



ZORANTECH
卓然照明

60W DALI / Triac dimmable C.V. led driver



■ Features

- Constant Voltage (C.V.) output
- Built-in EMI filter, High efficiency up to 88%
- Input voltage:90-130VAC or 180-265VAC
- Protections:Short circuit/Over voltage/Over temperature
- Cooling by free air convection
- Built-in 2 in 1 dimming function(DALI & Push or Triac)
- Dimming range:0-100%/10-100%
- Noise free, flicker free, 3-5 years warranty
- OEM & ODM, no MOQ, Support customization

■ Applications

- LED indoor lighting
- LED panel light
- LED track light
- LED ceiling light
- LED tri-proof light
- LED down light
- LED kitchen light
- LED grille light
- LED strip light

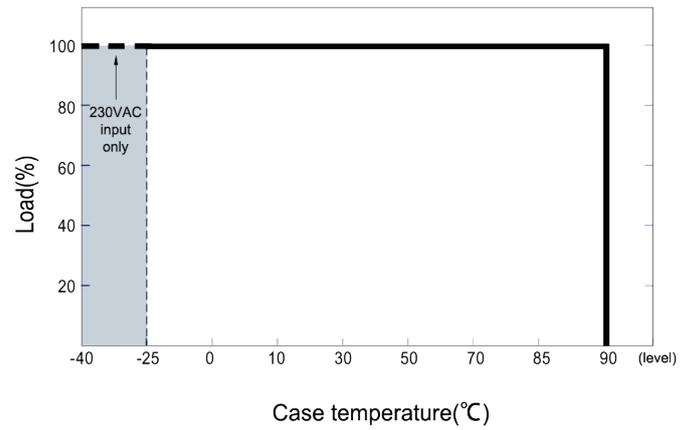
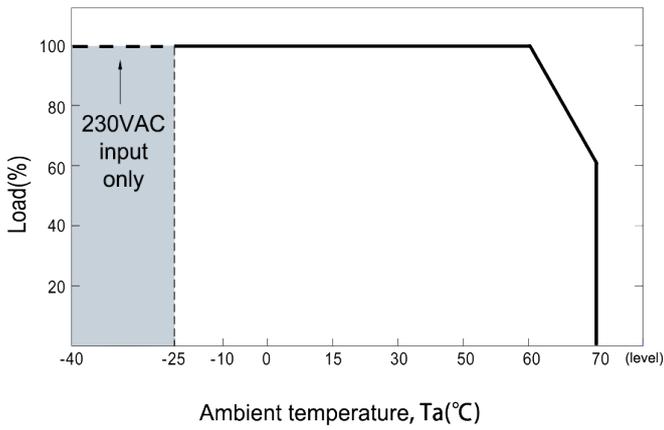
■ Description

The Triac & DALI constant voltage series produced by Zoran Technology is an AC-to-DC dimming driver.operates from 90-130VAC or 180-265VAC and offers different constant voltage output :12V/24V/36V/48V etc. The efficiency up to 88%, with the fanless design, the entire series is able to operate for -20~ +55 °C case temperature under free air convection. It can be widely matched with all mainstream Trailing Edge Triac dimmer, DALI dimmers and control systems in Europe and Australia.flicker free,achieve perfect soft dimming.

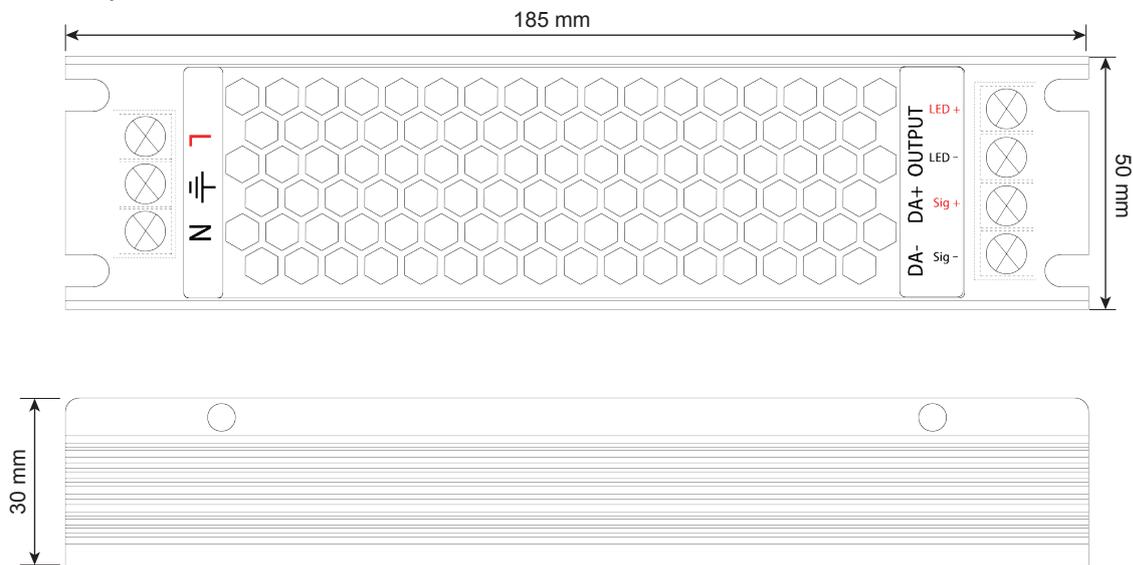
■ Electrical Specification

MODEL		ZR-60-12	ZR-60-24
Output	Output Voltage <small>Note.1</small>	12V	24V
	Output Current <small>Note.2</small>	5000 mA	2500 mA
	Rated Power	60W	60W
	Voltage Tolerance <small>Note.4</small>	±5%	±5%
	Line Regulation	±3%	±3%
	Load Regulation	±3%	±3%
	Setup,Rise Time <small>Note.6</small>	50ms/115VAC 230VAC	
	Hold Up Time <small>(Typ.)</small>	20ms/115VAC 230VAC	
Input	Rate Voltage <small>Note.5</small>	90-130VAC or 180-265VAC	
	Frequency Range	48-62Hz	
	Full load Efficiency	≥87%	≥88%
	AC Inrush current <small>(Typ.)</small>	30A/230V AC (cold start)	
	AC Current <small>(Typ.)</small>	0.64A/110VAC 0.32A/220VAC 0.26A/265VAC	
	input signal	DALI & Push or Triac	
Protection	Short Circuit	Hiccup Mode,Recovers automatically after fault condition is removed	
	Over Voltage	Protection type:Shut down O/P voltage,re-power on to recover	
	Over Temperature	Shut down O/P voltage,re-power on to recover	
Environment	Working Temperature	Tcase= -20~+55 C	
	Max Case Temperature	Tcase=+60 C	
	Working Humidity	20-95%RH non-condensing	
	Storage TEMP. Humidity	-40~+85 C 10-95%RH	
EMC	Withstand Voltage	I/P-O/P:1.5KVAC/5mA/1min I/P-FG:1.5KVAC/5mA/1min O/P-FG:0.5KVAC/5mA/1min	
	Isolation Resistance	I/P-O/P,I/P-FG,O/P-FG:100M ohms/500VDC/25 C/70%RH	
	EMC Emission	Compliance to GB4943	
	EMC Immunity	Compliance to GB9254	
Others	Dimension (L×W×H)	185*50*30 mm	
	Weight	320 g	
	Packing	60pcs/19.5Kg/ctn	
Note	<p>1.All parameters not specially mentioned are measured at 230VAC input, rated load and 25 C of ambient temperature.</p> <p>2.Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>3.Length of seting time is measured at first cold starting. Turning ON/OFF the power supply may increase of the length of seting time.</p> <p>4.When the maximum temperature point Tc of the shell of this series is lower than 60 C , the working life is more than 30,000 hours.</p> <p>5.Please refer to the product warranty on Zoran Technology website http://www.zorantech.com.</p> <p>6.If you need other special parameters, please contact our customer service for consultation!</p>		

■ Output load VS Temperature

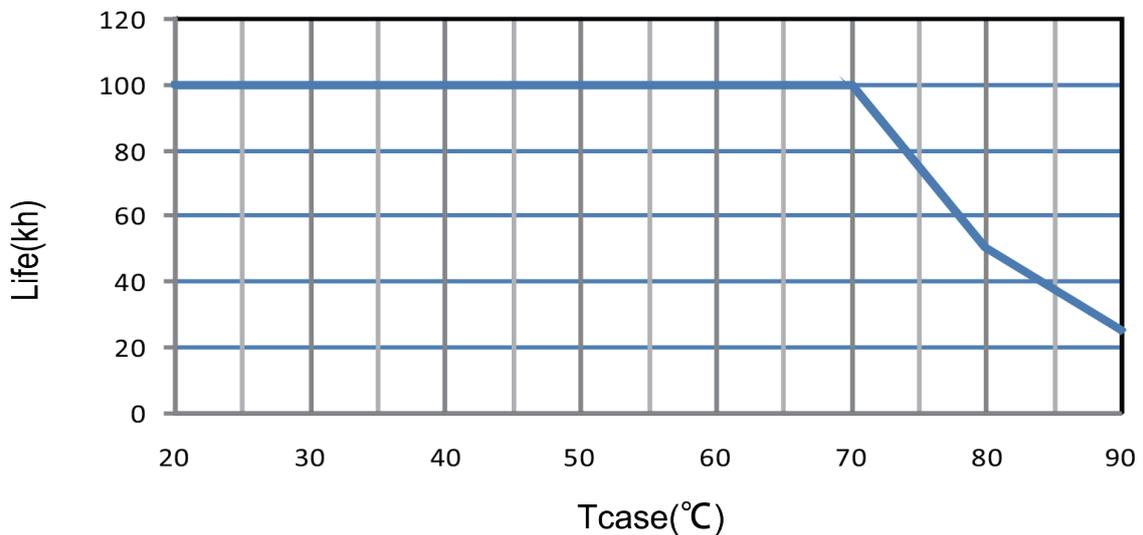


■ Mechanical Specification

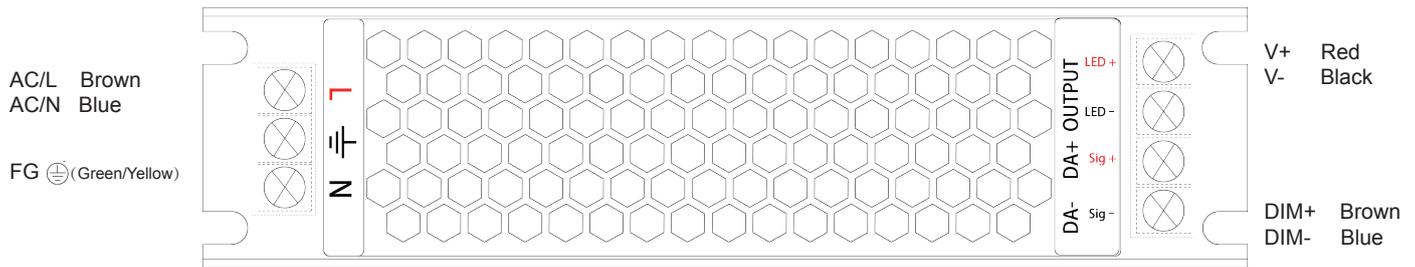


- ※ The input terminal is a 3 in 1 terminal block. Please connect the corresponding neutral wire (N) and fire wire (L) and Ground wire (FG) according to the label;
- ※ The output terminal is 4 in 1 terminal block. Please connect the corresponding dimming signal positive electrode (DIM+), dimming signal negative electrode (DIM-), LED lamp positive (+), LED lamp negative (-) according to the label;
- ※ Support customization, For more information, please contact Zoran Customer Service;

■ Life



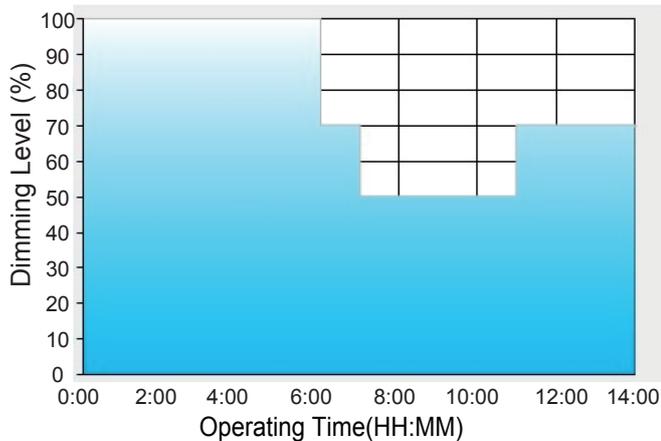
■ Dimming Operation



※ DALI Interface

- Add DALI signal between DA+ and DA- ;
- DALI protocol 16 groups and 64 addresses ;
- Can set any output current to boot ;

◎ D01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart time dimming software program:

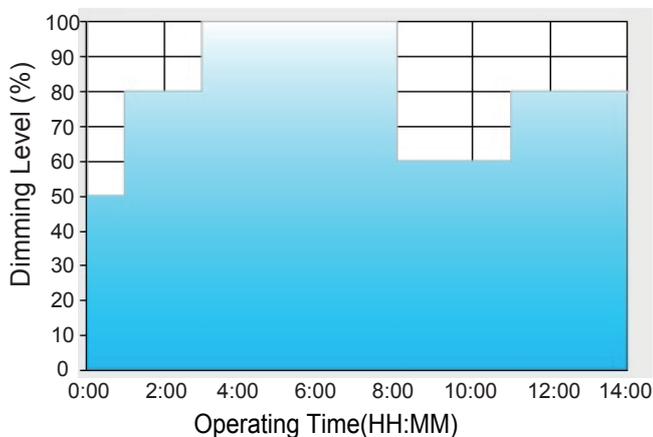
	T1	T2	T3	T4
TIME **	06:00	07:00	11:00	----
LEVEL **	100%	70%	50%	70%

** : Time matches Operating Time in the diagram whereas LEVEL matches Dimming level.

Example: If a residential lighting application adopts D01-Type, when turning on the power supply at 6:00pm, for instance:

- [1] The power supply will switch to the constant current level at 100% starting from 6:00pm.
 - [2] The power supply will switch to the constant current level at 70% in turn, starting from 0:00am, which is 06:00 after the power supply turns on.
 - [3] The power supply will switch to the constant current level at 50% in turn, starting from 1:00am, which is 07:00 after the power supply turns on.
 - [4] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.
- The constant current level remains till 8:00am, which is 14:00 after the power supply turns on.

◎ D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart time dimming software program:

	T1	T2	T3	T4	T5
TIME **	01:00	03:00	08:00	11:00	----
LEVEL **	50%	80%	100%	60%	80%

** : Time matches Operating Time in the diagram whereas LEVEL matches Dimming level.

Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:

- [1] The power supply will switch to the constant current level at 50% starting from 5:00pm.
 - [2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.
 - [3] The power supply will switch to the constant current level at 100% in turn, starting from 8:00pm, which is 03:00 after the power supply turns on.
 - [4] The power supply will switch to the constant current level at 60% in turn, starting from 1:00am, which is 08:00 after the power supply turns on.
 - [5] The power supply will switch to the constant current level at 80% in turn, starting from 4:00am, which is 11:00 after the power supply turns on.
- The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.