

LED 60W DE Series – Fixed Output and Dimmable
 Switch Mode LED Drivers
 Constant Current & Constant Voltage with Isolation
 Black Plastic Housing

Total Power: 60 Watts
 Input Voltage: 110-277Vac
 Outputs: Single from 7-170Vdc
 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 @ 230Vac, Cold Start 25°C
 Input Current: 0.63A @ 100Vac
 Maximum Power: 60 W
 Line Regulation: $\pm 1\%$
 Load Regulation: $\pm 3\%$
 THD: $\leq 20\%$ @70-100% load, 100-277V
 Leakage Current: 400 μ A 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% to 95%
 Cooling: Convection
 Vibration Frequency: 10 to 300Hz/1G, 60 minutes
 MTBF: 439,000Hours 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 page 3 for additional specifications.
- TE: Customized timeshare dimming. See page 3 for additional specifications.

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Note:

1. All parameters NOT specially mentioned are measured at 230Vac input, rated load and 25°C of ambient temperature.
2. Specifications subject to change without notice.



Constant Current – Product Specifications

Model Number	Output Current (mA $\pm 3\%$)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
DE060-170S035-YY	350	102~170	59.5	90%
DE060-086S070-YY	700	52~86	60.2	90%
DE060-058S105-YY	1050	35~58	60.9	90%
DE060-048S140-YY	1400	29~48	67.2	90%
DE060-036S175-YY	1750	22~36	63	90%
DE060-028S210-YY	2100	17~28	58.8	89%
DE060-024S245-YY	2450	14~24	58.8	89%
DE060-021S280-YY	2800	13~21	58.8	88%
DE060-018S315-YY	3150	11~18	56.7	87%
DE060-015S420-YY	4200	9~15	63	86%
DE060-012S500-YY	5000	7~12	60	85%

-YY indicates dimming options are available. See options at left.

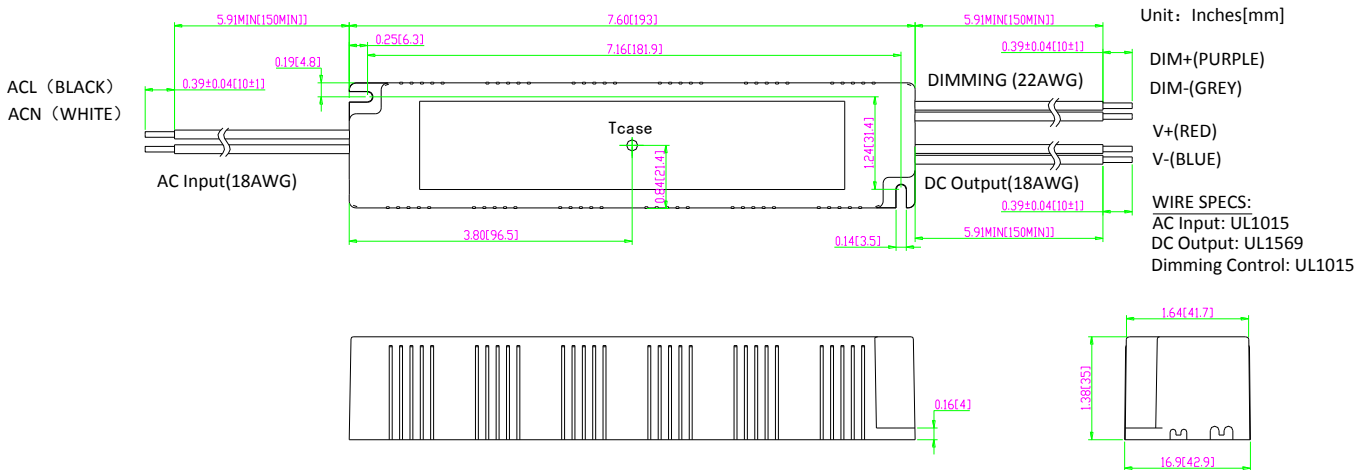
Blank = fixed current output.

Constant Voltage – Product Specifications

Model Number	Output Voltage (Vdc $\pm 5\%$)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
DE060-170S035-YY	170	18~350	59.5	90%
DE060-086S070-YY	86	35~700	60.2	90%
DE060-058S105-YY	58	53~1050	60.9	90%
DE060-048S140-YY	48	70~1400	67.2	90%
DE060-036S175-YY	36	88~1750	63	90%
DE060-028S210-YY	28	105~2100	58.8	89%
DE060-024S245-YY	24	123~2450	58.8	89%
DE060-021S280-YY	21	140~2800	58.8	88%
DE060-018S315-YY	18	158~3150	56.7	87%
DE060-015S420-YY	15	210~4200	63	86%
DE060-012S500-YY	12	250~5000	60	85%

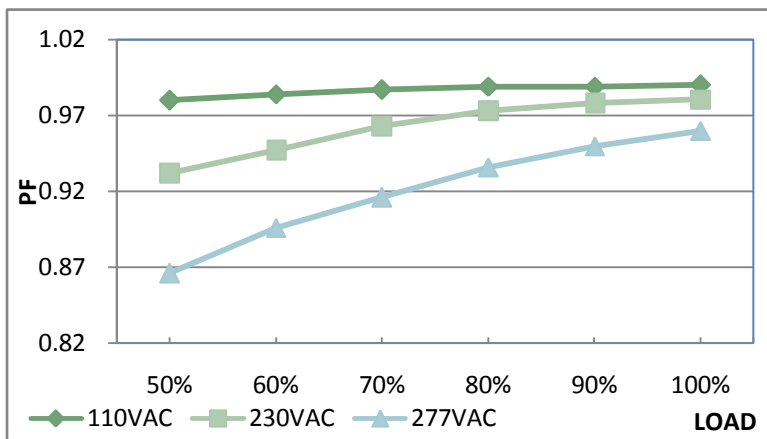
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Dimensions:

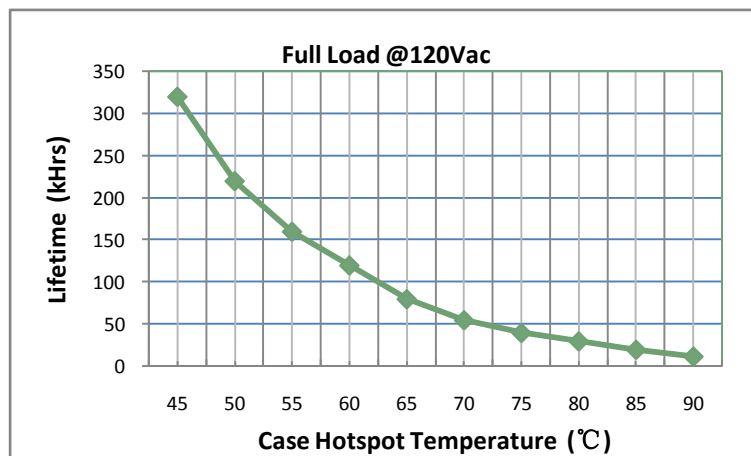


- ※ Tcase: Max. Case Temperature.
- ※ Power's internal temperature is 10°C warmer than case temperature.
- ※ No dimming control wire if without dimming function.
- ※ Please DO NOT connect "DIM -" to "V -" (load)

Power Factor vs Load



Lifetime vs Case Temperature

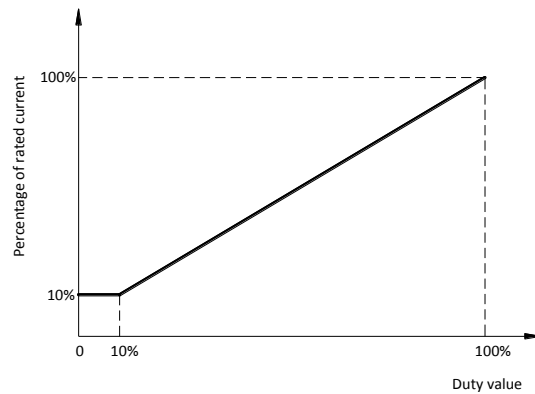
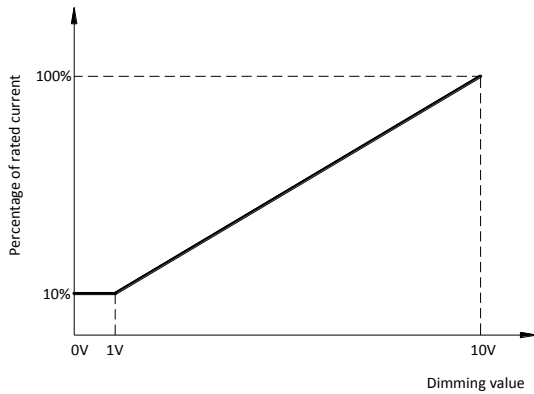


"-TC" option: 0-10V & PWM dimming

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

a. 0-10V dimming function for output current adjustment (Typical)

b. 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.

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