

HVGC-100A Series

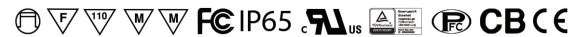
100W Single Output LED Power Supply



Case: 8019KW
236 x 68 x 38.8 mm

Features

- Constant Current Design
- Wide input range 180~528VAC
- Built-in active PFC function
- High Efficiency up to 91%
- Protections: Short circuit: Over Voltage / Over Temperature
- Cooling by free air convection
- OCP point adjustable through internal potentiometer
- IP65 Design for indoor or outdoor installations
- Suitable for LED lighting and street lighting applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty



Specification

INPUT	Voltage	180 ~ 528VAC 254VDC ~ 747VDC	
	Frequency	47 ~ 63 Hz	
	Power Factor	PF \geq 0.98/230VAC, PF \geq 0.98/277VAC, PF \geq 0.97/347VAC, PF \geq 0.93/480VAC at full load (please refer to "Power Factor Characteristic" curve)	
	Total Harmonic Distortion	THD <20% when output loading \geq 50% at 230VAC/277VAC/347VAC or at \geq 75% load at 480VAC input	
	Efficiency	91%	91%
	AC Current	0.38A/347VAC	0.28A/480VAC
	Inrush Current (Typ.)	Cold start 25A (twidh=900 μ s measured at 50% Ipeak) at 480VAC	
	Max. No of PSUs on 16A circuit breaker	5 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 480VAC	
	Leakage Current	<0.75mA/480VAC	
OUTPUT	MODEL No.	HVGC-100-350A	HVGC-100-700A
	Rated Current	350mA	700mA
	Rated Power	99.75W	99.4W
	Current Accuracy	\pm 5.0%	
	R&N	1Vp-p	0.5Vp-p
	Current Adj. Range	210~350mA	420~700mA
	Setup Rise Time	500ms, 80ms 230VAC/347VAC/480VAC at full load	
	Hold Up Time	30ms at full load 480VAC/347VAC	
PROTECTION	Short Circuit	Constant current limiting, recovers automatically after fault condition is removed	
	Over Voltage	300 ~ 320V	150 ~ 160V
		Protection type: Shut down o/p voltage with auto-recovery or re-power on to recovery	
	Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down	
ENVIRONMENT	Working Temperature	-40 ~ +70 °C (Refer to "Derating Curve")	
	Working Humidity	20 ~ 95% RH non-condensing	
	Storage Temperature	-40 ~ +80 °C, 10 ~ 95%RH	
	Temp Coefficient	\pm 0.03%/°C (0 ~ 50°C)	
	Vibration	10 ~ 500Hz, 5G 12 min./1cycle, period for 72 min. each along X, Y, Z axes	
Safety & EMC	Safety Standards	UL8750, CSA C22.2 No. 250.0-08, TUV EN61347-1, EN61347-2-13, IP65 approved; design refer to UL60950-1, TUV EN60950-1	
	Withstand Voltage	I/P-O/P:3.75VAC	I/P-FG:2KVAC O/P-FG:1.5KVAC
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC/25°C/70% RH	
	EMC Emission	Compliance to EN55015, EN61000-3-2, Class C (\geq 50% load); EN61000-3-3, FCC part 15 class B	
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level (Surge 4KV), criteria A	
OTHERS	M.T.B.F.	186.1K hrs min. MIL-HDBK-217F (25°C)	
	Packing	1.18Kg;12pcs/15.2Kg/0.74CUFT	

1. All parameters NOT specially mentioned are measured at 347VAC input, rated load and 25°C of ambient temperature.
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1 μ f & 2.2 μ f parallel capacitor.
3. Derating may be needed under low input voltages. Please check the static characteristics for more details.
4. Safety and EMC design refer to EN60598-1, CNS15233, GB7000.1.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.
7. Refer to Warranty statement.

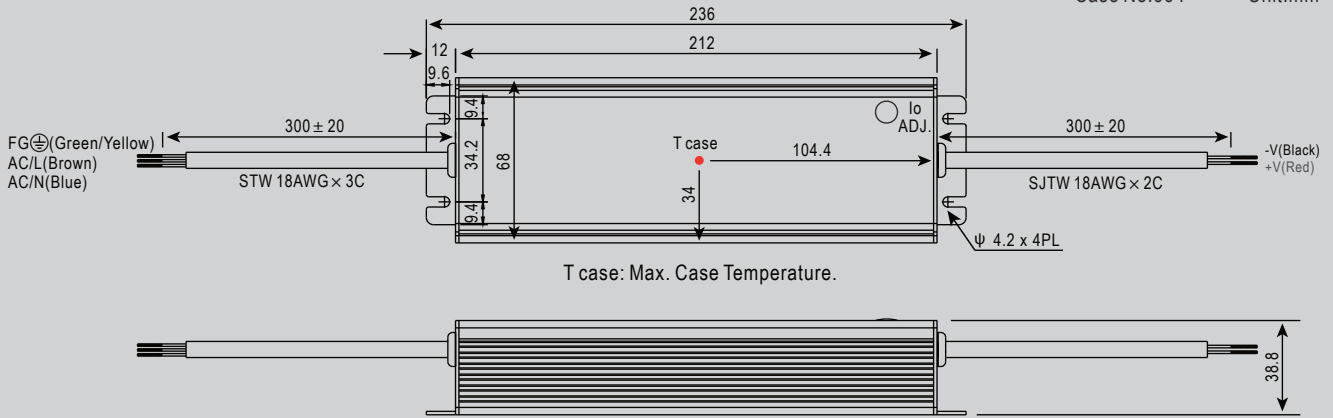
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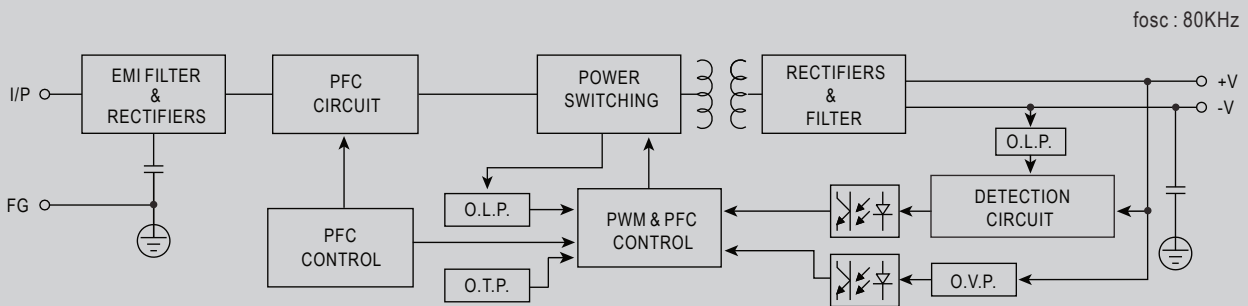
Mechanical Specification

Case No.994 Unit:mm

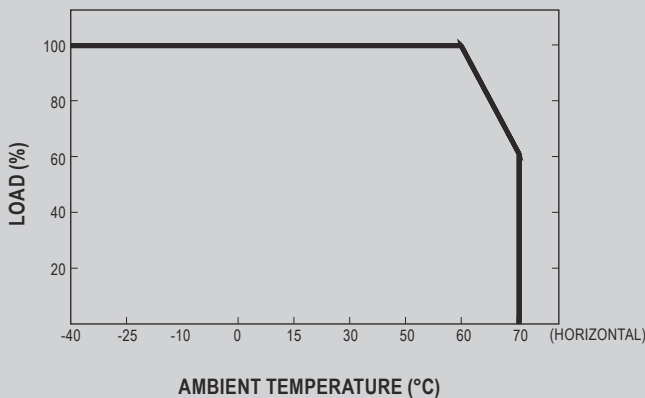


IP65 rated. Constant current level can be adjusted through internal potentiometer.
(Can access by removing the rubber stopper on the case.)

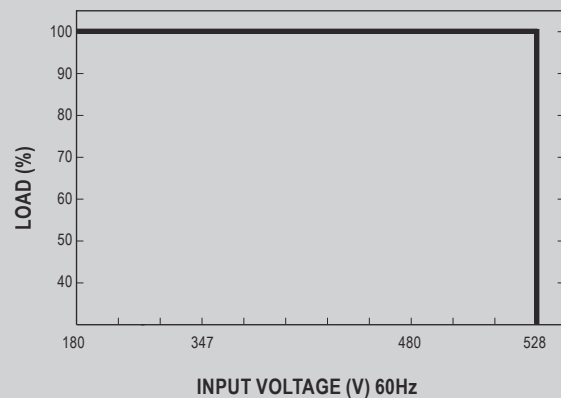
Block Diagram



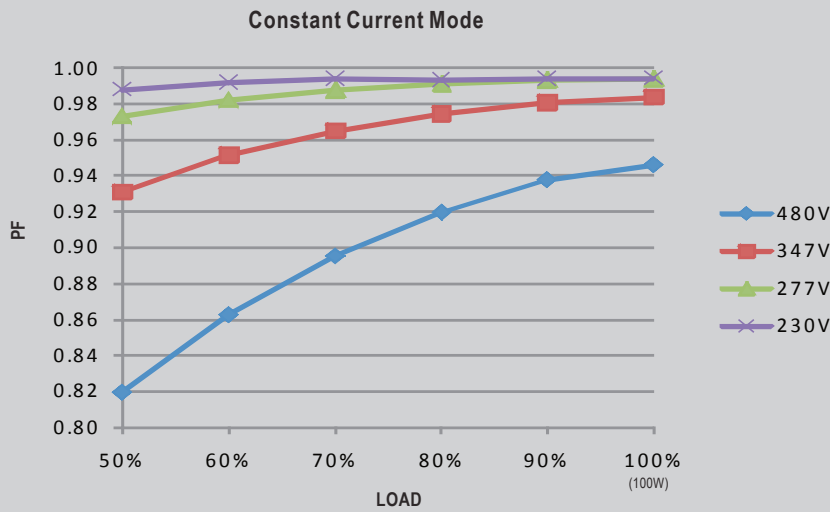
Derating Curve



Static Characteristics

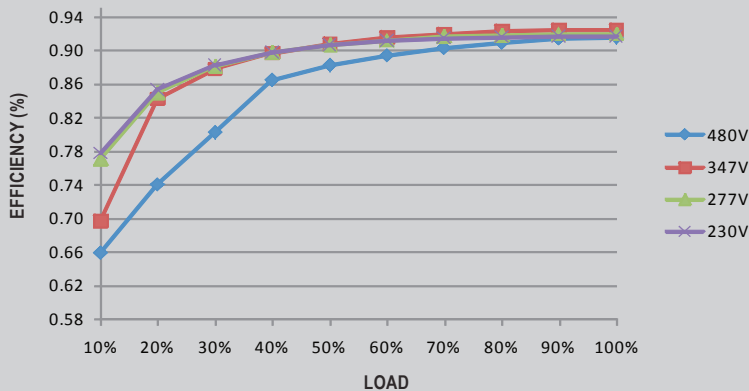


Power Factor Characteristic



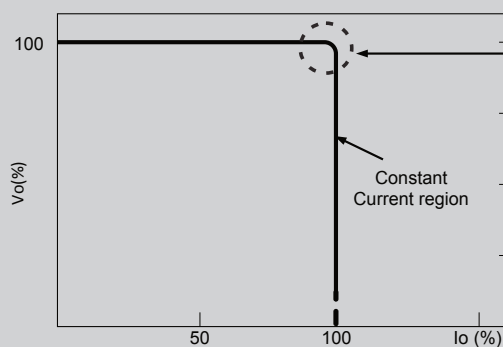
Efficiency vs Load (100-700 Model)

HVGC-100 series possess superior working efficiency that up to 91% can be reached in field applications.



Diving Methods of LED Module

A typical LED power supply may work in "constant current mode (CC)" to drive the LEDs.
 Mean Well's LED power supply with CC characteristic can be operated at CC mode (direct drive).



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

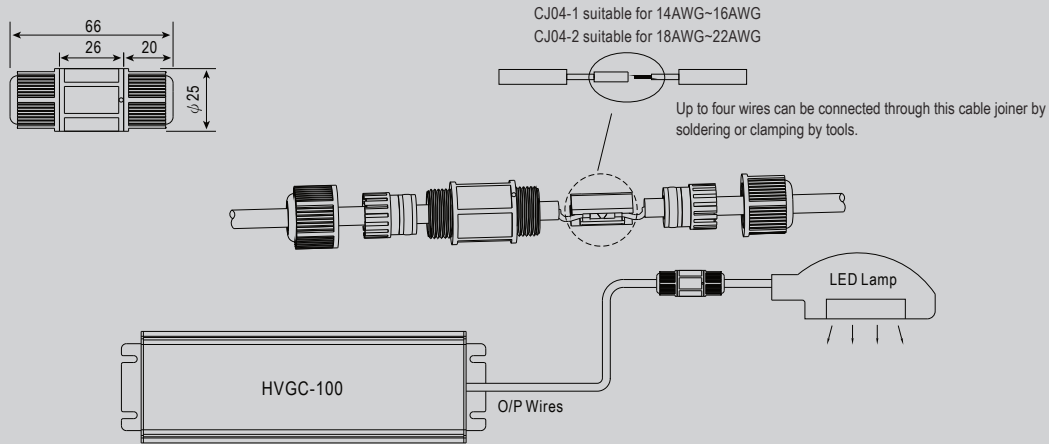
Typical LED power supply I-V curve

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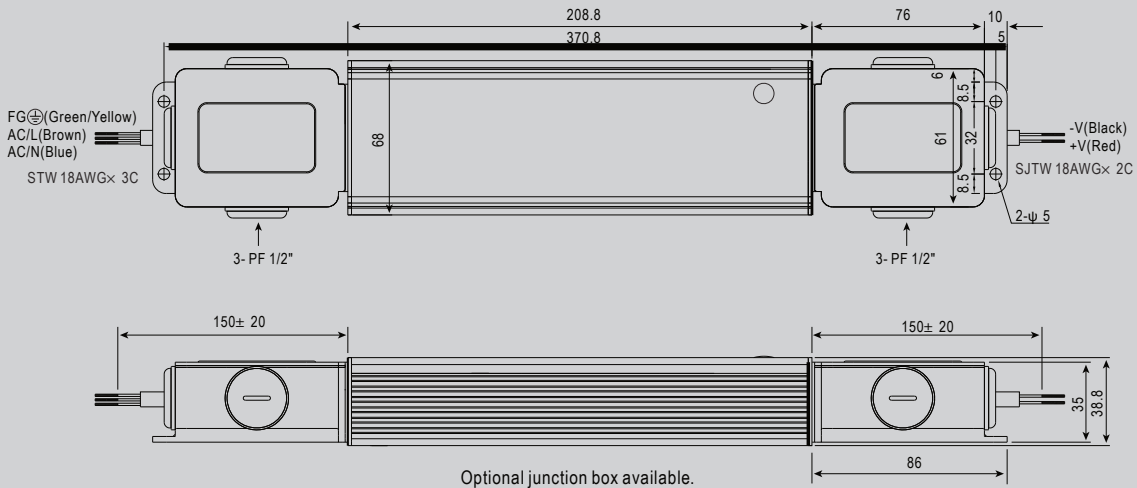
Cable Joiner



CJ04 cable joiner can be purchased independently for user's own assembly.

Junction Box

Junction Box(Optional)



Optional junction box available.

Waterproof Connection

Waterproof connector can be assembled on the output cable of HVGC-100 to operate in dry/wet/damp or outdoor environment.

