

8600 Series 100W



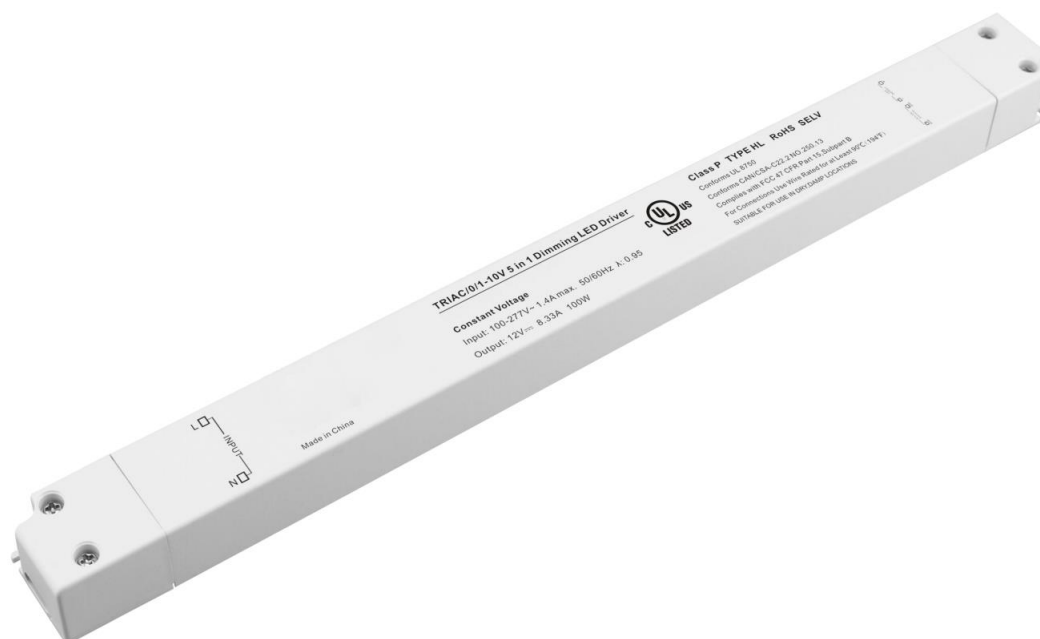
Class P

TYPE HL

SELV



RoHS



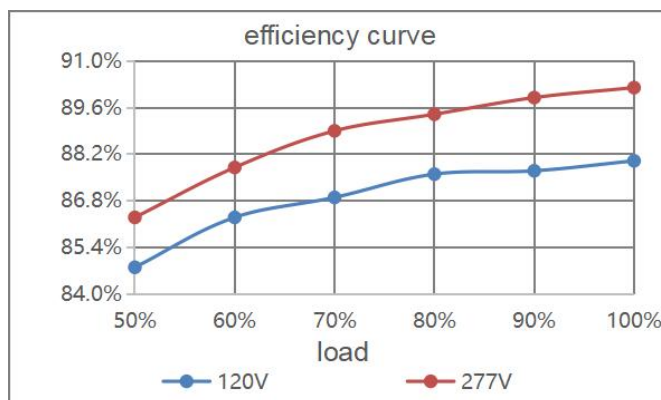
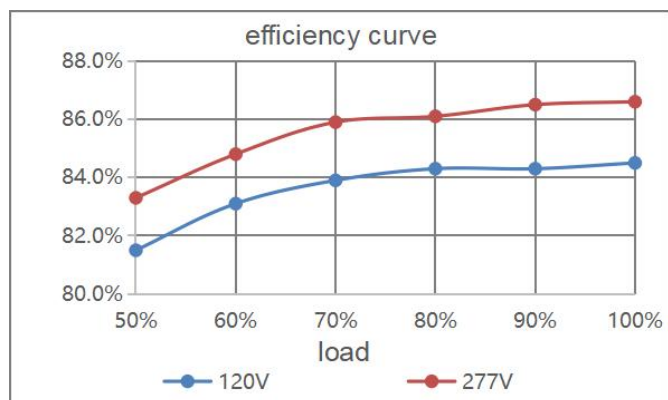
Features

Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 88%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	Full protection plastic housing, for dry, damp location
Dimming function:	<u>Phase dimming</u> : work with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers. <u>0-10V dimming</u> : 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
Dimming range:	0-100%
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

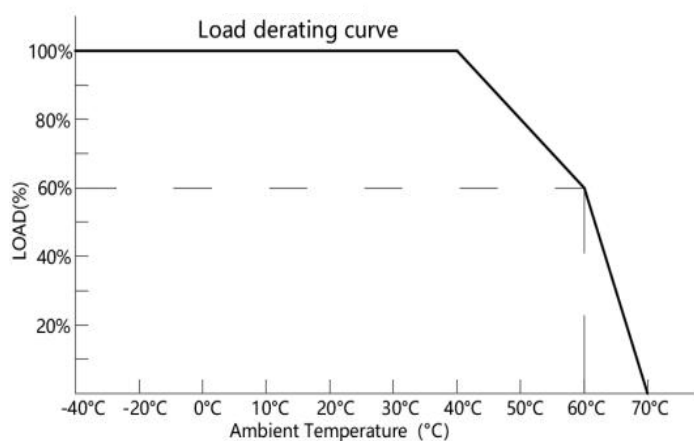
Specification

Model		8600-100W-12V
Certificate		UL / cUL / FCC / CE / ROHS / Reach
Output	DC Voltage	12V
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Rated current	8.33A
	Rated power	100W
	Load Regulation	±2%
Input	Voltage Range	100-277VAC
	Frequency Range	47 - 63Hz
	Power Factor@ full load	0.995@120VAC 0.995@277VAC
	THD(Typ.) @ full load	<10%@120VAC <15%@277VAC
	Efficiency(Typ.) @ full load	82%@120VAC 86%@277VAC
	AC Current (Max.)	1.3A
	Inrush Current (Typ.)	11A ,1.04ms@120VAC 27A ,960us@277VAC
	Leakage current	<0.5mA
Protection	Short Circuit	Shut down o/p voltage, re-power on to recover after fault condition removed
	Over Load	≤120% Hiccup mode,recovers automatically after fault condition is removed
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling
Environment	Working TEMP.	-40~+60℃ (see below derating curve)
	Working Humidity	20 - 90%RH non-condensing
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing
	TEMP.coefficient	±0.03%/℃(0 - 50℃)
	Vibration	10~500Hz, 2G 12min./1 cycle, period for 72min. each along X,Y,Z axes
Safety & EMC	Safety standards	UL8750, CAN/CSA-C22.2 No.250.13
	Withstand voltage	I/P-O/P: 1.80KVAC
	Isolation resistance	I/P-O/P: 100MΩ / 500VDC / 25℃ / 70% RH
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B
Others	Net Weight	0.32Kg
	Dimension	329.7*30*22mm(L*W*H)
	Packing	350*330*145mm 50pcs /CTN 17.5KG/CTN
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25℃of ambient temperature.	
	2. Tolerance: includes set up tolerance and load regulation .	

Efficiency Curve (efficiency vs output load)

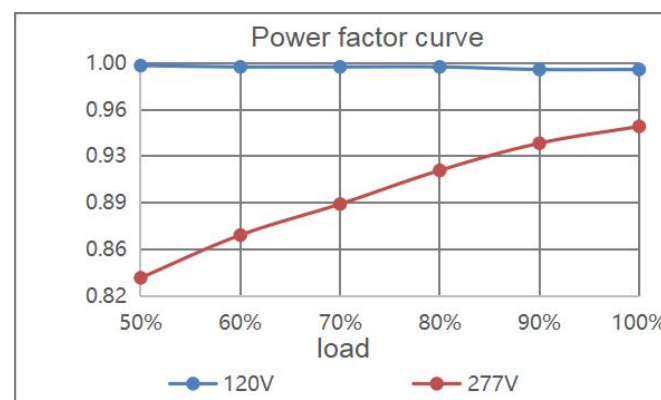
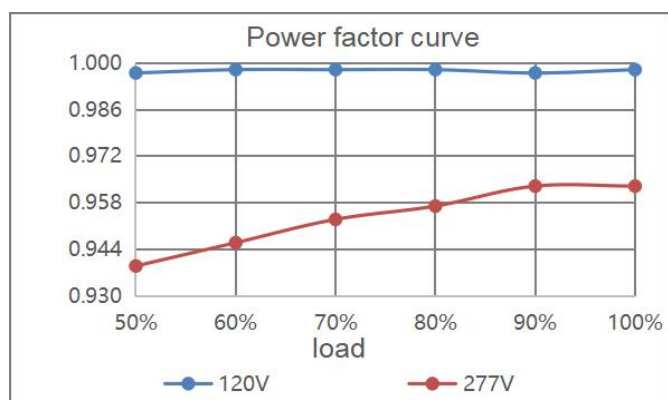


Derating Curve (output load vs TEMP.)

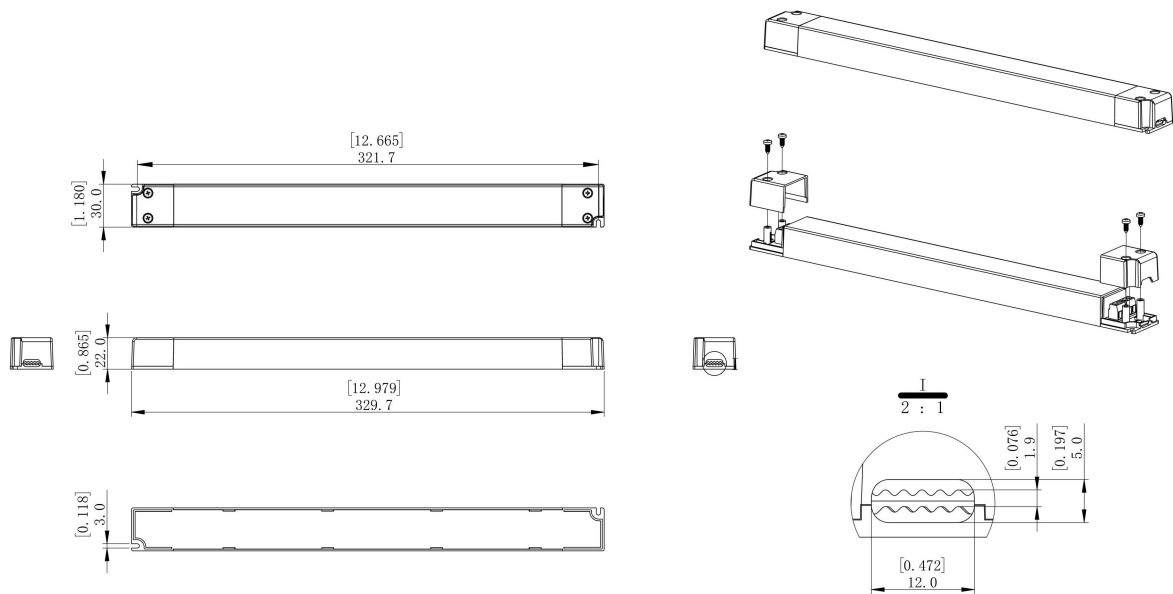


❖ To extend their life, please refer to the Derating Curve and derate according to the temperature.

Power factor curve



Mechanical Specification



12V & 24V Version

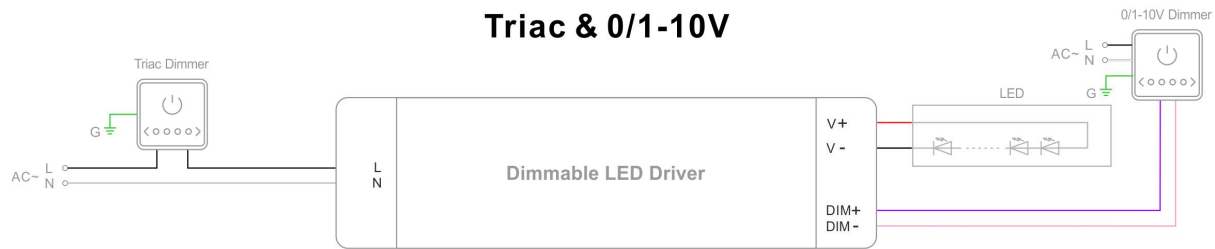
1. Connect Live and Neutral wire to PRI (L) and (N) of power supply terminals.
2. Connect LED light to SEC Positive (LED+) and Negative (LED-) of power supply terminals.
3. Connect the dimming signal wire (+) and (-) to DIM (+) and DIM(-) of power supply terminals.
4. Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
5. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

Warm tips:

1. Suggested wire diameter: Input 0.75-2mm²; Output:0.5-2mm².
2. Any other requests for, we can customized.

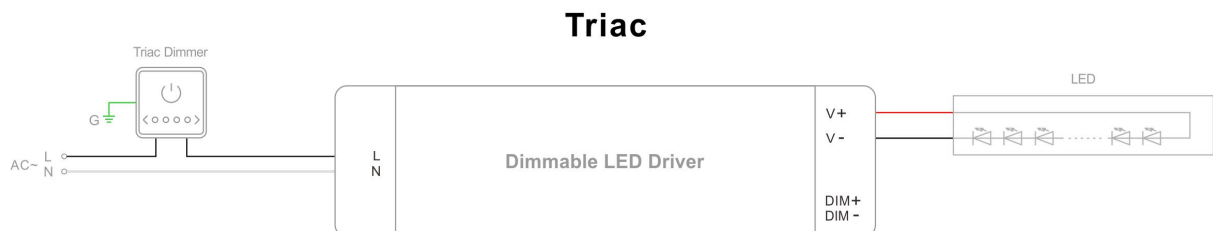
Dimming Operation and Connecting Diagram

- **Using two ways of dimming at the same time**, you must be assured that LED lighting is up to the max. Brightness then you could operate with the other dimming;

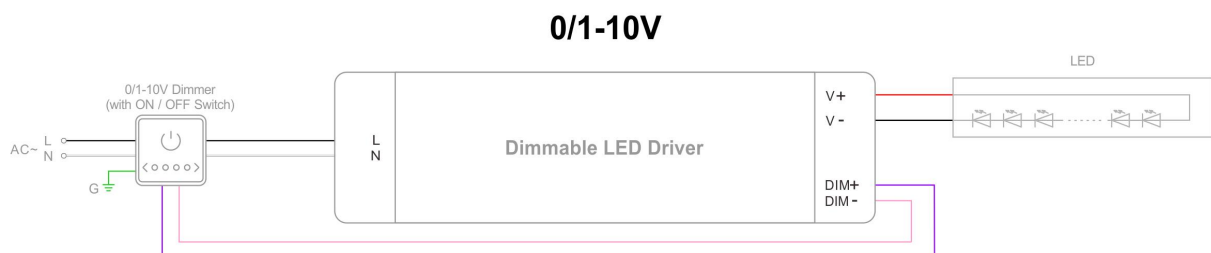


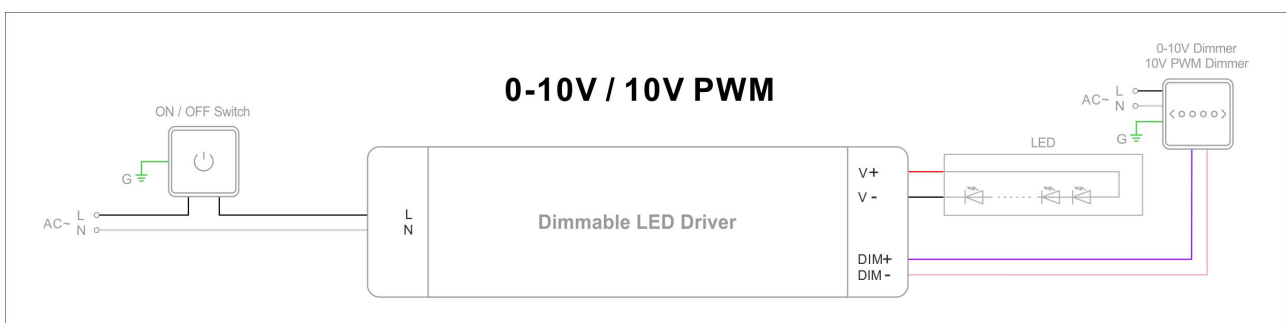
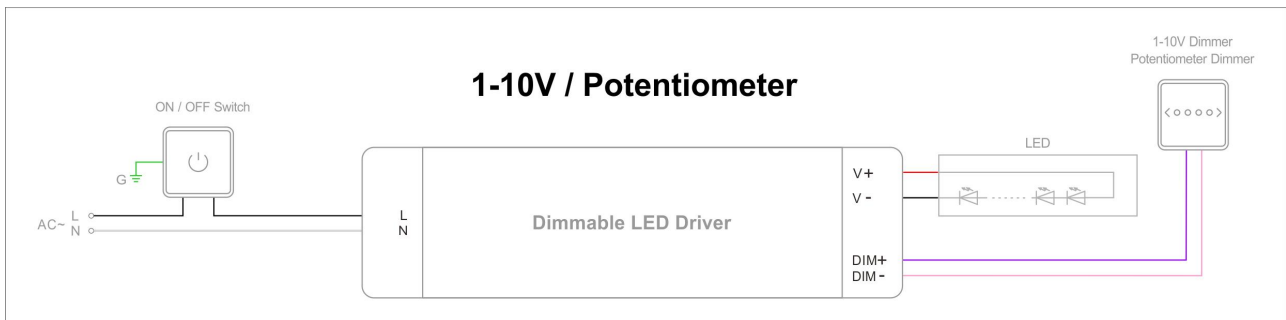
- **Using one dimming ---TRIAC/Phase cut dimming**

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers or light system.
3. Min. loading is about 10%.
4. Please try to use dimmers with power at least 1.5 times as the output power of the driver.



- **Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming**





Instruction

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation; If the product is installed in a sealed lamp, it is recommended to reduce the load and use it; The recommended load size is $\leq 80\%$ of the rated load.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.

Have any questions, please contact Richee Lighting.

Please visit our website or contact us for more information! www.richeelighting.com