PYJD-TDW Series 200W

Class P TYPE HL SELV RoHS Reach

TRIAC Dimmable LED Driver - Constant Voltage Output

Features

Output:	Constant Voltage
Range:	110-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 90%
Protections:	Short circuit / Over load / Over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	Driver built in junction box, for dry, damp & wet locations.
Dimming function:	Phase dimming: work with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers.
Dimming range:	0.1-100%
Application:	Suitable for the application of LED lighting
Warranty:	2 years warranty
Others:	PWM output, High power factor PF>0.9, flicker-free dimming

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Specification

Model		PYJD-12200-TDW	PYJD-24200-TDW	PYJD-48200-TDW
Certificate		(12V/24V): UL / cUL / FCC / Class P / TYPE HL / SELV / ROHS / REACH (48V): /		
Output	DCVoltage	12V	24V	48V
	VoltageTolerance	±0.5V		±1V
	VoltageRegulation	±0.5%		
	Ratedcurrent	16.6A	8.33A	4.17A
	Ratedpower	200W		
	LoadRegulation	±2%	±1%	±1%
Input	VoltageRange	110-277VAC		
	FrequencyRange	50/60Hz		
	PowerFactor@fullload	>0.9		
	THD(Typ.)@fullload	<20%@120VAC&277VAC		
	Efficiency(Typ.) @fullload	≥86%@120VAC ≥88%@277VAC	≥88%@120VAC ≥90%@277VAC	≥88%@120VAC ≥90%@277VAC
	ACCurrent(Max.)	2.3A		
	InrushCurrent(Typ.)	40A,570us@50%120VAC 65.6A,560us@50%277VAC		
	Leakagecurrent	<0.5mA		
Protection	ShortCircuit	12V/24V: Shut down o/p voltage, re-power on to recover after fault condition removed. Or, hiccupmode,recoversautomaticallyafterfaultconditionisremoved. 48V: Hiccup mode, recovers automatically after fault condition is removed.		
	Over Load	105%~120% 12V/24V: Shut down o/p voltage, re-power on to recover after fault condition removed. 48V: Hiccup mode, recovers automatically after fault condition is removed.		
	Overtemperature	Shellsurfacetemp.100℃±10℃shutdowno/pvoltage,automaticallyrecoveraftercooling.		
Environment	WorkingTEMP.	-40~+60℃(seebelowderatingcurve)		
	WorkingHumidity	20-95%RH non-condensing		
	StorageTEM.,Humidity	-40-+80℃,10-95%RHnon-condensing		
	TEMP.coefficient	±0.03%/℃(0-50℃)		
	Vibration	10~500Hz,5G12min./1cycle,periodfor72min.eachalongX,Y,Zaxes		
Safety & EMC	Safetystandards	UL8750; CAN/CSA-C22.2No.250.13		
	Withstandvoltage	I/P-O/P:1.88KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC		
	Isolationresistance	I/P-O/P:100MΩ/500VDC/25℃/70%RH		
	EMCImmunity	FCC/ICESdonotrequestthistest.		
	EMCEmission	FCCPart15SubpartB; ANSIC63.4-2014		
Others	NetWeight	1.82KG		
	Dimension	260.6*106*49mm(L*W*H)		
	Packing	320*295*240mm 10pcs/CTN		
Notes	1. AllparametersNOTspeciallymentionedaremeasuredat120VACinput,ratedloadand25℃ofambienttemperature. 2. Tolerance:includessetuptoleranceandloadregulation.			

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MCB recommendation

When the input voltage is 120Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCBType	Level	ThenumberofLEDDriver
Ctype	10A	4
	13A	5
	16A	6
	20A	8
	25A	9
When the input voltage is 277Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCBType	Level	ThenumberofLEDDriver
Ctype	10A	3
	13A	4
	16A	5
	20A	6
	25A	7

Note:

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

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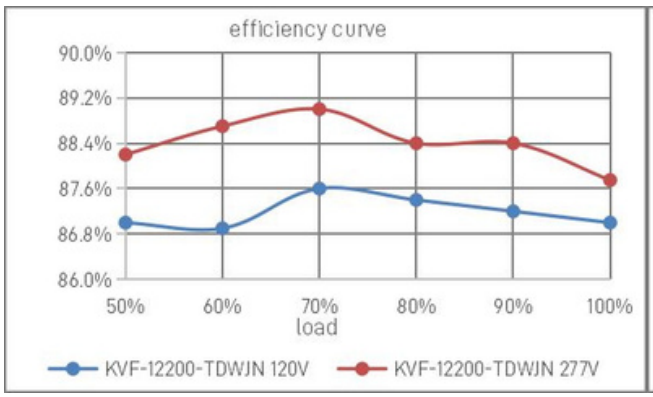
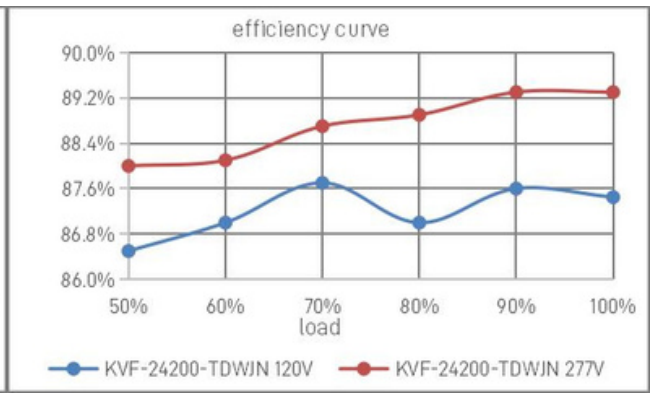
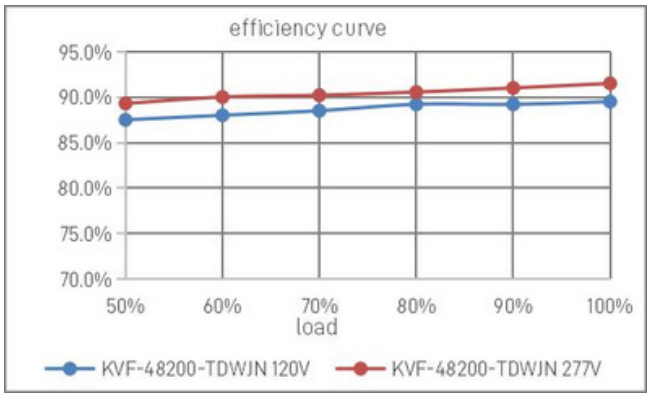
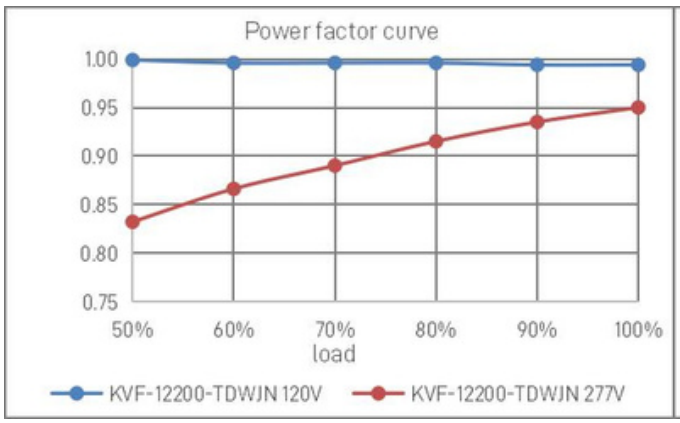
Efficiency Curve (efficiency vs output load)

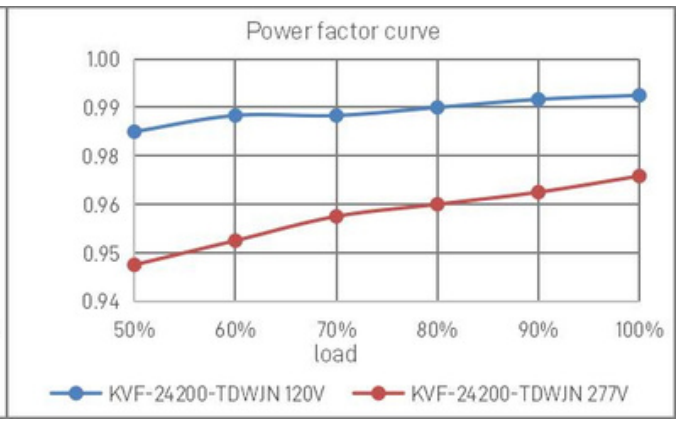


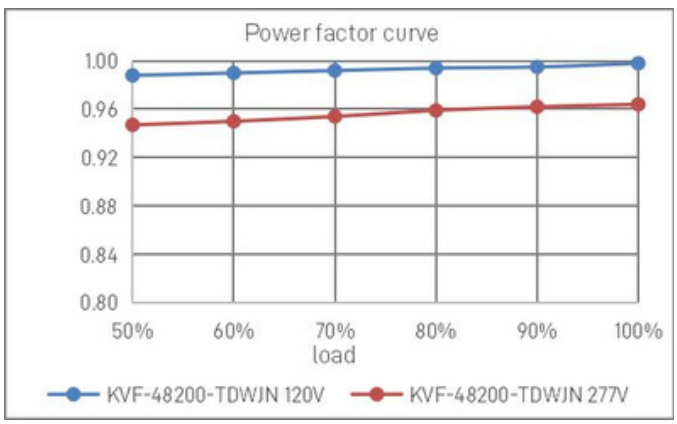




Power Factor Curve (power factor vs output load)







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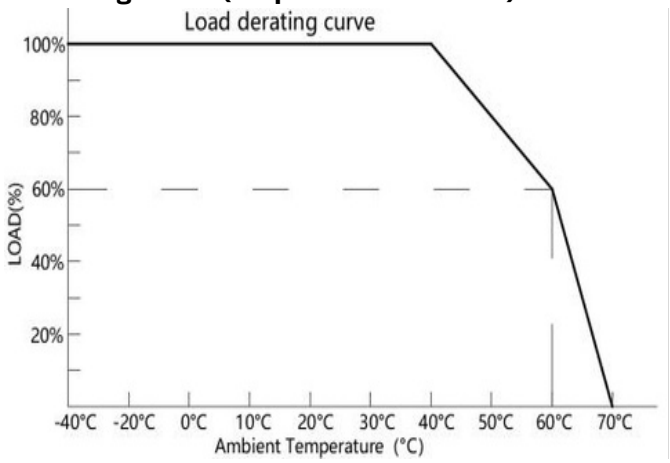
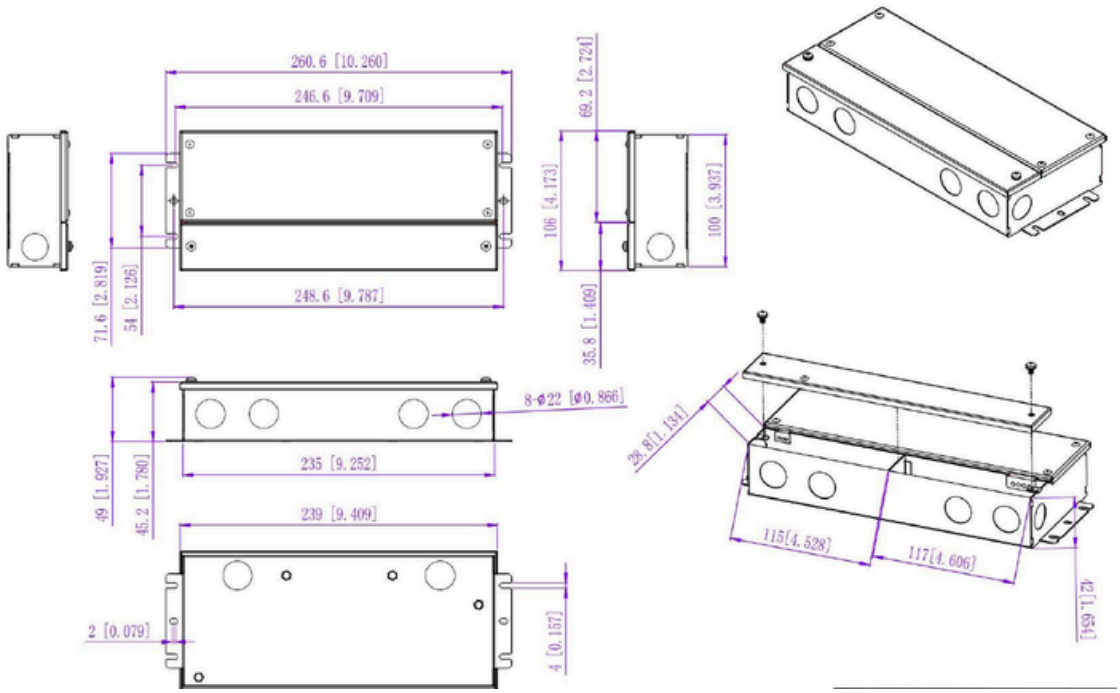
Derating Curve (output load vs TEMP.)



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 .



American wire gauge	
JM96 -A1	
Inputwire	Black(L)White(N)Green(G)(3*18AWG)
Outputwire	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:

1. Recommended Max. Carrying Current (A) = wire diameter(mm^2) x 10A/mm^2
   For example: 1mm^2 output cable, Recommended Max. Carrying Current (A) = 1mm^2 x 10A/mm^2=10A

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, MLV and Reverse phase, ELV, TRIAC dimmers.
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.

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.