

ORLRPV24240-HLG-A

ITEM NO. DRIVER - 15208

Features

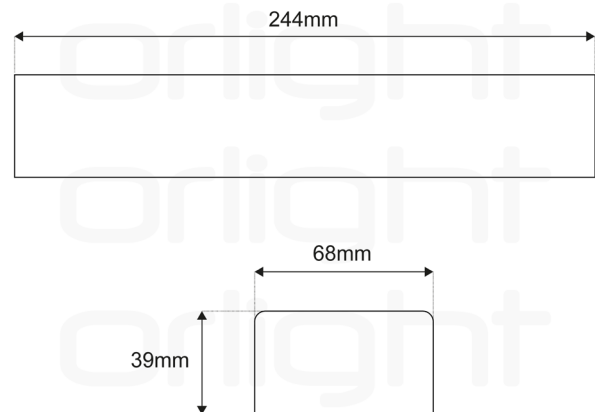
- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- IP67 / IP65 rating for indoor or outdoor installations
- Typical lifetime > 62000 hours

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		10A
	Rated Power		240W
	Ripple & Noise (max.)	Note. 2	150mVp-p
	Voltage Adj. Range		Adjustable for A/AB/C-Type only (via built-in potentiometer) 22.4 ~ 25.6V
	Current Adj. Range		Adjustable for A/AB/C-Type only (via built-in potentiometer) 5 ~ 10A
	Voltage Tolerance	Note. 3	±1.0%
	Line Regulation		±0.5%
	Load Regulation		±0.5%
	Setup, Rise Time	Note. 6	1000ms,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 @ 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.)	92.5%
	AC Current (Typ.)	4A / 115VAC 2A / 230VAC 1.2A / 277VAC
	Inrush Current (Typ.)	COLD START 75A(twidth=570 μ s measured at 50% Ipeak) at 230VAC; Per NEMA 410
	Max. No. of PSUs on 16A Circuit Breaker	2 units (circuit breaker of type B) / 4 units (circuit breaker of type C) at 230VAC
	Leakage Current	<0.75mA / 277VAC
Protection	Over Current	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 ~ 34V Shut down and latch off o/p voltage, re-power on to recover
	Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down
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%/°C (0 ~ 50°C)
	Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
Safety & EMC	Safety Standards	Note.8 UL1012, CAN/CSA-C22.2 No. 107.1-01, UL8750(type"HL"), CSA C22.2 No. 250.0-08; EN/AS/NZS 61347-1,EN/AS/NZS 61347-2-13 independent (except for HLG-240H C type); IEC/UL/EN 62368-1(except for AB,D type),UL8750;GB19510.1GB19510.14; Ip65 or IP67;J61347-1,J61347-2-13(except for B,AB and D-type),BIS IS15885(for 48V only),EAC TP TC 004, KC61347-1,KC61347-2-13(except for ABC,D-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 EN55015, EN55032 (CISPR32) Class B, EN61000-3-2 Class C (@ load $\geq$ 50%) ; EN61000-3-3, GB17743 and GB17625.1,EAC TP TC 020;KC KN15,KN61547(except for ABC,D-type)
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge immunity Line-Earth 4KV, Line-Line 2KV) EAC TP TC 020;KC KN15,KN61547(except for ABC,D-type)
Others	MTBF	729.2K hrs min. Telcordia SR-332 (Bellcore) ; 207.9K hrs min. MIL-HDBK-217F (25°C)
	Dimension	244 x 68 x 39mm
	Packing	1.3Kg; 12pcs/16.6Kg/0.84CUFT
Note	1. All parameters NOT specially mentioned are measured at 230VAC input, rated current 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 0.1μf & 47μf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Please refer to "DRIVING METHODS OF LED MODULE". 5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. 6. 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. 7. 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. 8. 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.	

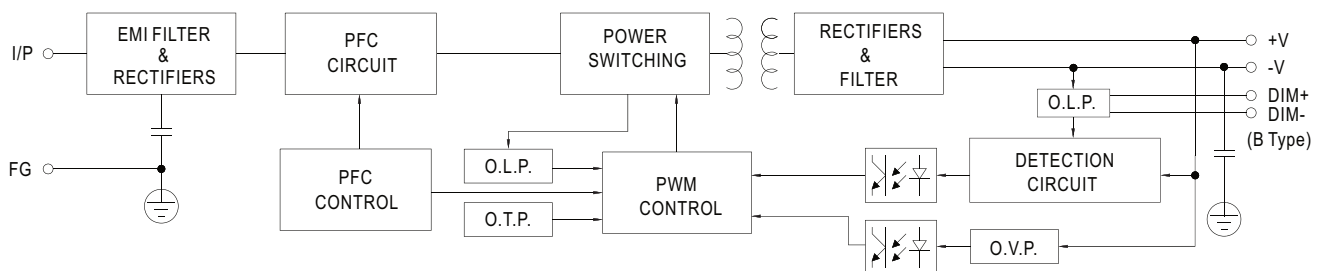
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Technical Specification Continued

Note	9. This series meets the typical life expectancy of >62,000 hours of operation when T_{case}, particularly t_c point (or TMP, per DLC), is about 75°C or less. 10. 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).
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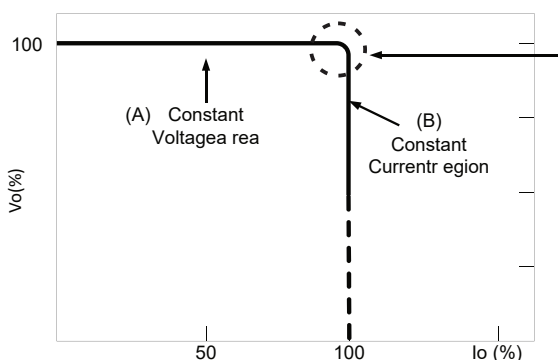
Block Diagram

Fosc : 100KHz



Driving Methods of LED Module

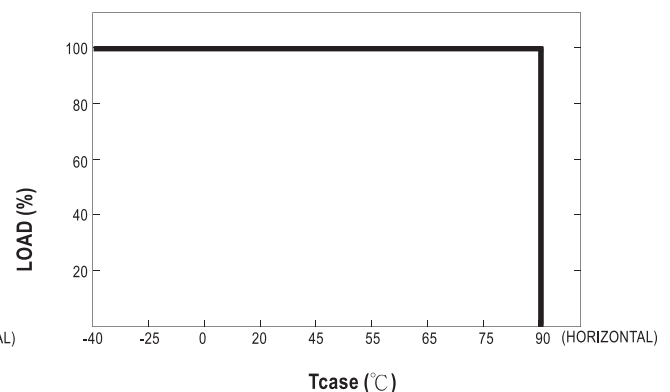
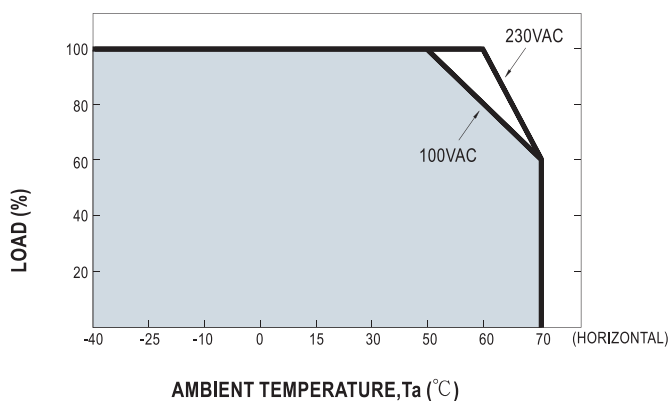
This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.



Typical output current normalized by rated current (%)

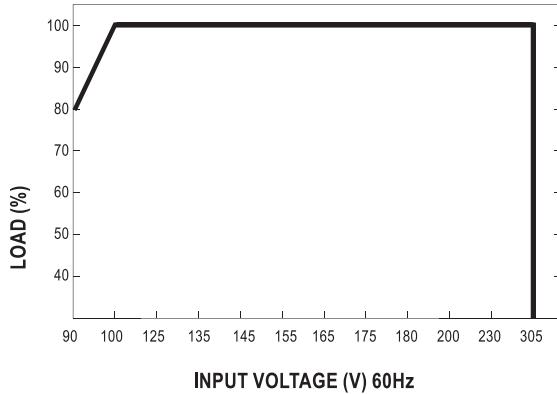
In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Output Load vs Temperature



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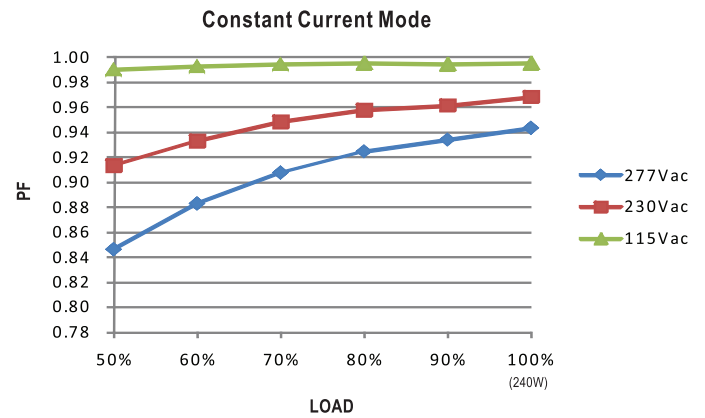
Static Characteristics



※ De-rating is needed under low input voltage.

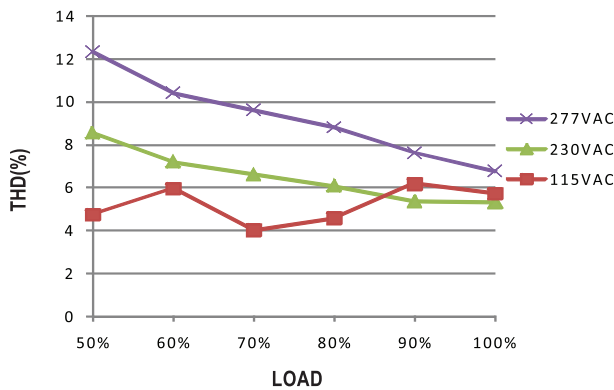
Power Factor (PF) Characteristic

※ Tcase at 80°C



Total Harmonic Distortion (THD)

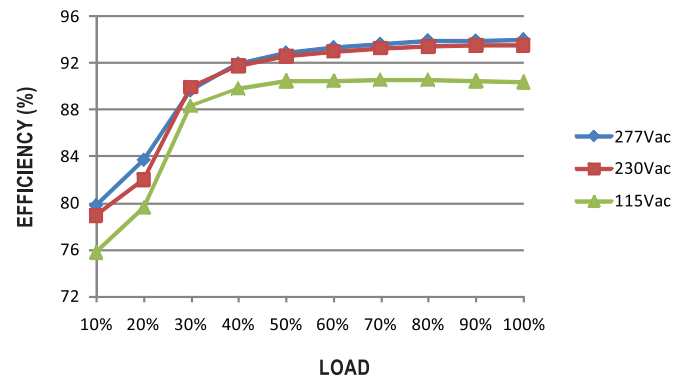
※ 48V Model, Tcase at 80°C



Efficiency vs Load

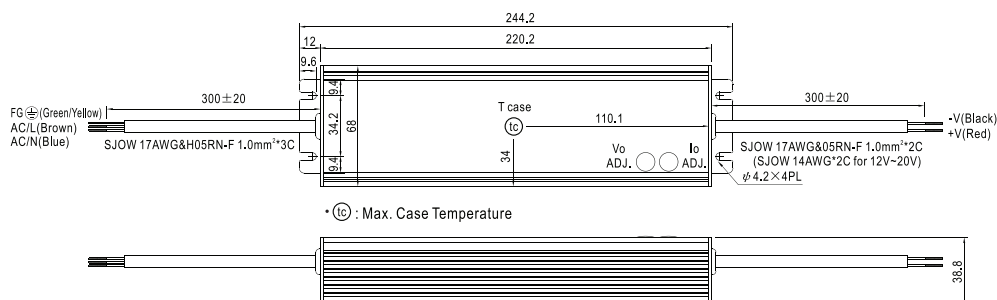
HLG-240H series possess superior working efficiency that up to 93.5% can be reached in field applications.

※ 48V Model, Tcase at 80°C



Mechanical Specification

※ A-Type

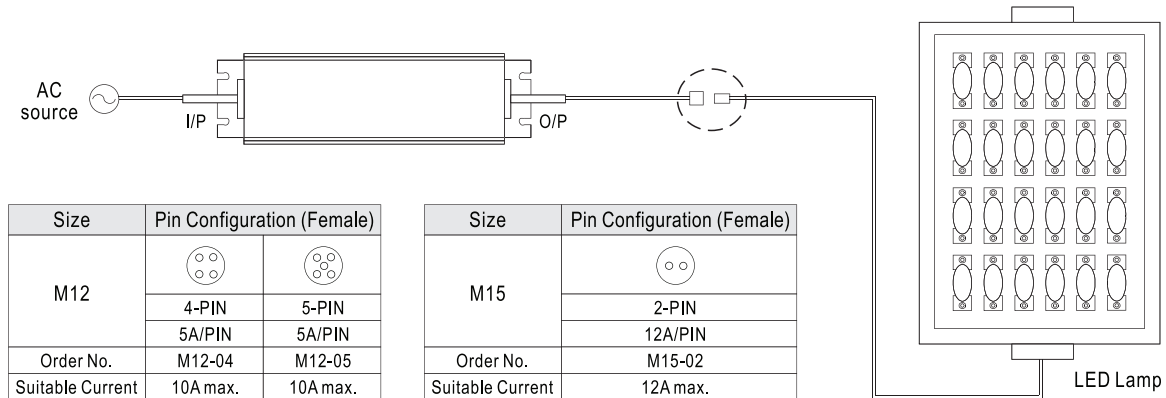


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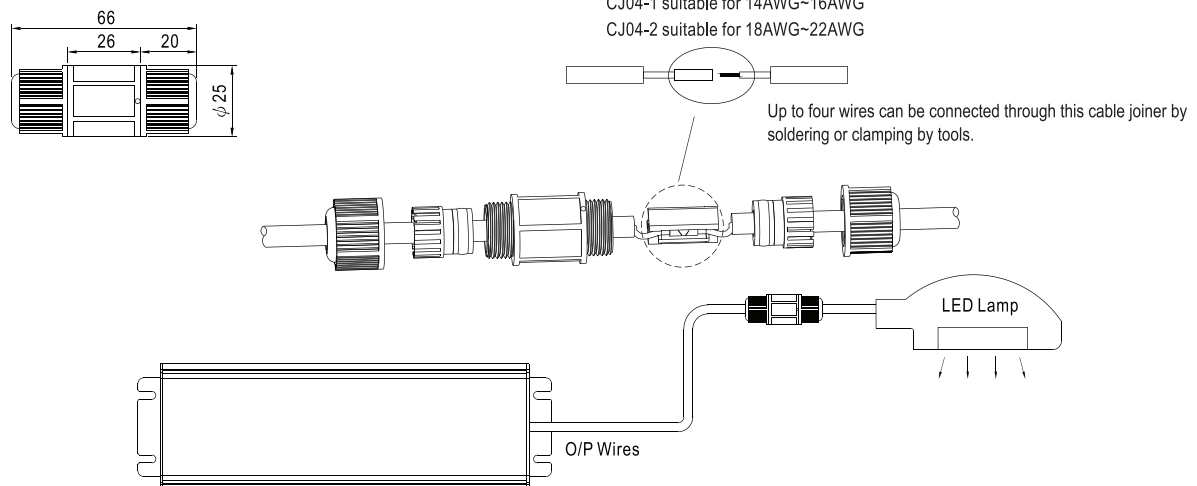
Waterproof Connection

※ Waterproof connector

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

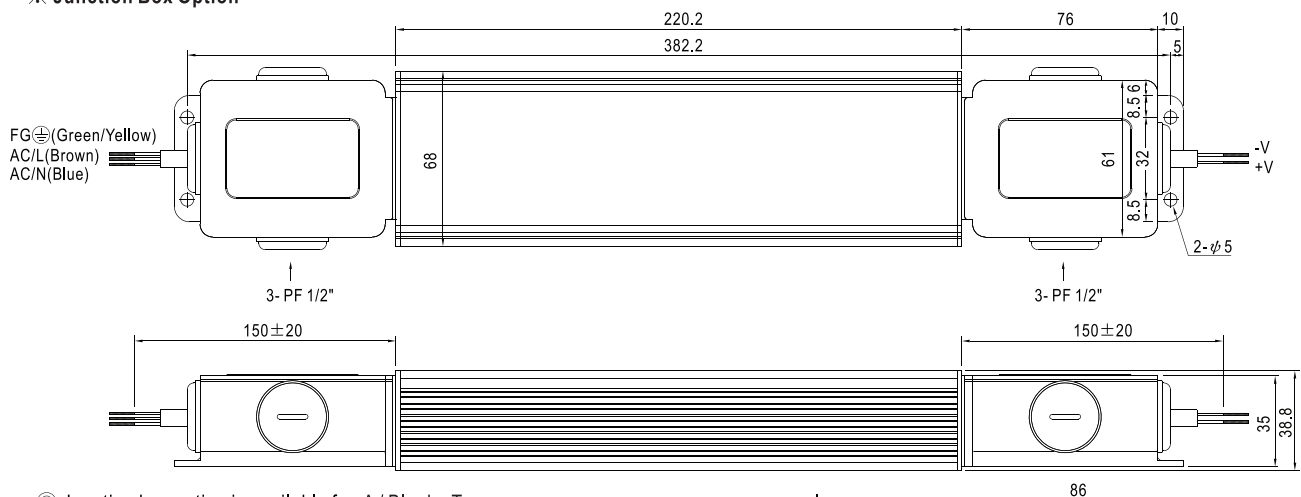


※ Cable Joiner



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

※ Junction Box Option



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