



## PYJD-TDW Series 120W

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### TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 120W



#### 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-48120-TDW</b>
<b>Certificate</b>		
<b>Output</b>	DCVoltage	48V
	VoltageTolerance	±1V
	VoltageRegulation	±0.5
	Ratedcurrent	% 2.5A
	Ratedpower	120W
	LoadRegulation	±1%
<b>Input</b>	Range:	100-277VAC
	FrequencyRange	47-63Hz
	Power Factor(Typ.)@fullload	≥0.98@120VAC ≥0.95@277VAC
	THD(Typ.)@fullload	<20%
	Efficiency(Typ.)@fullload	≥85%@120VAC ≥88%@277VAC
	ACCurent(Max.)	≤1.6A
	InrushCurrent(Typ.)	11.4A,1.32ms@50%120VAC 24.4A,1.19ms@50%277VAC
	Leakagecurrent	<0.5mA
<b>Protection</b>	ShortCircuit	Hiccupmode,recoversautomaticallyafterfaultconditionisremoved.
	OverLoad	≥110%Hiccupmode,recoversautomaticallyafterfaultconditionisremoved
	Overtemperature	Shell surface temp.100°C±10°C shut down o/p voltage, automatically recover after cooling
<b>Environment</b>	WorkingTEMP.	-40~+60°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,5G12min./1cycle,periodfor72min.eachalongX,Y,Zaxes
<b>Safety &amp; EMC</b>	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
<b>Others</b>	NetWeight	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>AllparametersNOTspeciallymentionedaremeasuredat120VACinput,ratedloadand25°Cofambienttemperature.</li> <li>Tolerance:includessetuptoleranceandloadregulation.</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:		
MCBType	Level	The number of LED Driver
Ctype	10A	7
	13A	9
	16A	11
	20A	15
	25A	14
When the input voltage is 277Vac, the number of LED Driver matched by circuit breakers is as follows:		
MCBType	Level	The number of LED Driver
Ctype	10A	7
	13A	9
	16A	10
	20A	13
	25A	15

**Note:**

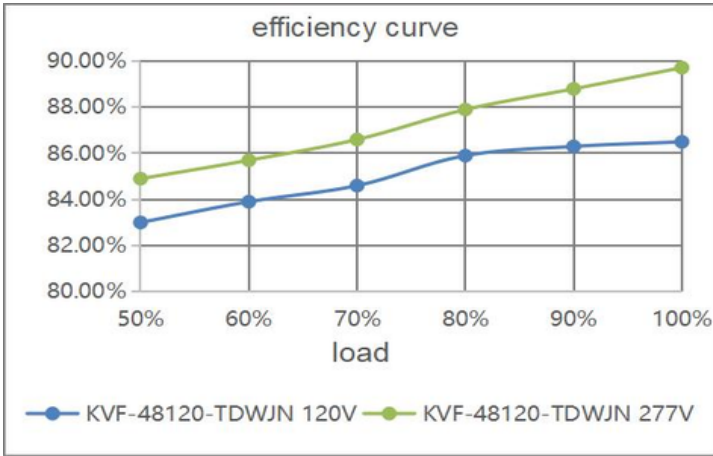
1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50 °C
2. The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve.



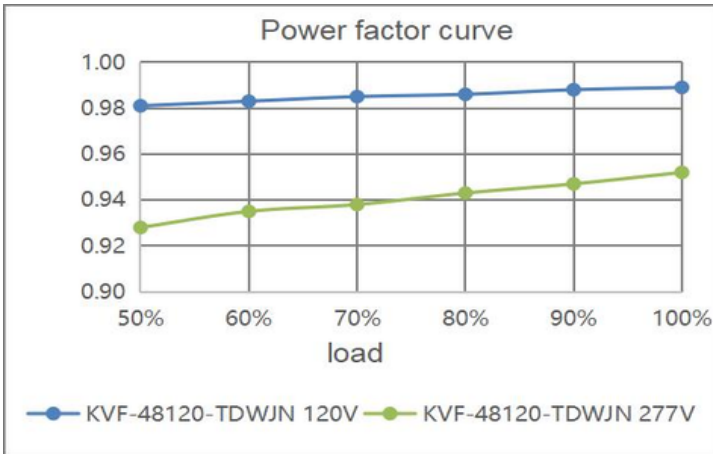


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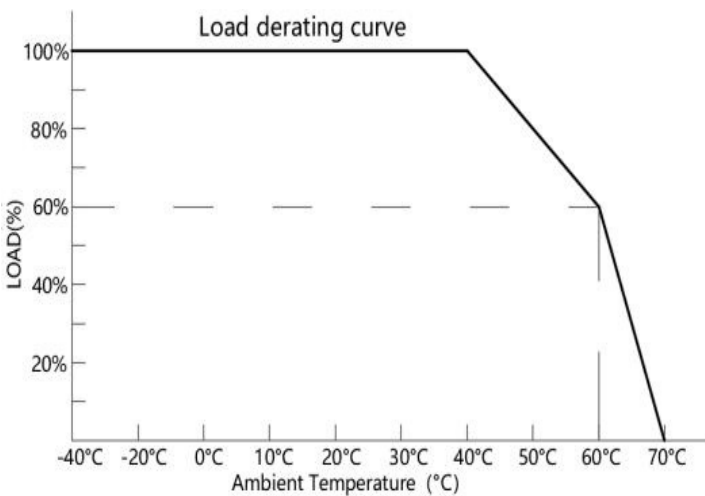
### Efficiency Curve (efficiency vs output load)



### Power Factor Curve



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

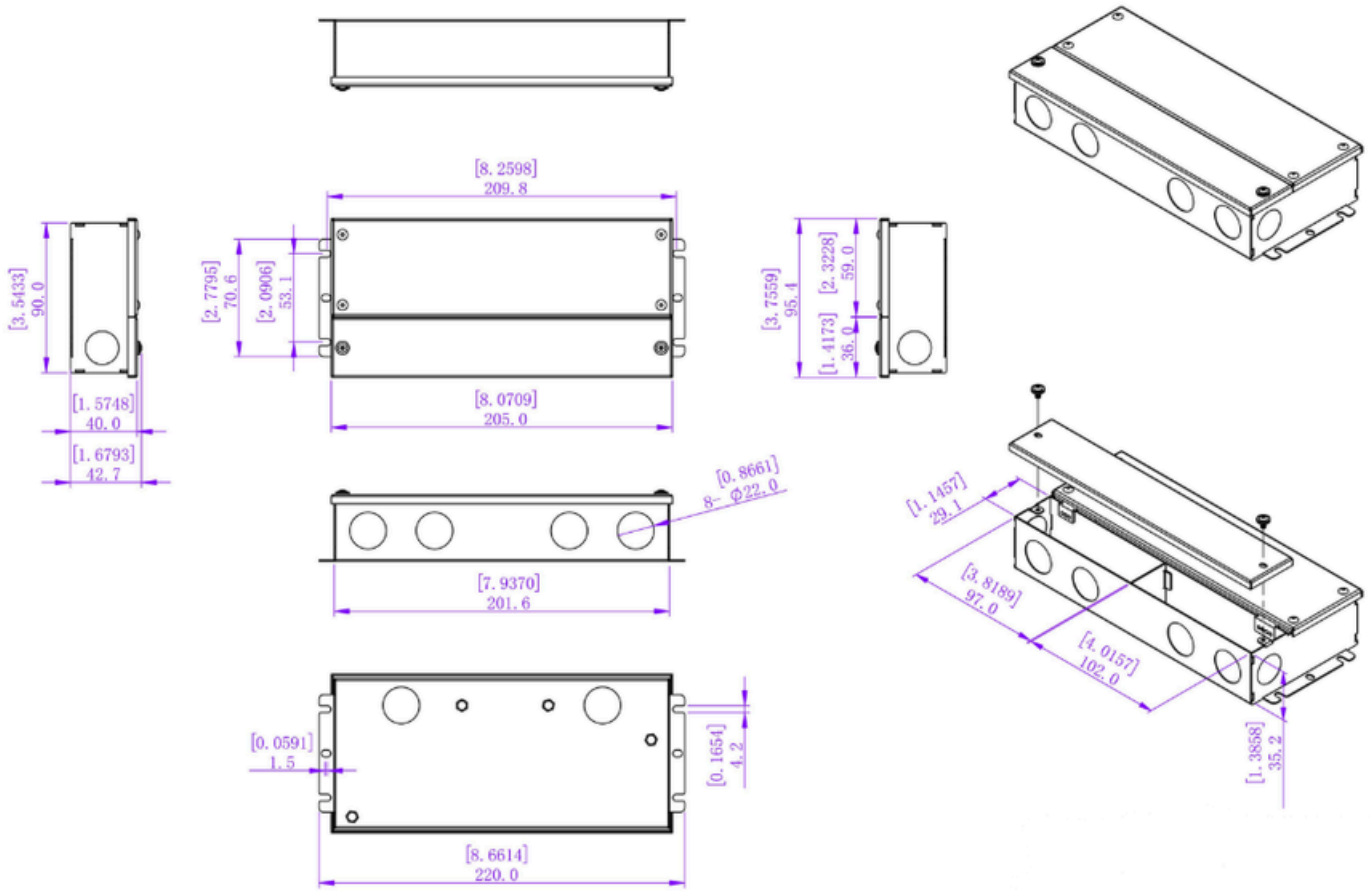


1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.



## TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 120W

### 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*16AWG)

### 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 120W

### 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.

