



Constant Voltage Driver

Model: XV100W12
XV100W24
XV100W36
XV100W48

CE SELV IP67   

Model	Input Current Type	Input Voltage Range	Rated Output Power	Rated Output Current	Rated Output Voltage	Typical Efficiency	Certification
XV100W12	$\leq 0.6A$	220-240VAC	100W	0-8.33A	12V	89%	CE
XV100W24	$\leq 0.6A$	220-240VAC	100W	0-4.16A	24V	90%	CE
XV100W36	$\leq 0.6A$	220-240VAC	100W	0-2.77A	36V	91%	CE
XV100W48	$\leq 0.6A$	220-240VAC	100W	0-2.08A	48V	91%	CE

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Voltage
	IP Grade	IP67
	Insulation Class	Class I
	Installation	Independent
Input	Rated Input Voltage	220-240Vac
	Operating Input Voltage	176-264Vac
	Input Frequency	Rated 50/60Hz
	Power Factor	≥ 0.95 (230VAC, full load)
	THD	$\leq 10\%$ 230VAC,50-60Hz,100% loading $\leq 20\%$ 220-240VAC,50-60Hz,80-100% loading
	Input Current	$\leq 0.6A$ (230VAC, full load)
	Leakage Current	0.7mAmax @240Vac 50Hz, IEC61347-1
	Input Under/Over Voltage	No damage of wrong mains voltage: 176V AC to 264V AC, 10minutes maximum
	Standby Power	$< 0.5W$
	Lightning Surge	6KV line-line; 10KV line-earth
Output	Ripple Current(< 120 Hz)	$\pm 5\%$
	PstLM	≤ 1
	SVM	≤ 0.4
	Current Accuracy	$\pm 5\%$

	Line Regulation	±5%
	Load Regulation	±5%
	Overshoot	Constant current type <110%Io
	Start-up Time	≤0.5S @230Vac
	Hold up Time	10mS typical @ 230VAC
	Efficiency	≥ 89%, 90%, 91% typical @230Vac, refer to Efficiency vs. Load curve
Protection	Short Circuit	Auto recovery
	Over Current	Auto recovery
	Over Voltage	Auto recovery
	Over Temperature	Auto recovery
Environment	Operating Ambient Temperature	-40℃~+50℃, 10%RH~100%RH, Rated Load
	Storage Temperature	-40℃~+85℃; 5%RH~100%RH
	Operating Case Temperature for Safety	-40℃~+50℃; 5%RH~100%RH
	Operating Case Temperature for Warranty	-40℃~+85℃; Case temperature for 5 years warranty. Humidity: 10% RH to 100% RH.
Standards	Certification	CE
	Safety Standards	GB 19510.14-2009; EN61347-2-13:2014 EN61347-1:2008+A1:2011+A2013
	EMC Standards	EN55015:2013+A1:2015
Others	MTBF	250 Khours, 10% failure rate,MIL-HDBK-217F
	Lifetime	50,000 hours, <75℃
	Dimensions	165×66.4x36.7mm(L*W*H)
	Net Weight	710g/PCS
	Wiring	Input VDE: H05RN-F/3X1.0mm,Brown/Blue/(Yellow/Green)
		Output VDE: H05RN-F/2X1.0mm,Brown/Blue,
Notes: Unless specified, all the test results are measured in 25℃ room temperature. * marked items are optional and contact with sales people to get the functions.		

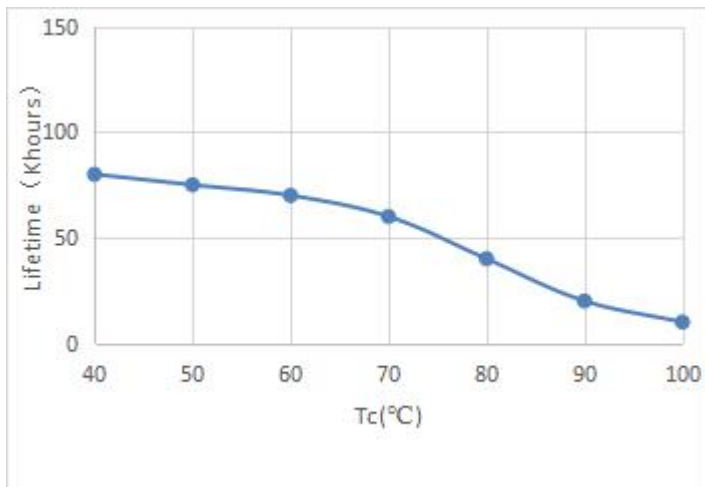
2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		14	18	22	27	34	@230VAC	44	288us
TYPE C		22	28	35	44	55			
TYPE D		35	45	56	70	87			

3. Label

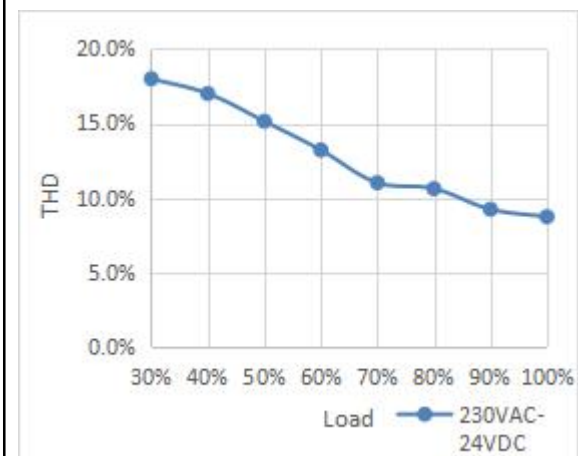
INPUT ☐ ACL BN ☐ ACN BU ☒ --- GW/YR MADE IN CHINA www.kg-power.com S/N:	KGP LED Driver KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid MODEL:XV100W12 INPUT:220-240V~Max 0.6A 50/60Hz PF:0.95 OUTPUT:12V= 0-8.33A 100W Suitable for Dry, Damp and Wet Locations. For LED Module only CE SELV IP67	OUTPUT Vo+--- BN ☐ Vo- --- BU ☐
INPUT ☐ ACL BN ☐ ACN BU ☒ --- GW/YR MADE IN CHINA www.kg-power.com S/N:	KGP LED Driver KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid MODEL:XV100W24 INPUT:220-240V~Max 0.6A 50/60Hz PF:0.95 OUTPUT:24V= 0-4.16A 100W Suitable for Dry, Damp and Wet Locations. For LED Module only CE SELV IP67	OUTPUT Vo+--- BN ☐ Vo- --- BU ☐
INPUT ☐ ACL BN ☐ ACN BU ☒ --- GW/YR MADE IN CHINA www.kg-power.com S/N:	KGP LED Driver KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid MODEL:XV100W36 INPUT:220-240V~Max 0.6A 50/60Hz PF:0.95 OUTPUT:36V= 0-2.77A 100W Suitable for Dry, Damp and Wet Locations. For LED Module only CE SELV IP67	OUTPUT Vo+--- BN ☐ Vo- --- BU ☐
INPUT ☐ ACL BN ☐ ACN BU ☒ --- GW/YR MADE IN CHINA www.kg-power.com S/N:	KGP LED Driver KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid MODEL:XV100W48 INPUT:220-240V~Max 0.6A 50/60Hz PF:0.95 OUTPUT:48V= 0-2.08A 100W Suitable for Dry, Damp and Wet Locations. For LED Module only CE SELV IP67	OUTPUT Vo+--- BN ☐ Vo- --- BU ☐

4. Lifetime vs. Case Temperature

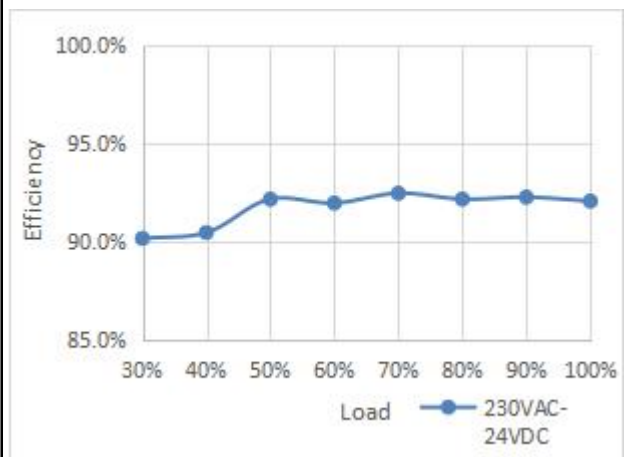


5. Power Factor, THD and Efficiency vs. Load

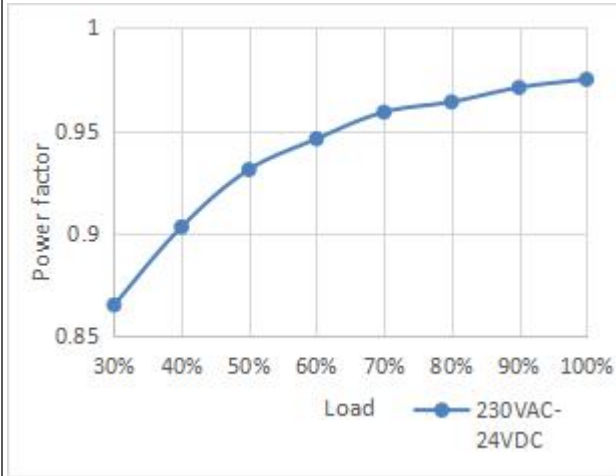
Typical THD V.S load



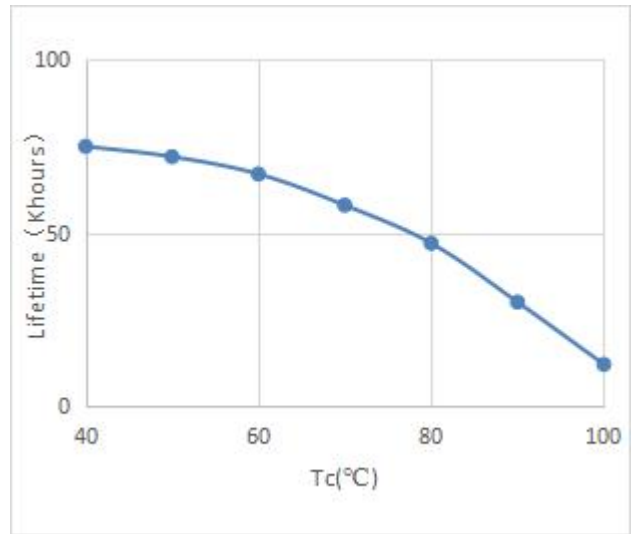
Typical Efficiency V.S load



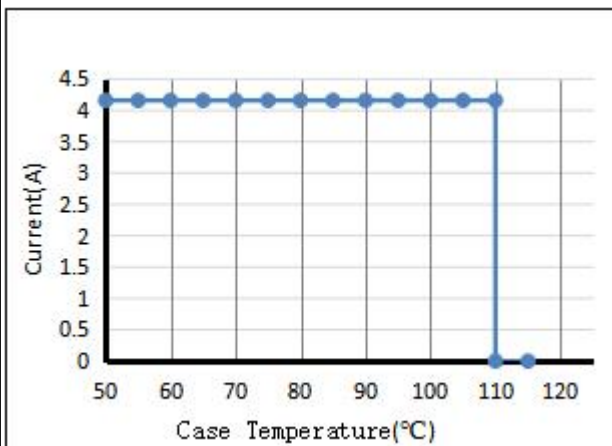
Typical Power factor V.S load



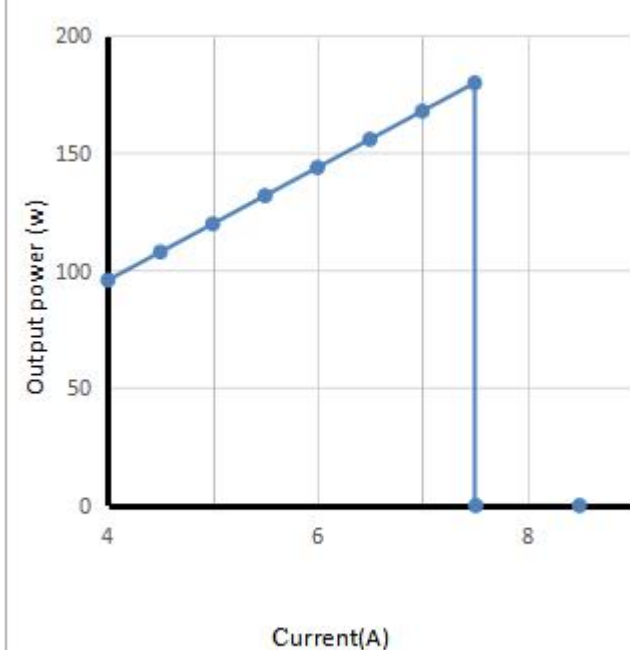
Typical Lifetime V.S Tc



OTP curve(Tc V.S output current)



Typical output power V.S Tc at OCP condition

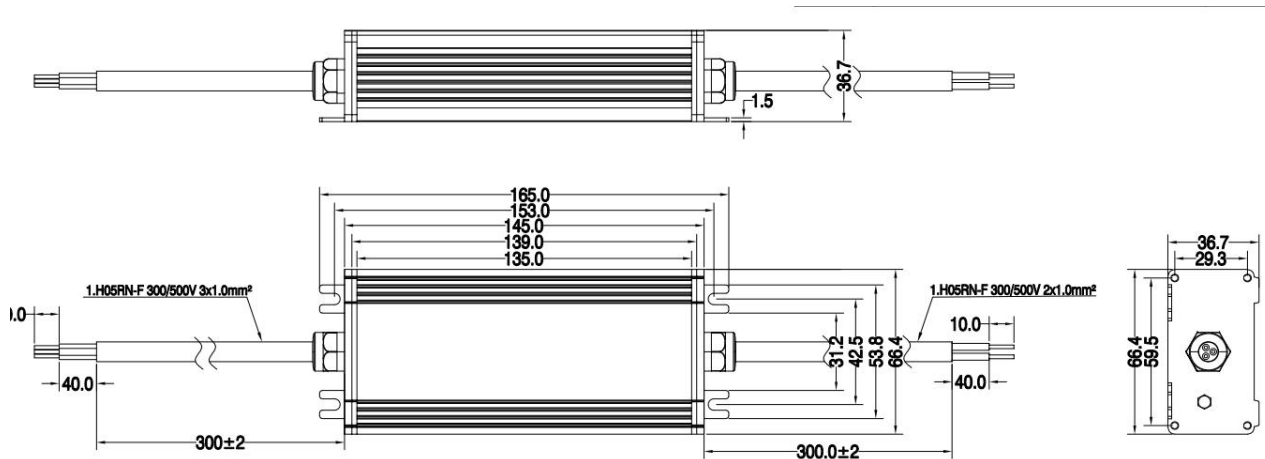


6. Packing information

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
410*220*210	24Pcs	0.710	17.04	17.6

7. Mechanical Design

- VDE Cable



8. Wiring instructions

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 3 m
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)