


Product Specification:

<p>Class I type for insulation</p> <ul style="list-style-type: none"> Input voltage range:100-277V ~ 50/60Hz (input 330-380Vac overvoltage protection for option, no damage after 8 hours of power-on) Efficiency89% (Typ.) Constant current output, with power limitation for control mode Metal material case, protection grade against water and dust: IP67 Surge level : differential mode: 4kV common mode: 6kV Function available: Output current is dimmed by external potentiometer Output current is dimmed by Isolated 3 in 1 dimmer 	
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Model Specification:

IS 50W-WTF-72A-S IS 50W-WTF-72D-S IS 50W-WTF-72X-S	Rated Input voltage	100-277V 50/60Hz
	Max Output power	50W
	Output voltage	36-72Vdc Rated Power (48-72V)
	The default current	0.695A
	Eff.	≥89%
<p>Note :</p> <p>1. Test conditions: Ta=25°C, under 230Vac input, after running for 30 minutes with full load.</p> <p>2. When the input is less than 95± 15Vac, the output power gradually decreases to 25W± 20%, and it recovers full power of 50W when the input is above 95VAC again. Please refer to “THE OUTPUT POWER VS INPUT VOLTAGE” curve chart for details</p>		

Input characteristics:

Parameter	Min	Typ.	Max	Remark
Rated input voltage	100Vac	230Vac	277Vac	-
Input voltage range	90Vac	-	305Vac	-
Rated frequency range	47Hz	50/60Hz	63Hz	-
Power factor	0.95	-	-	@230Vac input ,with full load
Power factor	0.91	-	-	@100-277Vac input ,with 70%-100%
T.H.D.	-	-	10%	@230Vac input ,with full load
T.H.D.	-	-	20%	@100-277Vac input ,with 70%-100%
Input current	-	-	0.60A	@100Vac input ,with full load
Inrush current	-	-	70A	230Vac, cold start (25°C)

Output characteristics:

Parameter	Min	Typ.	Max	Remark
Rated current	-	0.695A	-	Rated Load :72VDC
Output current range	0.5A	-	1.05A	-
Output voltage range	36V	-	72V	Constant power output range:48-72VDC
Available power (90-100Vac)	-	25W	-	Decrease to a half once input voltage being less than 100Vac
Rated power (100-277Vac)	-	50W	-	-
No-load voltage	-	-	95V	-
Efficiency @230Vac	-	89%	-	@230Vac input ,with full load
Accuracy of output current	-5%	-	+5%	For constant-power range, with full load
Ripple current		±3%	<±5%	
Line regulation	-3%	-	+3%	full load
Load regulation	-3%	-	+3%	full load
Starting time	-	-	500ms	Full load@230Vac
Note: 1.The output current is limited by the input and output voltage, please refer to “I-V WORKING AREA” for details;				

Dimming characteristics:

Dimming function		Min	Typ.	Max	Instructions
1-10V Dimming (Optional)	Safe operation voltage range	1V	-	12V	Beyond the range may lead to a failure of the driver.
	Dimming output range	10%	-	100%	-
	Rated operation voltage range	1V	-	10V	-
PWM Dimming (Optional)	PWM high level	9.5V	-	10.5V	-
	PWM low level	0V	-	0.3V	-
	Rated dimming frequency	300Hz	-	2000Hz	-
	PWM duty cycle	10%	-	99%	full power output at 99% duty cycle
Resistor Dimming (Optional)	Rated external resistance value	10KΩ	-	100KΩ	-
	Dimming output range	10%	-	100%	-
Note: 1.Output current of dimming port: 100uA (typical value). 2.The maximum operation voltage for the dimming port is 12V. Wrong voltage beyond the range or a reverse connection may lead to a critical failure of the driver. 3.This product has 0-10V dimming function, standby power consumption >0.5W (D version only) when 0V dim -off, 1-10V dimming is recommended at the terminal use.					

Protections:

Protection	Description
Under-voltage protection	When the input voltage is less than $95 \pm 15\text{Vac}$, the output power decreases. Refer to derating curve for details
Output overload protection	Protection mode:hiccup mode,and recovers automatically when the fault condition is removed
Output short circuit protection	Hiccup mode,and recovery automatically when the fault condition is removed
Over temperature protection	Could recover automatically; when the temperature of the case is greater than 90°C , the output power decreases to a half
Output over-voltage protection	Protection mode:Hiccup or clamp at a certain output highest voltage state, the product will not be damaged, when the fault is removed, the driver works normally
Note: 1. Unless otherwise specified, all parameters should be measured at the condition of 230Vac (50Hz) input ,with rated load ,and ambient temperature of 25°C ; 2. Including setting error, linear adjustment rate and load adjustment rate;	

Environmental characteristics:

Environmental categories	Parameter
Working temperature	$-40 \sim +55^{\circ}\text{C}$ @120-277Vac((Refer to "Service Life Curve"))
Safety case temperature	$-40 \sim 90^{\circ}\text{C}$
Working humidity	20 ~ 95% RH,non-condensing
Storage temperature humidity	$-40 \sim +80^{\circ}\text{C}$, 10 ~ 95% RH
Resistant to vibration	10 ~ 500Hz, 5G 12 min/cycle, X, Y, Z axis 72 min each
MTBF	230Khrs min. MIL-HDBK-217F ($T_a=25^{\circ}\text{C}$)
Lifetime	50000 hours @230Vac,80% load, $T_{\text{case}}=75^{\circ}\text{C}$,.Refer to" T_{case} VS Lifetime" curve for details.

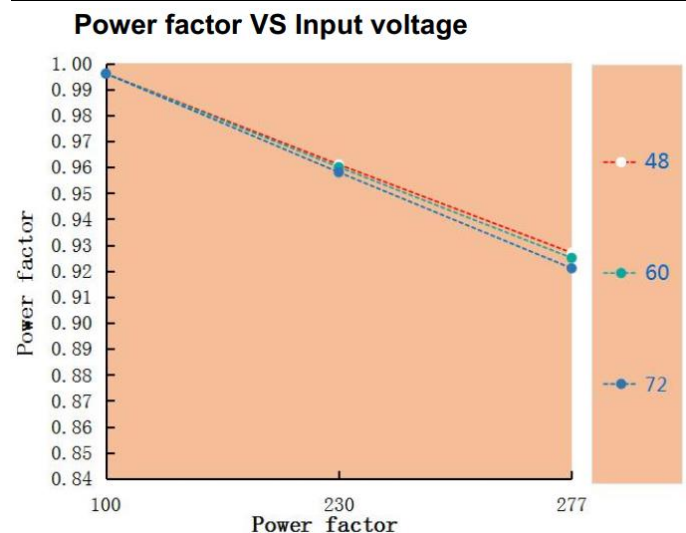
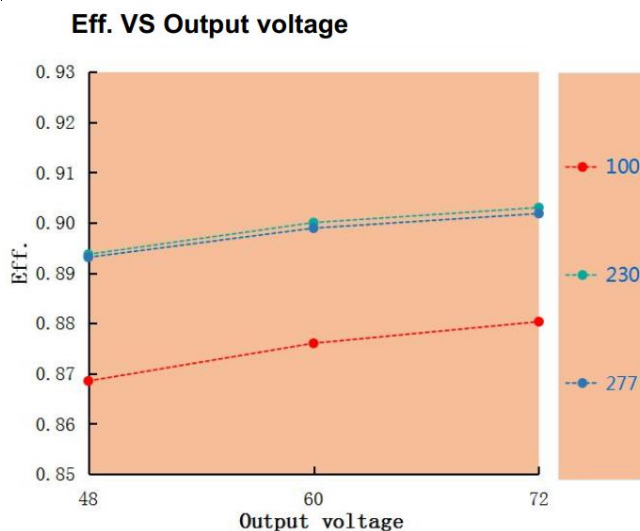
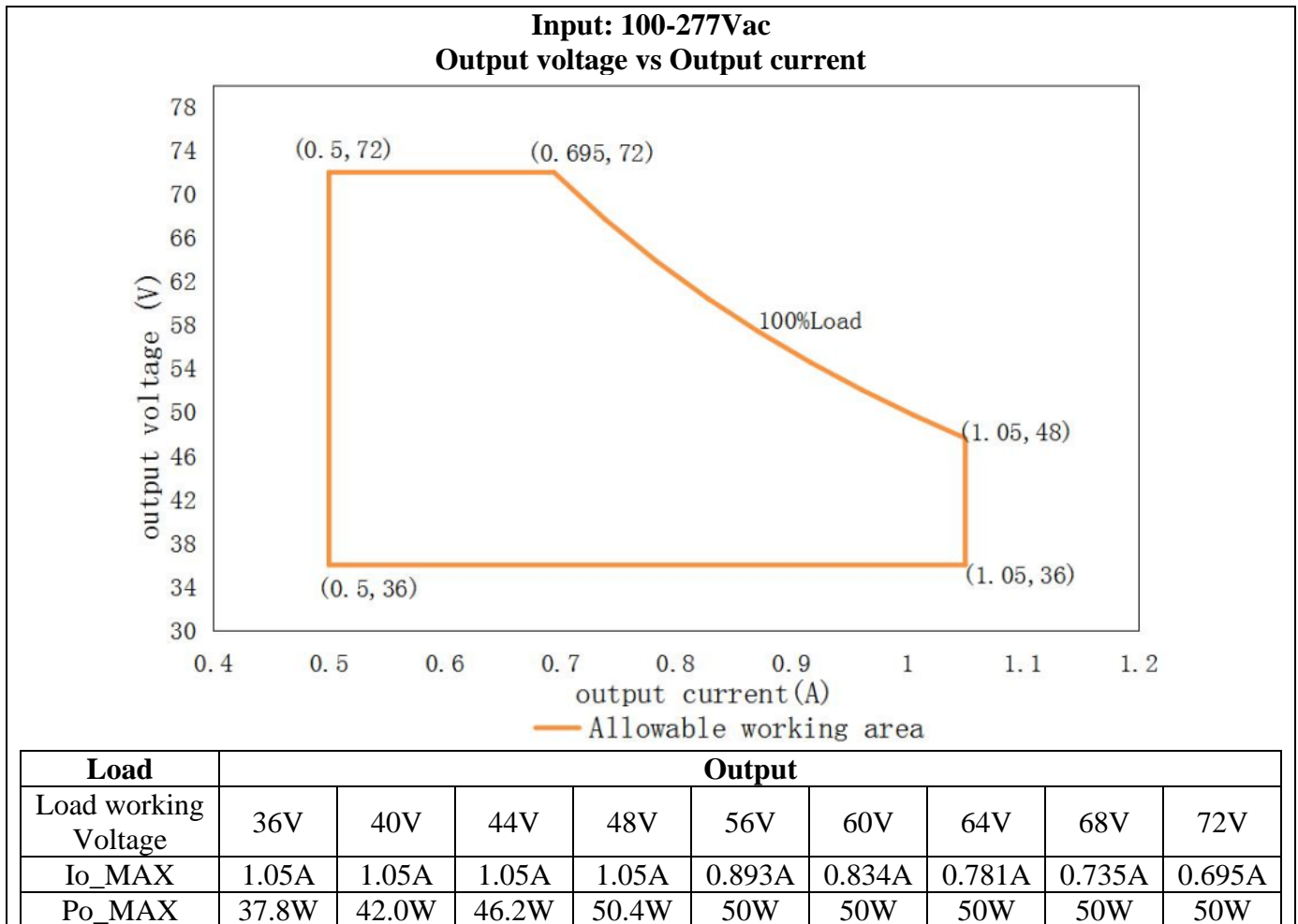
Safety and EMC:

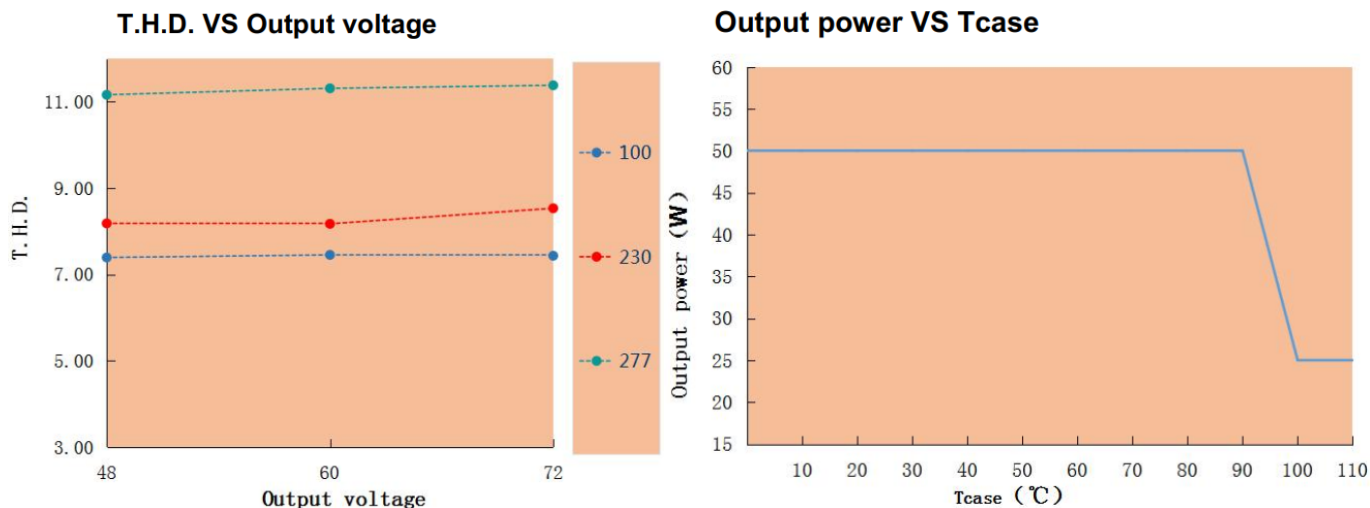
Safety categories	Standard
Safety	GB19510.1, GB19510.14, EN61347-1, EN61347-2-13, IEC61347-1, IEC61347-2-13, AS/NZS61347.1, AS61347.2.13, EN 62384 ;
EMC	EN 55015, EN 61547, EN 61000-3-2, GB/T 17743, GB17625.1, EN 61000-3-3
Surge level	Differential mode L-N $\pm 4\text{KV}$ (2 Ω),common mode L, N-PE $\pm 6\text{KV}$ (12 Ω) Refer toIEC61000-4-5 2014
High-pot test	I/P-O/P:3.75KVac I/P-PE :1.5KVac O/P-PE : 0.5KVac I/P-DIM:3.75KVac O/P-DIM:1.5KVac
Insulation impedance	I/P-PE:100M Ω / 500VDC; I/P-O/P:100M Ω / 500VDC / 25°C / 70% RH
Leakage current	<0.7mA@277Vac

Note:

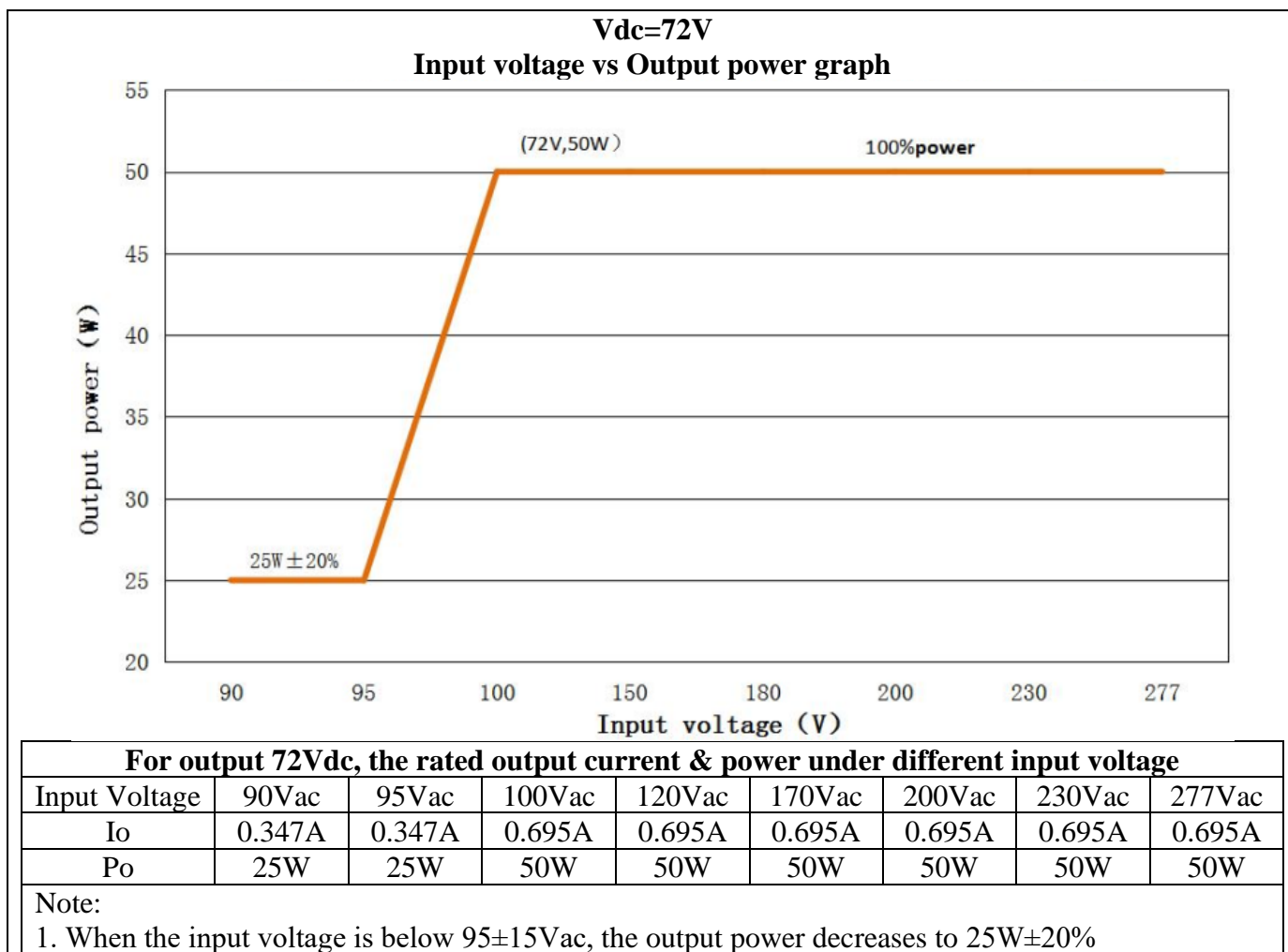
1.Attention! As a component of the whole, the EMC performance of the final product is not only decided by the driver, even if the driver is well-designed and fulfil all the required compliance. The final equipment manufacturers must re-qualify EMC Directive on the complete product

I-V Working area:



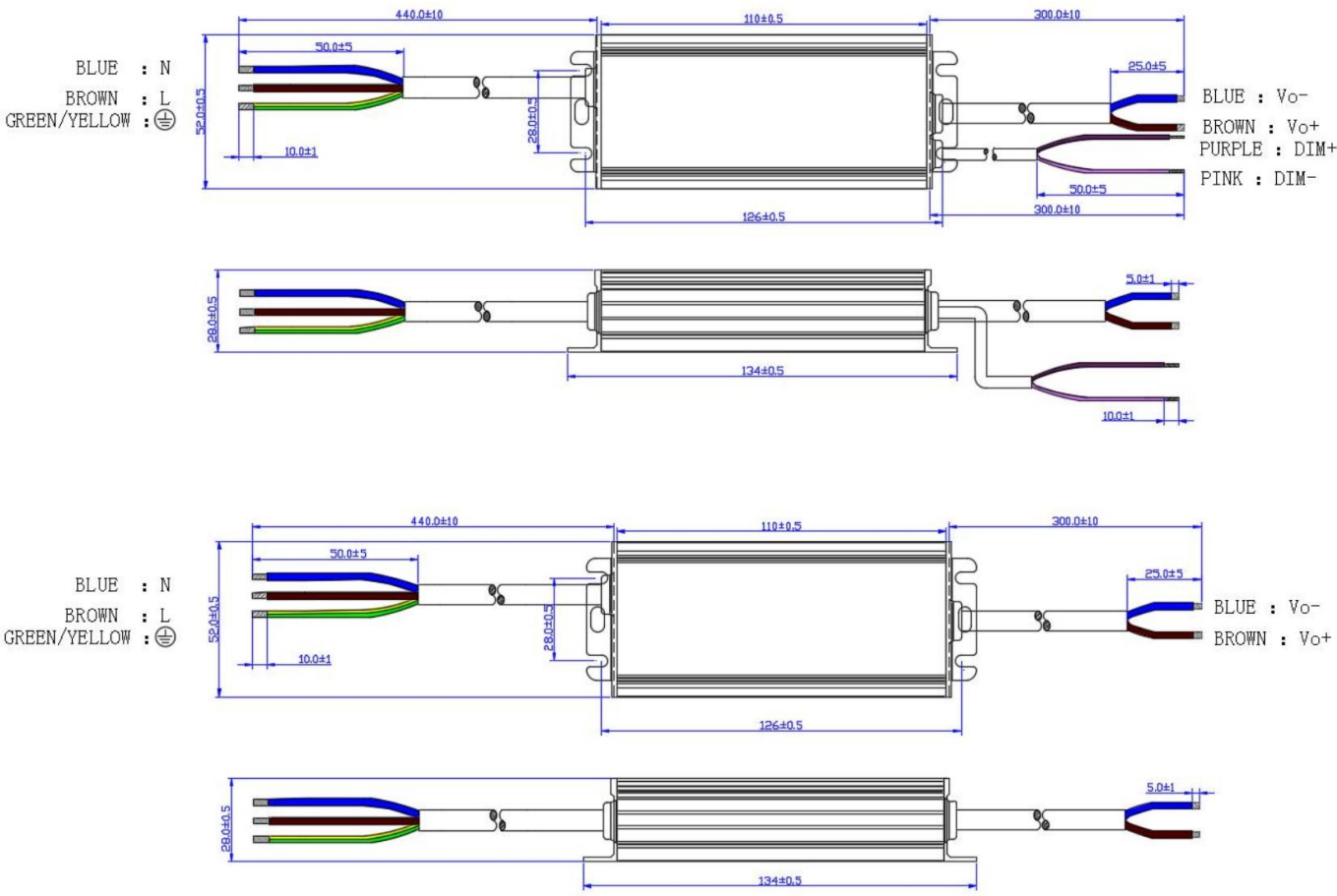


Output power VS Input voltage:



Mechanical specification:

Size (mm)	L134mm*W52mm*H28mm
Weight (Kg)	440g
Packaging (mm)	



BLUE : N
 BROWN : L
 GREEN/YELLOW : \oplus

BLUE : Vo-
 BROWN : Vo+
 PURPLE : DIM+
 PINK : DIM-

BLUE : Vo-
 BROWN : Vo+

Please check the type with the manager:
 IS 50W-WTF-72A-S - with dimming by potentiometer
 IS 50W-WTF-72D-S - with dimming by 0-10V
 IS 50W-WTF-72X-S - with an additional 12V/0.25A output