

## PSCD-600W24V KVE



Class P TYPE HL SELV RoHS




### Features

Output:	Constant Voltage
Input voltage range:	110-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 93%
Protections:	Short circuit/over temperature/over load
Heat dissipation:	Cooling by free air convection
Waterproof performance:	Full iron protection housing, for dry, damp & wet locations (US)
Dimming function:	Phase dimming: work with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers. PWM & Voltage reduce (VR) mode can be switched (American Invention Patent)
Dimming mode:	
Dimming range:	PWM: 0-100% & Min load 15% VR: 24V(14-24V); 36V(21-36V); 48V(28-48V)
Application:	Suitable for the application of LED lighting
Warranty:	2 years warranty
Others:	High efficiency, small size, high power factor, low THD



## Specification

Model		PSCD-600W24V KVE	PSCD-600W36V KVE	PSCD-600W48V KVE
Certificate		UL / FCC / Type HL/ Class P / SELV / CE / RoHS / REACH		
Output	DC Voltage	24V	36V	48V
	Fine-tune Voltage 	24V-25.5V	36V-37.5V	48V-49.5V
	Voltage Tolerance	±1.5%	±1%	±1%
	Voltage Regulation	≤0.5%		
	Rated current	25A	16.67A	12.5A
	Rated power	600W		
	Load Regulation	±1%		
Input	Voltage Range	110-277VAC		
	Frequency Range	47 - 63Hz		
	Power Factor @ full load	> 0.95		
	Efficiency @ full load	90.5%@120VAC 93%@277VAC	90.5%@120VAC 93%@277VAC	90.5%@120VAC; 93%@277VAC
	AC Current (Max.)	6A		
	THD(Typ.)@full load	<20%@120VAC & 277VAC		
	Inrush Current (Typ.)	52A,810us@50%Ipeak110Vac; 76A,148us@50%Ipeak277Vac		
	Leakage current	<0.5mA		
Protection	Short Circuit	Hiccup mode, automatically recovers after an exception is removed		
	Over Load	≤120%, hiccup mode, automatically recovers after an exception is removed		
	Over Temperature	100°C±10°C shut down o/p voltage, automatically recover after cooling		
Environment	Working TEMP	-40~+60°C (see below derating curve)		
	Working Humidity	20 -95%RH non-condensing		
	Storage TEM.,Humidity	-40 - +80°C,10 - 95% RH non-condensing		
	TEMP.coefficient	±0.03%/°C(0 - 50°C)		
	Ambient TEMP.	45°C		
	Case TEMP.	90°C		
	Vibration	10~500Hz, 5G 10min./1 cycle, period for 60min. each along X,Y,Z axes		
Safety & EMC	Safety standards	UL8750 (US)		
	EMC Emission	FCC Part 15 Subpart B; ANSI C63.4a-2017		
	EMC Immunity	Conform to EN61000-4-2,3,4,5,6,11 EN61547		
	Withstand voltage	I/P-O/P:1.8KVAC I/P-FG:1.8KVac O/P-FG:1.8KVac		
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70%RH		
	Stroboscopic test standards	Conform to IEEE 1789 no flicker		
	Lightning surge	Different mode: 2KV,Common mode: 4KV		
Others	Net Weight	2.58Kg		
	Dimension	280*140.2*48.5mm(L*W*H)		
	Packing	342*285*170mm 5pcs /CTN		



**Triac/Phase/ELV/MLV-Constant Voltage Output-KVE TDWJ Series 600W**

<b>Notes</b>	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Under low input voltage, derating output is required to ensure a long life.</li> <li>3. Regarding LED driver load types where the driver meets the harmonic emissions requirements of ANSI C82.77-10.</li> </ol>
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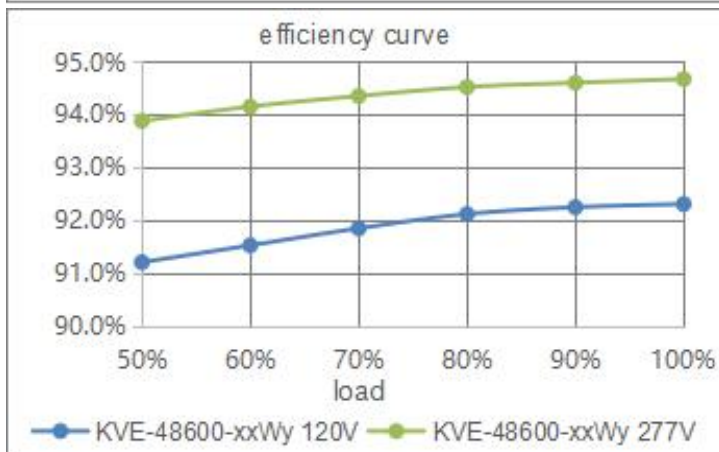
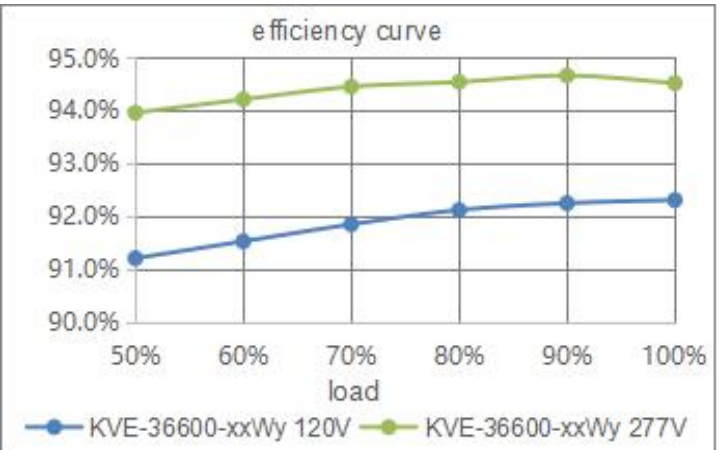
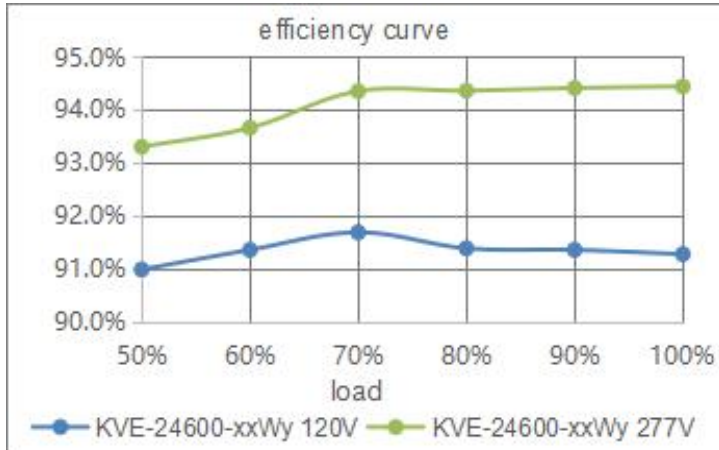
**MCB recommendation**

When the input voltage is 120Vac, the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type	10A	1
	13A	1
	16A	2
	20A	2
	25A	3
When the input voltage is 277Vac, the number of LED Driver matched by circuit breakers is as follows:		
MCB Type	Level	The number of LED Driver
C type	10A	2
	13A	3
	16A	4
	20A	5
	25A	6

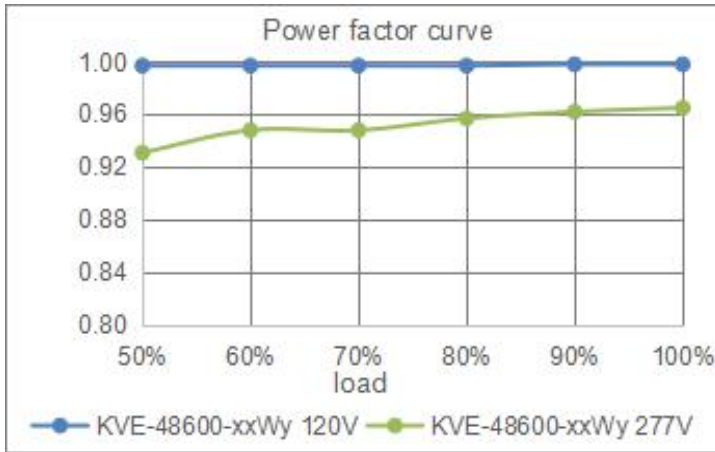
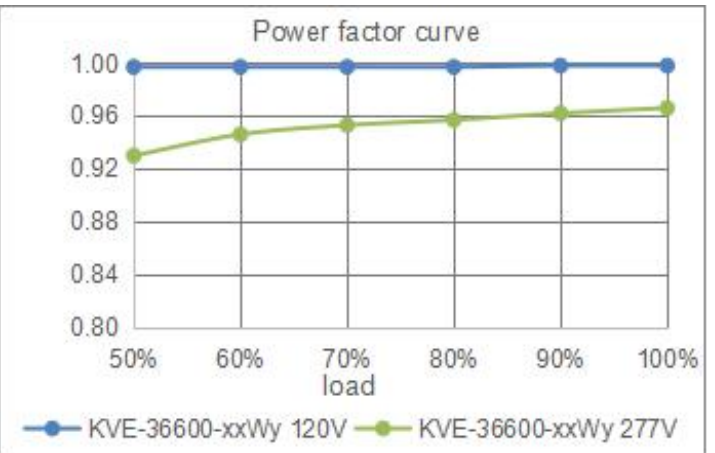
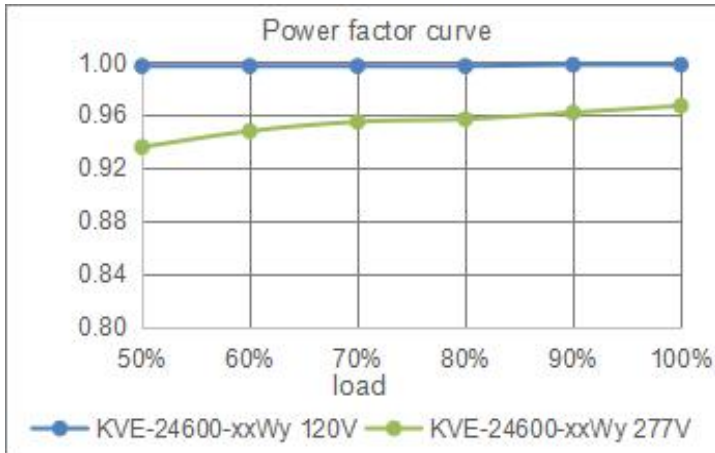
**Note:**

1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50 °C.
2. The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve.

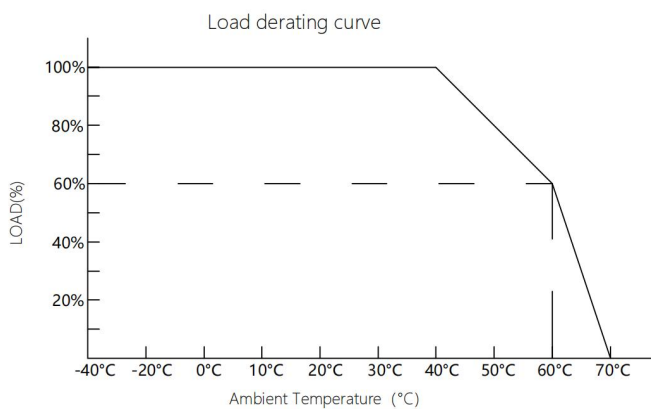
## Efficiency Curve (efficiency vs output load)



## Power factor curve(Power factor vs output load)

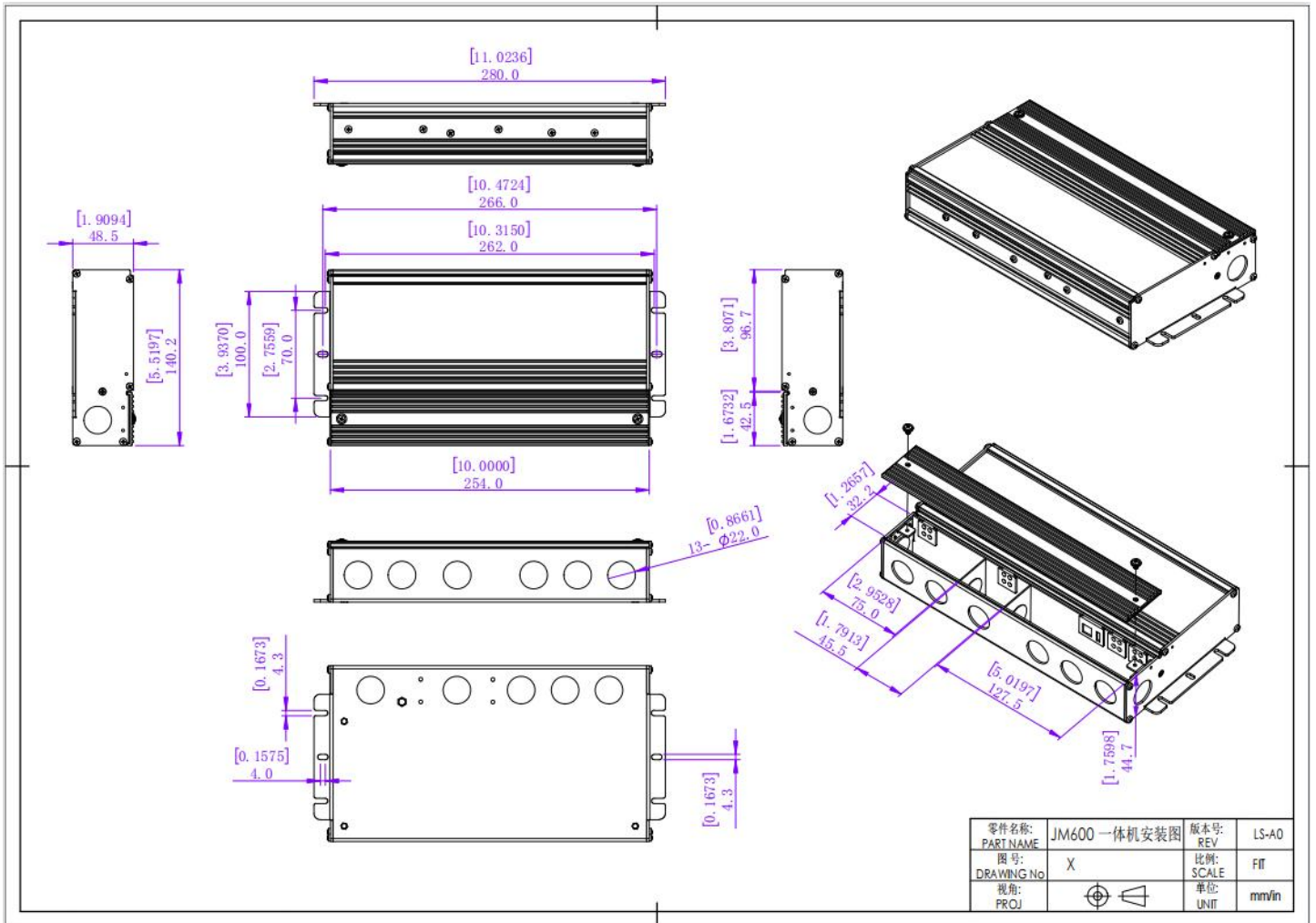


## Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading .

## Mechanical Specification



American wire gauge

JM600

Input wire	Black(L)White(N)Green(G)(3*18AWG)
Output wire(24V&36V)	Red(V+) Black(V-)(2*14AWG) Red(V+) Black(V-)(2*14AWG)
Output wire(48V)	Red(V+) Black(V-)(2*14AWG)

Remarks: Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged

### Warm tips:

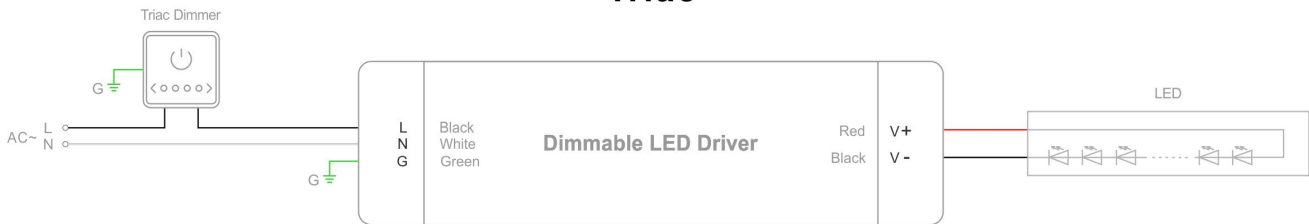
- Recommended Max. Carrying Current (A) = wire diameter(mm<sup>2</sup>) x 10A/mm<sup>2</sup>  
For example: 1mm<sup>2</sup> output cable, Recommended Max. Carrying Current (A) = 1mm<sup>2</sup> x 10A/mm<sup>2</sup> = 10A
- Any other requests for cable, we can customized.

### Dimming Operation and Connecting Diagram

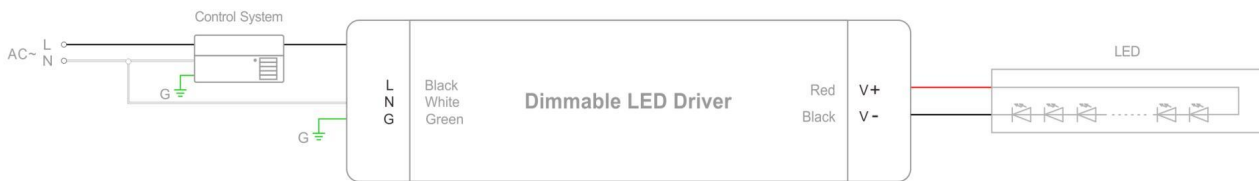
#### Using one dimming ---TRIAC/Phase cut dimming

- 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 /leading edge, MLV and Reverse phase /trailing edge, 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.

#### Triac



#### Triac



### Instructions

1. Confirm if the rated input voltage of the power supply is within the range of market voltage before use.
2. Pay attention to the distinction between the input and output lines of the power supply to avoid power damage or unnecessary safety accidents caused by connecting the reverse line.
3. The power supply cannot be stacked for installation (placement), and the installation distance between the power supply and the power supply should be greater than 10cm. Multiple power supplies should be installed in a narrow space, and the environmental temperature should be less than 55 °C during use; For example, distribution boxes, etc.
4. In order to extend the service life of the power supply, the power supply should be installed in an environment that is conducive to heat dissipation as much as possible;
5. As the ambient temperature increases, the power used by the power supply gradually decreases, and the lifespan of the power supply also gradually shortens.
6. Do not use under abnormal loads: Overloading can cause damage to the power supply, and extremely light loads can cause the power supply to malfunction.
7. To ensure safety and reduce interference, please ensure that the grounding wire is reliably grounded

Have any questions, please contact [sjoly@axentled.com](mailto:sjoly@axentled.com)

Please visit our website or contact us for more information! [www.axentled.com](http://www.axentled.com)