

# LED Driver 24V 60W DALI/Push dimmbar

Artikel-Nr. EGD60-24VF6



## Features:

- . European AC input (220-240VAC).
- . DALI 2.0 DT6/DT8 dimming and CCT
- . Built-in press dimming function
- . Dimming scope 1-100%
- . Protections: Short circuit / Over load / Over voltage
- . Adopt plastic case and internal glue potting.
- . Built-in lightning protection device, can meet the difference mode 1kV
- . Efficiency > 88%



## Description:

EGDL60 series is an indoor constant voltage LED DALI power supply with an input voltage range of 198-264Vac, whose efficiency is up to 88%, adopt fanless design, it's working in the temperature range of - 20 ° C to + 45° C under free air convection. It has a high power factor, ultra-low total harmonic distortion, low standby power consumption and other comprehensive protection functions, which not only greatly improve the reliability of the product, but also guarantee the product life cycle. This series of products is designed for LED lighting and is used in indoor lighting applications. They are suitable for a wide range of applications in almost any environment where LED luminaires can be installed. Comply with DALI2.0 standard (IEC 62386-101, 102, 207, 209), Innovative thermal management technology, intelligent protection of power supply life.

## Model:

Model	Output voltage	Output current	Max. Output power	Output voltage precision	Total harmonic distortion (Typ.)	Power factor (Typ.)	Efficiency (Typ.)
EGDL60-24VF6	24V	0-2.5A	60W	±5%	8%	0.95	88%

**Remark:** All the parameters are measured at 230VAC input, full load and 25 °C of ambient temperature if they are not specially mentioned.

### PUSH Dimming/Change Color Temperature

Dimming: Long press

Switch: Short press

Dimming Memory: When the light is switched on after turn off, return to the previous adjusted brightness level.

Brightness and color temperature are adjusted in opposite directions with each long press.

Long press for more than 15s is the synchronization function, and all devices are adjusted to 50% level. Long press again to lower the brightness (color temperature will be unified to 4500K, and long press again to lower the color temperature)

## Input:

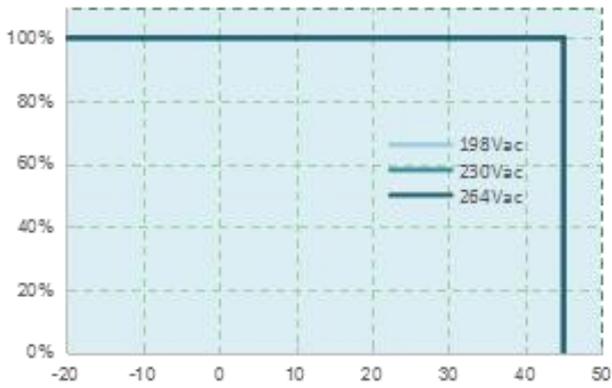
Parameter	Min. value	Typical value	Max. value	Note
Rated input voltage	220 Vac		240Vac	Derating curve is shown in figure
Input voltage	198 Vac		264Vac	
Input frequency	47Hz		63Hz	
Max. Input current			0.6A	
Input inrush current			60A	230Vac/50Hz, Cold Start
Power factor	0.9	0.95		230Vac, Full Load
Total harmonic input		8%	15%	230Vac, Full Load
Leakage current			0.7mA	264Vac/50Hz
Stand-by power consumption		0.4W	0.5W	230Vac/50Hz, No Load

## Output:

Parameter		EG DL60-24VF6	Note
Output voltage		24.0VDC	
Rated output current		2.5A	
Output current		0.25-2.5A	
Rated output power		60W	
Rated output efficiency		88%	230Vac
Output voltage precision		±5%	
Output voltage ripple ( PK-PK )		±2%	Full load (Test under 20M bandwidth)
Output current ripple ( PK-PK )		---	Full load (Test under 20M bandwidth)
Rise time		<100mS	230Vac
Startup time		<680mS	230Vac
Line regulation		±1%	full load
Load regulation		±1%	

## Characteristic Curve:

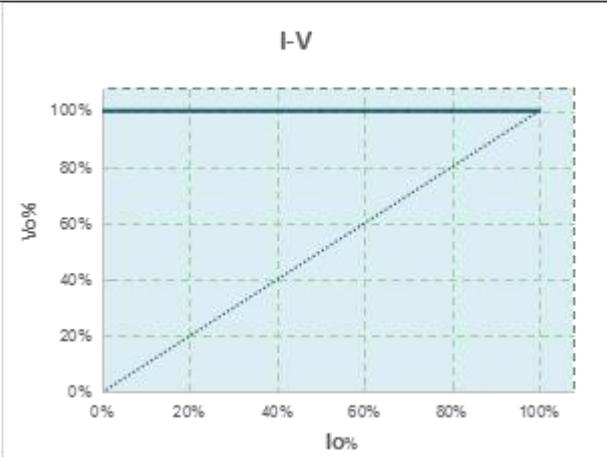
**Fig. 1 Output load-Temperature curve**



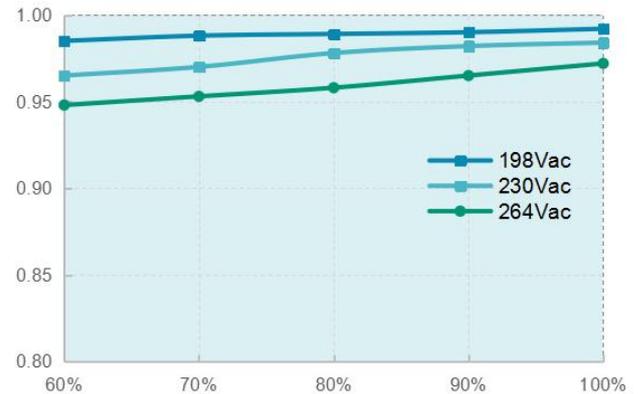
**Fig. 2 Static characteristic curve**



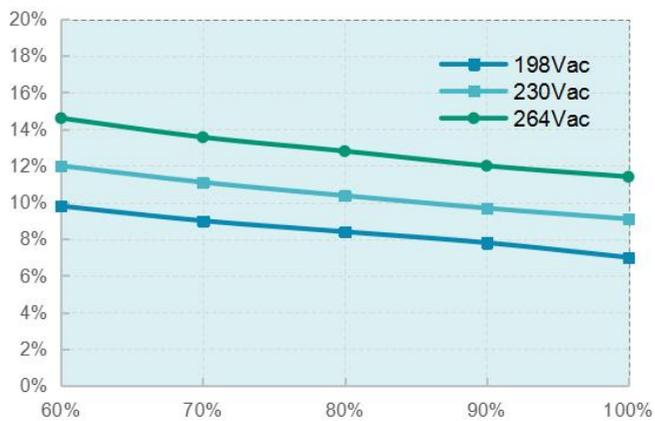
**Fig. 3 I-V curve**



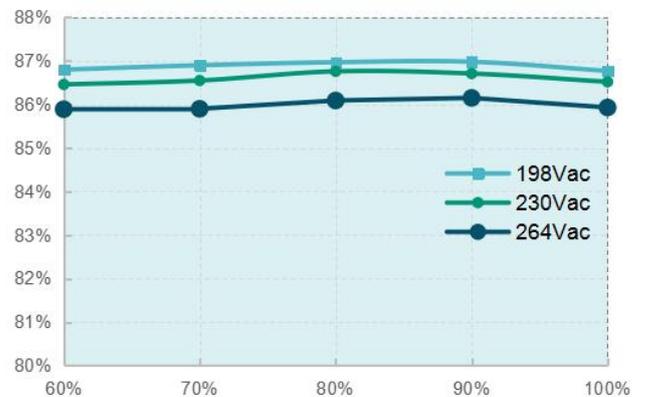
**Fig. 4 Power factor characteristic curve**



**Fig.5 Total harmonic distortion curve ( THD )**



**Fig.6 Efficiency-Load curve**



## Protection:

Parameter		Conditions	Note
Protection	Over load	1.1-1.6 times rated load	Auto-recovery after overload removed.
	Short circuit	Short circuit power $\leq$ 0.5W	Auto-recovery after short circuit removed.
	Over voltage	Full load, output voltage $>$ 5V	Turn off the input voltage and recover after restart.
	Over temperature	--	--

## Environment Requirement:

Parameter	Min.	Typ.	Max.	Note
Working temp.	-20°C	25°C	+45°C	See Fig.2
Storage temp.	-40°C	25°C	+85°C	
Working humidity	10%RH		90%RH	
Storage humidity	5%RH		95%RH	
IP grade			IP20	
Cooling mode	Natural cooling			

**Remark:** All the parameters are measured at 25 °C of ambient temperature if they are not specially mentioned.

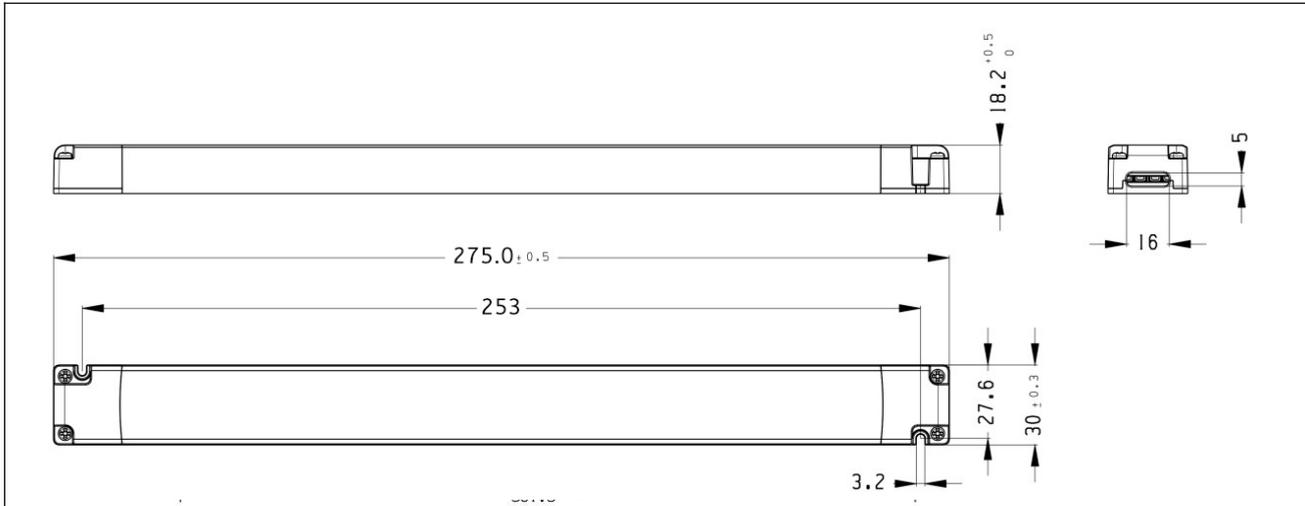
## Safety&EMC standard:

Certificate	Safety standards	Certification	Note
UL/CUL	---		
TUV	EN61347-1:2015 EN 61347-2-13:2014+A1 EN62493:2015	√	
SAA	AS/NZS 61347.2.13		
CCC	---		
CE	EN 61347-2-13:2014 +A1 EN61347-1:2015	√	
Safety test		Qualification	Note
Dielectric compressive strength	Input to output	3750Vac/5mA Max/60s	Reinforced insulation, no breakdown, no flashover
	Primary to ground	---	Basic insulation, no breakdown, no flashover
	Secondary to ground	---	Functional insulation, no breakdown, no flashover
Insulation resistance	Input to output	≥10MΩ	Test voltage : 500Vdc
Grounding resistance		---	---
Leakage current		≤0.75mA	264Vac
EMI/EMS item	Standard/Level	Data	
Conduction CE	EN55015		
Radiation RE	EN55015		
Harmonics	EN IEC 61000-3-2	Class C	

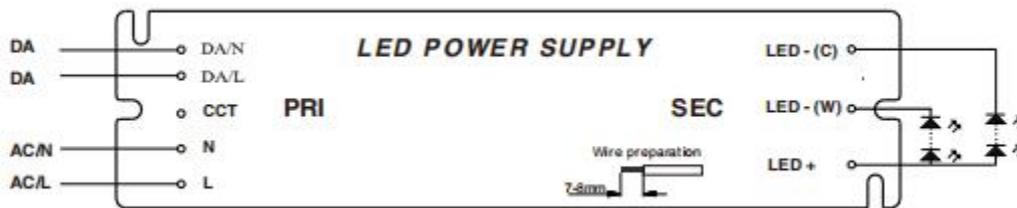
## Others:

Parameters	Condition	note
Lifetime	50,000 hours	230Vac,full load, Tc 80°C
MTBF	200,000 hours	230Vac,full load, Ta 25°C (MIL-HDBK-217F)
TC	85°C	
Warranty	5 years	
Weight	230 g	±10g
Dimensions	275mm * 30mm * 18.2mm	L x W x H

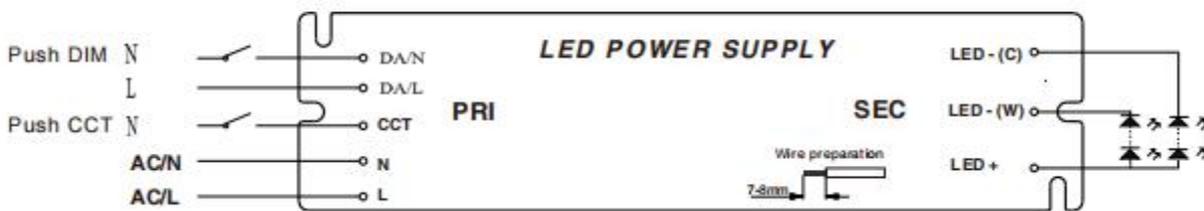
## Mechanical Specification ( Unit : mm )



## DAI dimming connection diagram



## PUSH dimming connection diagram



### Remark :

AC input cable

Terminal + H03WH2-F 2\*0.75mm<sup>2</sup>

DC output cable

Terminal + H05WH2-F 2\*0.75mm<sup>2</sup> ; Terminal + H05WH2-F 2\*1.0mm<sup>2</sup>