

Наличие и актуальные цены на

# HLG-320H-24C

https://www.mean-

well.ru/store/HLG-320H-24C/





















# 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
- Function options: output adjustable via potentiometer; 3 in 1 dimming
- Typical lifetime > 62000 hours
- 7 years warranty

# 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.

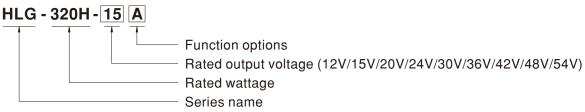
#### ■ GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

# 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  $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$  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 as to provide the optimal design flexibility for LED lighting system.

# Model Encoding



Type	IP Level	Function	Note
Blank	IP67	Io and Vo fixed	In Stock
Α	IP65	Io and Vo adjustable through built-in potentiometer	In Stock
В	IP67	3 in 1 dimming function (1~10VDC, 10V PWM signal and resistance)	In Stock
AB	IP65	Io adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
С		Terminal block for I/O connection. Output voltage and constant current level can be adjusted through internal potentiometer.	By request
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



#### **SPECIFICATION**

MODEL		HLG-320H-12	HLG-320H-15	HLG-320H-20	HLG-320H-24	HLG-320H-30	HLG-320H-36	HLG-320H-42	HLG-320H-48	HLG-320H-54								
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V								
ОИТРИТ	CONSTANT CURRENT REGION Note.4		7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V								
	RATED CURRENT	22A	19A	15A	13.34A	10.7A	8.9A	7.65A	6.7A	5.95A								
	RATED POWER	264W	285W	300W	320.16W	321W	320.4W	321.3W	321.6W	321.3W								
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p								
	, ,	Adjustable for A/C-Type only (via built-in potentiometer)																
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V	,,	17 ~ 22V	21 ~ 26V	26 ~ 32V	32 ~ 39V	38 ~ 45V	43 ~ 52V	49 ~ 58V								
					t-in potentiome													
	CURRENT ADJ. RANGE	11 ~ 22A	9.5 ~ 19A	7.5 ~ 15A	· ·	5.35 ~ 10.7A	4.45 ~ 8.9A	3.8 ~ 7.65A	3.35 ~ 6.7A	2.97 ~ 5.99								
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%								
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%								
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%								
		2500ms,80ms/115VAC 600ms,80ms/230VAC																
	HOLD UP TIME (Typ.)	15ms / 115VA																
INPUT		90 ~ 305VAC	127 ~ 431	VDC														
	VOLTAGE RANGE Note.5																	
	FREQUENCY RANGE	47 ~ 63Hz																
	THE GOENOT TO MOE	41 ~ 0.5 mz PF≥0.98/115VAC, PF≥0.95/230VAC, PF≥0.94/277VAC @ full load																
	POWER FACTOR (Typ.)				ARACTERISTI	•												
	TOTAL HARMONIC DISTORTION	,		. ,		,	<u></u>											
		THD< 20% (@ load≥50% / 115VAC,230VAC; @ load≥75% / 277VAC)  (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)																
	EFFICIENCY (Typ.) (230Vac)	91%	92.5%	93.5%	94%	94%	94.5%	95%	95%	95%								
	EFFICIENCY (Typ.) (277Vac)	91.5%	93%	94%	94.5%	94.5%	95%	95%	95%	95%								
	AC CURRENT (Typ.)				1.45A / 277VAC		90 /0	3370	9070	3370								
	INRUSH CURRENT(Typ.)	3.5A / 115VAC 1.65A / 230VAC 1.45A / 277VAC  COLD START 70A(twidth=1010μs measured at 50% Ipeak) at 230VAC; Per NEMA 410																
	MAX. No. of PSUs on 16A	TO CO O THE TO TO NATIONAL TO TO JAS TITUDO COLO O TO JUDIO AL ZOU VITO, I O I NEURINA TIU																
	CIRCUIT BREAKER	1 unit (circuit breaker of type B) / 2 units (circuit breaker of type C) at 230VAC																
	LEAKAGE CURRENT	<0.75mA/277VAC																
		95 ~ 108%																
PROTECTION -	OVER CURRENT Note.4	4 95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed																
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed																
	SHOKT CIRCUIT	14 ~ 17V		22.5 ~ 27V	27 ~ 33V	33 ~ 37V	40 ~ 46V	46.5 ~ 53V	53.5 ~ 60V	59 ~ 65V								
	OVER VOLTAGE				ver on to recove	1	<del>1</del> 0	40.0 001	33.3 00V	00 001								
	OVED TEMPERATURE																	
	OVER TEMPERATURE	Shut down and latch off o/p voltage, re-power on to recover																
FNVIRONMENT	WORKING TEMP.	Tcase= +90°	Tcase= -40 ~ +90 °C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)															
	MAX. CASE TEMP.																	
	WORKING HUMIDITY	20 ~ 95% RH non-condensing -40 ~ +80°C, 10 ~ 95% RH																
	STORAGE TEMP., HUMIDITY																	
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)																
	MDDATION	40 -0011 -	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes															
	VIBRATION	-								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),								
		UL8750(type"	HL"), CSA C22	2.2 No. 250.0-0	8; BS EN/EN/A	AS/NZS 61347-	1, BS EN/EN/A		•									
	VIBRATION SAFETY STANDARDS	UL8750(type" GB19510.1,G	HL"), CSA C22 B19510.14; IP	2.2 No. 250.0-0 65 or IP67 (exc	08; BS EN/EN/A cept for HLG-32	AS/NZS 61347- 20H C-type); J6	1, BS EN/EN/ <i>A</i> 31347-1, J6134	47-2-13 (excep	ot for B,AB,C an									
	SAFETY STANDARDS	UL8750(type" GB19510.1,G EAC TP TC 00	HL"), CSA C22 B19510.14; IP 04;KC61347-1	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13	08; BS EN/EN/A cept for HLG-32 3(except for AB	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS I8	1, BS EN/EN/ <i>A</i> 31347-1, J6134	47-2-13 (excep	ot for B,AB,C an									
SAFETY &	SAFETY STANDARDS WITHSTAND VOLTAGE	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75	HL"), CSA C22 B19510.14; IP 04;KC61347-1 (VAC I/P-F	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O	08; BS EN/EN/Acept for HLG-32 3(except for AB /P-FG:1.5KVA	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS IS	1, BS EN/EN/ <i>A</i> 31347-1, J6134	47-2-13 (excep	ot for B,AB,C an									
	SAFETY STANDARDS	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75 I/P-O/P, I/P-F	HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-FG G, O/P-FG:10	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O/	08; BS EN/EN/Acept for HLG-32 B(except for AB /P-FG:1.5KVA	AS/NZS 61347- 20H C-type); J& ,C-type), BIS IS C 70% RH	1, BS EN/EN// 81347-1, J6134 S 15885(Part2	47-2-13 (excep /Sec13) (NOTE	ot for B,AB,C ar E 13) approved	nd D-type),								
SAFETY &	SAFETY STANDARDS WITHSTAND VOLTAGE	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75I I/P-O/P, I/P-F Compliance to	HL"), CSA C22 B19510.14; IP 04;KC61347-1 (VAC I/P-F0 GG, O/P-FG:10 D BS EN/EN55	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O/ 10M Ohms / 50 015, BS EN/EN	08; BS EN/EN/A cept for HLG-3; 3(except for AB /P-FG:1.5KVA 00VDC / 25°C/ N55032 (CISPR	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C C 70% RH 332) Class B, B	1, BS EN/EN// 81347-1, J6134 S 15885(Part2	47-2-13 (excep /Sec13) (NOTE	ot for B,AB,C ar E 13) approved	nd D-type),								
	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75I I/P-O/P, I/P-F Compliance to BS EN/EN610	HL"), CSA C22 B19510.14; IP 04;KC61347-1 (VAC I/P-FG:10 0 BS EN/EN55 000-3-3,GB/T 1	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O/ IOM Ohms / 50 015, BS EN/EN 7743, GB1762	08; BS EN/EN/Accept for HLG-32 3(except for AB /P-FG:1.5KVA 10VDC / 25°C/ N55032 (CISPR 25.1,EAC TP T	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C 70% RH 832) Class B, B C 020	1, BS EN/EN/F 61347-1, J6134 S 15885(Part2 S EN/EN6100	47-2-13 (excep /Sec13) (NOTE	ot for B,AB,C ar E 13) approved (@ load≧50%	nd D-type),								
	SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75I I/P-O/P, I/P-F Compliance to BS EN/EN610 Compliance to	HL"), CSA C222 B19510.14; IP 04;KC61347-1 KVAC I/P-FG:10 D BS EN/EN55 000-3-3, GB/T 1	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O/ 0M Ohms / 50 015, BS EN/EN 7743, GB176	8; BS EN/EN/A cept for HLG-3; 3(except for AB /P-FG:1.5KVA 00VDC / 25°C/ N55032 (CISPR 25.1,EAC TP TO 6,8,11, BS EN/I	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C 70% RH 832) Class B, B C 020	1, BS EN/EN/F 61347-1, J6134 S 15885(Part2 S EN/EN6100	47-2-13 (excep /Sec13) (NOTE	ot for B,AB,C ar E 13) approved (@ load≧50%	nd D-type),								
	SAFETY STANDARDS  WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION  EMC IMMUNITY	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75I I/P-O/P, I/P-F Compliance to BS EN/EN610 Compliance to Line-Earth 4K	HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-F0 G, O/P-FG:10 BS EN/EN55 100-3-3,GB/T 1 D BS EN/EN61 V, Line-Line 2	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O/ 10M Ohms / 50 015, BS EN/EN 7743 , GB176: 000-4-2,3,4,5,6 (V), EAC TP T	8; BS EN/EN/A cept for HLG-3; 3(except for AB /P-FG:1.5KVA 00VDC / 25°C/ N55032 (CISPR 25.1,EAC TP TO 6,8,11, BS EN/B C 020	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS I8 C 70% RH 832) Class B, B C 020 EN61547, BS E	1, BS EN/EN/A 51347-1, J6134 S 15885(Part2 S EN/EN6100 EN/EN55024, Ii	47-2-13 (excep /Sec13) (NOTE 0-3-2 Class C ght industry le	ot for B,AB,C ar E 13) approved (@ load≧50%	nd D-type),								
EMC	SAFETY STANDARDS  WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION  EMC IMMUNITY  MTBF	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.751 I/P-O/P, I/P-F Compliance to BS EN/EN610 Compliance to Line-Earth 4K	HL"), CSA C22 B19510.14; IP 04; KC61347-1 (VAC I/P-FG: G, O/P-FG:10 0 BS EN/EN55 000-3-3, GB/T 1 0 BS EN/EN61 V, Line-Line 21 nin. Telcord	2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC O/ 10M Ohms / 50 015, BS EN/EN 7743 , GB176: 000-4-2,3,4,5,6 (V), EAC TP T	8; BS EN/EN/A cept for HLG-3; 3(except for AB /P-FG:1.5KVA 00VDC / 25°C/ N55032 (CISPR 25.1,EAC TP TO 6,8,11, BS EN/I	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS I8 C 70% RH 832) Class B, B C 020 EN61547, BS E	1, BS EN/EN/F 61347-1, J6134 S 15885(Part2 S EN/EN6100	47-2-13 (excep /Sec13) (NOTE 0-3-2 Class C ght industry le	ot for B,AB,C ar E 13) approved (@ load≧50%	nd D-type),								
	SAFETY STANDARDS  WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION  EMC IMMUNITY	UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.751 I/P-O/P, I/P-F Compliance to BS EN/EN610 Compliance to Line-Earth 4K 1702.2K hrs n 252*90*43.8n	HL"), CSA C22 B19510.14; IP 04; KC61347-1 (VAC I/P-FG: G, O/P-FG:10 0 BS EN/EN55 000-3-3, GB/T 1 0 BS EN/EN61 V, Line-Line 21 nin. Telcord	2.2 No. 250.0-0 65 or IP67 (exi KC61347-2-13 G:2KVAC Or 10M Ohms / 50 015, BS EN/EN 7743 , GB176; 000-4-2,3,4,5,6 (V), EAC TP To a SR-332 (Bel	8; BS EN/EN/A cept for HLG-3; 3(except for AB /P-FG:1.5KVA 00VDC / 25°C/ N55032 (CISPR 25.1,EAC TP TO 6,8,11, BS EN/B C 020	AS/NZS 61347- 20H C-type); J6 ,C-type), BIS I8 C 70% RH 832) Class B, B C 020 EN61547, BS E	1, BS EN/EN/A 51347-1, J6134 S 15885(Part2 S EN/EN6100 EN/EN55024, Ii	47-2-13 (excep /Sec13) (NOTE 0-3-2 Class C ght industry le	ot for B,AB,C ar E 13) approved (@ load≧50%	nd D-type),								

320W Constant Voltage + Constant Current LED Driver

#### NOTE

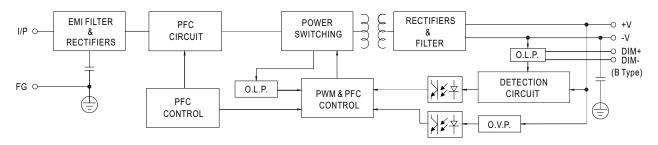
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance: includes set up tolerance, line regulation and load regulation.
- 4. Please refer to "DRIVING METHODS OF LED MODULE".
- 5. De-rating may be needed 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. (as available on https://www.meanwell.com//Upload/PDF/EMI\_statement\_en.pdf)
- 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.
- 9. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 75°C or less.
- 10. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com.

  11. 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).

  12. For any application note and IP water proof function installation caution, please refer our user manual before using.
- https://www.meanwell.com/Upload/PDF/LED\_EN.pdf
- 13. BIS certification is for HLG-320H-A only, but products sourced from Taiwan do not have the BIS logo, please contact your MEAN WELL sales for
- 14. For A/AB type need to consider build in using to comply with Type HL application.
- \*\* Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

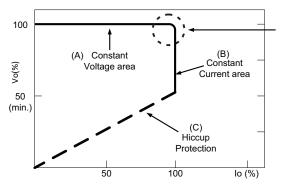
## ■ BLOCK DIAGRAM

Fosc: 65KHz



## ■ DRIVING METHODS OF LED MODULE

X 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.



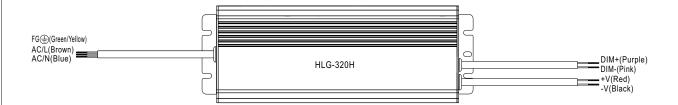
Typical output current normalized by rated current (%)

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

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

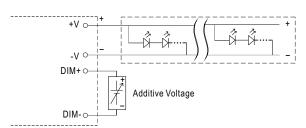


## ■ DIMMING OPERATION



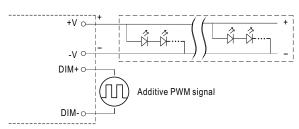
#### ※ 3 in 1 dimming function (for B/AB-Type)

- 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: 100µA (typ.)
- O Applying additive 1 ~ 10VDC



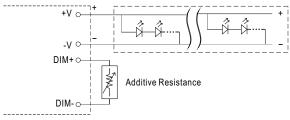
"DO NOT connect "DIM- to -V"

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

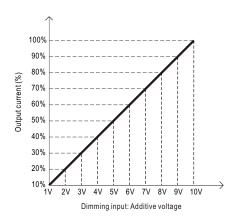


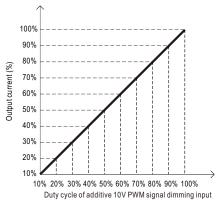
"DO NOT connect "DIM- to -V"

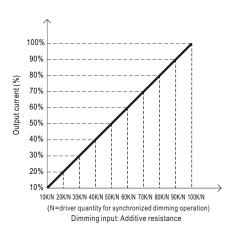
Applying additive resistance:



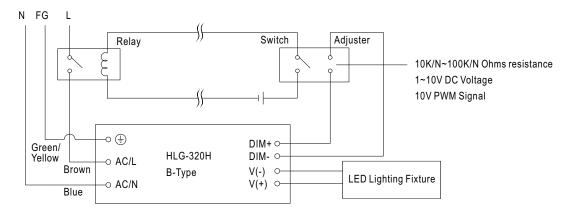
"DO NOT connect "DIM- to -V"





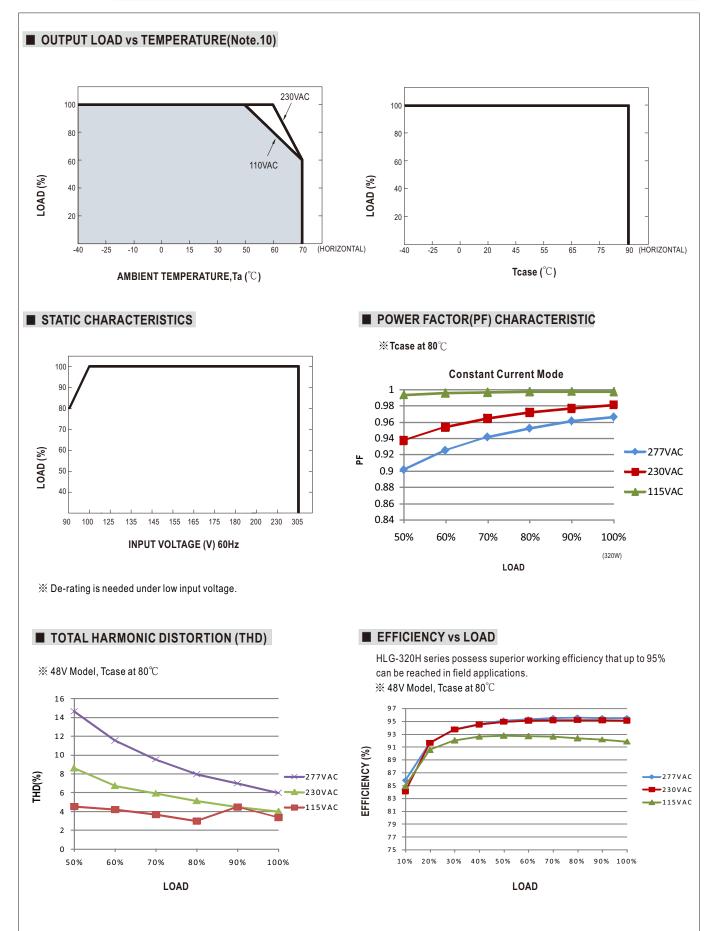


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.

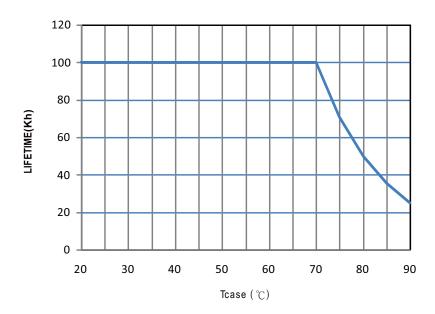


Using a switch and relay can turn ON/OFF the lighting fixture.

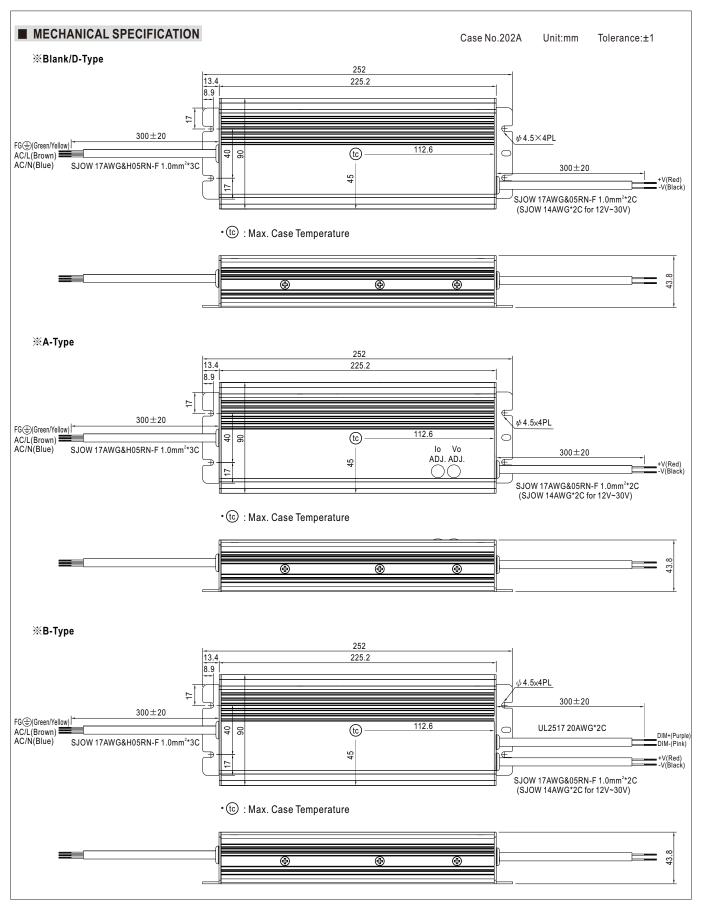




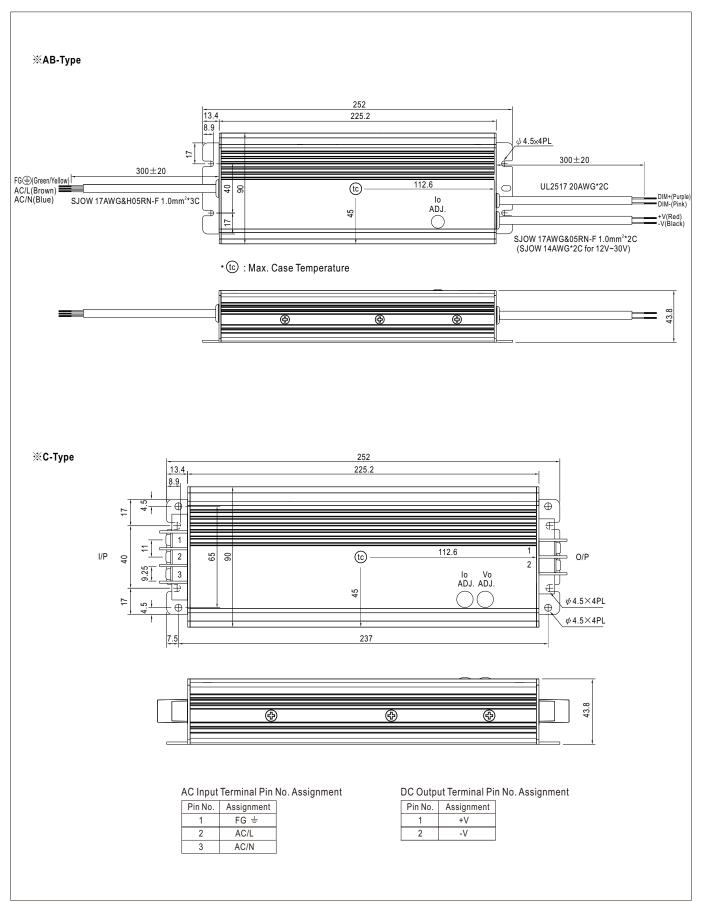
# **■** LIFETIME











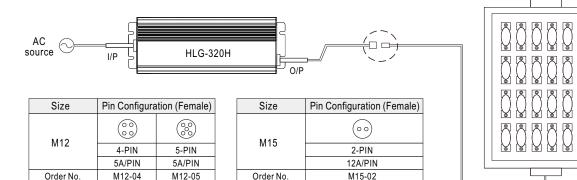
LED Lamp



## ■ WATERPROOF CONNECTION

#### Waterproof connector

 $Water proof connector can be assembled on the output cable of HLG-320H \ to operate in \ dry/wet/damp \ or outdoor \ environment.$ 



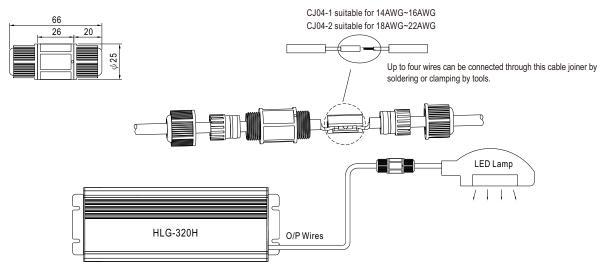
Suitable Current

#### **X** Cable Joiner

Suitable Current

10A max.

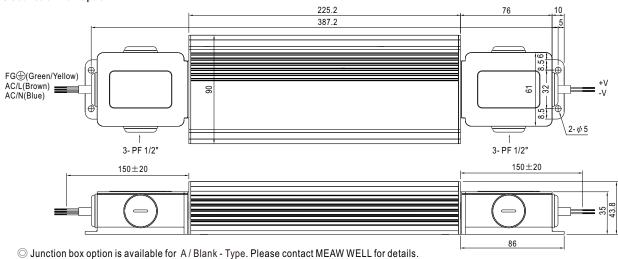
10A max.



12A max

© CJ04 cable joiner can be purchased independently for user's own assembly. MEAN WELL order No.: CJ04-1, CJ04-2.

## % Junction Box Option



#### ■ INSTALLATION MANUAL

Please refer to : http://www.meanwell.com/manual.html