

## **8600 Series 30W**

# CUDUS FC Class 2 Class P TYPE HL SELV CE ROHS Reach



#### **Features**

Output: Constant Voltage Range: 100-277VAC

PFC design: Built-in active PFC function

Efficiency: Up to 80%

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: Phase dimming: work with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers.

 $\underline{\text{0-10V dimming}}\textsc{:}\ \text{0-10V/1-10V/Potentiometer/10V PWM 4 in 1}$ 

Dimming range: 0-100%

Application: Suitable for LED lighting and moving sign applications

Warranty: 5 years warranty

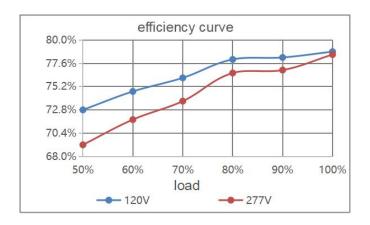


# **Specification**

Model		8600-30W-12V	8600-30W-24V
Certificate		UL / cUL / FCC / Class 2 / CE / ROHS / Reach	
Output	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Rated current	2.5A	1.25A
	Rated power	30W	
	Load Regulation	±2%	±1%
Input	Voltage Range	100-277VAC	
	Frequency Range	47 - 63Hz	
	Power Factor@ full load	0.99@120VAC 0.98@277VAC	
	THD(Typ. ) @ full load	<10%@120VAC <15%@277VAC	
	Efficiency(Typ.) @ full load	79%@120VAC 80%@277VAC	
	AC Current (Max.)	0.5A	
	Inrush Current (Typ.)	5A,960us@120VAC 13A,1ms@277VAC	
	Leakage current	<0.5mA	
Protection	Short Circuit	Hiccup mode,recovers automatically after fault condition is 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°C (see below derating curve)	
	Working Humidity	20 - 90%RH non-condensing	
	Storage TEM.,Humidity	-40 - +80°C,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+UL1310 , CAN/CSA-C22.2 No.250.13	
	Withstand voltage	I/P-O/P: 1.80KVAC	
	Isolation resistance	I/P-O/P: 100MΩ / 500VDC / 25°C / 70% RH	
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B	
Others	Net Weight	0.2Kg	
	Dimension	260*30*18.5mm(L*W*H)	
	Packing	330*275*130mm 50pcs /CTN 9.5	934KG/CTN
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature.</li> <li>Tolerance: includes set up tolerance and load regulation .</li> </ol>		

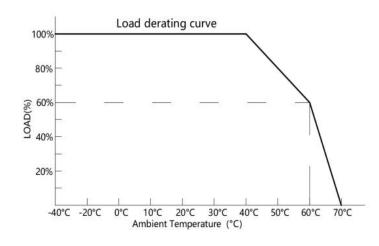


### **Efficiency Curve (efficiency vs output load)**



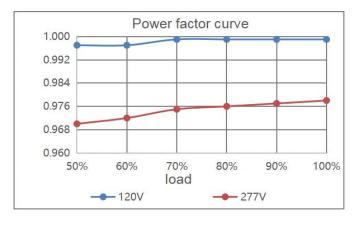


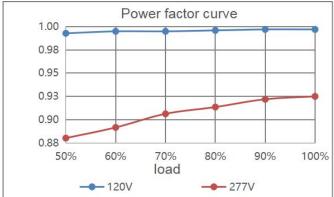
# **Derating Curve (output load vs TEMP.)**



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

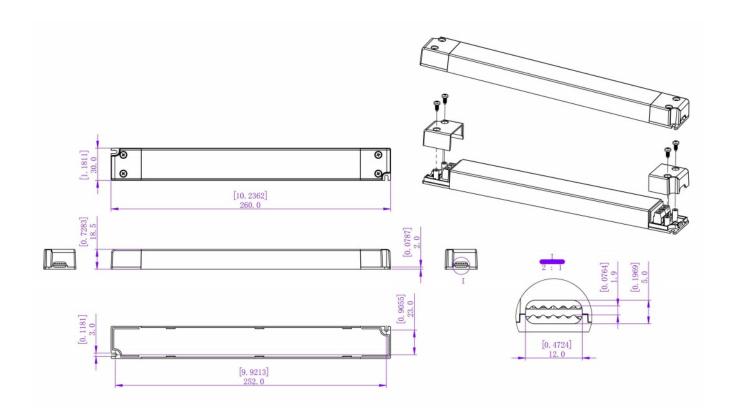
#### Power factor curve







### **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 your connect these correctly otherwise your product will not function correctly and could be damaged.

#### Warm tips:

- 1. Suggested wire diameter: Input 0.75-2mm<sup>2</sup>; Output:0.5-2mm<sup>2</sup>.
- 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.

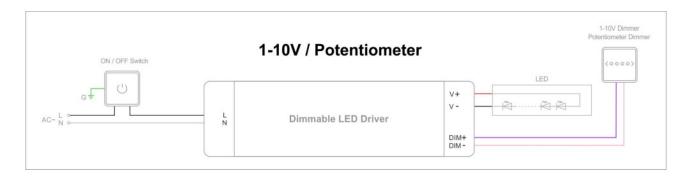


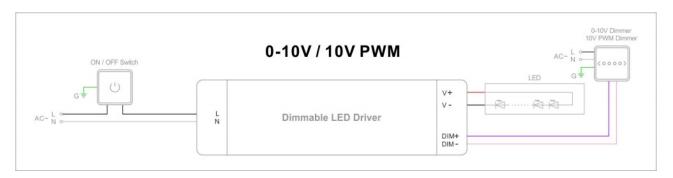
Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming











#### 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 ≤ 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