



Constant Voltage Driver

Model: FV60W24CG DALI



Model	Input Current	Input Power	Output Power Range	PF	Efficiency (full load)	Output Current	Output Voltage
FV60W24CG DALI	≤350mA	≤70W	15-60W	≥0.95	≥90%	625-2500mA	24V

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

1. Parameters

category	Item	Technical Norm
Features	Output Type	Constant Voltage
	Dimming Type	DALI-2
	Dimming range	1-100%
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	180-264VAC or 180-280VDC
	Frequency	50/60Hz
	Input Current	≤0.35A
	Input Power	≤70W
	Power Factor	≥0.95
	THD	≤15%
	No-load Power Consumption	≤0.5W
	Stand-by power	≤0.5W
	Inrush Current	≤18A/2.8us
	Connected quantity of 10A Breaker	21pcs/type A ; 34pcs/type B; 54pcs/type C
	Connected quantity of 16A Breaker	34pcs/type A ; 54pcs/type B; 86pcs/type C
Connected quantity of 20A Breaker	42pcs/type A ; 67pcs/type B; 107pcs/type C	
Output	Output Voltage	24VDC
	No Load Voltage	25.2VDC Max.
	Output Current	625-2500mA
	Max. Output Power	60W Max.
	Efficiency	≥90% (230VAC, full load)
	Voltage Ripple	3% (230VAC, full load (Vmax-Vmin) / (Vmax+Vmin))
	Voltage Accuracy	±3%
	Line Regulation	±1%
	Load Regulation	±2%
	Voltage Accuracy	±3%

	Started Delay Time	≤0.65S (230VAC, full load)
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (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%
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	< 250μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-20....+50℃
	Ts/Storage Temperature	-40....+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%....90%RH
	Atmospheric pressure	86-108KPa
Construction	Connection Method	terminal block
	Installation	Independent
	PRI Wire preparation	0.75-1.5 [□]
	SEC Wire preparation	0.75-1.5 [□]
	Dimension	170*57*18mm (L*W*H)
Standards	Certification	CE
	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,IEC62386-101{ed2.0}-2014, EN 62386-207{ed1.0}-2009, BS EN 62386-102{ed2.0}-2014
	Surge	L-N/2KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h @Ta/ Tc
	Warranty	5years , F.R. < 10000ppm

Remark:

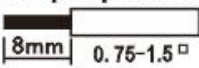
1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
3. Output ripple should be measured at the output end which has with 0.1uF/50V ceramic capacitance and 47uF/50V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

2. Label

KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid


N Input Voltage: 220-240VAC
 Input Frequency: 50/60Hz
Power Factor(λ): ≥ 0.95
 $I_{in} \leq 0.35A$
L $U_{rated} = 24VDC$
 $I_{range} = 0-2500mA$
 $P_{range} = 0-60W$
 $t_c: 85^\circ C$
 $t_a: -25 \text{ to } +50^\circ C$









LED Dimmable Driver
FV60W24CG DALI
For LED modules only
●tc

wire preparation


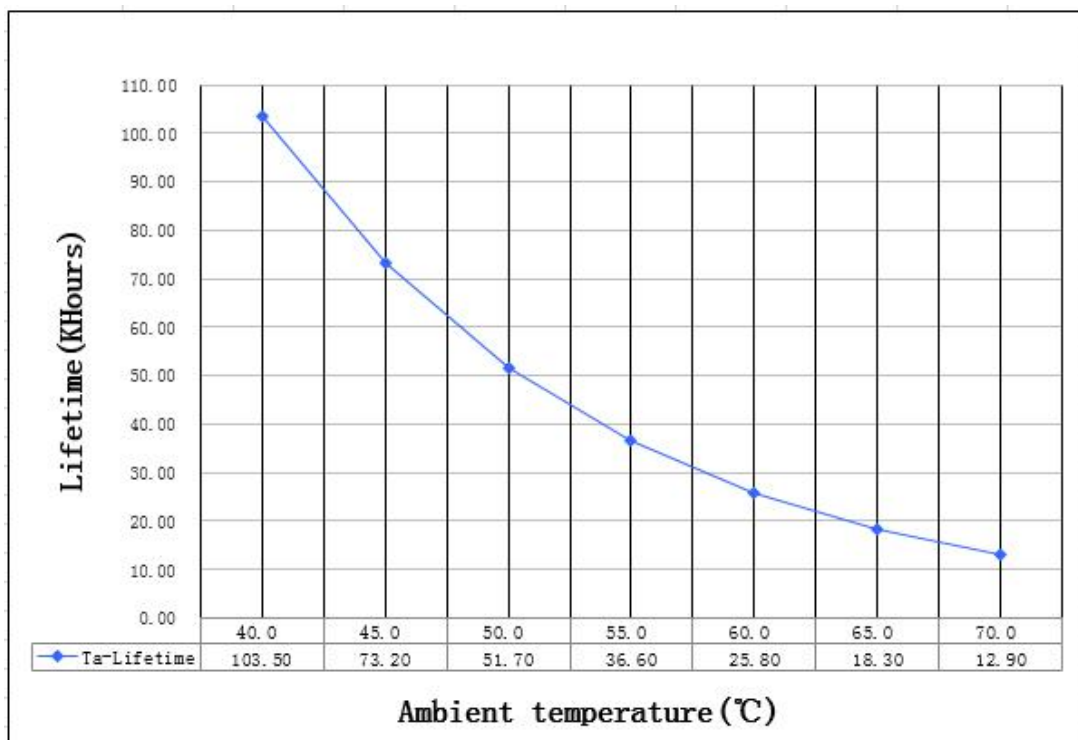
SEC+
SEC-

DALI
DALI

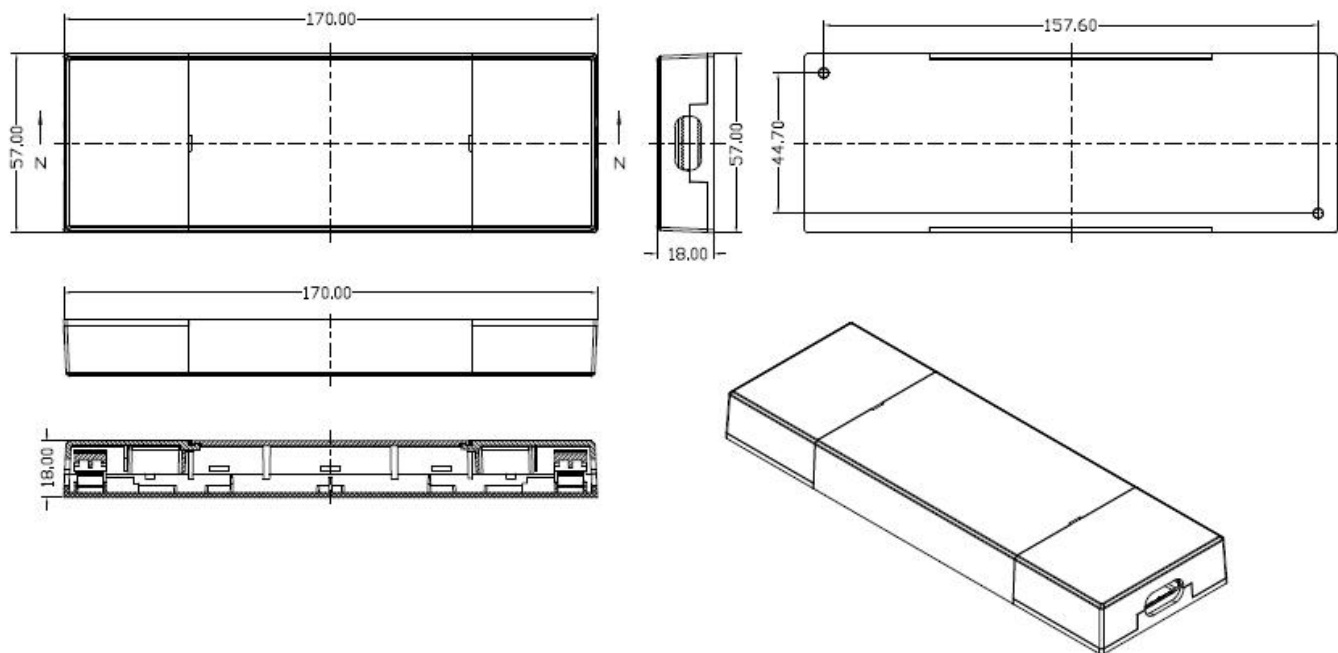


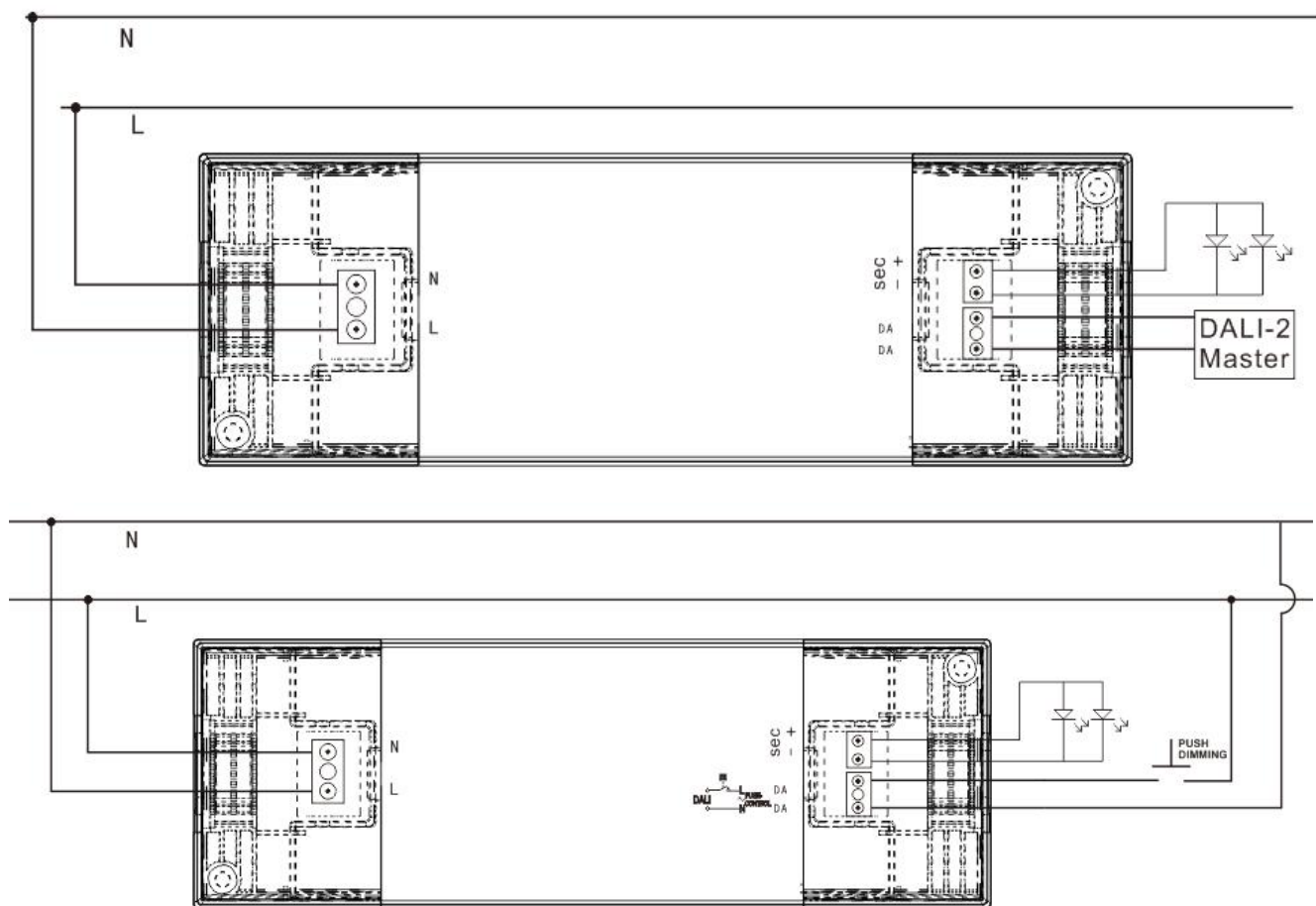
3. Lifetime curve



4. Dimension



5. Wiring Diagram



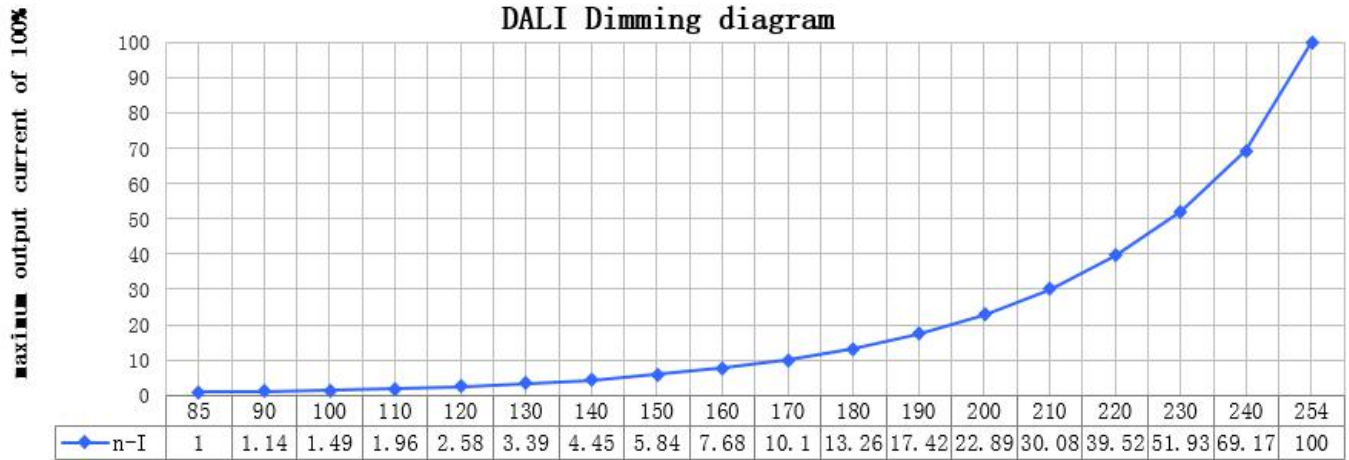
6. DALI dimming curve

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



target dimming stage of the total 254 stages

7. Packing information

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
450*240*200	65PCS	0.16	11.44	11.97