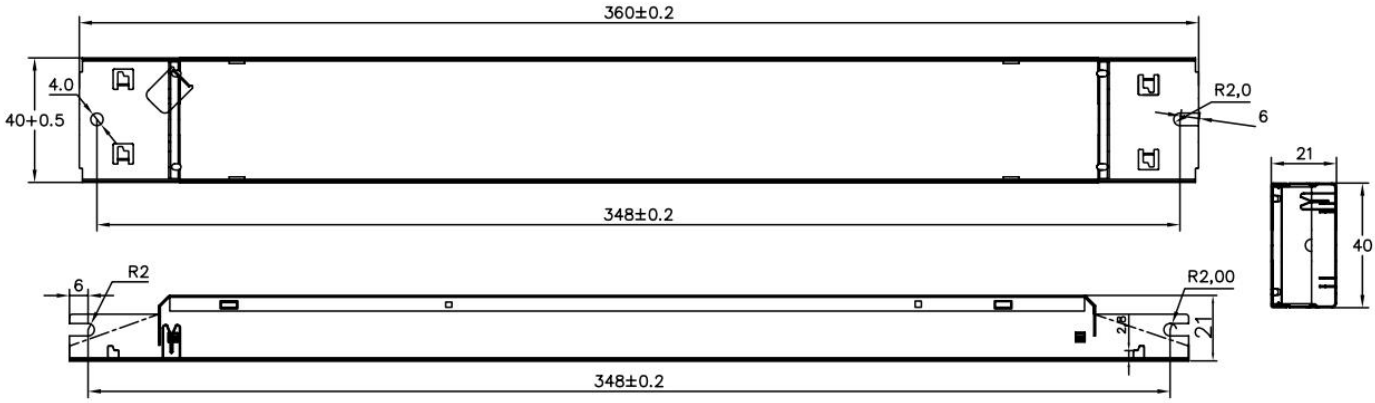
X(n) means the percent of the maximum output current



5. Lifetime curve



6. Dimension （Unit：mm）



7. Packing information

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
With white box and manual	420*280*180	25	0.392	9.8	10.248
Without white box and manual	440*300*155	25	0.392	9.8	10.13

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8. Wiring Diagram

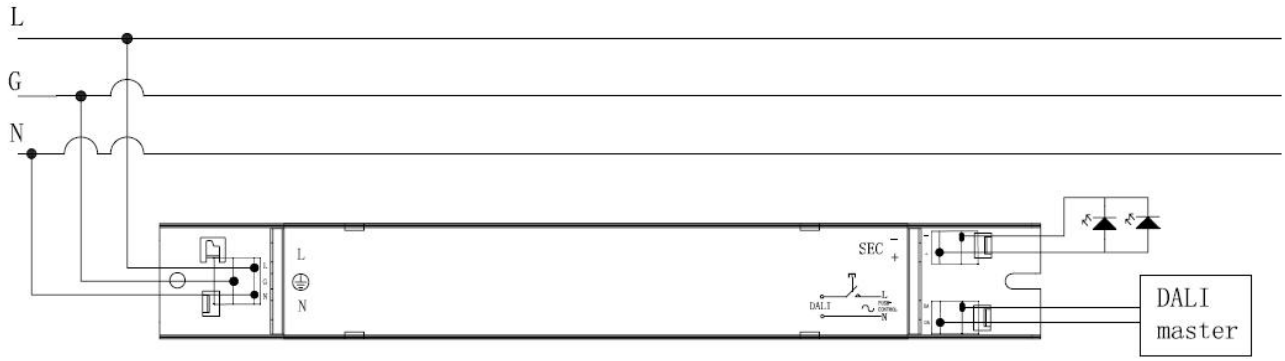
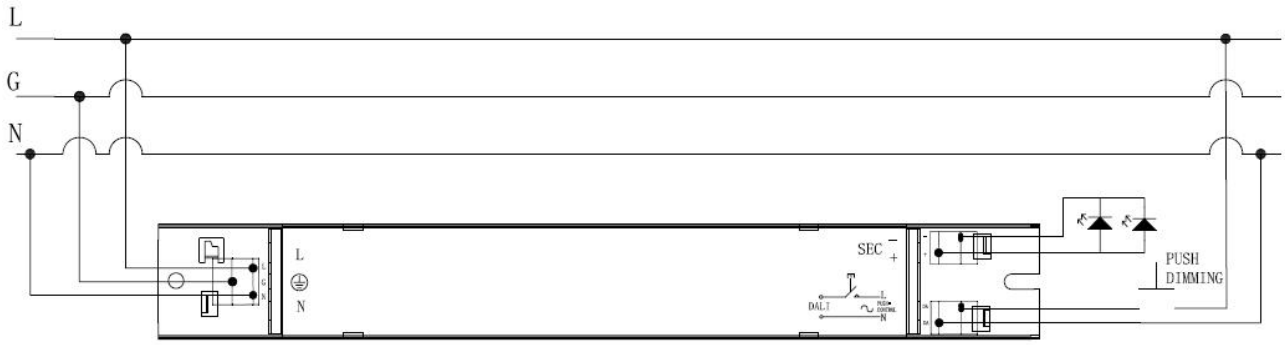


Fig. A:LV150W24 DALI

9. PUSH DIMMING (see wiring diagram)



9.1 On / off:

Short push (120ms-600ms) on the switch

Stepless dimming: long push (> 0.6sec) on the switch

9.2 Power-on memory function

When the LED driver is powered on, it will restore the memory before the LED driver is powered off. (brightness remembers the brightness after the last dimming is stable, and the bright ness during dimming is not memorized).

9.3 Light on/off

If the light is on, the light will be off after a short press. If the light is off, the light will be on after a short press. The time range of short press is 120-600mS.

9.4 PUSH Dimming

Press and hold the push switch for a long time, the light will enter the dimming state, if the previous time is dimming, it will automatically turn to dimming the next time.After releasing the reset button, the dimming stops and the current illuminance is maintained. The dimming range is 3.8%-100%. The default is to dim when the power is first long-press. If the brightness of the power-on is the maximum brightness, the first long-press is to dim. (Long press 0.6-3S to start dimming.)

9.5 Forced synchronization

Long press for 10 seconds to turn on all the lights and turn on the same brightness (50%), and continue to quickly short press will not change. After a short period of time without short press operation, the module exits the synchronization mode, and the short press restores the switch function.

9.6 PUSH Dimming rate

Long press the push switch 10S to switch the dimming rate to 3S, Long press the push switch 20S to switch the dimming rate to 6S, and it can also be changed by MAGIC or production software

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 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.)

11. REVISION HISTORY

DATE	REV	REMARK
2022-10-26	V1.0	Initial release.
2023-8-31	V1.1	Update the number of circuit breakers