



PYJD-TDW Series 100W

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:	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



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

Specification

Model		PYJD-48100-TDW
Certificate		/
Output	DCVoltage	48V
	VoltageTolerance	±2%
	VoltageRegulation	≤1%
	LineRegulation	±0.5%
	Ratedcurrent	2.08A
	Ratedpower	100W 1
Input	VoltageRange	00-277VAC
	FrequencyRange	47-63Hz
	Power Factor(Typ.)@fullload	>0.98@120VAC >0.96@277VAC
	THD(Typ.)@fullload	<20%@120V <20%@277V
	Efficiency(Typ.)@fullload	≥84.5%@120VAC ≥88%@277VAC
	ACCurrent(Max.)	≤1.1A@120VAC ≤0.5A@277VAC
	InrushCurrent(Typ.)	31.6A,530us@50%Ipeak120VAC 60A,460us@50%Ipeak277VAC
	Leakagecurrent	<0.5mA
Protection	ShortCircuit	Hiccupmode,recoversautomaticallyafterfaultconditionisremoved.
	OverLoad	≥110%Hiccupmode,recoversautomaticallyafterfaultconditionisremoved
	Overtemperature	Shellsurfacetemp.100°C±10°Cshutdownno/pvoltage,automaticallyrecoveraftercooling
Environment	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
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
	SurgeImmunityTest	ACPowerLine:DifferentialMode2KV,CommonMode4KV
	EMCImmunity	FCC/ICESdonotrequestthistest
	EMCEmission	FCCPart15SubpartB
Others	NetWeight	1.2KG
	Dimension	220*95.4*42.7mmmm(L*W*H)
	Packing	298*265*220mm 10pcs/CTN
Notes	<p>1. AllparametersNOTspeciallymentionedaremeasuredat120VACinput,ratedloadand25°Cofambienttemperature.</p> <p>2. Toextendthedriver'susingslife,pleasereducethelodingatlowerinputvoltage.</p>	

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

831 3rd St W, North Vancouver, BC V7P 3K7 Canada | P.: +1(604) 770-3315 | E: info@maxtarlighting.com



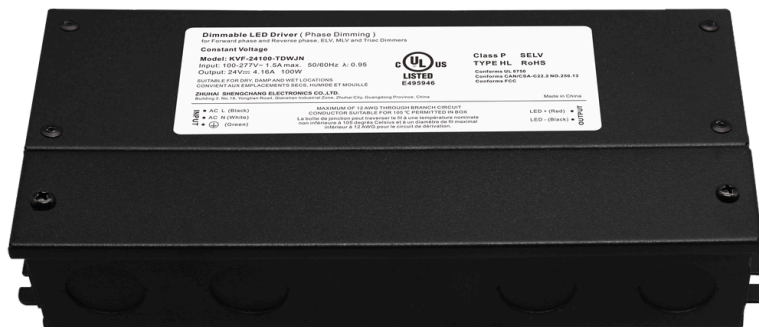
TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 100W

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 LEDDriver
Ctype	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:		
MCBType	Level	The number of LEDDriver
Ctype	10A	4
	13A	5
	16A	6
	20A	8
	25A	9

Note:

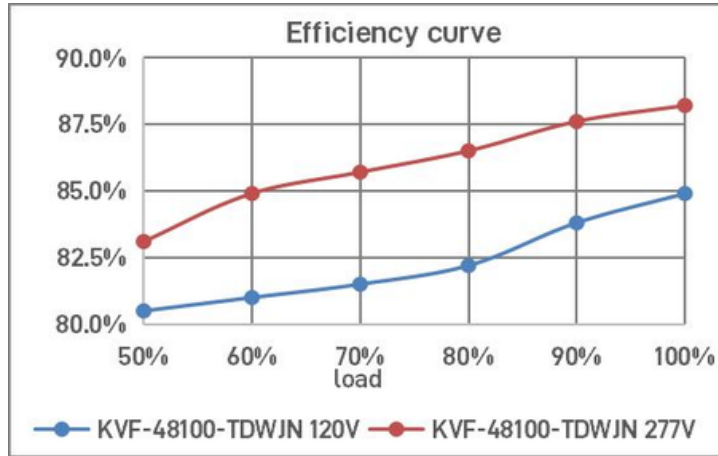
1. The above quantities of the led drivers connected on the Type C is recommended base on the maximum ambient temperature is 50 °C The breaker should be selected according to the input rated voltage, input rated current, ambient temperature, and trip characteristic curve.



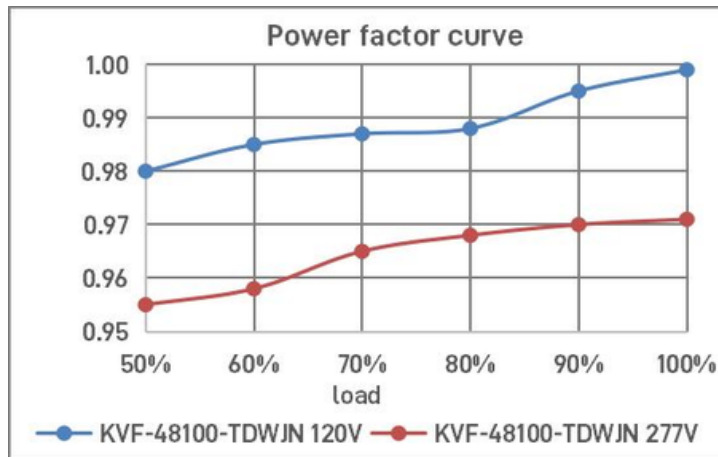


TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 100W

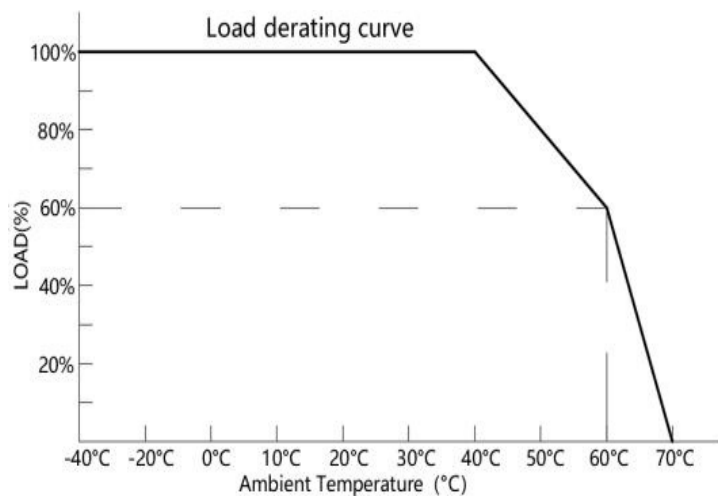
Efficiency Curve (efficiency vs output load)



Power factor curve(Power factor vs output load)



Derating Curve (output load vs TEMP)

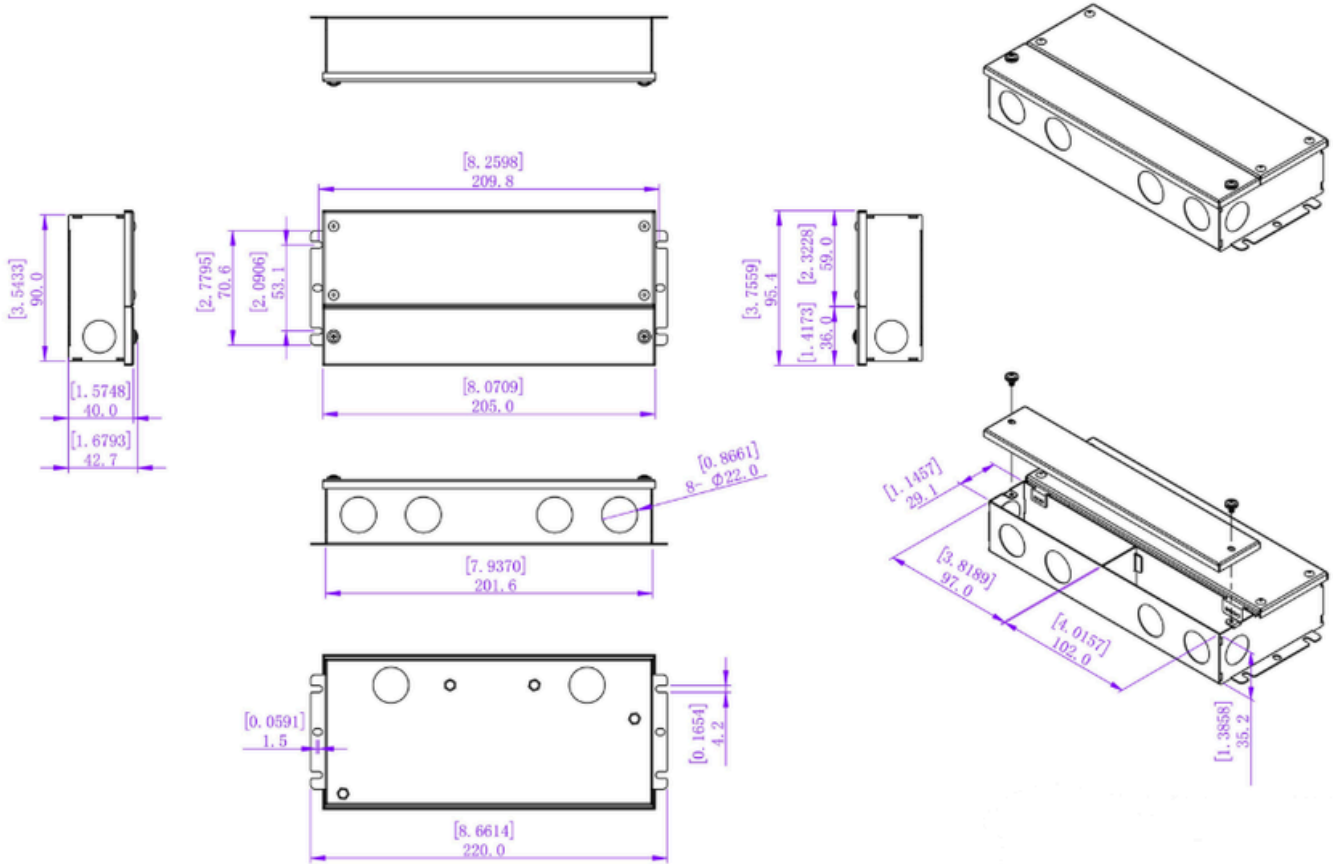


1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. The output current of the LED driver should be selected according to the rated current of the lamp and the ambient temperature. Normally, we recommend the power supply to reserve a certain amount of 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(mm²) x 10A/mm² For example: 1mm² output cable, Recommended Max. Carrying Current (A) = 1mm² x 10A/mm²=10A



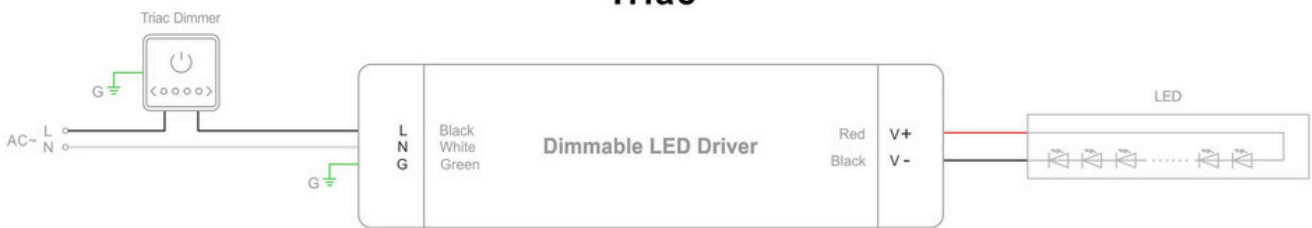
TRIAC Dimmable LED Driver - Constant Voltage Output PYJD-TDW Series 100W

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.

