KVS-J Series

Whole Family: KVS-xxxxx-J (12V - 80W) (24V / 48V/ 51 V - 96W)

c UL us LISTED E495946 FC Class P Class 2 SELV RoHS Reach

Features

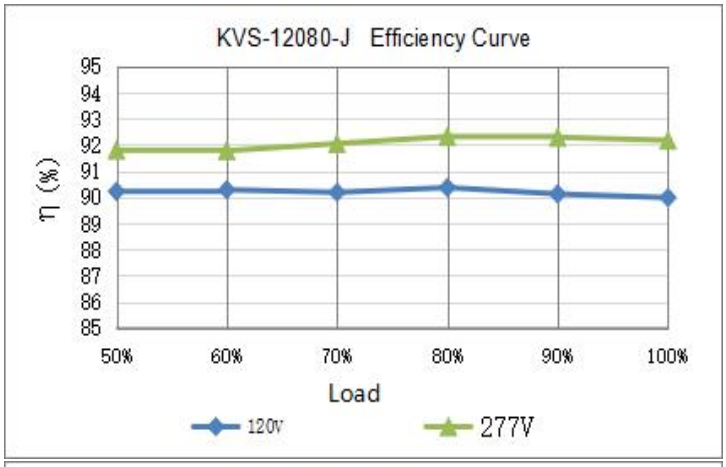
Output:	Constant Voltage
Input Range:	120-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 94%
Protections:	Short circuit/ Over load/ Over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	Full Iron protection housing, for dry, damp & wet locations (US)
Application:	Suitable for the application of LED lighting
Warranty:	5 years warranty
Others:	Flicker-free

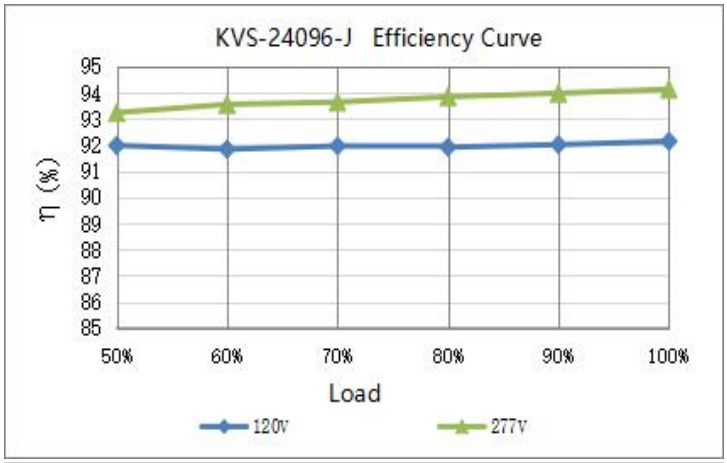
Specification

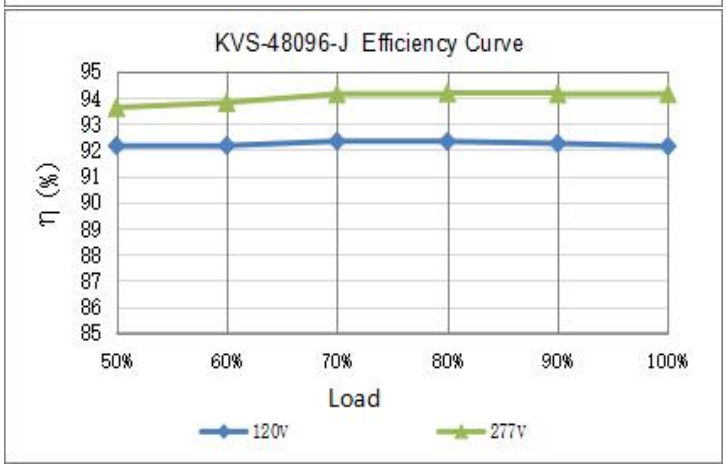
Model		KVS-12080-J	KVS-24096-J	KVS-48096-J	KVS-51096-J
Certificate		UL / cUL / FCC / Class P / Class 2 (24V&48V) / SELV / RoHS / Reach			
Output	DC Rate Voltage	12V	24V	48V	51V
	Voltage Tolerance	±0.36V	±0.48V	±0.72V	±0.75V
	Load Regulation	≤1%	≤1%	≤1%	≤1%
	Line Regulation	≤0.5%			
	Rated current	6.7A	4A	2A	1.88A
	Rated power	80W	96W	96W	96W
Input	Voltage Range	120-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor @ full load	≥0.99@120VAC; ≥0.95@277VAC			
	THD(Typ.) @ full load	≤10%@120VAC; ≤20%@277VAC (50%Load～100%Load)			
	Efficiency @ full load	≥90.0%@120VAC ≥92.5%@277VAC	≥92.0%@120VAC ≥94.0%@277VAC	≥93.0%@120VAC ≥94.2%@277VAC	≥93.0%@120VAC ≥94.2%@277VAC
	AC Current (Max.)	0.9A	1.0A	1.0A	1.0A
	Inrush Current (Typ.)	30A,150us@50%Ipeak@120VAC; 50A,180us@50%Ipeak@277VAC			
	Leakage current	<0.5mA			
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed			
	Over Load	≥110% Hiccup mode, recovers automatically after fault condition is removed			
	Over temperature	Shell surface temperature 100℃±10℃ shut down o/p voltage, automatically recover after cooling			
Environment	Working TEMP.	-40~+50℃ (see below derating curve)			
	Working Humidity	20 - 95%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 72 min. each along X,Y,Z axes			
Safety & EMC	Safety standards	UL8750 CAN/CSA-C22.2 No.250.13 (US)			
	Withstand voltage	I/P-O/P:1.88KVAC I/P-F/G:1.88KVAC O/P-F/G:1.88KVAC (US)			
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70% RH			
	Surge Immunity Test	AC Power Line: Differential Mode 2KV, Common Mode 4KV			
	EMC Immunity	FCC/ICES do not request this test (US)			
	EMC Emission	FCC Part15 Subpart B ANSI C63.4:2014 (US)			
Others	Net Weight	0.52KG			
	Dimension	165.4*80.0*40.4mm / 6.512"x3.150"x1.591" (Inch)			
	Packing				

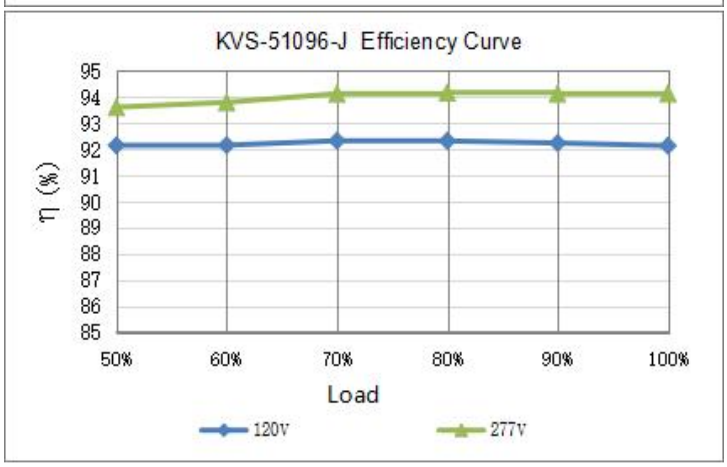
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25℃of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation . 3. The power supply is considered as a component that will be operated in combination with final Equipment. Since EMC performance will be affected by the complete installation, the final equipment manufactures must be-qualify EMC Directive on the complete installation again. 4. Regarding LED driver load types where the driver meets the harmonic emissions requirements of ANSI C82.77-10

Efficiency Curve (efficiency vs output load)

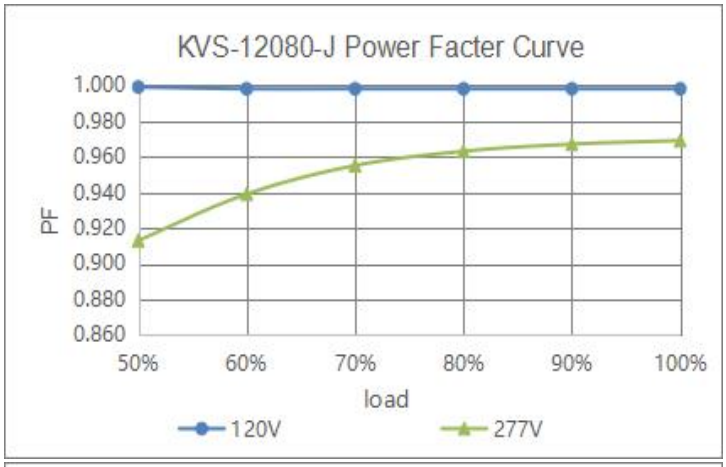


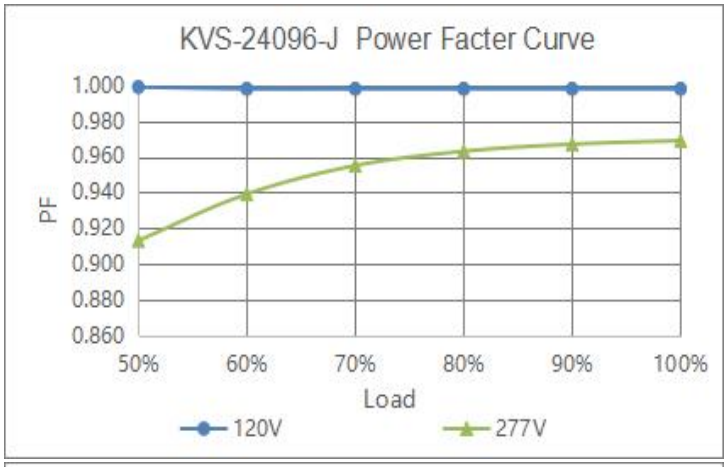


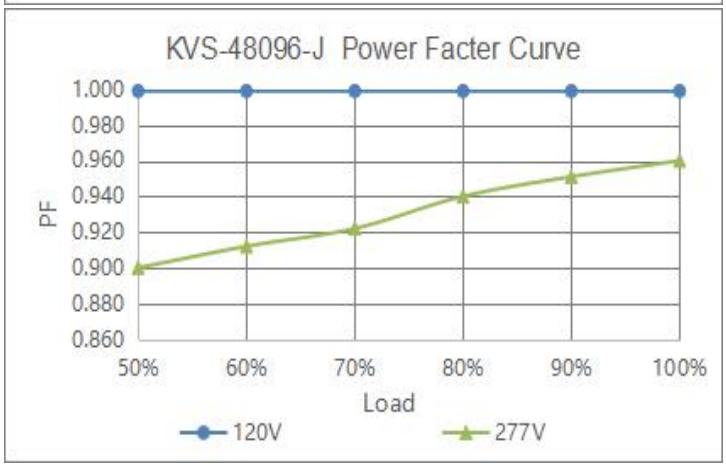


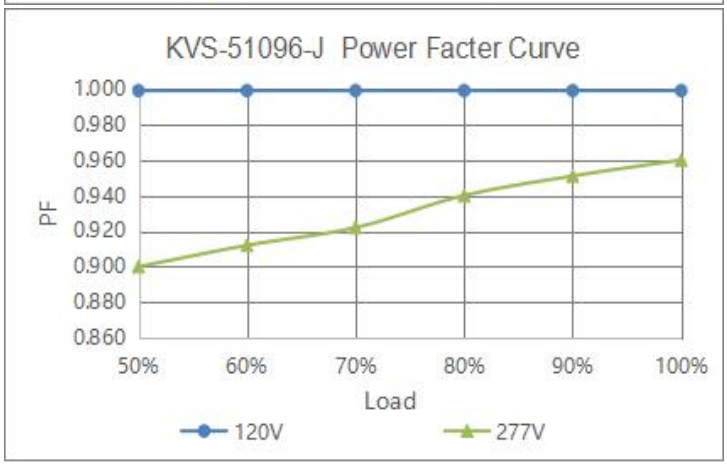


Power factor curve

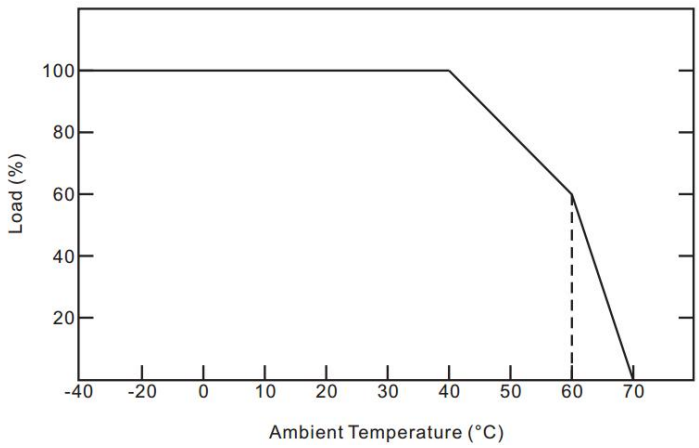






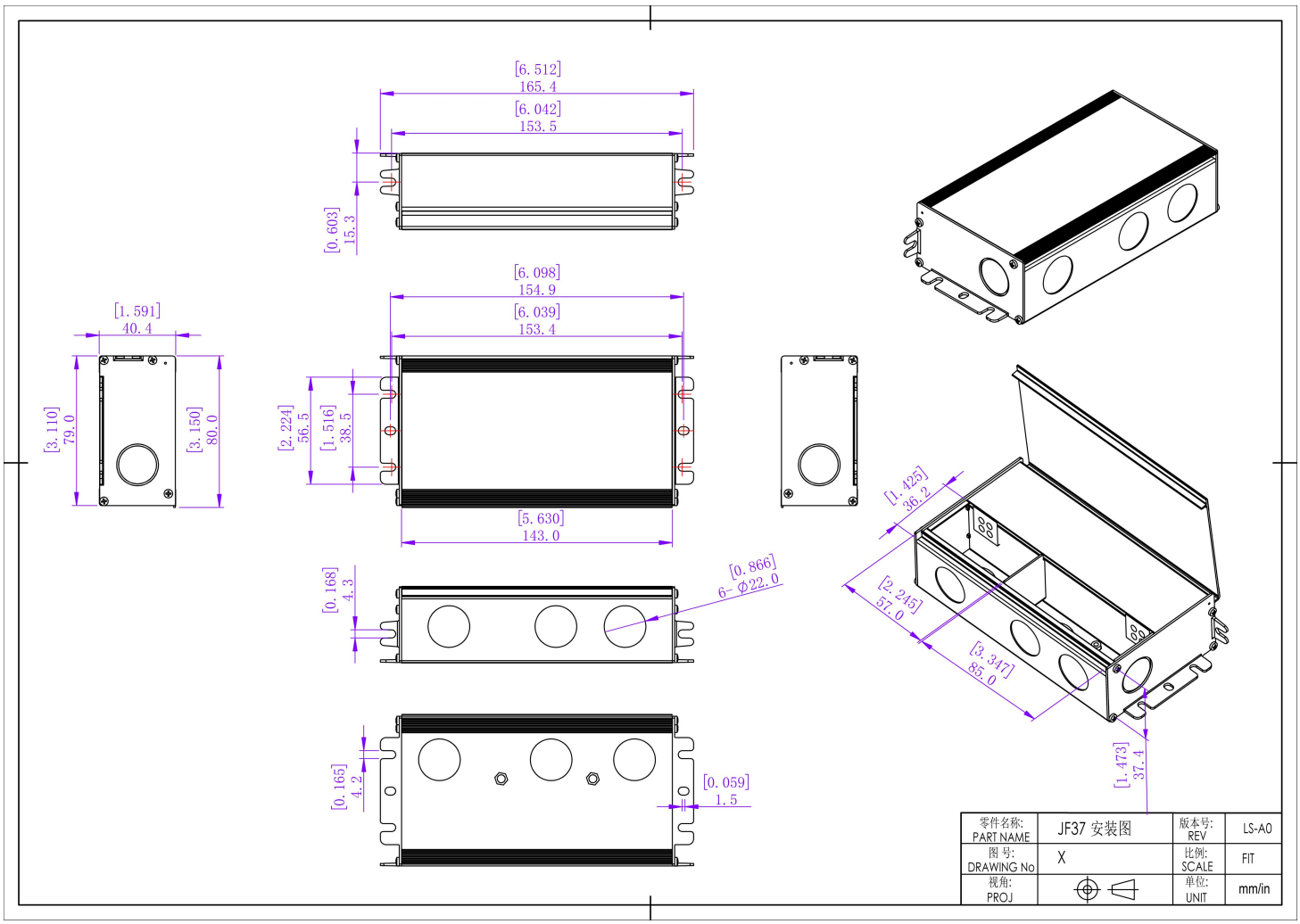


Derating Curve (Output power VS Ambient TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. The output current of the LED driver should be selected according to the rated current of the lamp and the ambient temperature. Normally, we recommend the power supply to reserve a certain amount of load to extend LED driver's life .

Mechanical Specification

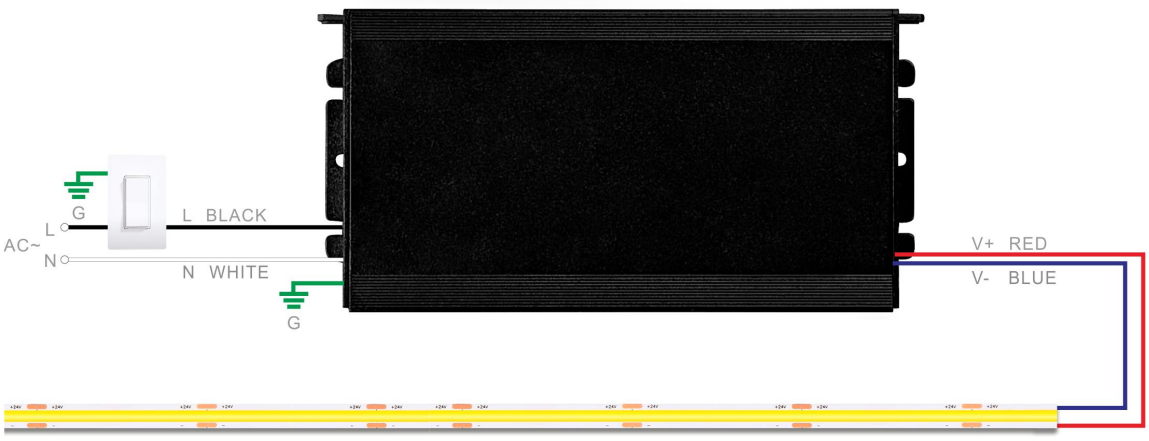


American Wire Gauge	
JF37	
Input wires	Black cable (L) White cable (N) Green cable (GND) (3*18AWG)
Output wires	Red cable (V+) Blue cable(V-) (12V : 2*16AWG, 24V/48V : 2*18AWG)

Warm tips:

1. Any other requests, we can customize.
2. Please ensure that the connection is correct.

Connecting Diagram



Instructions

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.
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 Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/en