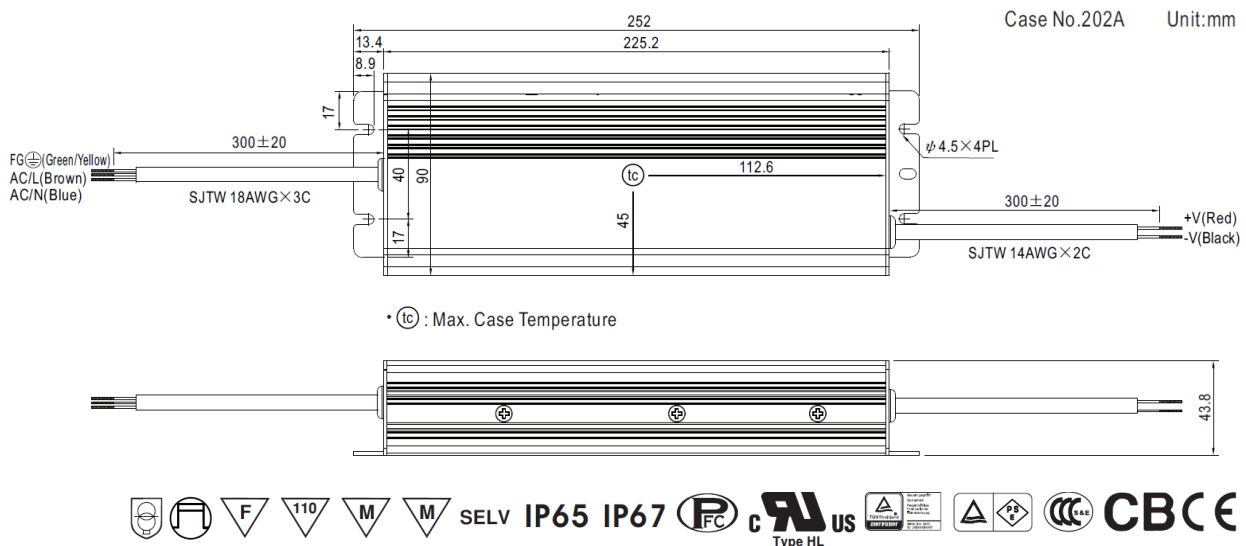


8 380 67 24 320 - IP67 LED power supply

Product Features

- Constant voltage + constant current mode output
- Metal housing with class 1 design
- Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming
- typical lifetime >62 000 hours
- 7 years warranty

1. Dimension



2. Description

- HLG-320H series is a 320W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-320H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 94%, with the fanless design, the entire series is able to operate for -40°C~+90°C case temperature under free air convection. The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. HLG-320H is equipped with various function options, such as dimming methodologies, so to provide the optimal design flexibility for LED lighting system.

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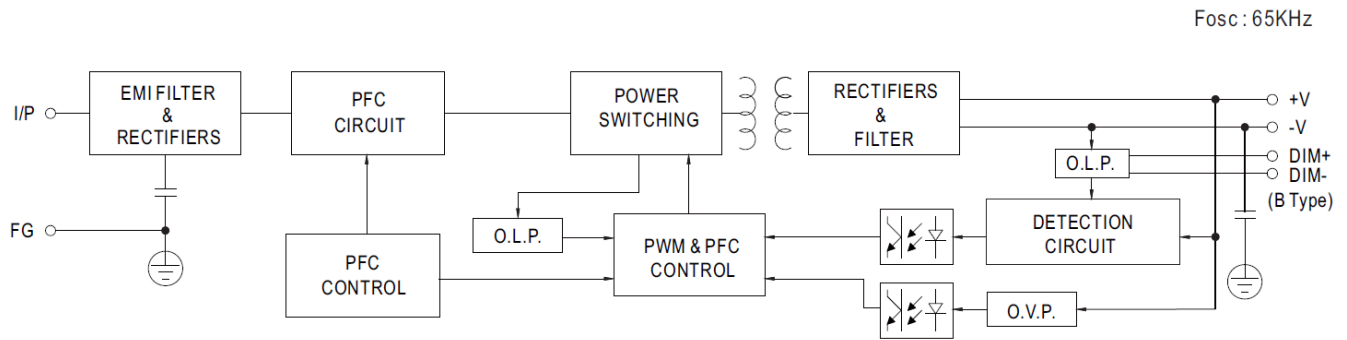
3. Specifications:

	Parameter	Value
Output	DC voltage	24,0VDC
	constant current region Note.1	12V~24V
	Rated current	13,34A
	Rated power	320,16W
	Efficiency (typ.)	94%
	Ripple & noise (max.) Note.2	150mVp-p
	Voltage ADJ. Range	21~26V
	Current ADJ Range	6,67~13,34A
	Voltage Tolerance Note.3	±1,0%
	Line regulation	±0,5%
	Load regulation	±0,5%
	Setup, rise time Note.4	2500ms, 80ms / 115VAC 500ms, 80ms /230VAC
Hold up time (typ.)	15ms/115VAC, 230VAC	
Input	Voltage range Note.5	90~305VAC 127~431VDC
	Frequency range	47~63Hz
	AC current	3,5A/115VAC 1,65A/230VAC 1,45A/277VAC
	Power Factor (typ.)	PF≥0.98/115VAC, PF≥0.95/230VAC, PF≥0.94/277VAC @ full load
	Total Harmonic Distortion	THD< 20% (@ load≥50% / 115VAC,230VAC; @ load≥75% / 277VAC)
	Max. No. of PSUs on 16A circuit breaker	1 units (circuit breaker of type B) / 2 units (circuit breaker of type C) at 230VAC
	Inrush current (max.)	Cold start 70A(twidth=1010µs measured at 50% Ipeak) at 230VAC; Per NEMA410
	Leakage current	<0,75mA / 277VAC
Protection	Over load	95 ~ 108% Constant current limiting, recovers autom. after condition is removed
	Over Voltage	27~34V Shut down and latch off o/p voltage, re-power on the recover
	Over Temperature	Shut down and latch off o/p voltage, re-power on the recover
Environment	Working temp.	Tcase= -40 ~ +90°C
	Working humidity	20 ~ 90% RH non-condensing
	Storage temp., humidity	-40 ~ +80°C , 10 ~ 95% RH
	temp. coefficient	±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.6	UL1012,CAN/CSA-C22.2 No 107.1-01,UL8750(type "HL"),CSA C22.2 No.250.0;TUV EN61347-2-13 independent;UL60950-1,UL8750,TUV EN60950-1;IP65 or IP67;J61347-2-13 approved
	withstand voltage	I/P-O/P:3,75KVAC I/P-FG:2KVAC O/P-FG:1,5KVAC
	isolation resistance	I/P-O/PI/P-FG,O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
	EMC emission Note.6	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (@ load≥50%) ; EN61000-3-3
	EMS 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)
Note	<p>1. Please refer to "DRIVING METHODS OF LED MODULE"</p> <p>2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0,1uf & 47uf parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. 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.</p> <p>5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.</p> <p>6. The model certified for CCC(GB19510.14, GB17743 and GB17625.1) is an optional model.</p>	

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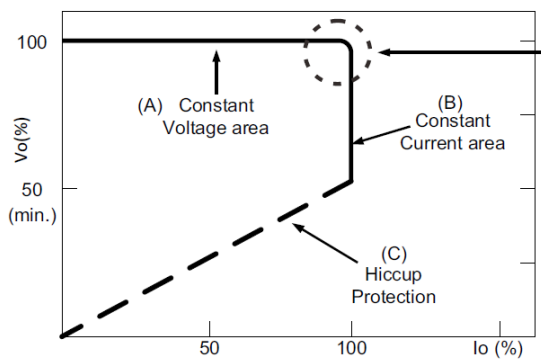
4. Block diagram:



5. More information:

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.

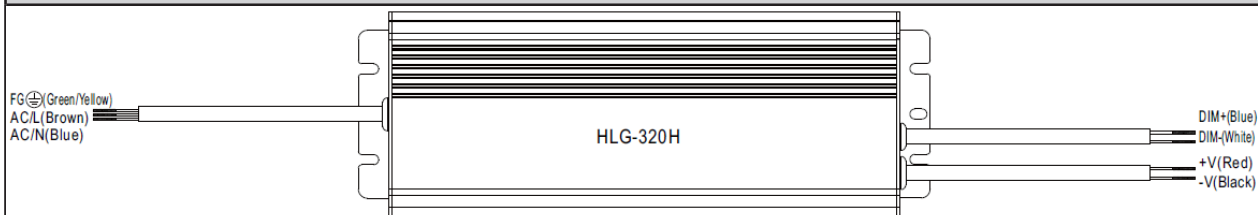
Should there be any compatibility issues, please contact MEAN WELL.

Typical output current normalized by rated current (%)

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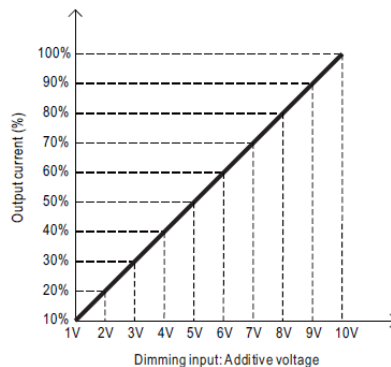
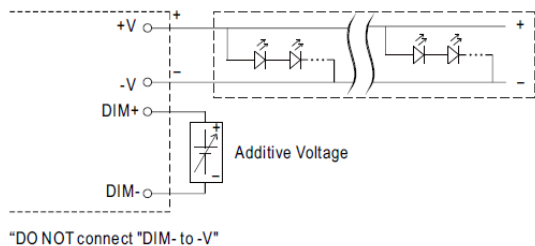
Dimming operation



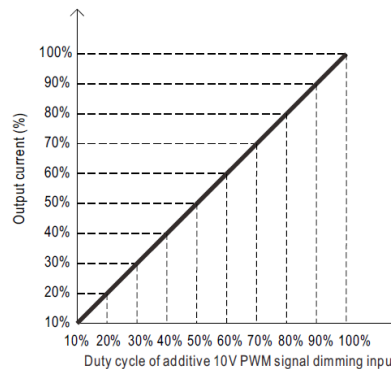
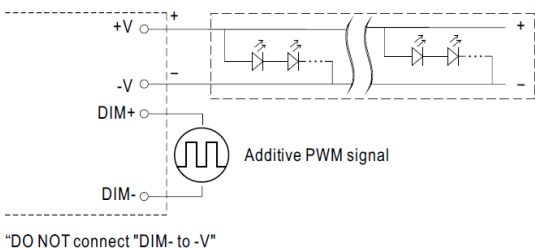
※ **3 in 1 dimming function (for B-Type)**

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 1 ~ 10VDC, or 10V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100 μ A (typ.)

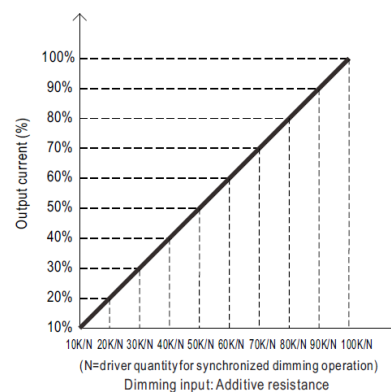
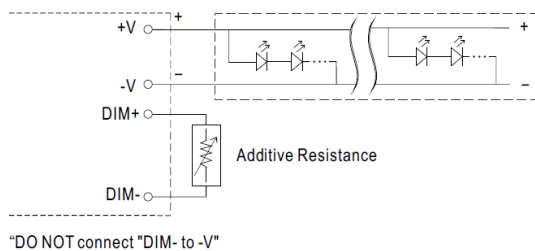
◎ Applying additive 1 ~ 10VDC



◎ Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):



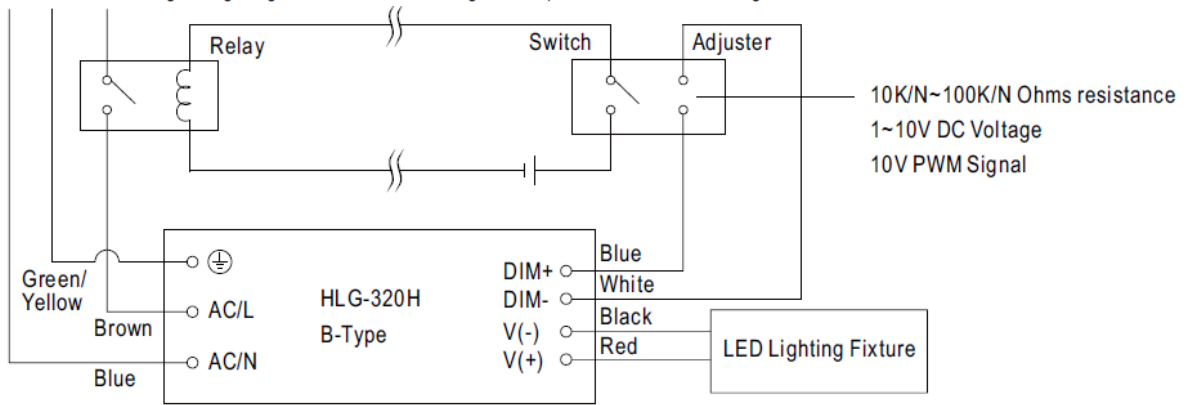
◎ Applying additive resistance:



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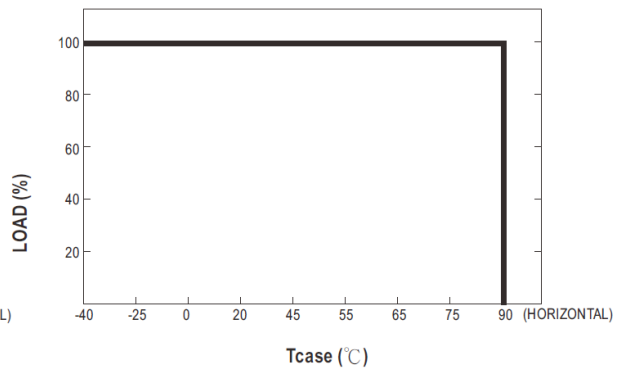
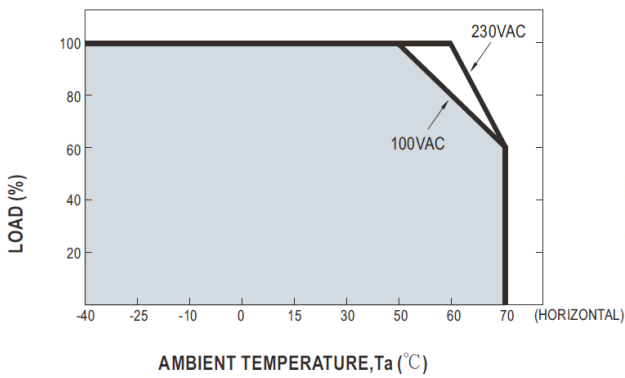
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Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow,

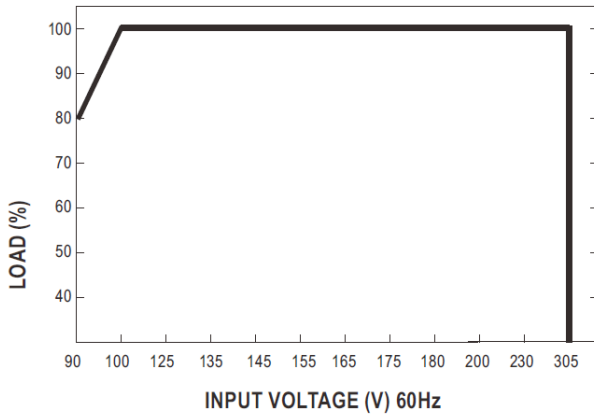


Using a switch and relay can turn ON/OFF the lighting fixture.

Output Load vs Temperature

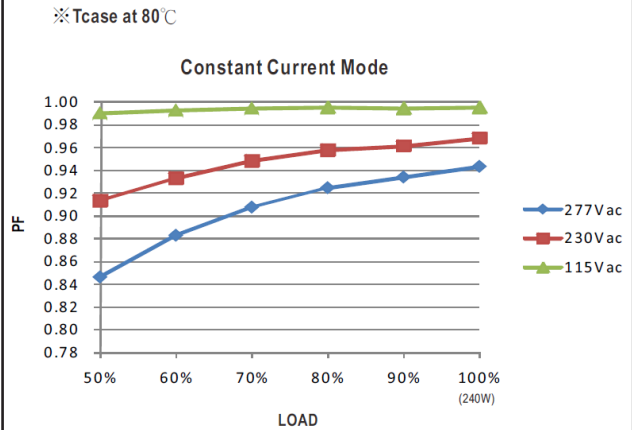


Static characteristics



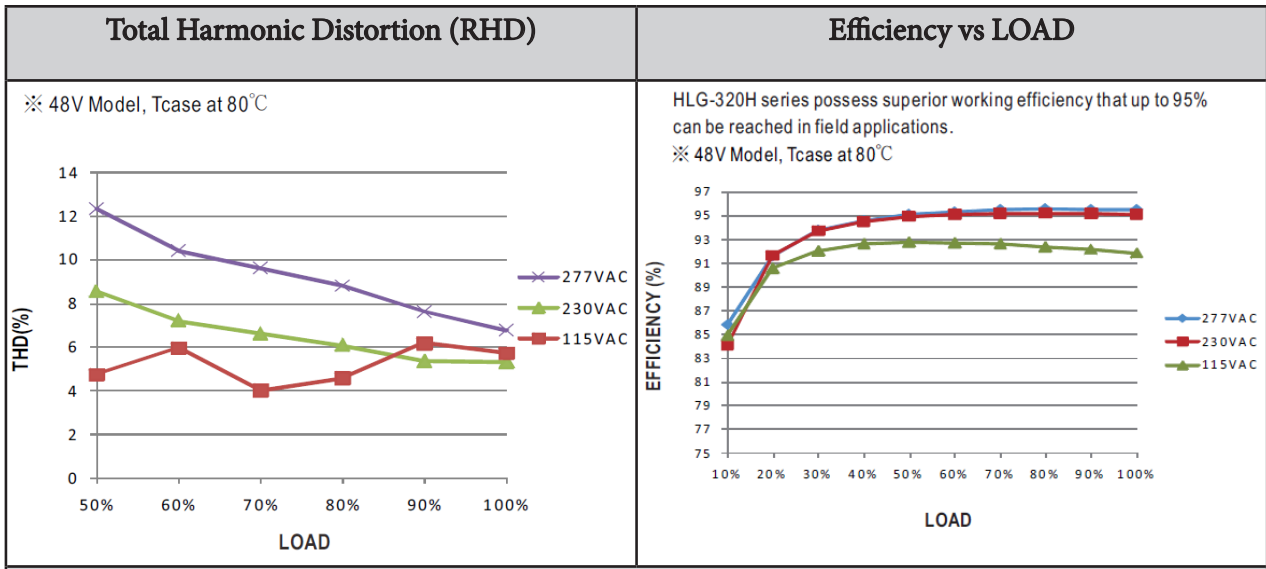
※ De-rating is needed under low input voltage.

Power factor(PF) characteristics



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Harmonic Distortion (RHD)

