



## PYJD -TDW Series 96W

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### TRIAC Dimmable LED Driver - Constant Voltage Output - PYJD-TDW Series 96W



#### Features

Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 88%
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 $PF \geq 0.95$ , flicker-free dimming



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**Specification**

<b>Model</b>	<b>PYJD-48096-TDW</b>	
<b>Certificate</b>	/	
<b>Output</b>	DC Voltage	48V
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Rated current	2A
	Rated power	96W
	Load Regulation	±1%
<b>Input</b>	Voltage Range	100-277VAC
	Frequency Range	47-63Hz
	Power Factor(Typ.)@fullload	0.98@120VAC 0.96@277VAC
	THD(Typ.)@fullload	<20%@120VAC&277VAC
	Efficiency @fullload	≥85.5%@120VAC ≥88%@277VAC
	AC Current(Max.)	1.3A
	Inrush Current(Typ.)	37.4A,170us@50%Ipeak120VAC 6.4A,280us@50%Ipeak277VAC
	Leakage current	<0.5mA
<b>Protection</b>	Short Circuit	Hiccupmode,recoversautomaticallyafterfaultconditionisremoved.
	Over Load	≥110%Hiccupmode,recoversautomaticallyafterfaultconditionisremoved
	Overtemperature	Shellsurfacetemp.100°C±10°Cshutdowno/pvoltage,automaticallyrecoveraftercooling
<b>Environment</b>	Working TEMP.	-40~+60°C(seebelowderatingcurve)
	Working Humidity	20-95%RH non-condensing
	Storage TEM., Humidity	-40-+80°C,10-95%RHnon-condensing
	TEMP. coefficient	±0.03%/°C(0-50°C)
	Vibration	10~500Hz,5G12min./1cycle,periodfor72min.eachalongX,Y,Zaxes
<b>Safety &amp; EMC</b>	Safety standards	UL8750; CAN/CSA-C22.2No.250.13
	Withstand voltage	I/P-O/P:1.88KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH
	EMC Immunity	FCC/ICESdonotrequestthistest
	EMCE mission	FCCPart15SubpartB
<b>Others</b>	Net Weight	1.28Kg
	Dimension	220*95.4*42.7mmmm(L*W*H)
	Packing	298*265*220mm 10pcs/CTN
<b>Notes</b>	<ol style="list-style-type: none"> <li>AllparametersNOTspeciallymentionedaremeasuredat120VAC,ratedloadand25°Cofambienttemperature.</li> <li>Tolerance:includessettoleranceandloadregulation.</li> </ol>	

Due to continuous improvements, the information herein may be changed without notice



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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	Thenumberof LEDDriver
Ctype	10A	8
	13A	11
	16A	13
	20A	16
	25A	19
When the input voltage is 277Vac,the number of LED Driver matched by circuit breakers is as follows:		
MCBType	Level	Thenumberof LED Driver
Ctype	10A	4
	13A	6
	16A	7
	20A	9
	25A	10

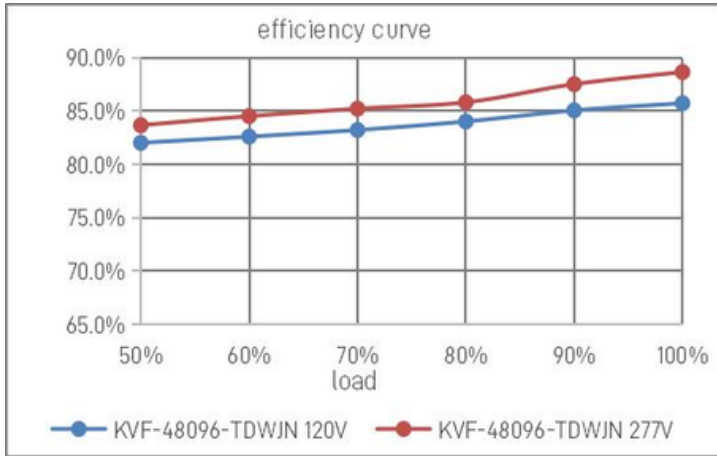
- Note:**
1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50 °C. The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve.



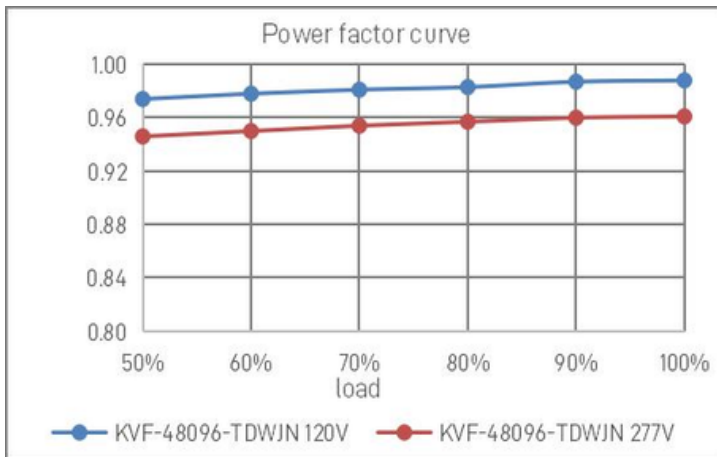


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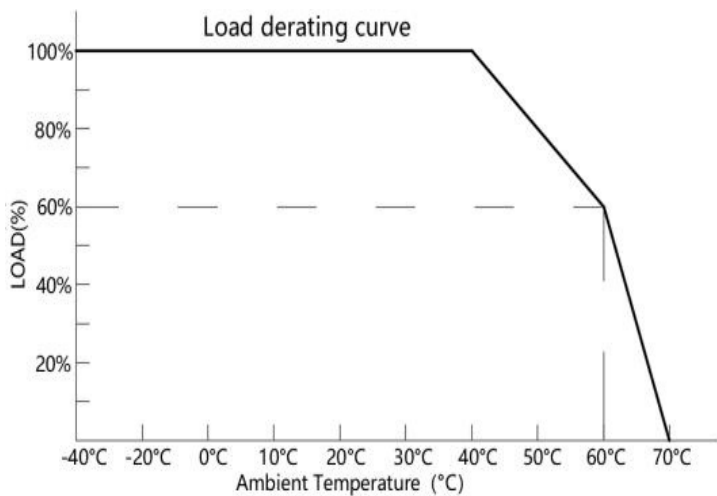
### Efficiency Curve (efficiency vs output load)



### Power Factor Curve



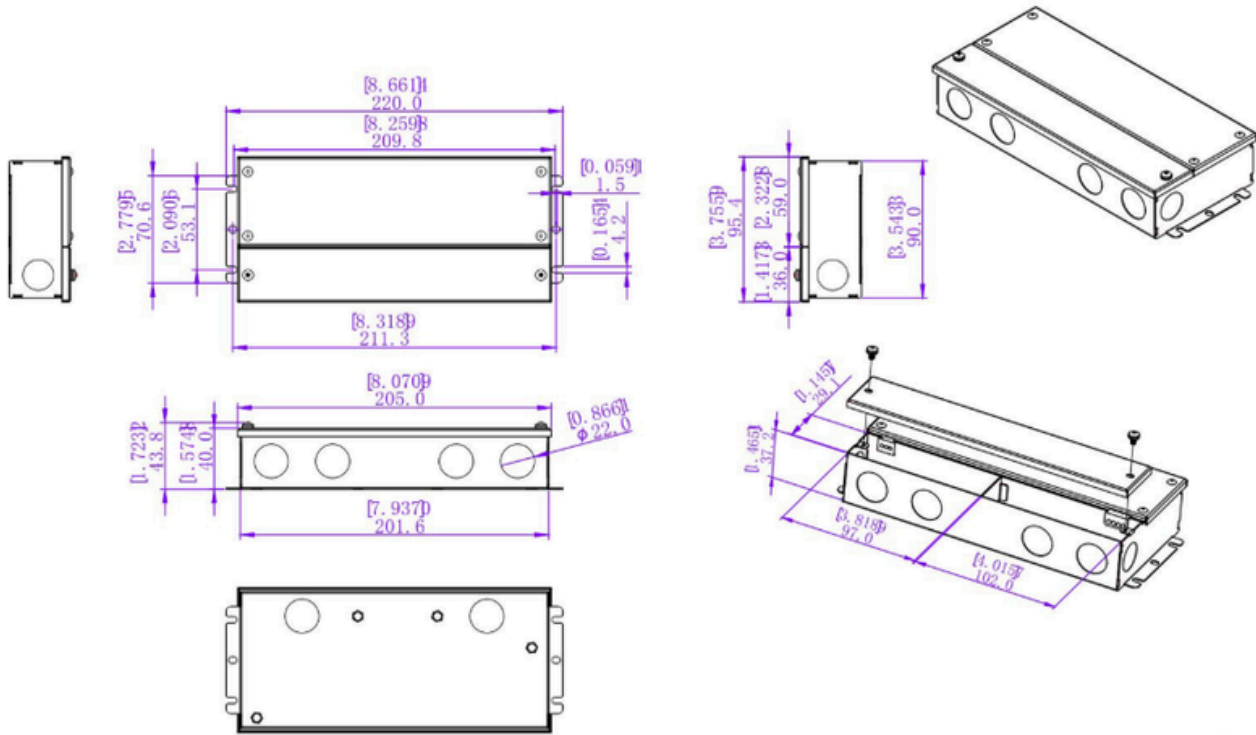
### Derating Curve (output load vs TEMP.)



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.



### Mechanical Specification



American wire gauge	
JM88-A1	
Input wire	Black(L) White(N) Green(G) (3*18AWG)
Output wire	Red(V+) Black(V-) (2*18AWG)

### 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



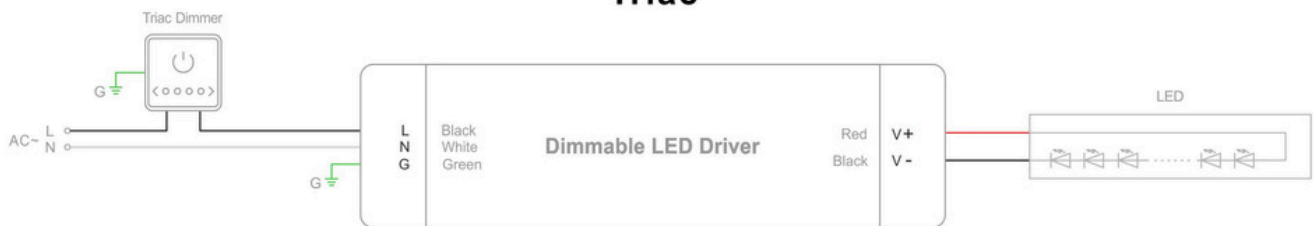
## TRIAC Dimmable LED Driver - Constant Voltage Output - PYJD-TDW Series 96W

### 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.

#### Triac



#### Triac



### 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.

