



Phase cut /Triac dimmable driver-PWM output 500W



Features

Output:	Constant Voltage
Range:	110-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 93%
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:	0-100% dimmingdepth0.1%
Min load:	Min load is 10%.
Application:	Suitable for the application of LED lighting
Warranty:	2 years warranty
Others:	PWM output, High power factor PF>0.95, Flicker-free dimming



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Specification

Model		PYJD-12500-TDW	PYJD-24500-TDW	PYJD-36500-TDW	PYJD-48500-TDW
Certificate		UL / FCC / ICES-005 / Class P / TYPE HL / SELV / ROHS / REACH			
Output	DCVoltage	12V	24V	36V	48V
	VoltageTolerance	±0.5V			±1V
	VoltageRegulation	≤0.5%			
	Ratedcurrent	41.67A	20.83A	13.89A	10.42A
	Ratedpower	500W			
	LoadRegulation	≤1%			
Input	VoltageRange	110~277VAC			
	FrequencyRange	50/60Hz			
	Power Factor (Typ.)@ full load	>0.95			
	THD(Typ.)@fullload	≤10%@120VAC@fullload			
	Efficiency(Typ.) @ full load	90%@120VAC 92.5%@277VAC	90.5%@120VAC 93%@277VAC	90.5%@120VAC 93%@277VAC	90.5%@120VAC 93%@277VAC
	Standbypower	<0.5W			
	ACCurrent(Max.)	5.03A			
	InrushCurrent(Typ.)	52A,810us@50%Ipeak110VAC 76A,148us@50%Ipeak277VAC			
	Leakagecurrent	<0.5mA			
Protection	ShortCircuit	Hiccupmode,recoversautomaticallyafterfaultconditionisremoved.			
	OverLoad	105%~120%Hiccupmode,recoversautomaticallyafterfaultconditionisremoved.			
	Overtemperature	100°C±10°Cshutdowno/pvoltage,automaticallyrecoveraftercooling.			
Environment	WorkingTEMP.	-40~+40°C(seebelowderatingcurve)			
	WorkingHumidity	20-95%RH non-condensing			
	StorageTEM.,Humidity	-40~+80°C,10-95%RHnon-condensing			
	TEMP.coefficient	±0.03%/°C(0-50°C)			
	Vibration	10~500Hz,5G10min./1cycle,periodfor60min.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°C/70%RH			
	EMCImmunity	FCC/ICESdonotrequestthistest.			
	EMCEmission	FCCPart15SubpartB; ANSIC63.4a-2017; ICES-005Issue5			
Others	NetWeight	2.7KG			
	Dimension	280*140.2*50.2mm(L*W*H)			
	Packing	342*285*170mm 5pcs/CTN			
Notes	<ol style="list-style-type: none"> AllparametersNOTspeciallymentionedaremeasuredatratedloadand25°Cofambienttemperature. 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	2
	13A	2
	16A	3
	20A	3
	25A	4
When the input voltage is 277Vac ,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

Note:

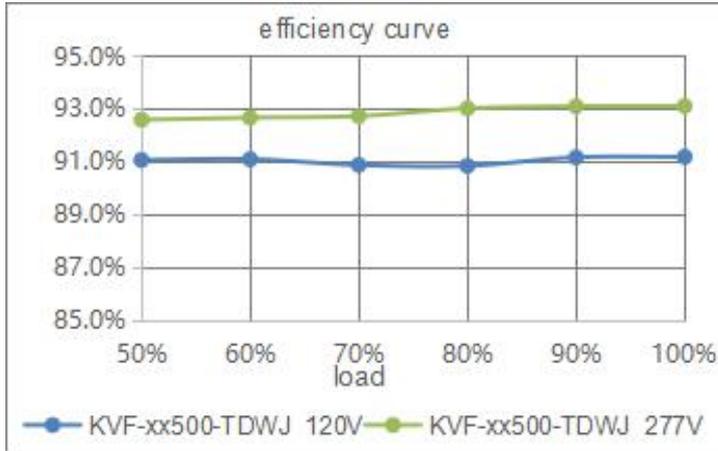
1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50 °C.
2. The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve.



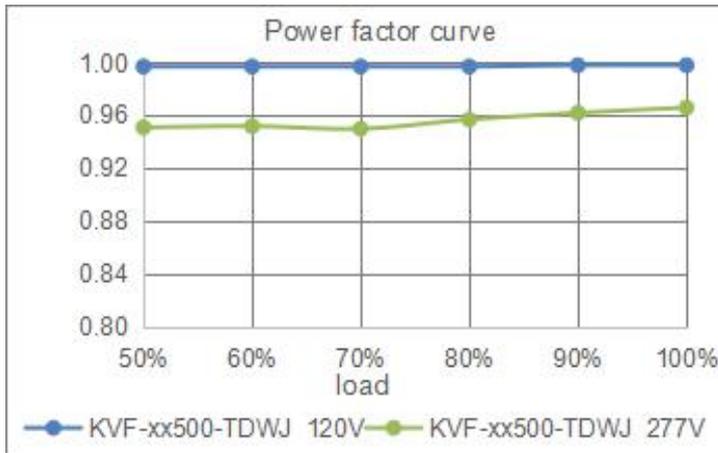


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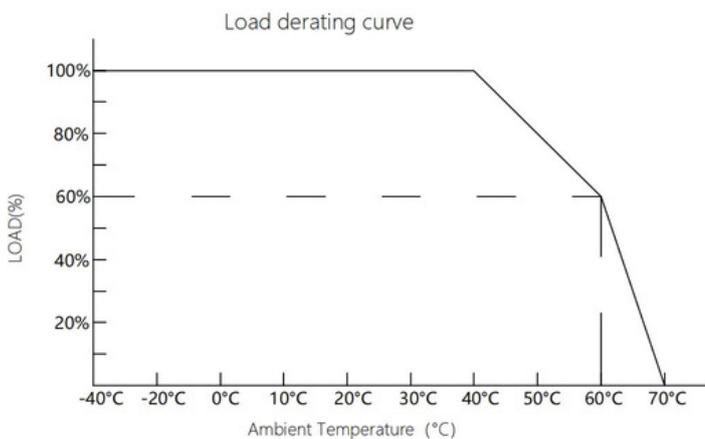
Efficiency Curve (efficiency vs output load)



Power Factor Curve (power factor vs output load)



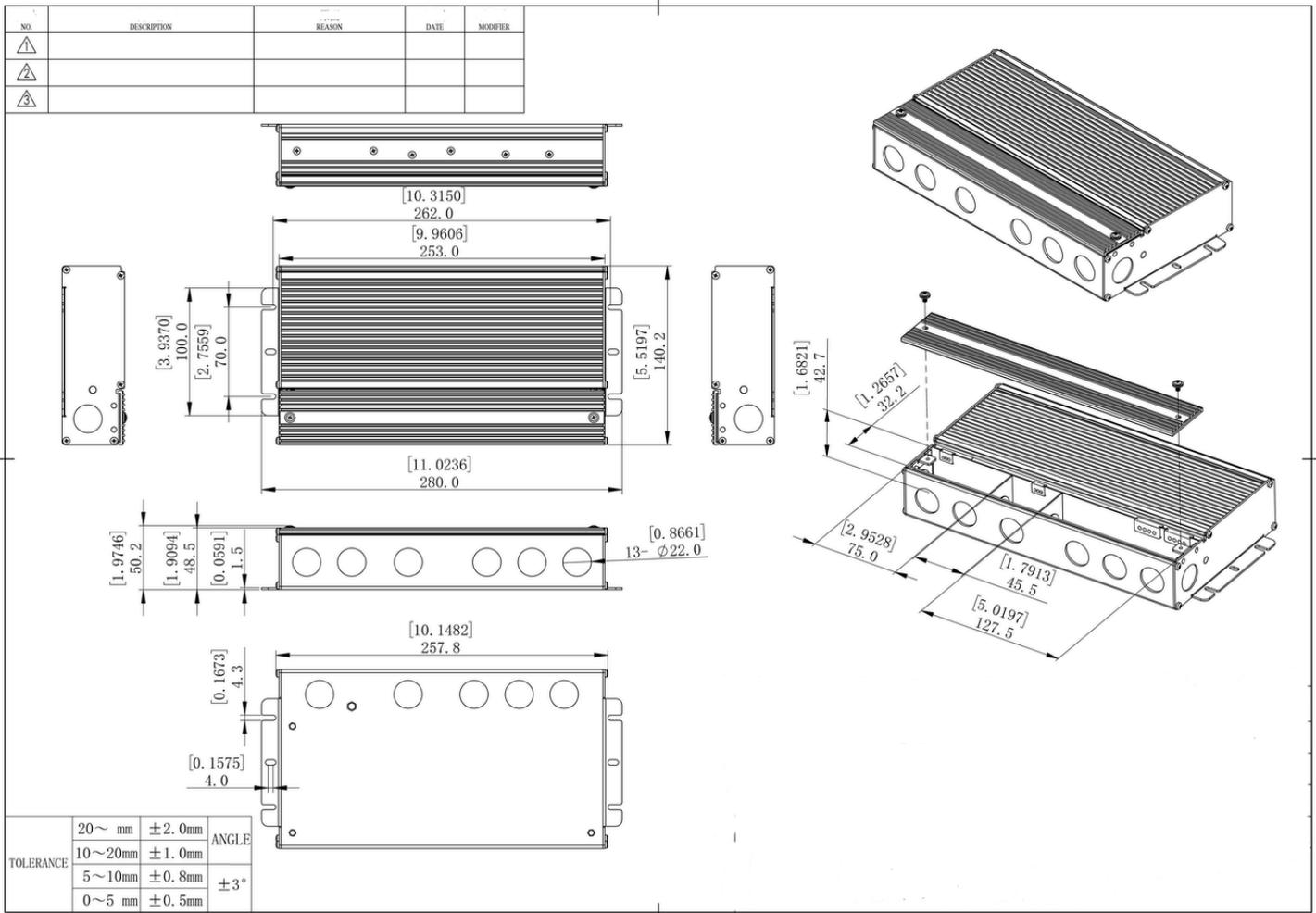
Derating Curve (output load vs TEMP.)



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



Mechanical Specification



American wire gauge

JM600

Inputwire	Black(L)White(N)Green(G)(3*18AWG)
Outputwire(12V)	Red(V+)Black(V-)(2*14AWG)*3
Outputwire(24V&36V)	Red(V+)Black(V-)(2*14AWG)*2
Outputwire(48V)	Red(V+)Black(V-)(2*14AWG)*1

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(mm²) x 10A/mm²
For example: 1mm² output cable, Recommended Max. Carrying Current (A) = 1mm² x 10A/mm²=10A
2. Any other requests for cable, we can customize.

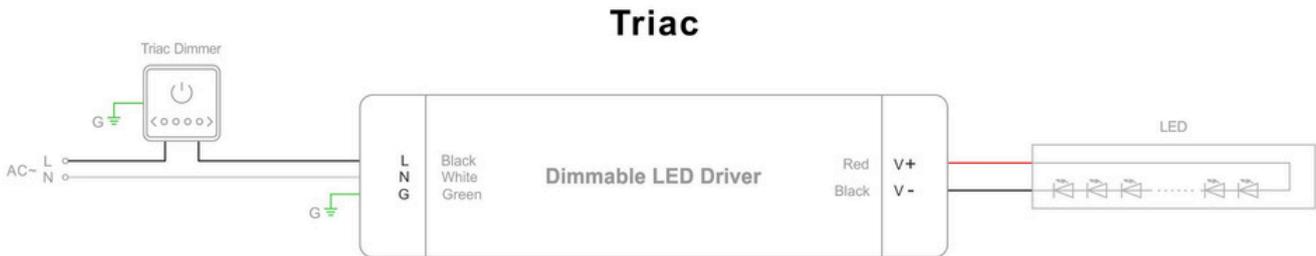


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Dimming Operation and Connecting Diagram

Using one dimming ---TRIAC/Phase cut dimming

- 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.
- Working with forward phase /leading edge, MLV and Reverse phase /trailing edge, ELV, TRIAC dimmers or light system.
- Min. loading is about 10%
- Please try to use dimmers with power at least 1.5 times as the output power of the driver.



Instructions

- This driver should be installed by qualified and professional person.
- Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
- Ensure that wiring is correct before test in order to avoid light and power supply damage.
- If driver Cannot work normally, don't maintain privately.

