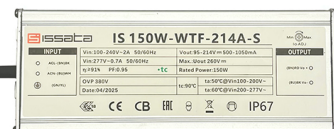


Product Specification:

- Class I type for insulation
- Input voltage range: 100-277V ~ 50/60Hz (input 330-380Vac overvoltage protection for option, no damage after 8 hours of power-on)
- Efficiency 91% (Typ.)
- Constant current output ,with power limitation for control mode
- Metal material case, protection grade against water and dust: IP67
- Surge level :
differential mode : 6kV
common mode : 10kV
- Function available :
Output current is dimmed by external potentiometer (Only Type A)
Output current is dimmed by Isolated 3 in 1 dimmer (Only Type D/X)
AUX Power : 12V/0.25A (Only Type X)


Model Specification:

IS 150W-WTF-214A-S IS 150W-WTF-214D-S IS 150W-WTF-214X-S	Rated Input voltage	100-277V 50/60Hz
	Max Output power	150W
	Output voltage	95-214Vdc Rated Power (143-214V)
	The default current	0.7A
	Eff.	≥91%

Note :

1. Test conditions: Ta=25°C, under 230Vac input, after running for 30 minutes with full load.
2. When the input is less than 100± 15Vac, the output power gradually decreases to 75W± 10%, and it recovers full power of 150W when the input is above 100VAC again. Please refer to “THE OUTPUT POWER VS INPUT VOLTAGE” curve chart for details

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	0.90	-	-	@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	-	-	2.0A	@90Vac input ,with full load
Inrush current	-	-	70A	230Vac, cold start (25°C)

Output characteristics:

Parameter	Min	Typ.	Max	Remark
Rated current	-	0.70A	-	Rated Load :214VDC
Output current range	0.50A	-	1.05A	-
Output voltage range	95V	-	214V	Constant power output range:143-214VDC
Available power (90-100Vac)	-	75W	-	Decrease to a half once input voltage being less than 100Vac
Rated power (100-277Vac)	-	150W	-	-
No-load voltage	-	-	277V	-
Efficiency @230Vac	-	91%	-	@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	-	-	600ms	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 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 $100 \pm 15\text{Vac}$, 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	$-40 \sim +55^{\circ}\text{C}$ @100-277Vac((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 "Tcase VS Lifetime" curve for details.

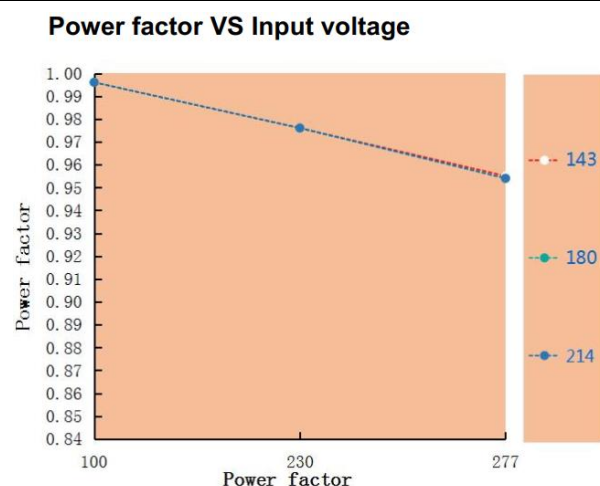
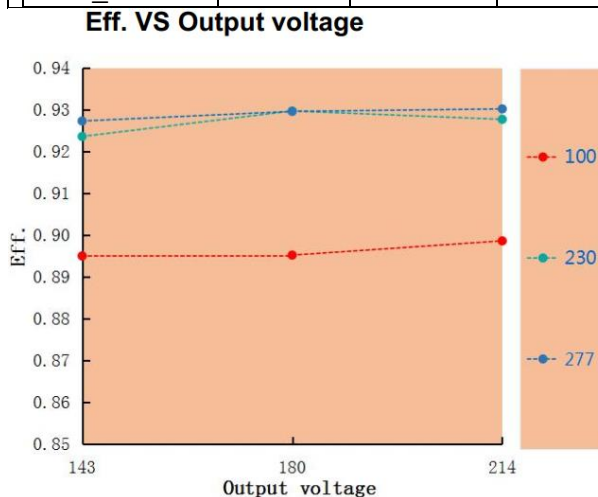
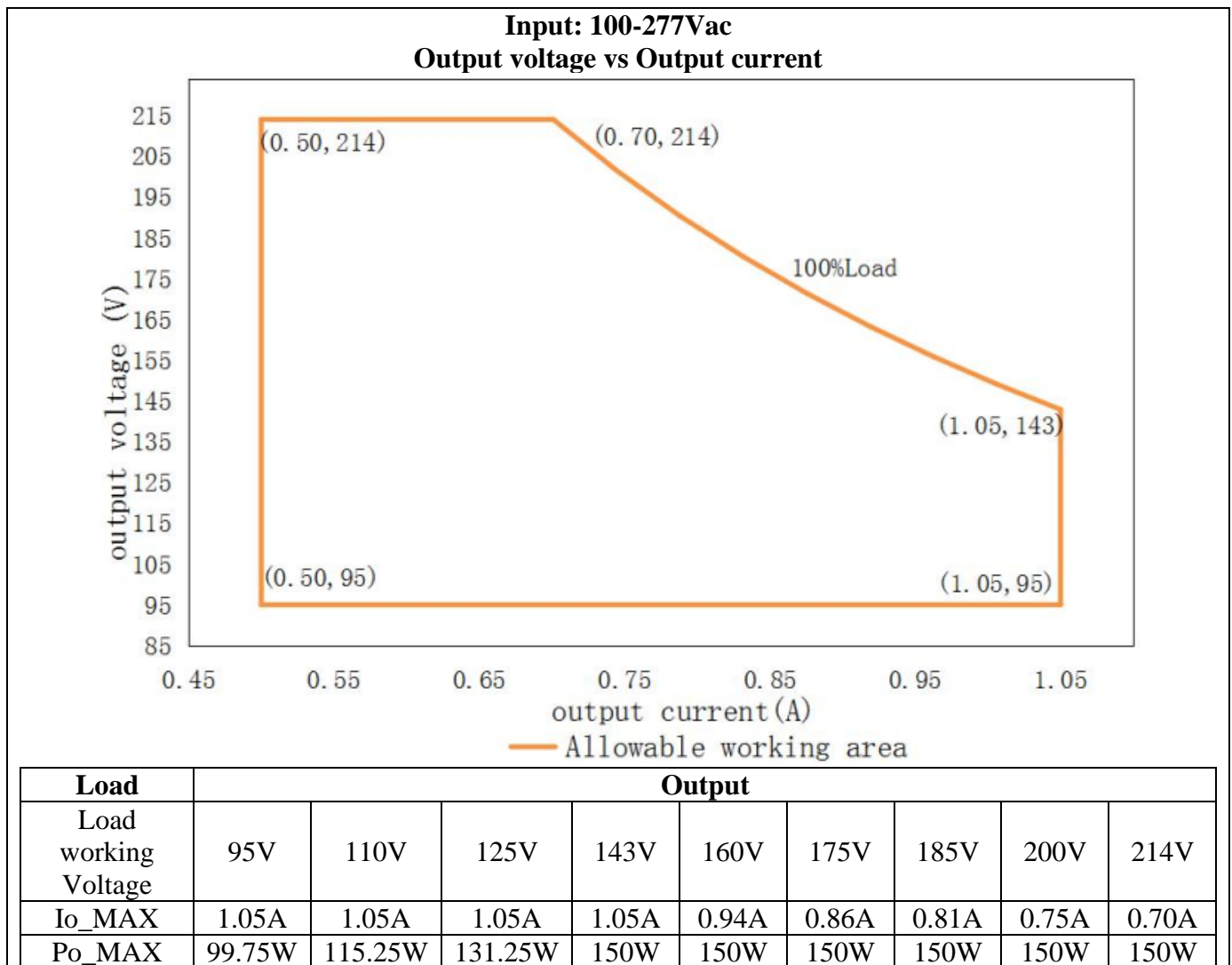
Safety and EMC:

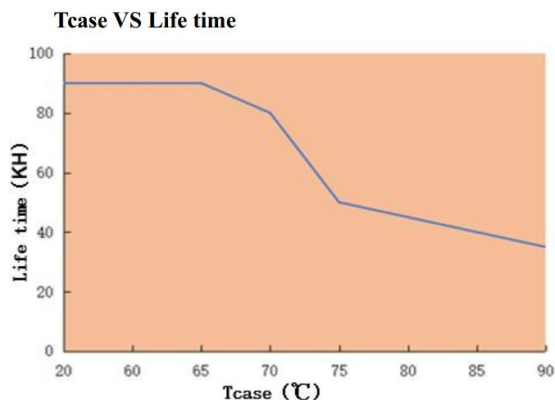
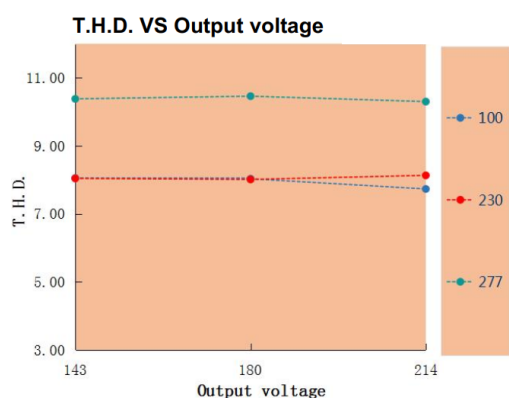
Safety categories	Standard
Safety	GB19510.1, GB19510.14, EN61347-1, EN61347-2-13, IEC61347-1, IEC61347-2-13, AS/NZS61347.1, AS61347.2.13, EN 62384 ;
EMC	EN 55015, EN 61547, EN 61000-3-2, GB/T 17743, GB17625.1, EN 61000-3-3
Surge level	Differential mode L-N $\pm 6\text{KV}$ (2 Ω), common mode L, N-PE $\pm 10\text{KV}$ (12 Ω) Refer to IEC61000-4-5 2014
High-pot test	I/P-O/P:3.75KVac I/P-PE :1.75KVac I/P-DIM:3.75KVac O/P-DIM:0.5KVac
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:

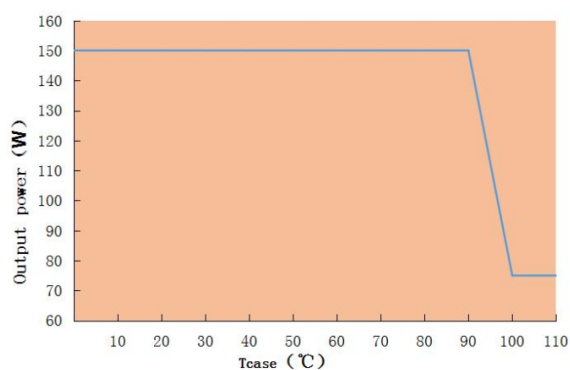
1.Attention! As a component of the whole, the EMC performance of the final product is not only decided by the driver, even if the driver is well-designed and fulfil all the required compliance. The final equipment manufacturers must re-qualify EMC Directive on the complete product

I-V Working area:

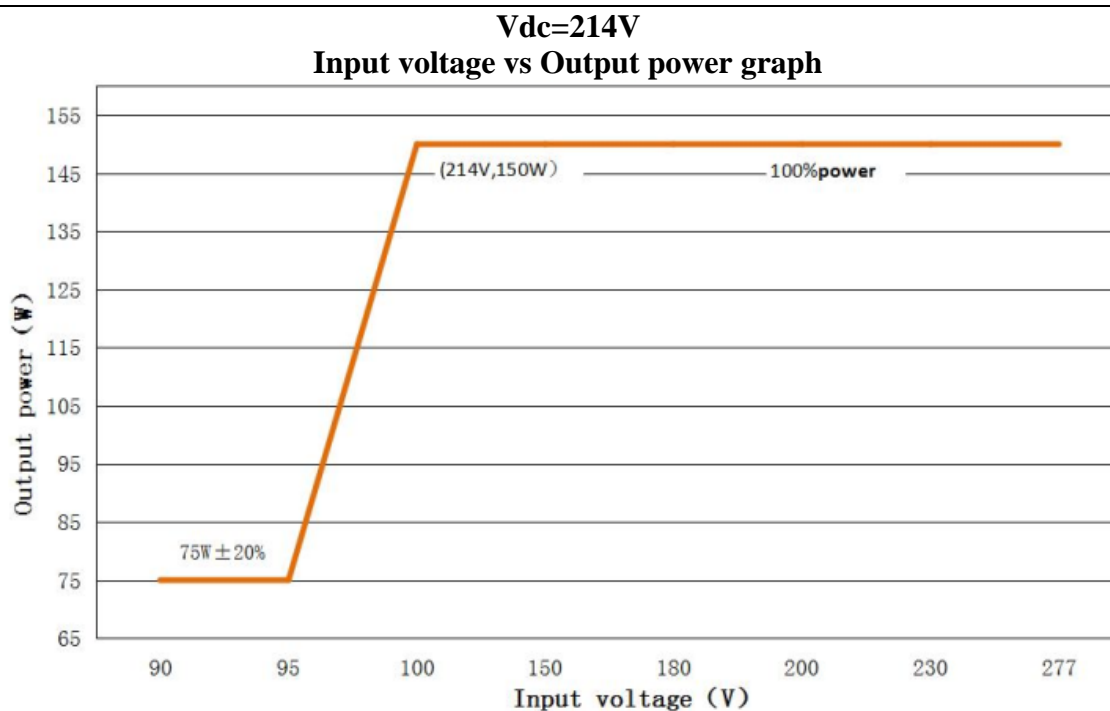




Output power VS Tcase



Output power VS Input voltage:

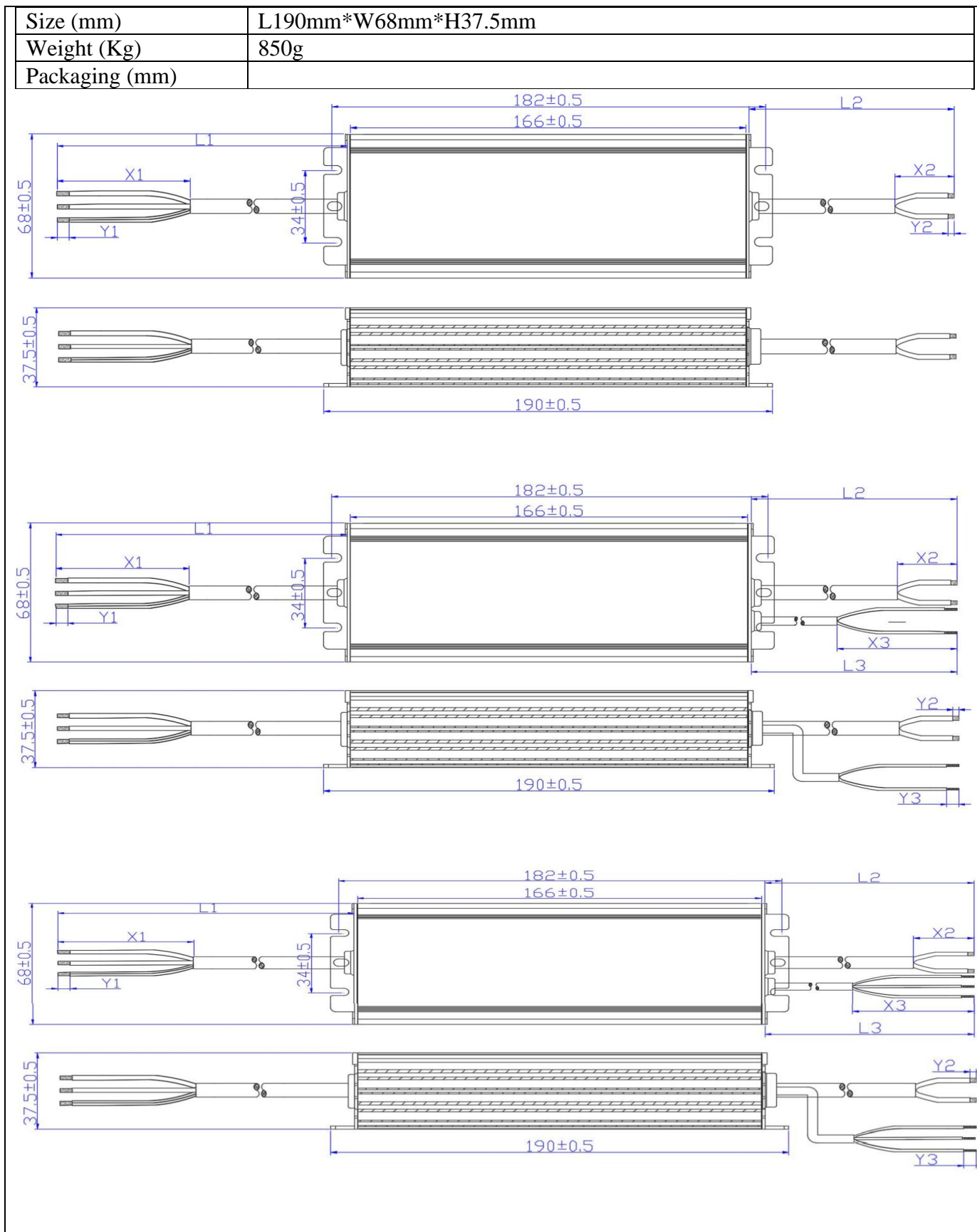


For output 214Vdc, the rated output current & power under different input voltage

Input Voltage	90Vac	95Vac	100Vac	150Vac	180Vac	200Vac	230Vac	277Vac
Io	0.35A	0.35A	0.70A	0.70A	0.70A	0.70A	0.70A	0.70A
Po	75W	75W	150W	150W	150W	150W	150W	150W

Note:

1. When the input voltage is below 100±15Vac, the output power decreases to 75W±10%

Mechanical specification:


Type	Input Wire	Output Wire	Dimming Wire & AUX Output Wire
Specifications	H05RN-F 3*1.0mm ² OD:7.2mm 300V/500V VDE/CCC/SAA	H05RN-F 2*1.0mm ² OD:6.8mm 300/500V VDE/CCC/SAA	PVC 22AWG 300V 105°C OD : 4.8mm
Color	AC-L(Brown); AC-N(Blue) PG(Yellow/Green)	LED+(Brown);LED-(Blue)	DIM+(Purple);DIM-(Pink)
Length	440±10mm (L1)	300±10mm (L2)	300±10mm (L3)
Peeled	50±5mm(X1)	25±5mm(X2)	50±5mm(X3)
Tinned	10±1mm (Y1)	5±1mm (Y2)	10±1mm (Y3)

Please check the type with the manager:

IS 150W-WTF-214A-S – with dimming by potentiometer

IS 150W-WTF-214D-S – with dimming by 0-10V

IS 150W-WTF-214X-S - with an additional 12V/0.25A output