



Constant Voltage Driver

Model: XV150W##VUNI



IP67 SELV



Model	Input Voltage Range	Rated Output Power①		Rated Output Voltage	Output② Voltage Adjustment Range	Output Current	Typical③ Efficiency	Certification
		90-120Vac	120-305Vac 125-420Vdc					
XV150W24*UNI④	90~305Vac	120 W	151.2 W	24V	22-26.4V	0-6.3A	93%	CE,TUV, CCC,,SAA
XV150W36*UNI				36V	33-39.6V	0-4.2A		
XV150W48*UNI				48V	44-52.8V	0-3.15A		

NOTE:

①Refer to the Input Voltage vs. Load Derating curve for details.

②Setting different Output voltage by adjustable resistor/rotary(Optional).

③Test condition:230Vac/50Hz,Rated Load,refer to Efficiency vs. Load curve for details.

④*=U : UL Cable/Class I

*=V : VDE Cable/Class I

1. Parameters

category	Item	Technical Norm
Features	Output Type	Constant Voltage
	IP Grade	IP67
	Insulation Class	Class I
	Installation	Independent
Input	Rated Input Voltage	100~277Vac or 125V-420Vdc
	Operating Input Voltage	90~305Vac or 125V-420Vdc
	Input Frequency	Rated 50/60Hz, operating 47~63Hz
	Power Factor	≥0.95@Full Load ≥0.9@70%-100%Load, refer to PF vs. Load curve
	THD	<10%@115Vac/230Vac 70%-100%Load <15%@277Vac 70%-100%Load, refer to THD vs. Load curve
	Input Current	≤1.6A@120Vac & Rated Load, ≤0.8A@230Vac & Rated Load, ≤0.7A@277Vac & Rated Load
	Input Power	≤140W @100Vac,80% Load, ≤175W @120Vac,Full Load
	Leakage Current	≤0.75mA @277Vac 60Hz, ≤UL8750 ≤0.7mA @240Vac 50Hz, IEC61347-1
	Input Under/Over Voltage	No damage of wrong mains voltage: 0V AC to 340V AC,

		10minutes maximum
	Standby Power	<0.5W
	Inrush Current	≤60A@240Vac/50Hz, 90-degree phase, full load, cold start-up, 50%I _{pk} ~50%I _{pk} , duration<0.8mS
	16A breaker connected Q'ty	7pcs, 16A type B / 13pcs 16A type C @230VAC
	Lightning Surge	6KV line-line; 6KV line-earth
Output	Ripple Voltage	<1%, (V _{max} -V _{min})/(V _{max} +V _{min})
	Voltage Accuracy	±2%
	Line Regulation	±1%
	Load Regulation	±2%
	Overshoot	<105% V _o
	Start-up Time	<0.5S @115/230Vac
	Hold up Time	10mS Typical @ 230VAC
	Efficiency	≥89%, 91% typical@120Vac, Full Load; ≥91%, 93% typical@230Vac, Full Load; refer to Efficiency vs. Load curve
Protection	Short Circuit	Hiccup, Auto recovery, The output recovers when short circuit is removed.
	Over Current	Hiccup, 120%~160% I _o , Auto recovery
	Over Voltage	Hiccup, 110%~150% V _o , Auto recovery
	Over Temperature	Hiccup, 90℃<T _c <110℃, Auto recovery
	Insulation Voltage	3.0KVac/5mA/60S Primary to Secondary
		1.5KVac/5mA/60S Primary to Earth
	Insulation resistance	>100M ohm @ 500Vdc Primary to Earth
Environment	Operating Ambient Temperature	-40℃~+50℃, 10%RH~100%RH, Rated Load ; +50℃~+70℃, 10%RH~100%RH, refer to Ambient Temperature vs. Load Derating curve
	Storage Temperature	-40℃~+85℃; 5%RH~100%RH
	Operating Case Temperature for Safety	-40℃~+90℃; 5%RH~100%RH
	Operating Case Temperature for Warranty	-40℃~+75℃; Case temperature for 5 years warranty. Humidity: 10% RH to 100% RH.
Standards	Certification	CE,TUV,CCC,SAA
	Safety Standards	EN61347-1:2015,EN61347-2-13:2014/A1:2017, EN62493:2015,AS61347.2.13:2018, AS/NZS61347.1:2016 Inc A1 UL8750
	EMC Standards	EN55015:2013/A1:2015,EN61000-3-2:2014, EN61000-3-3:2013,EN61547:2009 , FCC part15 Class-B
	Performance	EN62384
Others	MTBF	≥250 Khours, ≤75℃ case temperature (MIL-HDBK-217F)
	Lifetime	≥90,000 hours, ≤75℃ case temperature, refer to life vs. Tc curve(End of Life: Maximum Failure Rate=10%)

	Dimensions		7.60x2.09x1.24 by inch (body), 8.46x2.09x1.24 by inch (endcaps included)
			193x53x31.5 by mm (body), 215x53x31.5 by mm (endcaps included)
	Net Weight		610±10g/PC
	Wiring	Input	VDE: H05RN-F/3X1.0mm ² ,Brown/Blue/(Yellow/Green) UL: SJTW/3X18AWG,Black/White
		Output	VDE: H05RN-F/2X1.0mm ² ,Brown/Blue, UL: SJTW/2X18AWG,Black/White

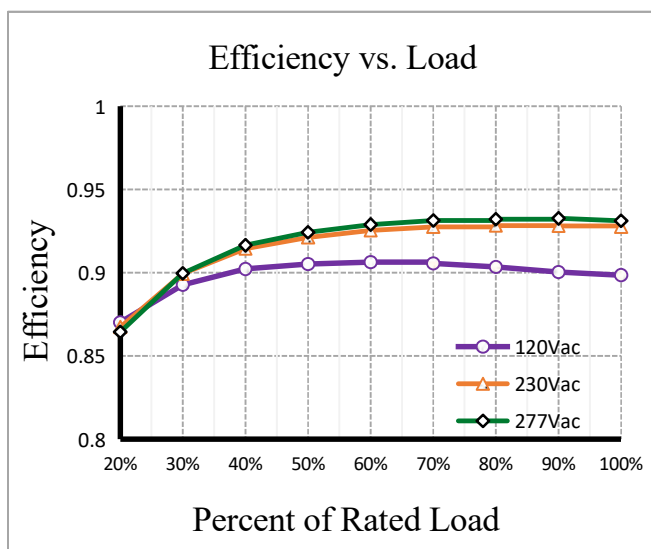
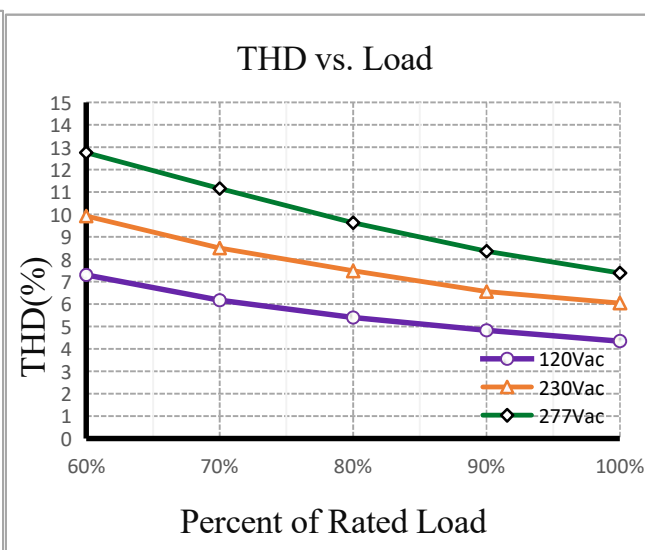
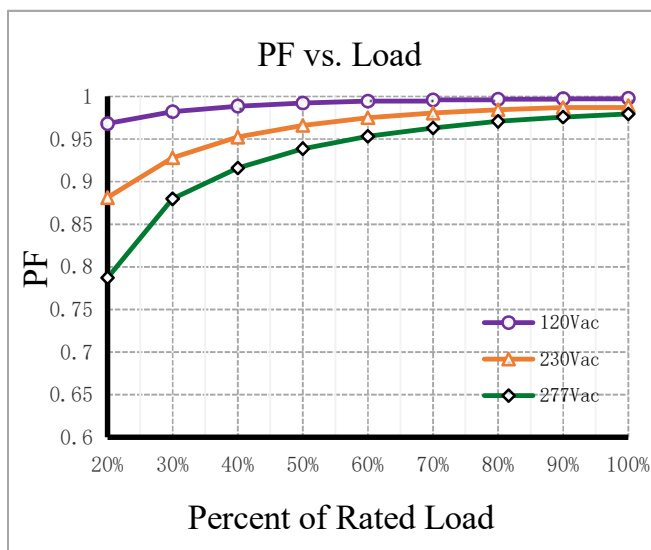
Notes: 1. Unless specified, all the test results are measured in 25°C room temperature.

2. Output ripple should be measured at the output end which has with 0.1uF100V ceramic capacitance and 47uF/100V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

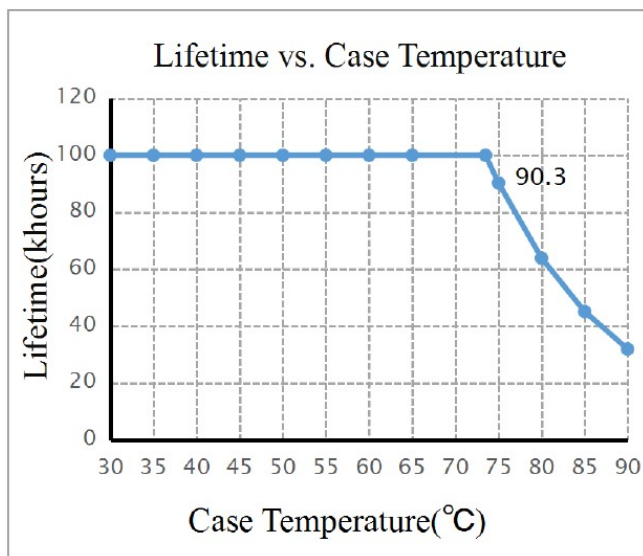
2. Label

☐ ⊕ (YL/GN) ☐ ACN(BLU) ☐ ACL(BRN) INPUT	 KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheld	XV150W48VUNI LED POWER SUPPLY Constant Voltage Type For LED modules only	INPUT:100-240V ~ 50/60Hz 1.6A Power Factor:≥0.95 OUTPUT:48V $\equiv$ Ta:50°C ● Tc:90°C Rated Power: Max.151.2W Max.3.15A(INPUT:120-240V~) Max.120W Max.2.5A(INPUT:100-120V~)		Vo ADJ. + (BRN) ☐ OUTPUT - (BLU) ☐
☐ ⊕ (YL/GN) ☐ ACN(BLU) ☐ ACL(BRN) INPUT	 KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheld	XV150W36VUNI LED POWER SUPPLY Constant Voltage Type For LED modules only	INPUT:100-240V ~ 50/60Hz 1.6A Power Factor:≥0.95 OUTPUT:36V $\equiv$ Ta:50°C ● Tc:90°C Rated Power: Max.151.2W Max.4.2A(INPUT:120-240V~) Max.120.24W Max.3.34A(INPUT:100-120V~)		Vo ADJ. + (BRN) ☐ OUTPUT - (BLU) ☐
☐ ⊕ (YL/GN) ☐ ACN(BLU) ☐ ACL(BRN) INPUT	 KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheld	XV150W24VUNI LED POWER SUPPLY Constant Voltage Type For LED modules only	INPUT:100-240V ~ 50/60Hz 1.6A Power Factor:≥0.95 OUTPUT:24V $\equiv$ Ta:50°C ● Tc:90°C Rated Power: Max.151.2W Max.6.3A(INPUT:120-240V~) Max.120W Max.5A(INPUT:100-120V~)		Vo ADJ. + (BRN) ☐ OUTPUT - (BLU) ☐

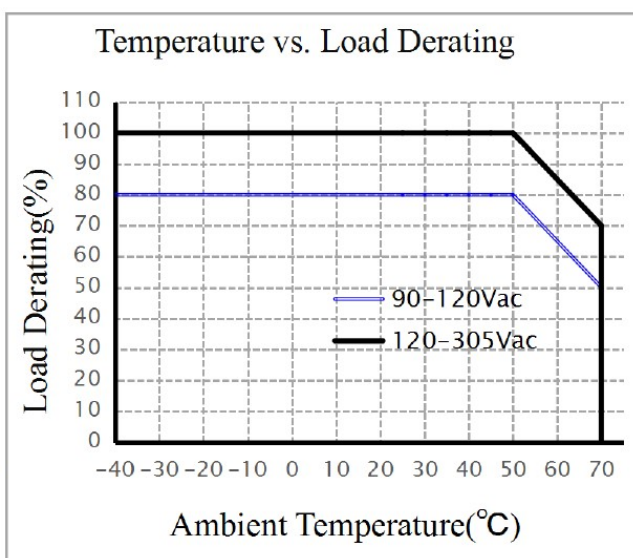
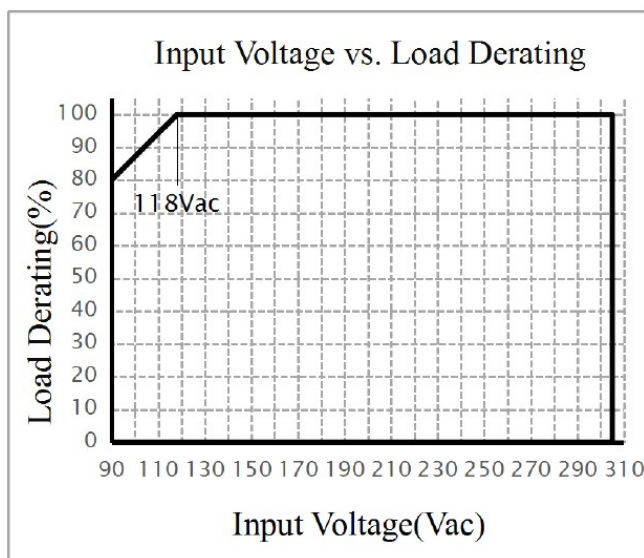
3. Power Factor, THD and Efficiency vs. Load



4. Lifetime vs. Case Temperature



5. Input Voltage and Temperature vs. Load Derating

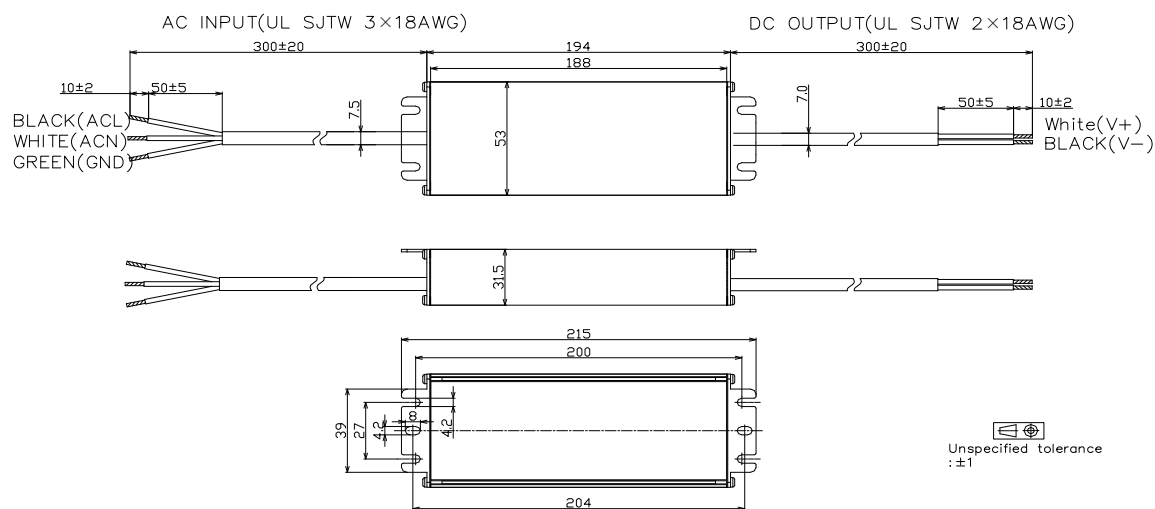


6. Packing information

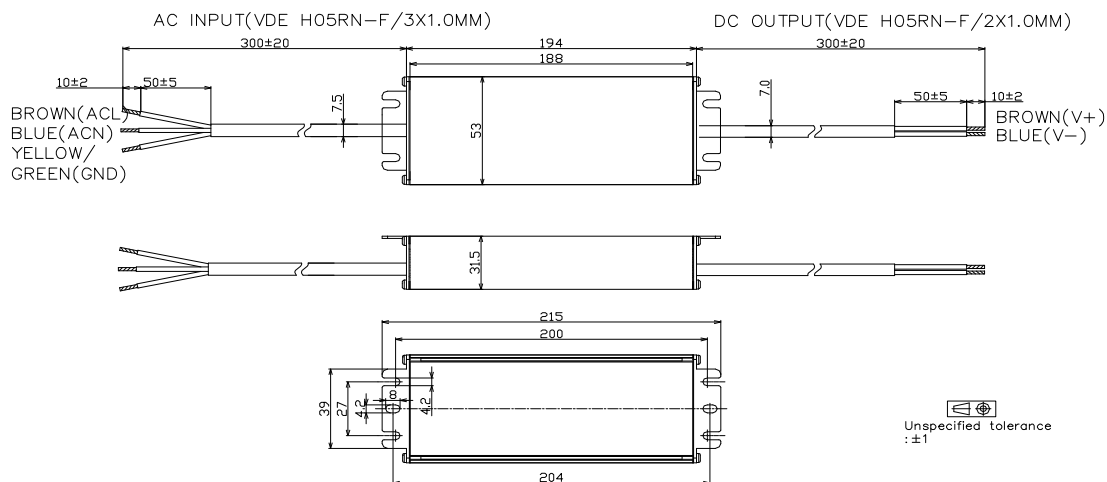
packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
With white box and manual	420X240X200				
Without white box and manual		15Pcs	0.61kg	9.15kg	10.4kg

7. Mechanical Design

- UL Cable



- VDE Cable



8. REVISION HISTORY

DATE	REV.	REMARK
2019-01-17	V0.01	Initial release.
2019-03-20	V0.02	Item 1: Lightning Surge :4KV line-line change to 6KV line-line
2019-05-17	V0.04	Update packing
2019-10-19	V0.05	Add 36V&48V model
2020-09-03	V0.06	Correct Input current