

LED 25W DE Series - Fixed Output and Dimmable

Switch Mode LED Drivers

Constant Current & Constant Voltage with Isolation

Black Plastic Housing

Total Power: 25 Watts Input Voltage: 110-277Vac Outputs: Single from 7-72Vdc

Indoor Application High Power Factor EN61347, CSA 22.2

EN61000-3-2, EN61000-3-3 Class C

Electrical Specifications

Input Voltage Range: 110-277Vac Nom. (100-305 V Min/Max)

Frequency: 50/60 Hz Nom. (47-63 Hz Min/Max)

Power Factor: ≥0.9@ full load, 100 V through 277 V

Inrush Current: <15A max @ 230 Vac, Cold Start25°C

Input Current: 0.30A @ 100Vac

Maximum Power: 25 W
Line Regulation: ±1%
Load Regulation: ± 3%

THD: ≤20% @ 70-100% load, 100-277V

Leakage Current: 400µA Typical Turn-on Time Delay: 3.0 S Max

Protection: Output Over-Voltage reset by power cycling

Output Over-Current and Output Short

Circuit Protection with auto recovery

Electrical Specifications

Operating Temperature: -40°C to +60°C

Maximum Case Temp: 80°C

Storage Temperature: -45°C to +85°C

Humidity: 5% - 95%
Cooling: Convection

Vibration Frequency: 10 to 300 Hz/1G, 60 minutes

MTBF: 443,000 Hours at full load and 30°C

ambient conditions per MIL-HDBK-217F

EMC: FCC 47CFR Part 15 Class B compliant

Ordering Options:

-TC: 0-10V&PWM dimmable version comes with an extra two wires
 +Purple/-Grey on the output side. See page 3 for additional specifications.

-TA: DALI dimming. See page3 for additional specifications.

-TE: Customized timeshare dimming. See page 3 for additional

specifications.

IP65

Note:

1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25 $^\circ\!\! C$ of ambient temperature.

2. Specifications subject to change without notice.



Constant Current – Product Specifications							
Model Number	Output Current	Output Voltage	Max. Output	Typical			
	(mA±3%)	Range (Vdc)	Power (W)	Efficiency			
DE025-072S035-YY	350	43~72	25.2	86%			
DE025-062S040-YY	400	37~62	24.8	85%			
DE025-056S045-YY	450	34~56	25.2	84%			
DE025-040S062-YY	620	24~40	24.8	84%			
DE025-036S070-YY	700	22~36	25.2	84%			
DE025-028S085-YY	850	17~28	23.8	83%			
DE025-024S105-YY	1050	14~24	25.2	83%			
DE025-020S125-YY	1250	12~20	25	83%			
DE025-018S140-YY	1400	11~18	25.2	82%			
DE025-015S175-YY	1750	9~15	26.3	82%			
DE025-012S210-YY	2100	7~12	25.2	81%			

-YY indicates dimming options are available. See options at left. Blank = fixed current output.

Constant Voltage– Product Specifications							
Model Number	Output Voltage	Output Current	Max. Output	Typical			
	(Vdc±5%)	Range (mA)	Power (W)	Efficiency			
DE025-072S035-YY	72	18~350	25.2	86%			
DE025-062S040-YY	62	20~400	24.8	85%			
DE025-056S045-YY	56	23~450	25.2	84%			
DE025-040S062-YY	40	31~620	24.8	84%			
DE025-036S070-YY	36	35~700	25.2	84%			
DE025-028S085-YY	28	43~850	23.8	83%			
DE025-024S105-YY	24	53~1050	25.2	83%			
DE025-020S125-YY	20	63~1250	25	83%			
DE025-018S140-YY	18	70~1400	25.2	82%			
DE025-015S175-YY	15	88~1750	26.3	82%			
DE025-012S210-YY	12	105~2100	25.2	81%			

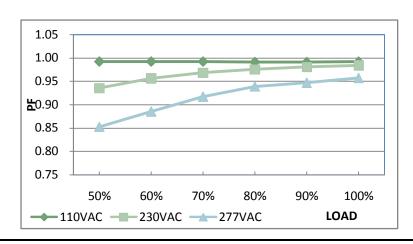
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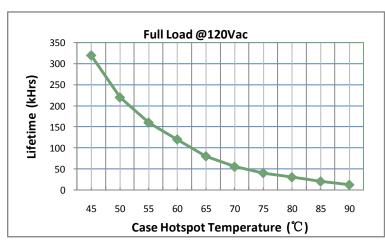
LED 25W DE Series Page 2 of 3 **Dimensions:** Unit: Inches[mm] DC Output(18AWG) V+(RED) V-(BLUE) ACL (BLACK) Tcase ACN (WHITE) DIM+(PURPLE) AC Input(18AWG) DIM-(GREY) DIMMING (22AWG) WIRE SPECS: AC Input: UL1015 DC Output: UL1569 Dimming Control: UL1015

- **%Tcase: Max. Case Temperature**
- $\ensuremath{\mathbb{X}}$ Power's internal temperature is 10 $^\circ$ C warmer than case temperature.
- *No dimming control wire if without dimming function.
- **Please DO NOT connect "DIM -" to "V -" (load)

Power Factor vs Load



Lifetime vs Case Temperature





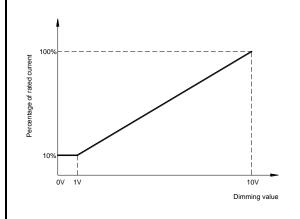
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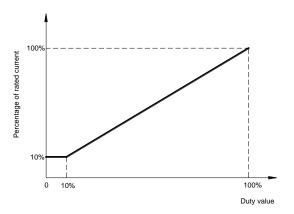
"-TC" option: 0-10V &PWM dimming

Parameters		Minimum	Typical	Maximum
Dimming Type	Voltage	-2V	0-10V	15V
	10V PWM(10%~100% f=200~1.5KHz)	-2V	0-10V	15V
Dimming Current		-0.5mA	-	0.5mA

0-10Vdimming function for output current adjustment (Typical)

10V PWM signal for output current adjustment (Typical): Frequency range: 200Hz ~1.5KHz





"-TA" option: DALI dimming

- a. DALI Testing Software: Please refer to www.impowercorp.com for downloading.
- b. Percentage of rated current: 10%~100%.
- c. "TA" version LED Driver shall work with a DALI Master and DALI Master control software.



"-TE" option: Customized timeshare dimming.

- a. Different output current (10% 100% rate output current) can be set for different time periods.
- b. Maximum 4 sections is available. The minimum length is 0 to maximum 12 hours for each section.
- c. The parameter can't be changed after shipping.

This datasheet is for reference only. Impow reserves the right to final explanation of the technical materials.