

ORLRPV24320HLG

ITEM NO. DRIVER - 15209

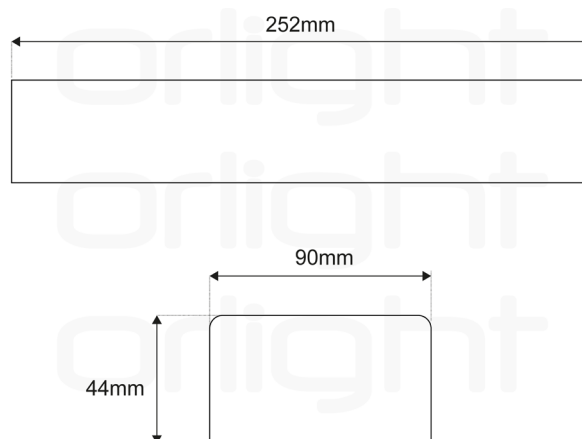
Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- Typical lifetime > 62000 hours

Applications

- LED street lighting
- LED high-bay lighting
- Parking space lighting
- LED fishing lamp
- LED greenhouse lighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location

Dimension



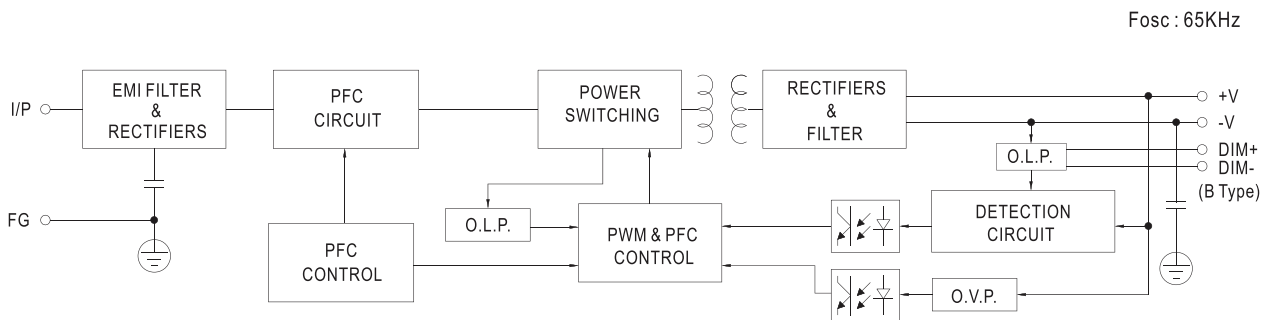
Technical Specification

Output	DC Voltage	24V
	Constant Current Region	Note. 4 12 ~ 24V
	Rated Current	13.34A
	Rated Power	320.16W
	Ripple & Noise (max.)	Note. 2 150mVp-p
	Voltage Adj. Range	Adjustable for A/C-Type only (via built-in potentiometer) 21 ~ 26V
	Current Adj. Range	Adjustable for A/AB/C- Type only (via built-in potentiometer) 6.67 ~ 13.34A
	Voltage Tolerance	Note. 3 ±1.0%
	Line Regulation	±0.5%
	Load Regulation	±0.5%
	Setup, Rise Time	Note. 6 2500ms,80ms/115VAC 500ms,80ms/230VAC
	Hold Up Time (Typ.)	15ms / 115VAC, 230VAC
Input	Voltage Range	Note.5 90 ~ 305VAC 127 ~ 431VDC (Please refer to "Static Characteristic" section)
	Frequency Range	47 ~ 63Hz
	Power Factor (Typ.)	PF _≥ 0.98/115VAC, PF _≥ 0.95/230VAC, PF _≥ 0.94/277VAC @ full load (Please refer to "Power Factor (PF) Characteristic" section)

Technical Specification Continued

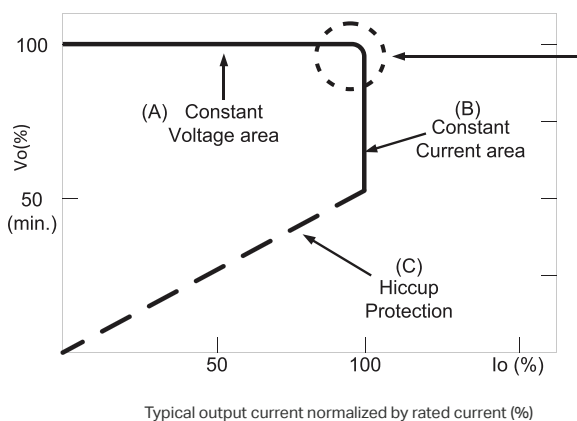
Input	Total Harmonic Distortion	THD< 20% (@ load $\geq$ 50% / 115VAC,230VAC; @ load $\geq$ 75% / 277VAC) (Please refer to "Total Harmonic Distortion (THD)" section)
	Efficiency (Typ.) (230Vac)	94%
	Efficiency (Typ.) (277Vac)	94.5%
	AC Current (Typ.)	3.5A / 115VAC 1.65A / 230VAC 1.45A / 277VAC
	Inrush Current (Typ.)	COLD START 70A(twidth=1010 μ s measured at 50% Ipeak) at 230VAC; Per NEMA 410
	Max. No. of PSUs on 16A Circuit Breaker	1 unit (circuit breaker of type B) / 2 units (circuit breaker of type C) at 230VAC
	Leakage Current	<0.75mA / 277VAC
Protection	Over Current Note.4	95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed
	Over Voltage	27 ~ 33V Shut down and latch off o/p voltage, re-power on to recover
	Over Temperature	Shut down and latch off o/p voltage, re-power on to recover
Environment	Working Temp.	Tcase= -40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)
	Max. Case Temp.	Tcase= +90°C
	Working Humidity	20 ~ 95% RH non-condensing
	Storage Temp. Humidity	-40 ~ +80°C, 10 ~ 95% RH
	Temp. Coefficient	$\pm 0.03\%/^{\circ}\text{C}$ (0 ~ 50°C)
	Vibration	10 ~ 500Hz, 5G 12min./1 cycle, period for 72min. each along X, Y, Z axes
Safety & EMC	Safety Standards Note.8	UL8750(type"HL"), CSA C22.2 No. 250.0-08; BS EN/EN/AS/NZS 61347-1, BS EN/EN/AS/NZS 61347-2-13 independent; GB19510.1,GB19510.14; IP65 or IP67 (except for HLG-320H C-type); J61347-1, J61347-2-13 (except for B,AB,C and D-type), EAC TP TC 004;KC61347-1,KC61347-2-13(except for AB,C-type) approved
	Withstand Voltage	I/P-O/P:3.75KVAC 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 Note.8	Compliance to BS EN/EN55015, BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class C (@ load $\geq$ 50%) ; BS EN/EN61000-3-3,GB17743 and GB17625.1,EAC TP TC 020
	EMC Immunity	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, BS EN/EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV), EAC TP TC 020
Others	MTBF	1702.2K hrs min. Telcordia SR-332 (Bellcore) ; 157.2K hrs min. MIL-HDBK-217F (25°C)
	Dimension	252 x 90 x 44mm
	Packing	1.88Kg; 8pcs/16Kg/0.92CUFT
Note	- All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature. - Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf parallel capacitor. - Tolerance : includes set up tolerance, line regulation and load regulation. - Please refer to "DRIVING METHODS OF LED MODULE". - De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. - Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time. - The driver 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. - To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains. - This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly tc point (or TMP, per DLC), is about 75°C or less. - The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m (6500ft).	

Block Diagram



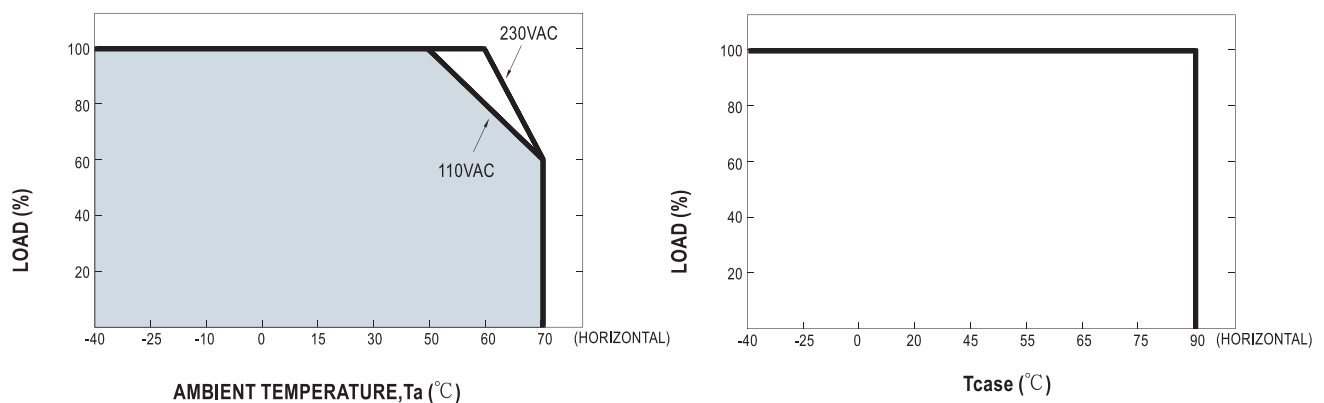
Driving Methods of LED Module

This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.



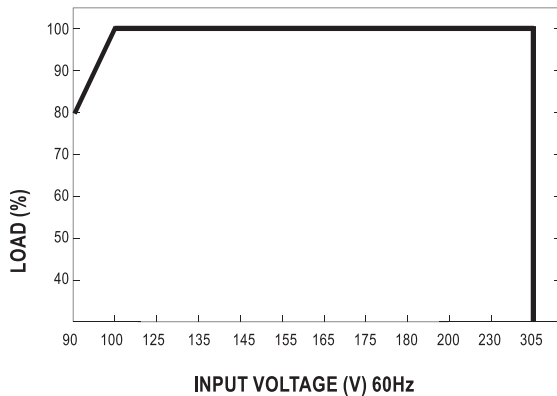
In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Output Load vs Temperature



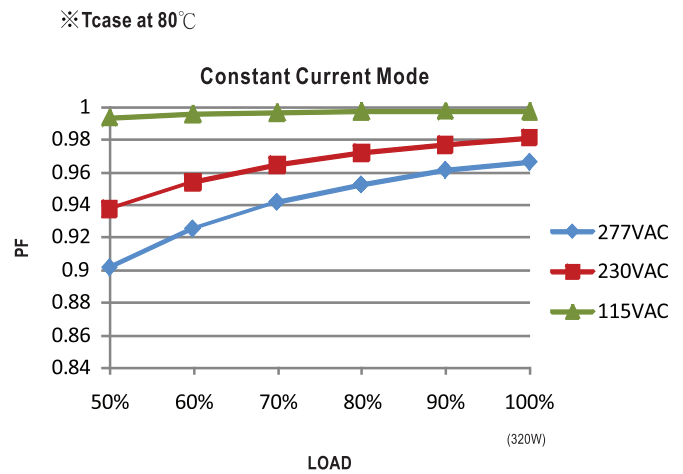
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Static Characteristics



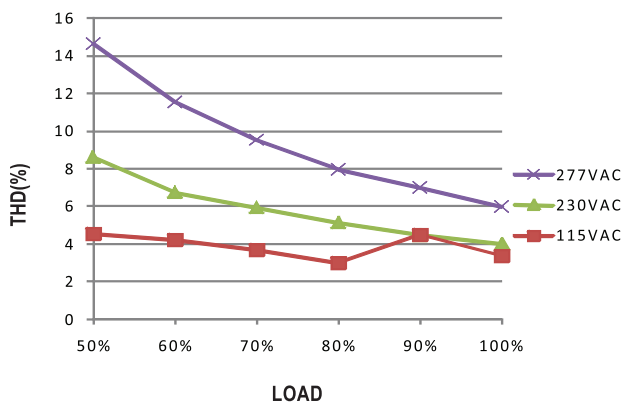
※ De-rating is needed under low input voltage.

Power Factor (PF) Characteristic



Total Harmonic Distortion (THD)

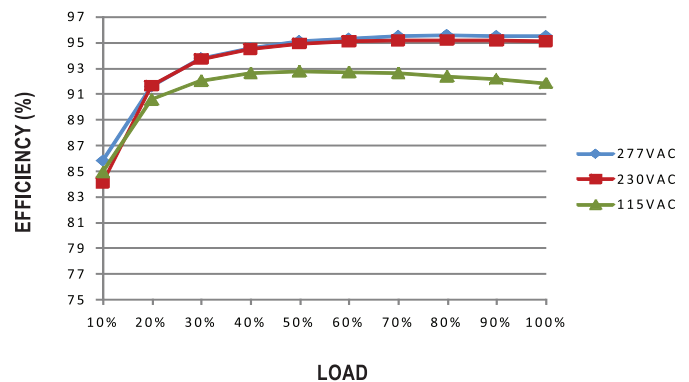
※ 48V Model, Tcase at 80°C



Efficiency vs Load

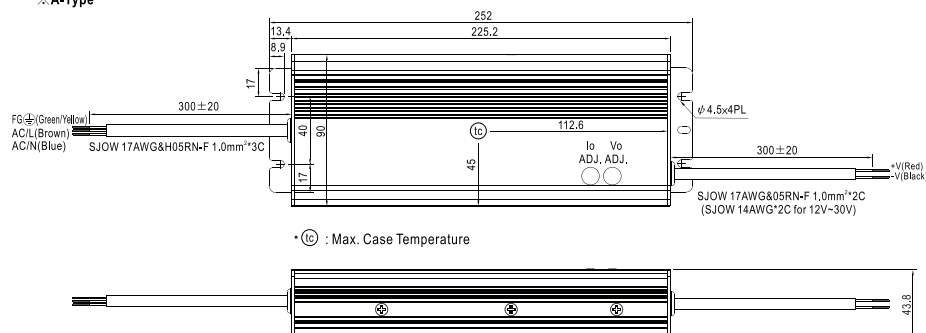
HLG-320H series possess superior working efficiency that up to 95% can be reached in field applications.

※ 48V Model, Tcase at 80°C



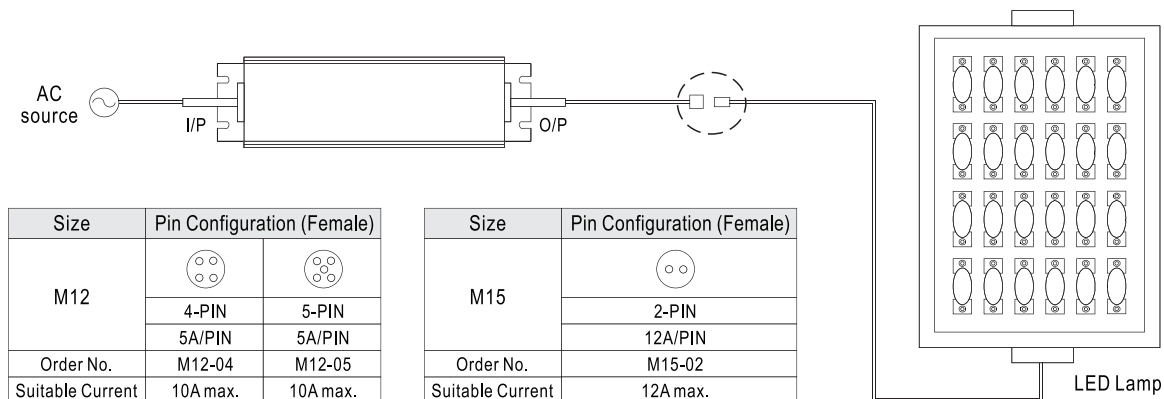
Mechanical Specification

※A-Type

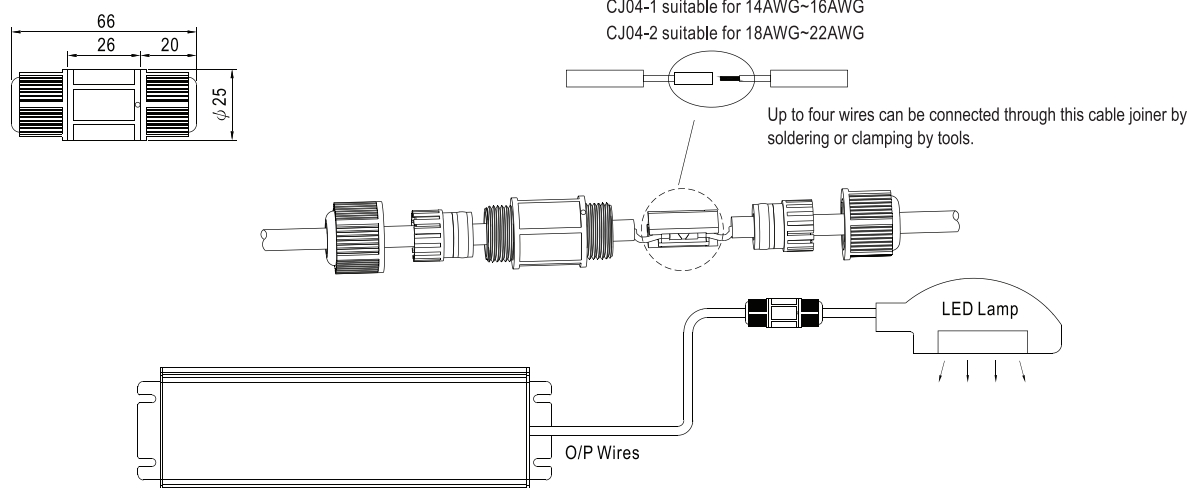


Waterproof Connection

Waterproof connector can be assembled on the output cable of HLG-240H to operate in dry/wet/damp or outdoor environment.

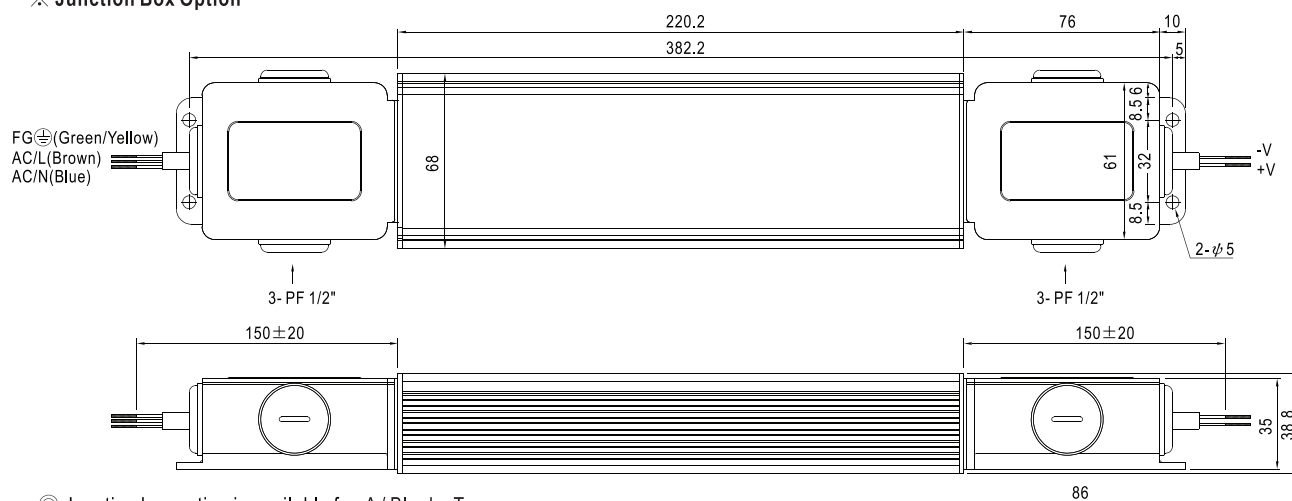


※ Cable Joiner



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

※ Junction Box Option



◎ Junction box option is available for A / Blank - Type.