



## PYJD-TDW Series 100W

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### TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 100W



#### 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:	<u>Phase dimming</u> : 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



## TRIAC Dimmable LED Driver - Constant Voltage Output - PYJD-TDW Series 100W

### Specification

<b>Model</b>		<b>PYJD-48100-TDW</b>
<b>Certificate</b>		/
<b>Output</b>	DC Voltage	48V
	Voltage Tolerance	±2%
	Voltage Regulation	≤1%
	Line Regulation	±0.5%
	Rated current	2.08A
	Rated power	100W
<b>Input</b>	Voltage Range	100-277VAC
	Frequency Range	47 - 63Hz
	Power Factor (Typ.) @ full load	>0.98@120VAC >0.96@277VAC
	THD(Typ. ) @ full load	<20%@120V <20%@277V
	Efficiency(Typ.) @ full load	≥84.5%@120VAC ≥88%@277VAC
	AC Current (Max.)	≤1.1A @120VAC ≤0.5A@277VAC
	Inrush Current (Typ.)	31.6A,530us@50%Ipeak 120VAC; 60A,460us@50%Ipeak 277VAC
	Leakage current	<0.5mA
<b>Protection</b>	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 temp.100°C±10°C shut down o/p voltage, automatically recover after cooling
<b>Environment</b>	Working TEMP.	-40~+60°C (see below derating curve)
	Working Humidity	20 - 95%RH non-condensing
	Storage TEM.,Humidity	-40 - +80°C,10 - 95% RH non-condensing
	TEMP.coefficient	±0.03%/°C(0 - 50°C)
	Vibration	10-500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes
<b>Safety &amp; EMC</b>	Safety standards	UL8750 CAN/CSA-C22.2 No.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
	Surge Immunity Test	AC Power Line:Differential Mode 2KV,Common Mode 4KV
	EMC Immunity	FCC/ICES do not request this test
	EMC Emission	FCC Part15 Subpart B
<b>Others</b>	Net Weight	1.2KG
	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>All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°Cof ambient temperature.</li> <li>To extend the driver's using life ,please reduce the loading at lower input voltage.</li> </ol>	



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**MCB recommendation**

When the input voltage is 120Vac, the number of LED Driver matched by circuit breakers is as follows:

MCB Type	Level	The number of LED Driver
C type	10A	7
	13A	9
	16A	11
	20A	13
	25A	15

When the input voltage is 277Vac, the number of LED Driver matched by circuit breakers is as follows:

MCB Type	Level	The number of LED Driver
C type	10A	4
	13A	5
	16A	6
	20A	8
	25A	9

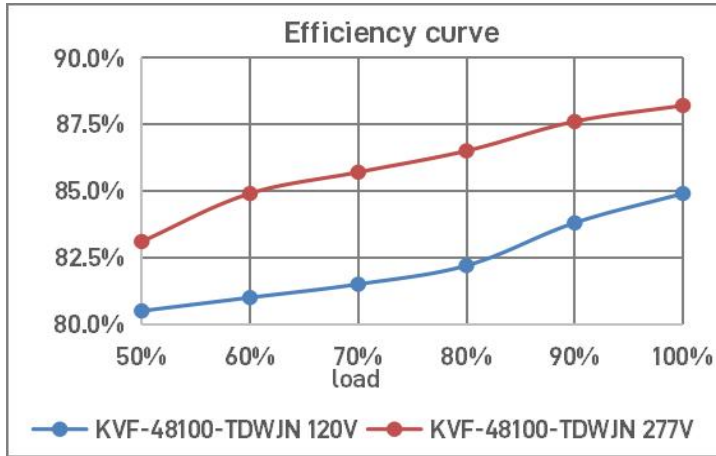
**Note:**

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.

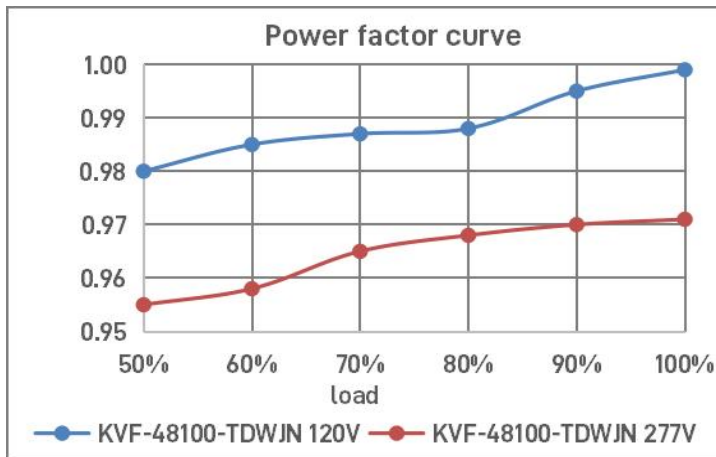


## TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 100W

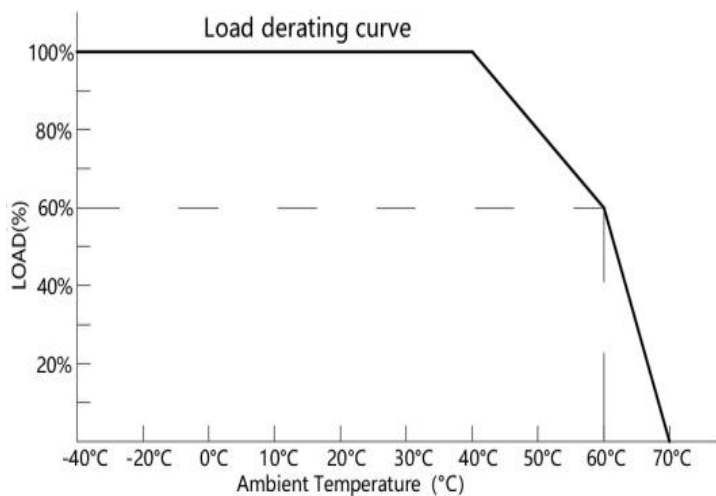
### Efficiency Curve (efficiency vs output load)



### Power factor curve(Power factor vs output load)



### Derating Curve (output load vs TEMP)

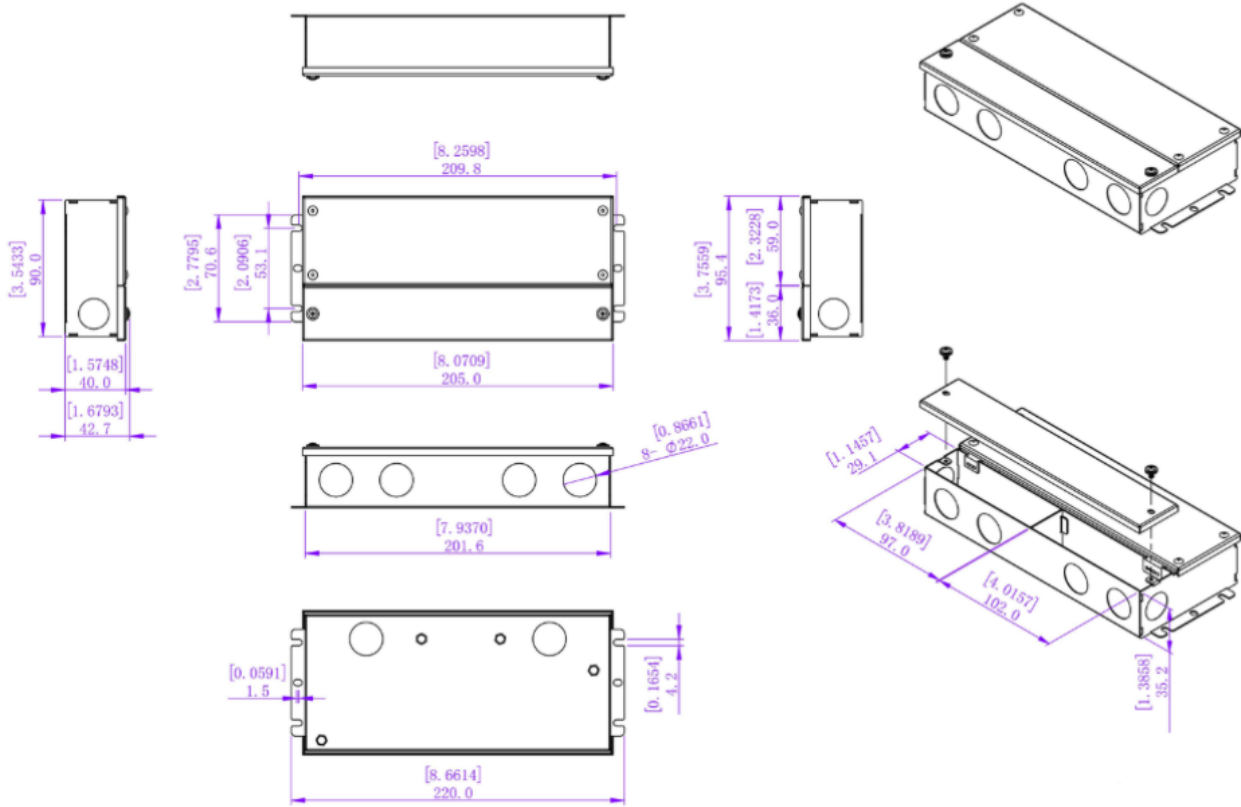


1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. The output current of the LED driver should be selected according to the rated current of the lamp and the ambient temperature. Normally, we recommend the power supply to reserve a certain amount of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



## TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 100W

### Mechanical Specification



### 48V Version

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
- Any other requests for cable, we can customize.



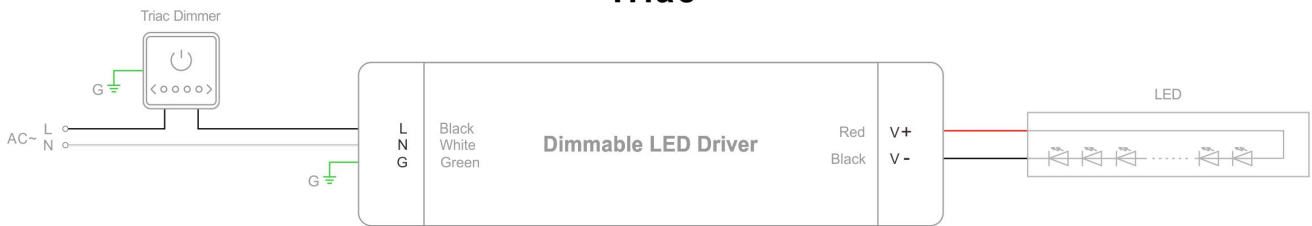
## TRIAC Dimmable LED Driver - Constant Voltage Output - KVF-TDWJN Series 100W

### Dimming Operation and Connecting Diagram

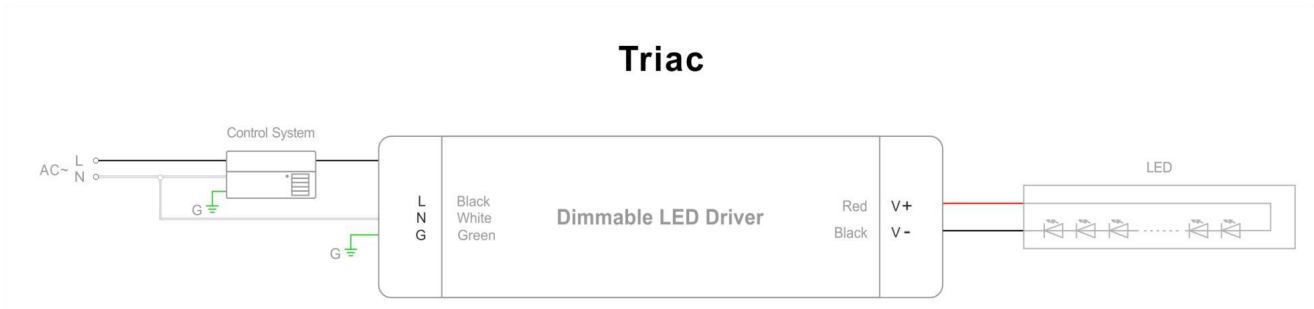
#### TRIAC/Phase cut dimming

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.