PYJD-TDW Series 300W

TRIAC Dimmable LED Driver - Constant Voltage Output

Features

Output:	Constant Voltage
Range:	110-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 91%
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.
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-12300-TDW	PYJD-24300-TDW
Certificate		UL / cUL / FCC / Class P / TYPE HL / SELV / RoHS / Reach	
Output	DC Voltage	12V	24V
	VoltageTolerance	±4%	±2%
	VoltageRegulation	≤0.5%	
	LineRegulation	±1%	
	Ratedcurrent	25A	12.5A
	Ratedpower	300W	
	VoltageRipple	356mVp-p	252mVp-p
Input	VoltageRange	110-277VAC	
	FrequencyRange	50/60Hz	
	PowerFactor(Typ.)@fullload	>0.9	
	THD(Typ.)@fullload	<20%	
	Efficiency(Typ.)@fullload	88%@120VAC 89%@277VAC	89%@120VAC 91%@277VAC
	ACCurrent(Max.)	3.4A	
	InrushCurrent(Typ.)	26.8A,5us@50%120VAC 70A,8us@50%277VAC	
	Leakagecurrent	<0.5mA	
Protection	ShortCircuit	Shutdowno/pvoltage,re-powerontorecoverafterfaultconditionisremoved	
	OverLoad	≥120%Hiccupmode,recoversautomaticallyafterfaultconditionisremoved	
	Over temperature	Shell surface temp.100℃±10℃ shut down o/p voltage, automatically recover after cooling	
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	
	SurgeImmunityTest	ACPowerLine:DifferentialMode1KV,CommonMode2KV	
	EMCImmunity	FCC/ICESdonotrequestthistest	
	EMCEmission	FCCPart15,SubpartB; ANSIC63.4-2014	
Others	NetWeight	2.12Kg	
	Dimension	278*110*48.6mm(L*W*H)	
	Packing	340*295*250mm 10pcs/CTN 22.45KG/CTN	
Notes	1. AllparametersNOTspeciallymentionedaremeasuredat120VACinput,ratedloadand25℃ofambienttemperature. 2. Tolerance:includessetuptoleranceandloadregulation. 3. LEDdriverMeetstheharmonicemissionsrequirementsofANSIC82.77-10.		

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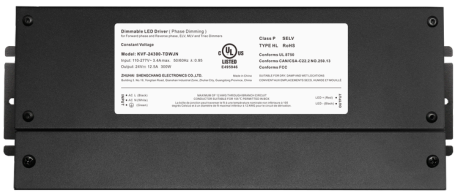
MCB recommendation

When the input voltage is 120Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCBType	Level	ThenumberofLEDDriver
Ctype	10A	2
	13A	3
	16A	4
	20A	5
	25A	6
When the input voltage is 277Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCBType	Level	ThenumberofLEDDriver
Ctype	10A	5
	13A	7
	16A	9
	20A	11
	25A	14

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.



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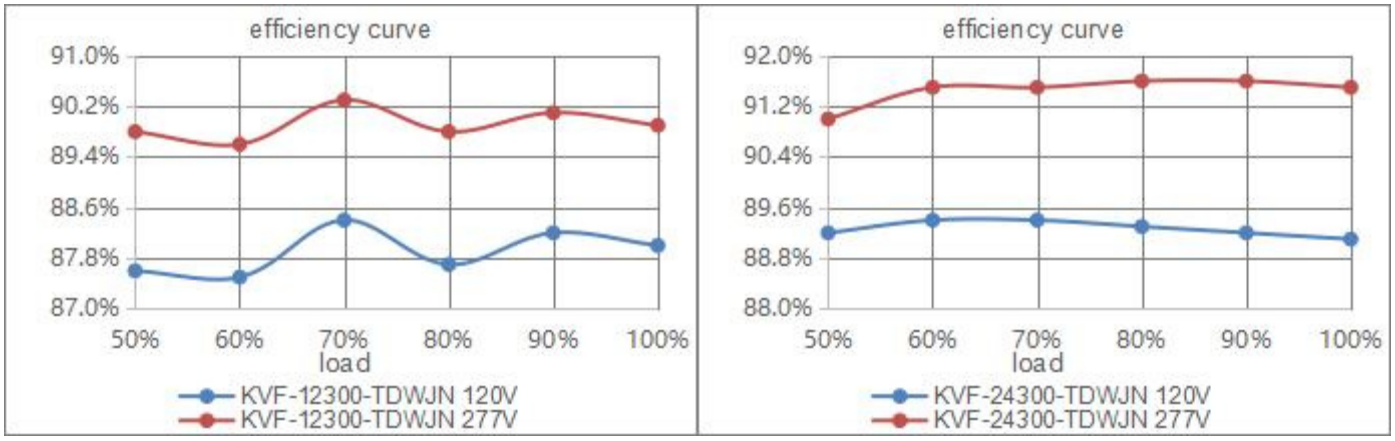
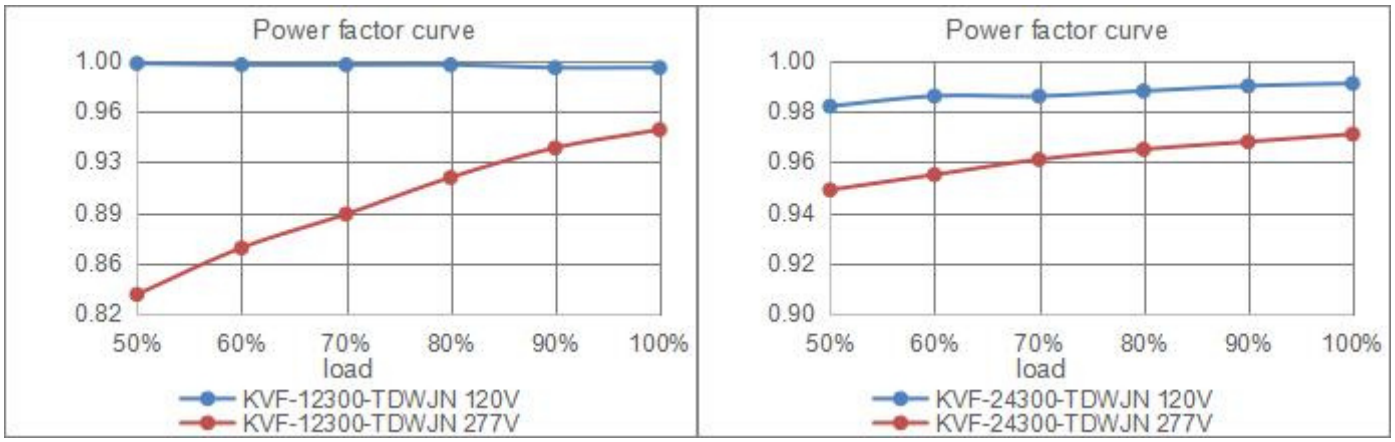
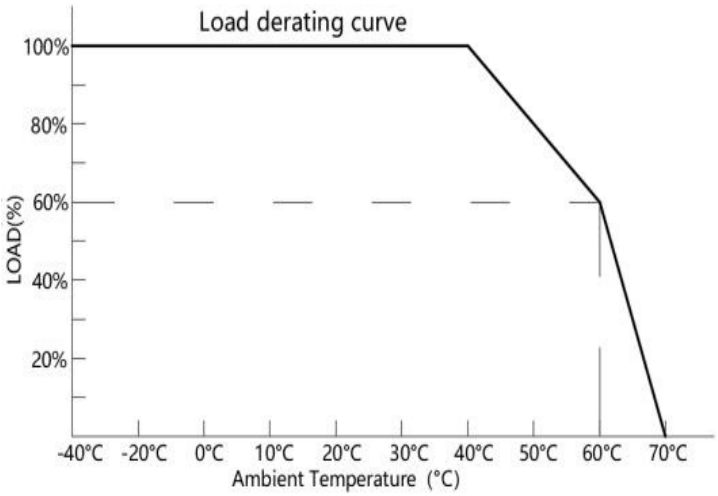
Efficiency Curve (efficiency vs output load)



Power Factor Curve



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.

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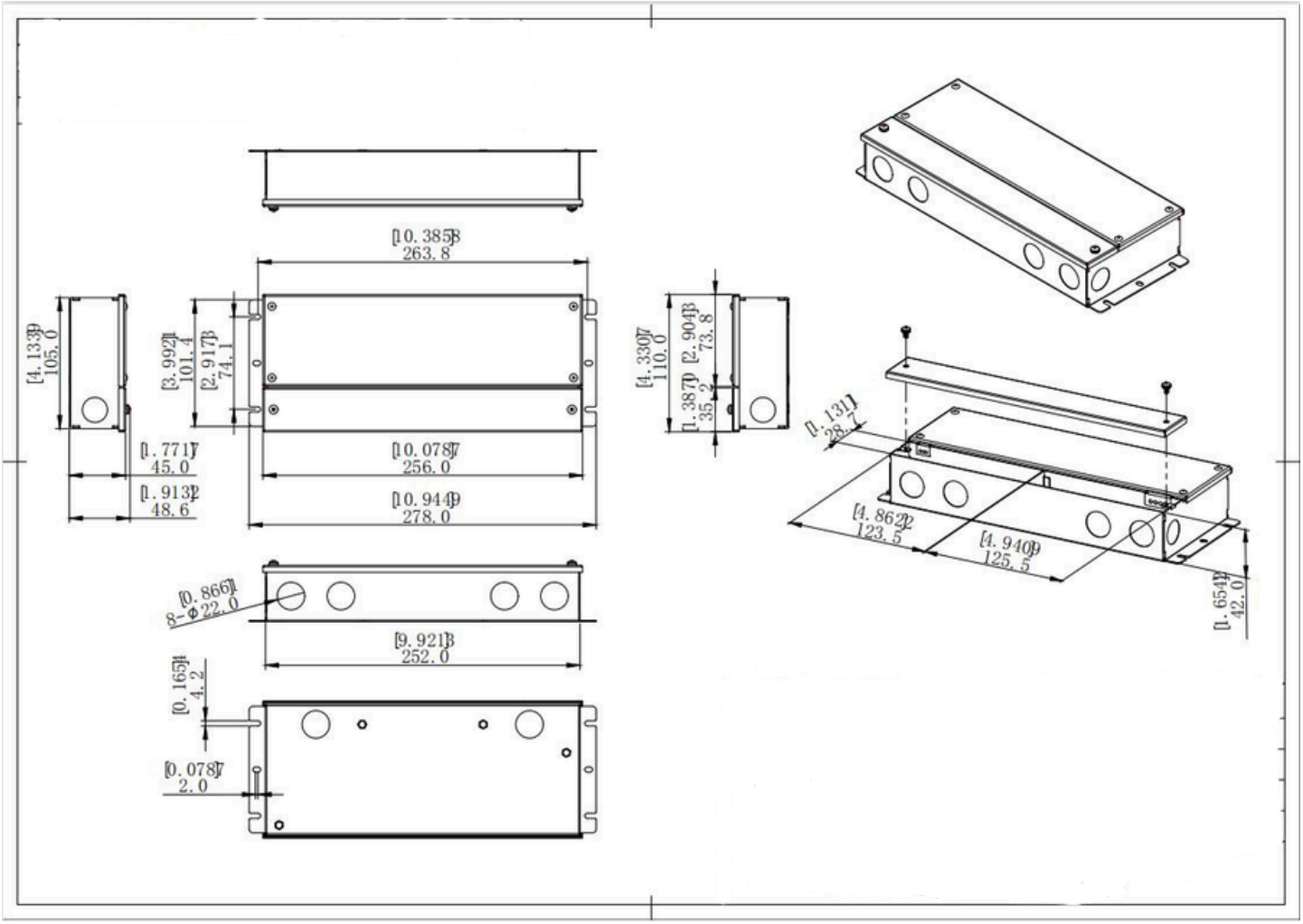
Mechanical Specification



12V&24V Version

American wire gauge	
JM98-1-A1	
Input wire	Black(L) White(N) Green(G) (3*18AWG)
Output wire(12V)	Red(V+) Black(V-)(2*14AWG)*2
Output wire(24V)	Red(V+) Black(V-)(2*14AWG)

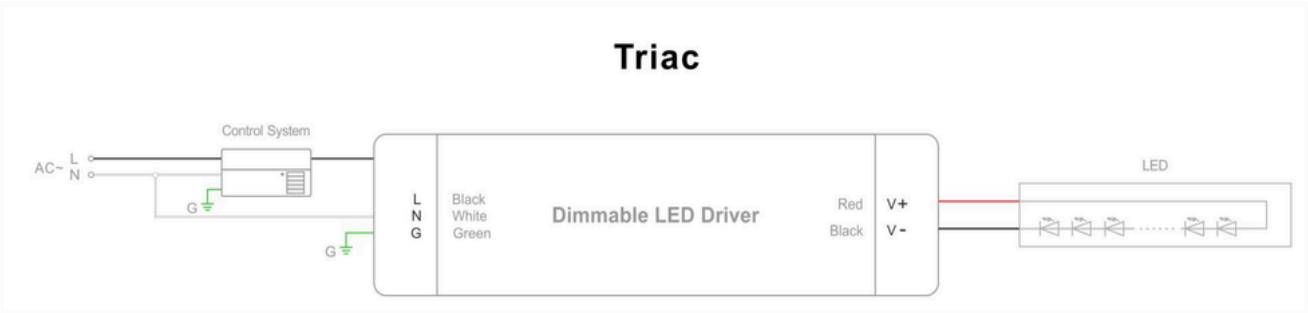
Warm tips:

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

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.



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.
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.