

HLG-185W series Single Output Switching Power Supply



Features:

Universal AC input / Full range

Built-in active PFC function

Protections: Short circuit / Over current / Over voltage / Over temperature

Cooling by free air convection

Output voltage and current adjustable through output cable or internal potentiometer

IP67 / IP65 design for indoor or outdoor installations

Suitable for LED lighting and moving sign applications

Compliance to worldwide safety regulations for lighting

Suitable for dry / damp / wet locations

3 years warranty

SPECIFICATION

Dimension: 225*68*40mm



	Model	HLG-185-24	HLG-185-36	HLG-185-42	HLG-185-48	HLG-185-54	
OUTPUT	DC VOLTAGE	24V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION	12~24V	18~36V	21~42V	24~48V	27~54V	
	RATED CURRENT	7.8A	5.2A	4.4A	3.9A	3.45A	
	RATED POWER	187.2W	187.2W	184.8W	187.2W	186.3W	
	RIPPLE & NOISE (max.)	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	22~27V	33~40V	38~46V	43~53V	49~58V	
	CURRENT ADJ. RANGE	Can be adjusted by internal potentiometer or through output cable					
		3.9~7.8A	2.6~5.2A	2.2~4.4A	1.95~3.9A	1.72~3.45A	
	VOLTAGE TOLERANCE	± 1%	± 1%	± 1%	± 1%	± 1%	
	SETUP, RISE HOLD UP TIME	2500ms,80ms,16ms/115VAC. 230VAC(Full load)					
INPUT	VOLTAGE RANGE	90 ~ 264VAC 47 ~ 63Hz, 127 ~ 373VDC					
	AC CURRENT (Typ.)	2.1A/115VAC 0.9A/230VAC					
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC(at full load and rated output voltage); PF≥0.9 (65-100% load)					
	EFFICIENCY (Typ.)	93.5%	93.5%	94%	94%	94%	
	INRUSH CURRENT (Typ.)	COLD START 75A/230VAC					
	LEAKAGE CURRENT	0.75mA/240VAC					
PROTECTION	OVER CURRENT	95~108%					
		Protection type: Constant current limiting, recovers automatical ly after fault condition is removed					
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is remove					
	OVER VOLTAGE	28 ~ 34V	41 ~ 46V	47 ~ 53V	54 ~ 60V	59 ~ 65V	
		Protection type : Shut down o/p voltage, re-power on to recover					
	OVER TEMPERATURE	105°C ± 10°C(RTH2)					
		Protection type : Shut down o/p voltage, re-power on to recover					
	WORKING TEMP.	$-30^{\circ}\text{C} \sim +70^{\circ}\text{C}; 20\% \sim 90\%$ RH(Please refer to "derating curve")					
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40°C ~ +80°C;10% ~ 95%RH Non-condensing					
	VIBRATION	10~500Hz, 2G 10min./1Cycle, Period for 60min, Each axes					
	SAFETY STANDARD	UI1310 Class2, TUV EN61347-1,EN61347-2-13,CAN/CSA C22.2 NO.223-M91(exceptfor 48V), IP65 certificated					
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC, I/P-FG: 1.88KVAC, O/P-FG: 0.5KVAC					
SAFETY & EMC	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 (≥ 50 % load); EN61000-3-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024, light industry level (surge 4KV), criteria A					
OTHERS	DIMENSION	225*68*40 (L*W*H)					
	PACKING	1.3kg/20pcs/27kg/0.033m ³					

NOTE

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12* twisted pair—wire terminated with a 0.1uf & 47uf parallel capacitor.

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 3. Tolerance: includes set up tolerance, line regulation and load regulation.

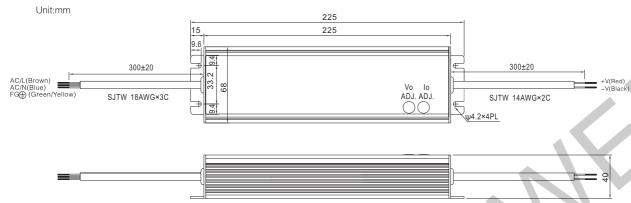
 4. Constant current operation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.

 5. Derating may be needed under low input voltages. Please check the static characteristics for more details.

 6. Safety and EMC design refer to EN60598–1, CNS15233, GB7000.1, FCC part18.

 7. Setup time is measured at cold start condition. Turning ON/OFF the power supply frequently may increase the setup time.

Mechanical specification

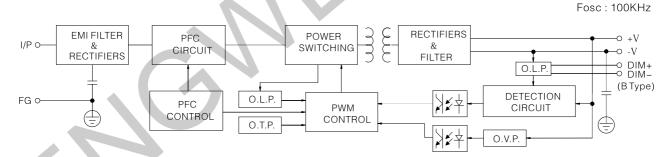


※ IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer. (Can access by removing the rubber stopper on the case.)

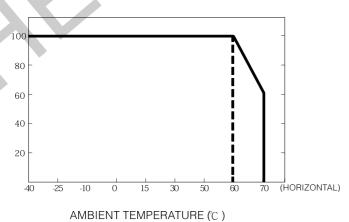
lead-out wire assignment

Input(Black	(three-core)	Output (Black two-core)		
Brown	AC/L	Red	DC OUTPUT +V	
Blue	AC/N	Black	DC OUTPUT -V	
Yellow-green	FG ±			

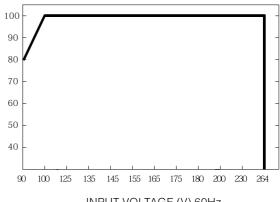
Block diagram



Derating curve



Static characteristic



INPUT VOLTAGE (V) 60Hz