























Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- · Built-in active PFC function
- · Class 2 power unit
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer 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.

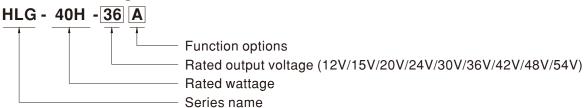
GTIN CODE

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

Description

HLG-40H series is a 40W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-40H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 89.5%, with the fanless design, the entire series is able to operate for -40 ~ +80 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-40H 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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request

40W Constant Voltage + Constant Current LED Driver

SPECIFICATION

MODEL		HLG-40H-12	HLG-40H-15	HLG-40H-20	HLG-40H-24	HLG-40H-30	HLG-40H-36	HLG-40H-42	HLG-40H-48	HLG-40H-54	
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION Note.4	7.2 ~12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V	
	RATED CURRENT	3.33A	2.67A	2A	1.67A	1.34A	1.12A	0.96A	0.84A	0.75A	
	RATED POWER	39.96W	40.05W	40W	40.08W	40.2W	40.32W	40.32W	40.32W	40.5W	
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	300mVp-p	300mVp-p	
	, ,			nly (via built-i						,	
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V	, ,	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	40 ~ 46V	44 ~ 53V	49 ~ 58V	
DUTPUT				nly (via built-i			1	1.0		1	
	CURRENT ADJ. RANGE	2 ~ 3.33A		1.2 ~ 2A	1 ~ 1.67A	0.8 ~ 1.34A	0.67 ~ 1.12A	0.58 ~ 0.96A	0.5 ~ 0.84A	0.45 ~ 0.75	
	VOLTAGE TOLERANCE Note.3		±2.0%	±1.0%	±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%	
		500ms,80ms					_ 0.070	_ 0.070			
	HOLD UP TIME (Typ.)	16ms / 115VA		01113,001113/20	0 1/10						
	TIOLD OF TIME (Typ.)	90 ~ 305VAC	127 ~ 43 ⁻	1VDC							
	VOLTAGE RANGE Note.5			IARACTERIST	IC" section)						
	FREQUENCY RANGE	47 ~ 63Hz	10 01/110 011	AINAOTEINIOT	10 36011011)						
	FREQUENCT RANGE		DE>0.0	NE/220\/AC DE	>0 00/077\/A	د ه د اا اه م م					
	POWER FACTOR (Typ.)			95/230VAC, PF		•					
		(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)									
NIB.LIT	TOTAL HARMONIC DISTORTION	THD< 20% (@ load≧60% / 115VAC,230VAC; @ load≧75% / 277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)									
NPUT		`			1	T .	I	I	I	I	
	EFFICIENCY (Typ.)	86.5%	86.5%	88%	88%	88.5%	88.5%	88.5%	89.5%	89.5%	
	AC CURRENT (Typ.)	0.43A / 115VA		/ 230VAC	0.23A / 277V						
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=210μs measured at 50% Ipeak) at 230VAC; Per NEMA 410									
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	12 units (circuit breaker of type B) / 20 units (circuit breaker of type C) at 230VAC									
	LEAKAGE CURRENT	<0.75mA/277VAC									
	OVER CURRENT	95 ~ 108%									
	OVER CORRENT	Constant current limiting, recovers automatically after fault condition is removed									
DOTECTION	SHORT CIRCUIT	Hiccup mode	recovers auto	matically after	fault condition	is removed					
PROTECTION	0.450.401.74.05	15 ~ 21V	18 ~ 24V	23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 65V	59 ~ 68V	
	OVER VOLTAGE	Shut down o/	voltage, re-p	ower on to reco	over						
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover									
	WORKING TEMP.	Tcase= -40 ~	+80°C (Pleas	e refer to "OU	TPUT LOAD v	s TEMPERATI	JRE" section)				
	MAX. CASE TEMP.	Tcase= +80°(2								
	WORKING HUMIDITY	20 ~ 95% RH	non-condensi	ng							
NVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)									
	VIBRATION			ele nerind for	72min_each al	ong X, Y, Z axe	9				
	SAFETY STANDARDS Note.8	UL8750(type GB19510.1,0	"HL"), CSA C2 GB19510.14,E	22.2 No. 250.0 EAC TP TC 004)-08 , BS EN/E 4,KC61347-1,	N/AS/NZS 613 KC61347-2-13 35-1(by reques	347-1,BS EN/E 8(except for AB				
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75	KVAC I/P-F	G:2KVAC O	/P-FG:1.5KV	AC .					
MC	ISOLATION RESISTANCE			00M Ohms / 50							
INIC	EMC EMISSION Note.8	Compliance to		015, BS EN/EN		ss C (@ load≧	60%) ; BS EN/E	EN61000-3-3,G	B/T 17743 , GB	317625.1,	
	EMC IMMUNITY	Compliance to	BS EN/EN61	000-4-2,3,4,5,		/EN61547, BS I)547, EAC TP T	C 020		
	MTBF	3395.8K hrs r				(hrs min. M					
OTHERS	DIMENSION	171*61.5*36.			, , 0			- /			
	PACKING		s/15.6Kg/0.9Cl	UFT							
						nt and 25°C of					

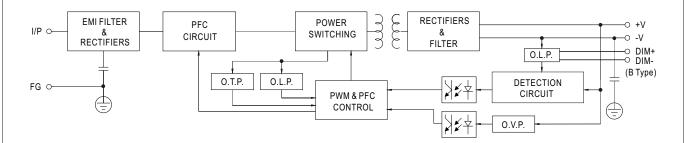
NOTE

- 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. For A/AB type need to consider build in using to comply with Type HL application.
- 14. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



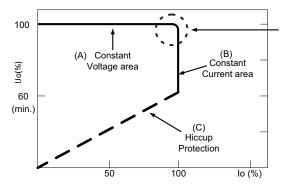
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.



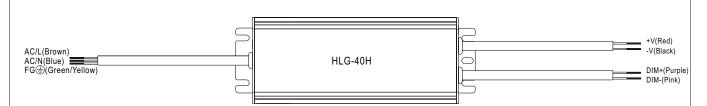
Typical output current normalized by rated current (%)

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.

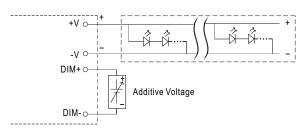


■ DIMMING OPERATION



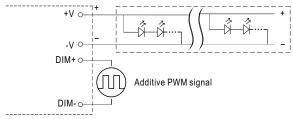
imes 3 in 1 dimming function (for B/AB-Type)

- 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: $100\mu A$ (typ.)
- \bigcirc Applying additive 1 ~ 10VDC



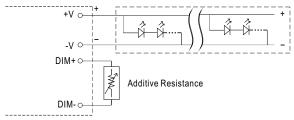
"DO NOT connect "DIM- to -V"

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

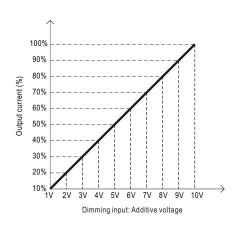


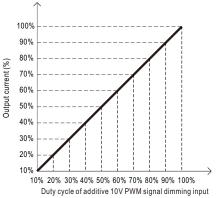
"DO NOT connect "DIM- to -V"

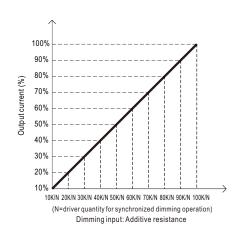
O Applying additive resistance:



"DO NOT connect "DIM- to -V"

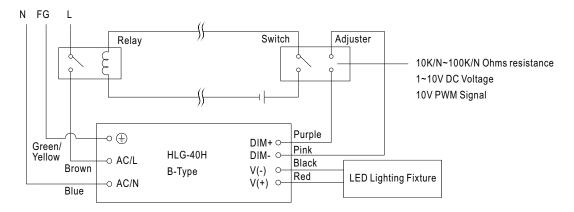






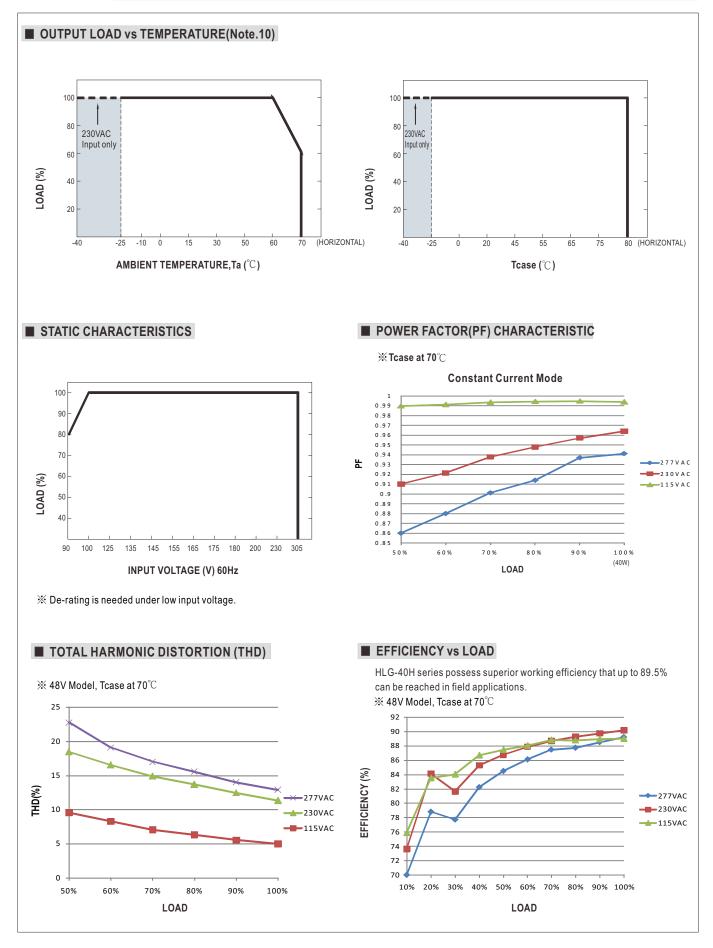


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



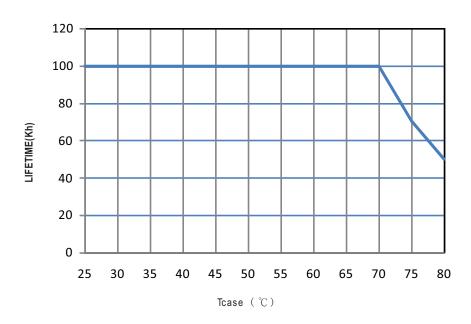
Using a switch and relay can turn ON/OFF the lighting fixture.



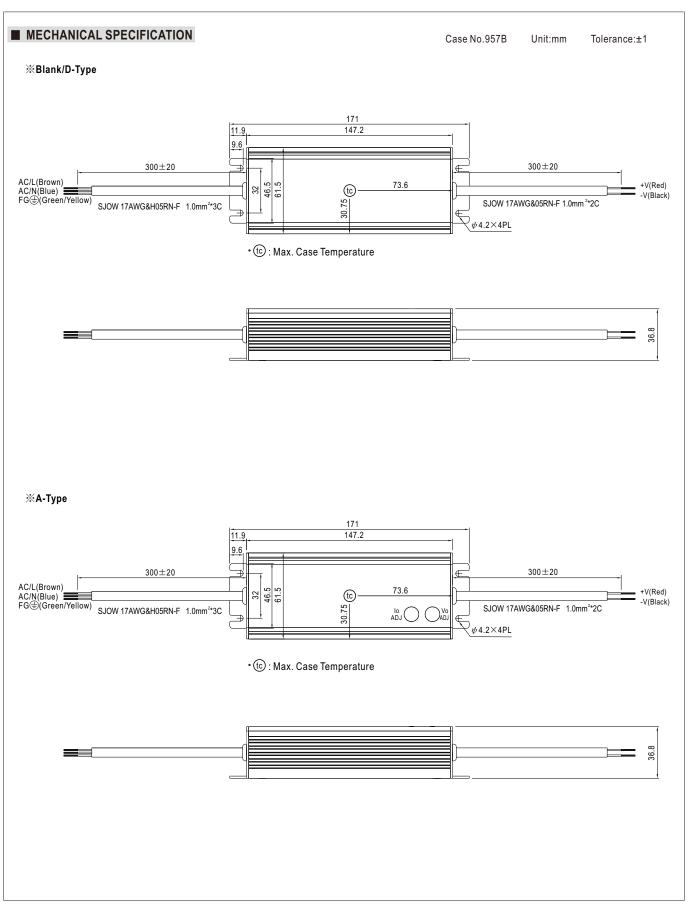




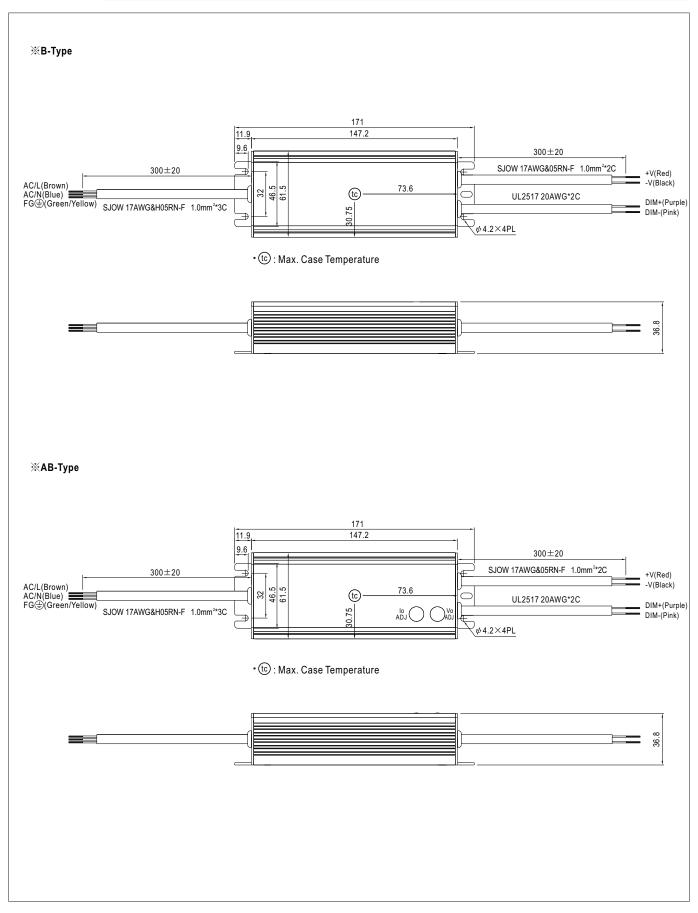
■ LIFE TIME









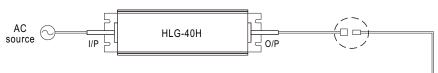




■ WATERPROOF CONNECTION

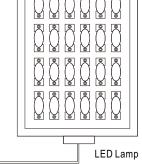
$\frak{\%}$ Waterproof connector

 $Waterproof connector \ can \ be \ assembled \ on \ the \ output \ cable \ of \ HLG-40H \ to \ operate \ in \ dry/wet/damp \ or \ outdoor \ environment.$

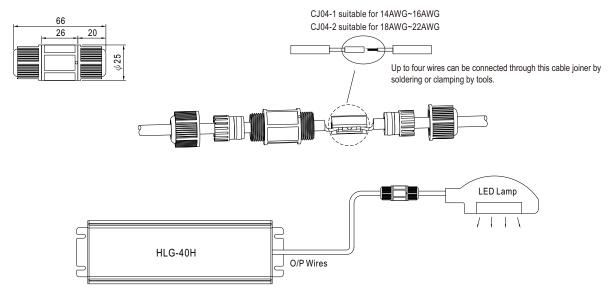


Size	Pin Configuration (Female)				
M12	000	000			
IVITZ	4-PIN	5-PIN			
	5A/PIN	5A/PIN			
Order No.	M12-04	M12-05			
Suitable Current	10A max.	10A max.			

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.



※ Cable Joiner



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

■ INSTALLATION MANUAL

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































Features

- · Constant Voltage + Constant Current mode output
- Metal housing with class I design
- · Built-in active PFC function
- · Class 2 power unit
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer 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.

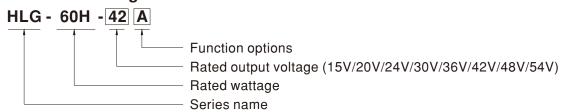
GTIN CODE

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

Description

HLG-60H series is a 60W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-60H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 15V and 54V. Thanks to the high efficiency up to 90.5%, with the fanless design, the entire series is able to operate for $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$ 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-60H 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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



SPECIFICATION

MODEL		HLG-60H-15	HLG-60H-20	HLG-60H-24	HLG-60H-30	HLG-60H-36	HLG-60H-42	HLG-60H-48	HLG-60H-54		
	DC VOLTAGE	15V	20V	24V	30V	36V	42V	48V	54V		
	CONSTANT CURRENT REGION Note.4	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V		
OUTPUT	RATED CURRENT	4A	3A	2.5A	2A	1.7A	1.45A	1.3A	1.15A		
	RATED POWER	60W	60W	60W	60W	61.2W	60.9W	62.4W	62.1W		
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	300mVp-p	300mVp-p	300mVp-p		
		Adjustable for A	A/AB-Type only	(via built-in pote	entiometer)						
	VOLTAGE ADJ. RANGE	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	40 ~ 46V	44 ~ 53V	49 ~ 58V		
		Adjustable for A	A/AB-Type only	(via built-in pote	entiometer)						
	CURRENT ADJ. RANGE	2.4 ~ 4A	1.8 ~ 3A	1.5 ~ 2.5A	1.2 ~ 2A	1 ~ 1.7A	0.87 ~ 1.45A	0.78 ~ 1.3A	0.69 ~ 1.15		
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±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%		
	LOAD REGULATION	±1.5%	±1.0%	± 0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
		500ms,80ms/1		1		_ = 0.0 /0	_ = 0.0 /0	= 0.070	0.070		
	HOLD UP TIME (Typ.)	16ms / 115VAC		3,001113/200 VAC	<u>'</u>						
	HOLD OF THML (Typ.)	90 ~ 305VAC	127 ~ 431VE)C							
	VOLTAGE RANGE Note.5				action)						
	EDECUENCY DANCE	(Please refer to "STATIC CHARACTERISTIC" section)									
	FREQUENCY RANGE	47 ~ 63Hz	1A O DE > 0 05/0	1001/AO DE > 0	00/077\/A0 @ 5.1	U d					
	POWER FACTOR (Typ.)		•	30VAC, PF≥0.9	O						
		(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)									
	TOTAL HARMONIC DISTORTION	THD< 20% (@ load ≥ 60% / 115VAC, 230VAC; @ load ≥ 75% / 277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)									
NPUT		,			· , ,						
	EFFICIENCY (Typ.)	87.5%	89%	89.5%	90%	90%	90%	90.5%	90.5%		
	AC CURRENT (Typ.)	0.64A / 115VAC									
	INRUSH CURRENT(Typ.)	COLD START 55A(twidth=265μs measured at 50% Ipeak) at 230VAC; Per NEMA 410									
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	9 units (circuit breaker of type B) / 16 units (circuit breaker of type C) at 230VAC									
	LEAKAGE CURRENT	<0.75mA/277VAC									
	OVER CURRENT No. 4	95 ~ 108%									
	OVER CURRENT Note.4	Constant current limiting, recovers automatically after fault condition is removed									
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed									
ROTECTION		18 ~ 24V	23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 65V	59 ~ 68V		
	OVER VOLTAGE	Shut down o/p	voltage, re-powe	er on to recover	1		·				
	OVER TEMPERATURE		voltage, re-powe								
	WORKING TEMP.	Tcase= -40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)									
	MAX. CASE TEMP.	Tcase=+80°C	00 0 (11000010	310110 0011 01	LOND TO TEIM	ETUTIONE 000					
	WORKING HUMIDITY										
NVIRONMENT	STORAGE TEMP., HUMIDITY	20 ~ 95% RH non-condensing									
	TEMP. COEFFICIENT	-40 ~ +80°C, 10 ~ 95% RH									
		± 0.03%/°C (0 ~ 60°C) 10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes									
	VIBRATION			·			ENI/ENI/A O /NIEO	04047.0.401			
	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,EAC TP TC 004,KC61347-1,KC61347-2-13(except for AB-type), IP65 or IP67 approved; J61347-1, J61347-2-13; design refer to BS EN/EN60335-1(by request)									
SAFETY & WITHSTAND VOLTAGE I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC											
MC	ISOLATION RESISTANCE			1 Ohms / 500VD		Н					
	EMC EMISSION Note.8	Compliance to		5, BS EN/EN610		(@ load≧60%) ;	BS EN/EN6100	0-3-3,GB/T 1774	3 , GB17625.		
	EMC IMMUNITY	Compliance to	•	0-4-2,3,4,5,6,8,1	1; BS EN/EN615	47, light industry	level (surge imm	unity Line-Earth	4KV, Line-Lin		
	MTBF	3396.9K hrs mi		SR-332 (Bellcore	345 8K hrs mir	n. MIL-HDBK-2	217F (25°C)				
				002 (D0110016	, ,5 10.01011110 /1111	11001(-2	(200)				
)THEPS	DIMENSION	171*61 5*36 ¤r	nm (I *W*H)								
OTHERS	DIMENSION PACKING	171*61.5*36.8r	nm (L*W*H) 15.6Kg/0.9CUF1	Г							

NOTE

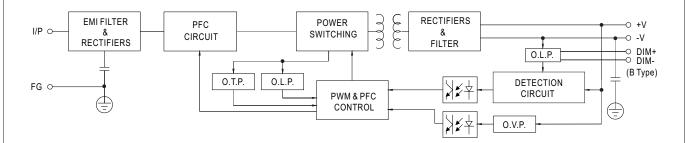
- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, 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 (tc) point (or TMP, per DLC), is about 70 °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).
- 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. For A/AB type need to consider build in using to comply with Type HL application.
- 14. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



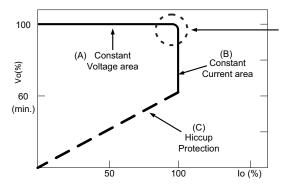
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.



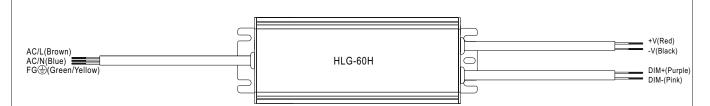
Typical output current normalized by rated current (%)

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.

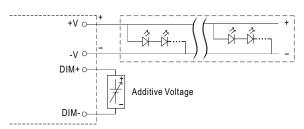


■ DIMMING OPERATION



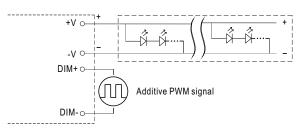
imes 3 in 1 dimming function (for B/AB-Type)

- $\cdot \ \mathsf{Output} \ \mathsf{constant} \ \mathsf{current} \ \mathsf{level} \ \mathsf{can} \ \mathsf{be} \ \mathsf{adjusted} \ \mathsf{by} \ \mathsf{applying} \ \mathsf{one} \ \mathsf{of} \ \mathsf{the} \ \mathsf{three} \ \mathsf{methodologies} \ \mathsf{between} \ \mathsf{DIM+} \ \mathsf{and} \ \mathsf{DIM-} \mathsf{ind} \ \mathsf{one} \ \mathsf{one$
 - 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: $100\mu A$ (typ.)
- O Applying additive 1 ~ 10VDC



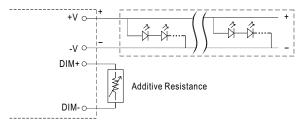
"DO NOT connect "DIM- to -V"

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

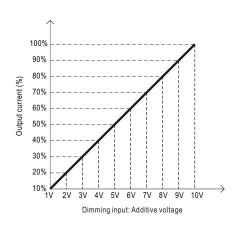


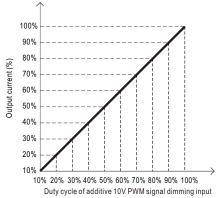
"DO NOT connect "DIM- to -V"

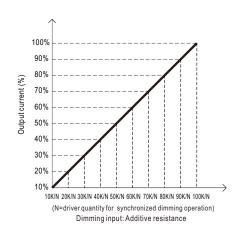
O Applying additive resistance:



"DO NOT connect "DIM- to -V"

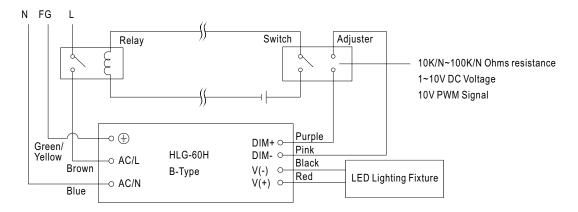






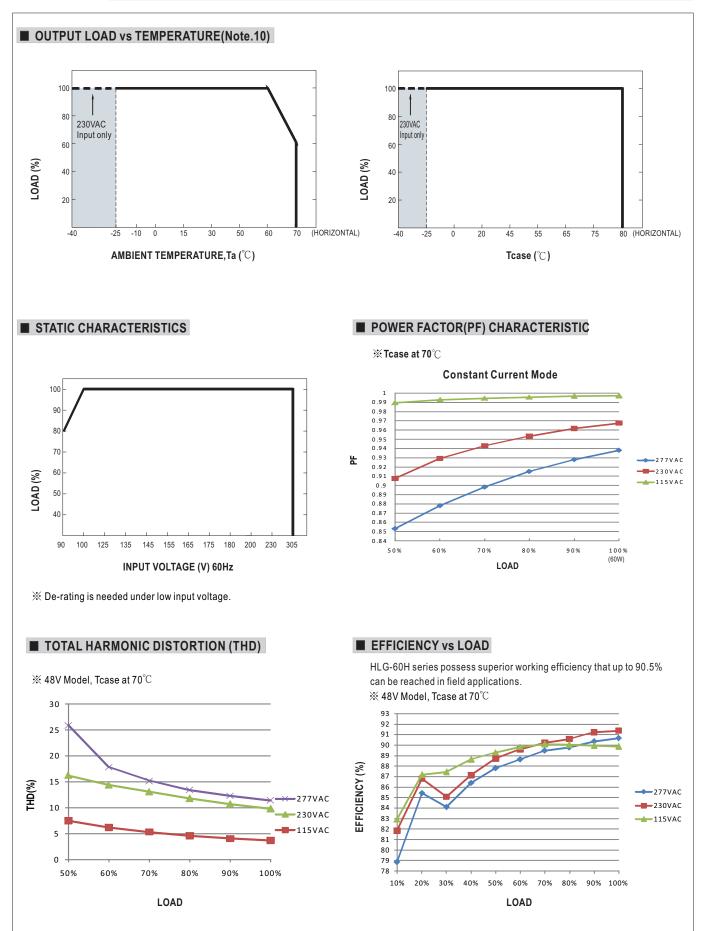


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



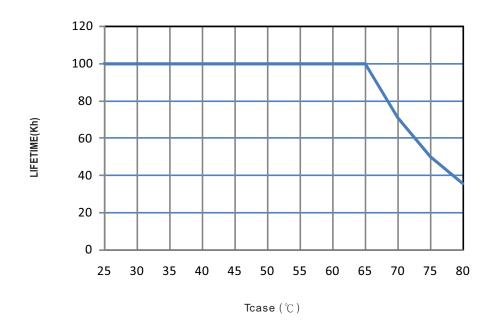
Using a switch and relay can turn $\ensuremath{\mathsf{ON}}\xspace(\ensuremath{\mathsf{OFF}}\xspace$ the lighting fixture.



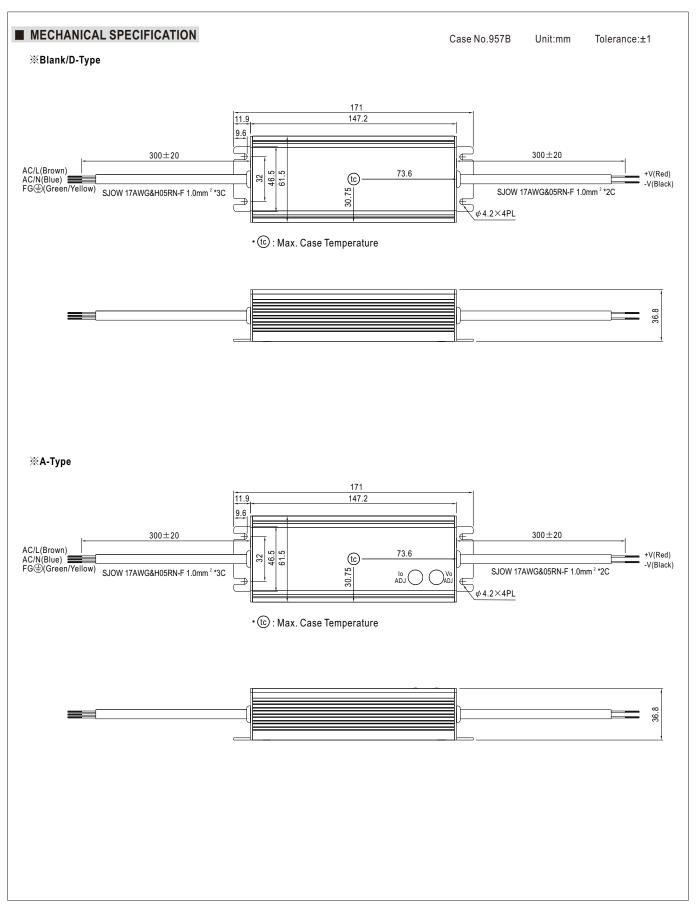




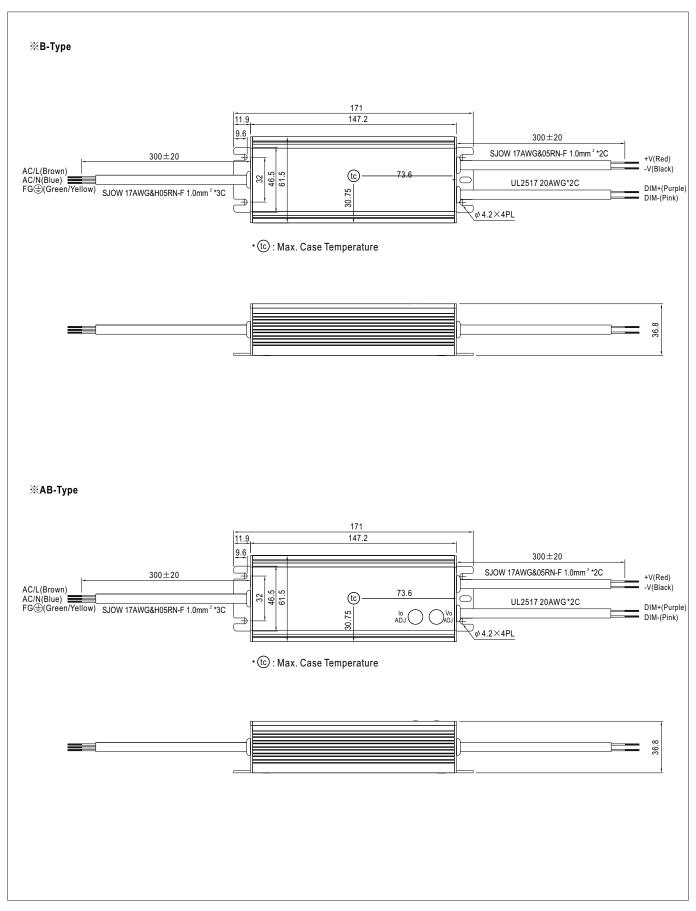
■ LIFE TIME









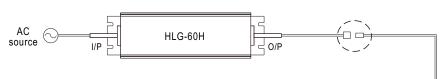




■ WATERPROOF CONNECTION

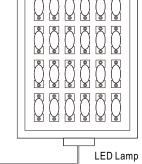
$\frak{\%}$ Waterproof connector

 $Waterproof connector \ can \ be \ assembled \ on \ the \ output \ cable \ of \ HLG-60H \ to \ operate \ in \ dry/wet/damp \ or \ outdoor \ environment.$

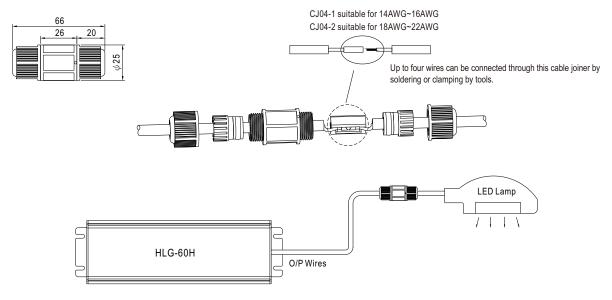


Size	Pin Configuration (Female)			
M12	000	<u></u>		
IVITZ	4-PIN	5-PIN		
	5A/PIN	5A/PIN		
Order No.	M12-04	M12-05		
Suitable Current	10A max.	10A max.		

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.



※ Cable Joiner



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

■ INSTALLATION MANUAL

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







































Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- · Built-in active PFC function
- Class 2 power unit
- · IP67 / IP65 rating for indoor or outdoor installations
- · Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer 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.

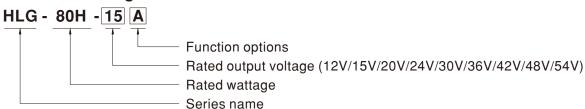
GTIN CODE

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

Description

HLG-80H series is a 80W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-80H operates from 90 ~ 305VAC and offers models with different rated voltage rangingbetween 12V and 54V. Thanks to the high efficiency up to 91%, with the fanless design, the entire series is able to operate for -40°C ~ +80°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-80H 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
BL	IP66	B-Type with junction box. UL8750 LISTED. Contact MEAN WELL for details	By request
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



SPECIFICATION

MODEL		HLG-80H-12	HLG-80H-15	HLG-80H-20	HLG-80H-24	HLG-80H-30	HLG-80H-36	HLG-80H-42	HLG-80H-48	HLG-80H-54
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.4		9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V
	RATED CURRENT	5A	5A	4A	3.4A	2.7A	2.3A	1.95A	1.7A	1.5A
	RATED POWER	60W	75W	80W	81.6W	81W	82.8W	81.9W	81.6W	81W
	-		-							
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V	r A-Type only (17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V
DUTPUT						1	33 ~ 400	30 ~ 40V	43 ~ 55V	49 ~ 30 V
	CURRENT ADJ. RANGE	Adjustable for			2.04 ~ 3.4A	· ·	1.38 ~ 2.3A	1.17 ~ 1.95A	1.02 ~ 1.7A	00 154
	VOLTAGE TOLERANCE Note.3		3 ~ 5A ±2.0%	2.4 ~ 4A		1.62 ~ 2.7A	±1.0%	±1.0%		0.9 ~ 1.5A
				±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%
		1200ms,200n		•	230VAC					
	HOLD UP TIME (Typ.)		ad 230VAC							
	VOLTAGE RANGE Note.5	90 ~ 305VAC	127 ~ 431 to "STATIC CH		IC" section)					
	FREQUENCY RANGE	47 ~ 63Hz		, and to the training						
	TREGOLITOT RANGE		SVAC, PF≧0.9	6/23N\/AC DE	≥n 9//277\/A	C. @ full load				
	POWER FACTOR (Typ.)		to "POWER FA			•				
		,		,		,	C)			
INDUT	TOTAL HARMONIC DISTORTION	THD< 20% (@ load ≥ 60% / 115VAC,230VAC; @ load ≥ 75% / 277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)								
INPUT	EFFICIENCY (T)	`			T .	· · · ·	040/	040/	040/	040/
	EFFICIENCY (Typ.)	88%	89%	90%	90.5%	91%	91%	91%	91%	91%
H	AC CURRENT (Typ.)	0.85A / 115VA		A / 230VAC	0.4A / 277VA					
	INRUSH CURRENT (Typ.)	COLD START 70A(twidth=485µs measured at 50% lpeak) at 230VAC; Per NEMA 410								
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	3 units (circui	t breaker of typ	e B) / 6 units (circuit breaker	of type C) at 23	30VAC			
	LEAKAGE CURRENT	<0.75mA/277VAC								
		95 ~ 108%								
	OVER CURRENT	Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed								
PROTECTION		14 ~ 17V	18 ~ 24V	23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 63V	59 ~ 68V
	OVER VOLTAGE									
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover Shut down o/p voltage, re-power on to recover								
	WORKING TEMP.	-				s TEMPERATU	IDE" coction)			
				e relei to OO	IFUI LOAD V	SIEWIFERATO	TRE Section)			
	MAX. CASE TEMP.	Tcase= +80°C								
ENVIRONMENT	WORKING HUMIDITY	20 ~ 95% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C,								
	TEMP. COEFFICIENT	±0.03%/°C (
	VIBRATION			•		ong X, Y, Z axes				
		UL8750(type"HL"), CSA C22.2 No. 250.0-08, UL8750 LISTED for HLG-80H-□BL;BS EN/EN/AS/NZS 61347-1,BS EN/EN/AS/NZS 61347-2-1								
	SAFETY STANDARDS Note.8	J61347-1, J61347-2-13(except for BL-type), GB19510.1,independent, GB19510.14,EAC TP TC 004,BIS IS15885(for 36A,54A only),								
		IP65 or IP67,KC61347-1,KC61347-2-13(except for AB,BL-type) approved								
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75	KVAC I/P-F	G:2KVAC O	P-FG:1.5KVA	(C				
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-F	G, O/P-FG:10	00M Ohms / 50	0VDC / 25°C/	70% RH				
	EMC EMISSION NO.	Compliance to					≧60%); BS E	N/EN61000-3-	3,GB/T 17743	, GB17625.
	EMC EMISSION Note.8	Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (@ load ≧ 60%); BS EN/EN61000-3-3,GB/T 17743 , GB17625.1, KS C 9815, KS C 9547 (except for BL type) , EAC TP TC 020								
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN61547, light industry level (surge immunity Line-Earth 4KV,								
		Line-Line 2K\	/), KS C 9815,	KS C 9547 (ex	cept for BL typ	e),EACTPTC	020			
	MTBF	2992.9K hrs n	nin. Telcord	ia SR-332 (Bel	lcore) ; 289.1K	hrs min. MI	L-HDBK-217F	(25°C)		
OTHERS			nin. Telcord 8.8mm (L*W*H		lcore) ; 289.1K	hrs min. MI	L-HDBK-217F	(25°℃)		
OTHERS	MTBF	195.6*61.5*38)	lcore) ; 289.1K	Ahrs min. MI	L-HDBK-217F	(25°C)		

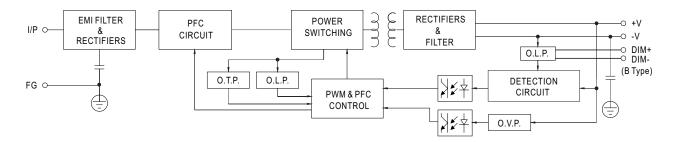
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, line regulation and load regulation.
- 4. Please refer to "DRIVING METHODS OF LED MODULE".
- 5. De-rating may be needed 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. For A/AB type need to consider build in using to comply with Type HL application.
- 14. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- ** Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx File Name:HLG-80H-SPEC 2025-04-10



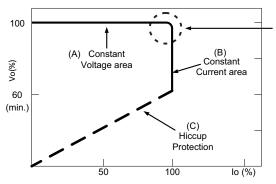
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.



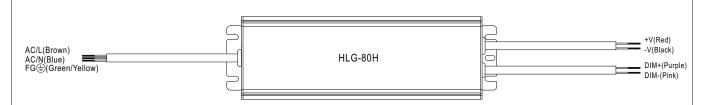
In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

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

Typical output current normalized by rated current (%)

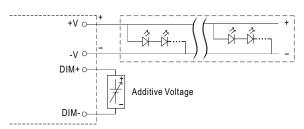


■ DIMMING OPERATION



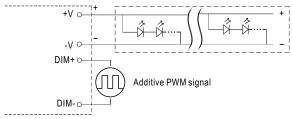
imes 3 in 1 dimming function (for B/AB-Type)

- 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



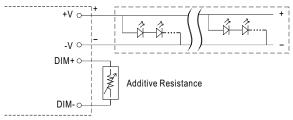
"DO NOT connect "DIM- to -V"

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

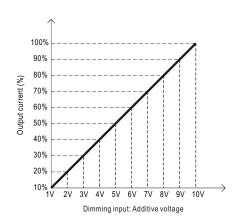


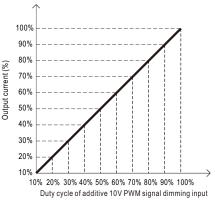
"DO NOT connect "DIM- to -V"

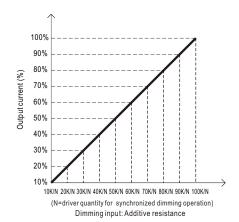
Applying additive resistance:



"DO NOT connect "DIM- to -V"

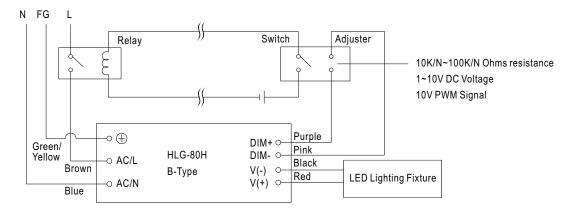






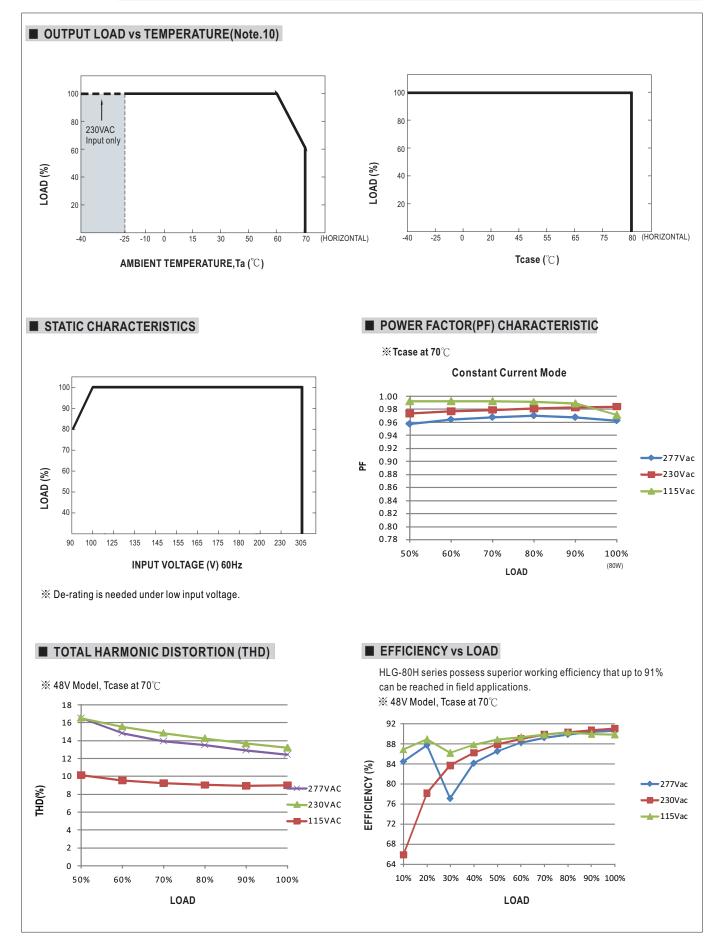


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



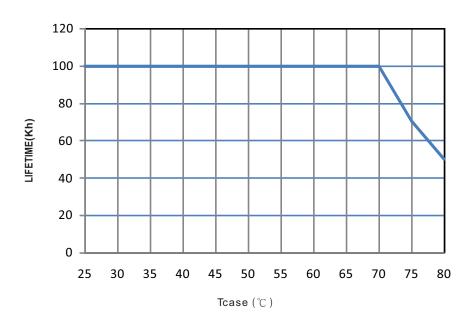
Using a switch and relay can turn ON/OFF the lighting fixture.



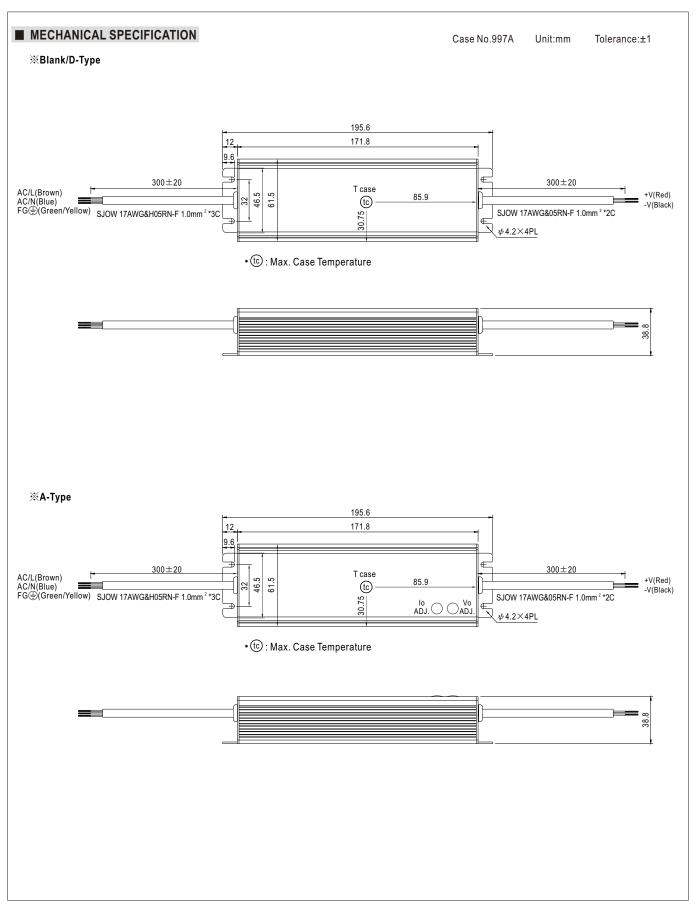




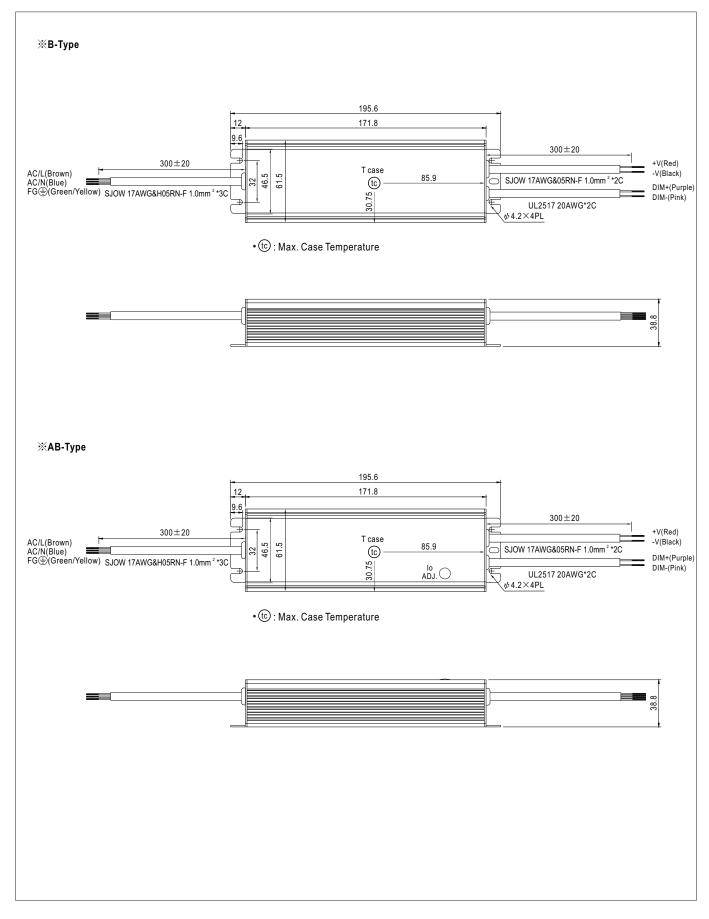
■ LIFE TIME









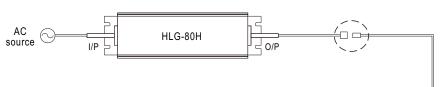




■ WATERPROOF CONNECTION

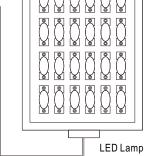
$\frak{\%}$ Waterproof connector

Waterproof connector can be assembled on the output cable of HLG-80H to operate in dry/wet/damp or outdoor environment.

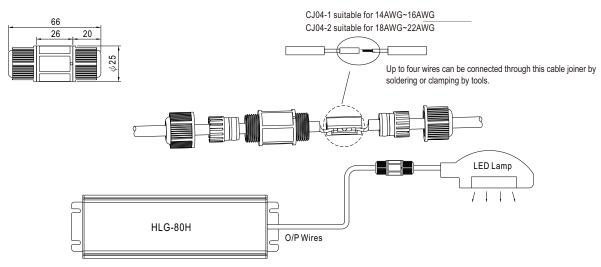


Size	Pin Configuration (Female)				
M12	000	000			
IVITZ	4-PIN	5-PIN			
	5A/PIN	5A/PIN			
Order No.	M12-04	M12-05			
Suitable Current	10A max.	10A max.			

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.

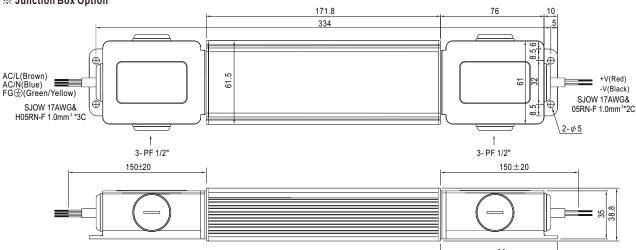


X Cable Joiner



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

※ Junction Box Option



O Junction box option is available for A/B/Blank - Type. Please contact MEAW WELL for details.

HLG-80H-BL models with junction box on both input and output sides are UL LISTED approved(modified by B type only).

■ INSTALLATION MANUAL

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



























Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- · Built-in active PFC function
- · Class 2 power unit
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer 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.

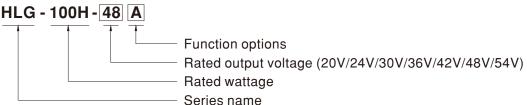
GTIN CODE

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

Description

HLG-100H series is a 100W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-100H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 20V and 54V. Thanks to the high efficiency up to 93%, with the fanless design, the entire series is able to operate for $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$ 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-100H 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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



SPECIFICATION

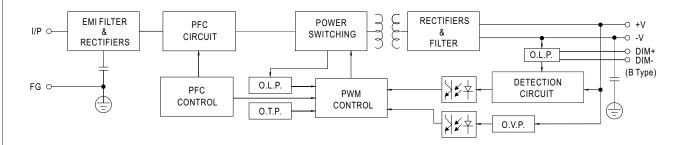
MODEL		HLG-100H-20	HLG-100H-24	HLG-100H-30	HLG-100H-36	HLG-100H-42	HLG-100H-48	HLG-100H-54	
	DC VOLTAGE	20V	24V	30V	36V	42V	48V	54V	
OUTPUT -	CONSTANT CURRENT REGION Note.4	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V	
	RATED CURRENT	4.8A	4A	3.2A	2.65A	2.28A	2A	1.77A	
	RATED POWER	96W	96W	96W	95.4W	95.76W	96W	95.58W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	
		Adjustable for A/AB-Type only (via built-in potentiometer)							
	VOLTAGE ADJ. RANGE	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V	
		Adjustable for A/AB-Type only (via built-in potentiometer)							
	CURRENT ADJ. RANGE	3 ~ 4.8A	2.5 ~ 4A	2 ~ 3.2A	1.65 ~ 2.65A	1.4 ~ 2.28A	1.25 ~ 2A	1.1 ~ 1.77A	
	VOLTAGE TOLERANCE Note.3		±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%	
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
			15VAC 500ms,5			20.070	±0.070	±0.070	
			-	01115/230 VAC					
INPUT	HOLD UP TIME (Typ.)	16ms / 115VAC, 230VAC 90 ~ 305VAC 127 ~ 431VDC							
	VOLTAGE RANGE Note.5								
	EDECUENCY DANCE								
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF≥0.98/115VAC, PF≥0.95/230VAC, PF≥0.93/277VAC @ full load							
		(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)							
	TOTAL HARMONIC DISTORTION	THD< 20% (@ load≥60% / 115VAC,230VAC; @ load≥75% / 277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)							
		,					I	T	
	EFFICIENCY (Typ.)	93%	93%	93%	93%	93%	93%	93%	
	AC CURRENT (Typ.)	1.2A / 115VAC	0.55A / 230VAC						
	INRUSH CURRENT (Typ.)	COLD START 60A(twidth=415/s measured at 50% lpeak) at 230VAC; Per NEMA 410							
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 230VAC							
	LEAKAGE CURRENT	<0.75mA / 277VAC							
	OVER CURRENT	95 ~ 106%							
	OVER CORRENT	Constant current limiting, recovers automatically after fault condition is removed							
DOTEOTION	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed							
PROTECTION		23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 63V	59 ~ 65V	
	OVER VOLTAGE	Shut down o/p vo	ltage with auto-rec	overy or re-power of	on to recovery				
	OVER TEMPERATURE Note.9								
ENVIRONMENT -	WORKING TEMP.	Tcase= -40 ~ +80°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)							
	MAX. CASE TEMP.	Tcase=+80°C							
	WORKING HUMIDITY	20 ~ 95% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)							
	VIBRATION			od for 72min each	along X Y 7 axes				
SAFETY & EMC	TIDIO (TIO)	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes UL8750(type"HL"), CSA C22.2 No. 250.0-08; BS EN/EN 61347-1, BS EN/EN 61347-2-13, AS/NZS 61347-1(except for AB-type),							
	SAFETY STANDARDS Note.8	1000170 04047 0 404							
	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 Ohi	ms / 500VDC / 25°0	C/70% RH				
	EMC EMISSION Note.8	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH Compliance to BS EN/EN55015, BS EN/EN55032 Class B, BS EN/EN61000-3-2 Class C (@ load ≥ 60%); BS EN/EN61000-3-3, GB/T 17743, GB17625.1, EAC TP TC 020, KSC 9815(except for D-type)							
	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, KSC 9547(except for D-type)							
	MTBF	2185.8K hrs mi	n. Telcordia SR-3	332(Bellcore);	167.1K hrs min. N	/IL-HDBK-217F (25℃)		
		220*68*38.8mm	/I *\//*H\			,			
THERS	DIMENSION	220 00 30.011111	(L VV II)						
THERS	DIMENSION PACKING	1.12Kg; 12pcs/14	· ,						

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. For OTP which triggered at light load/no load condition, proceed AC repower on to recovery.
- 10. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 80°C or less.
- 11. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
- 12. 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).
- 13. 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
- 14. For A/AB type need to consider build in using to comply with Type HL application.
- 15. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

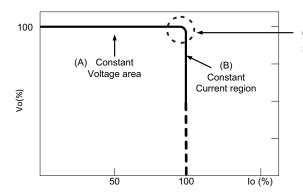
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.



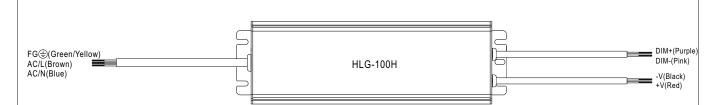
Typical output current normalized by rated current (%)

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.

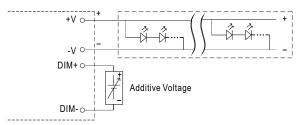


■ DIMMING OPERATION



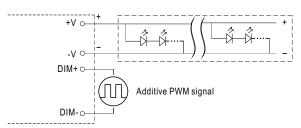
imes 3 in 1 dimming function (for B/AB-Type)

- $\cdot \ \mathsf{Output} \ \mathsf{constant} \ \mathsf{current} \ \mathsf{level} \ \mathsf{can} \ \mathsf{be} \ \mathsf{adjusted} \ \mathsf{by} \ \mathsf{applying} \ \mathsf{one} \ \mathsf{of} \ \mathsf{the} \ \mathsf{three} \ \mathsf{methodologies} \ \mathsf{between} \ \mathsf{DIM+} \ \mathsf{and} \ \mathsf{DIM-} \mathsf{ind} \ \mathsf{one} \ \mathsf{one$
 - 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: $100\mu A$ (typ.)
- O Applying additive 1 ~ 10VDC



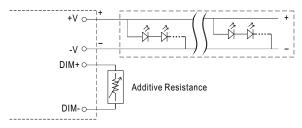
"DO NOT connect "DIM- to -V"

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

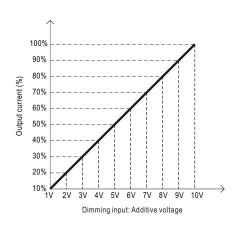


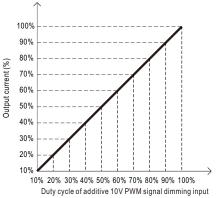
"DO NOT connect "DIM- to -V"

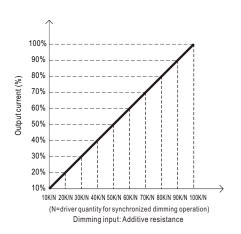
Applying additive resistance:



"DO NOT connect "DIM- to -V"

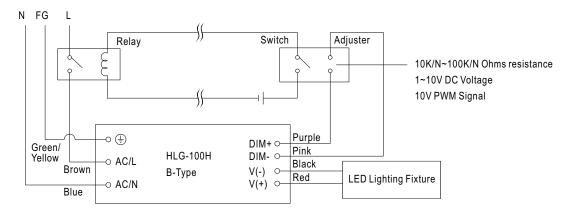






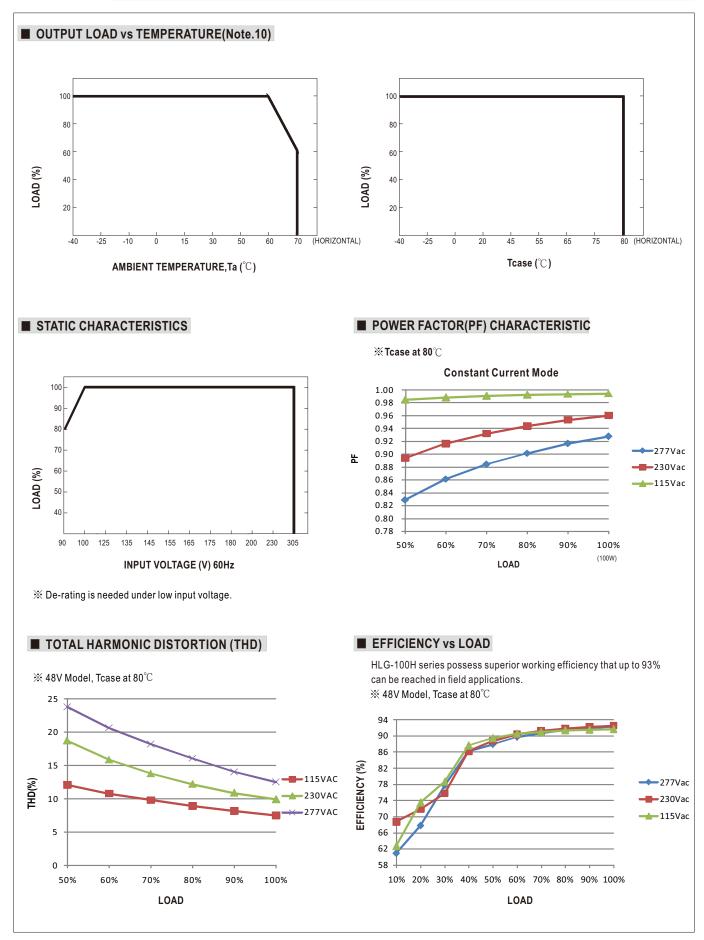


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



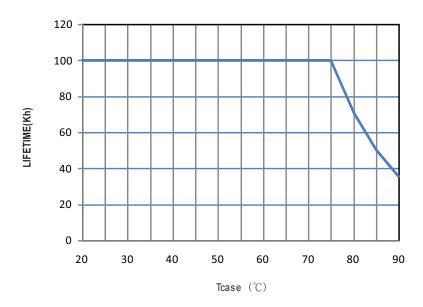
Using a switch and relay can turn ON/OFF the lighting fixture.



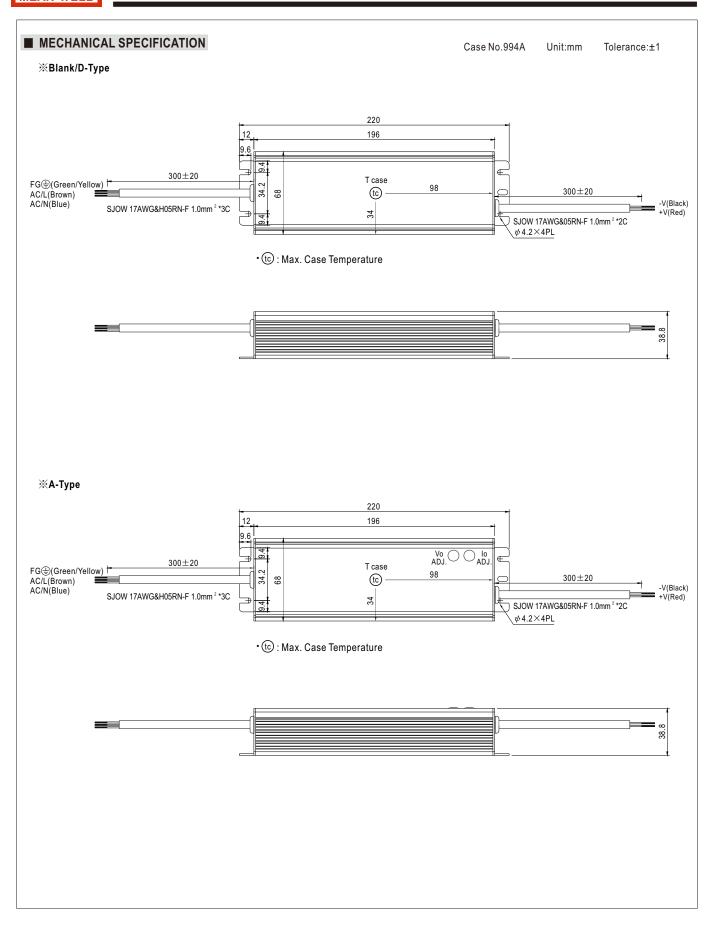




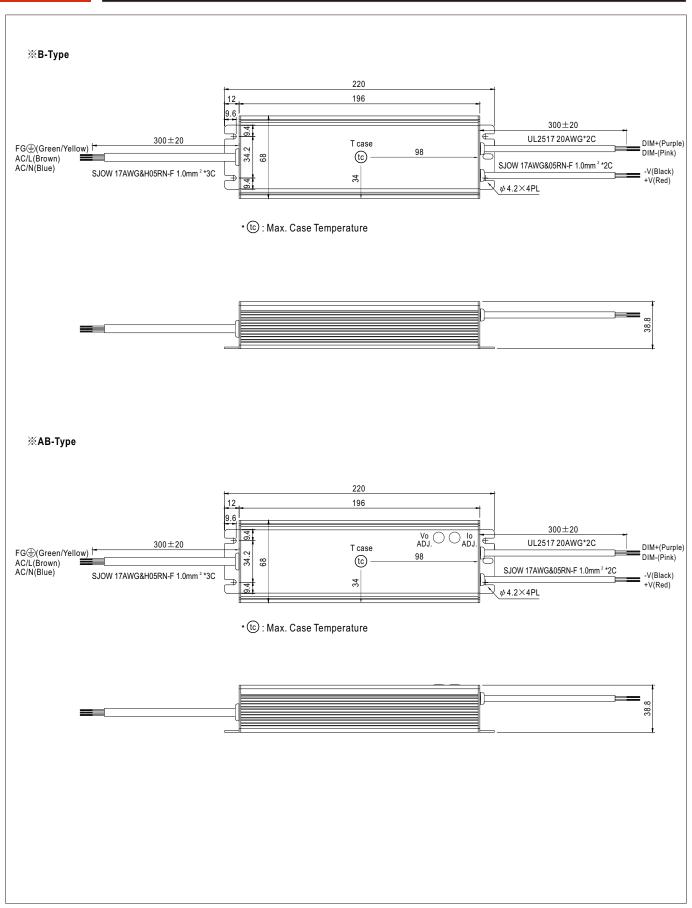
■ LIFE TIME



HLG-100H series





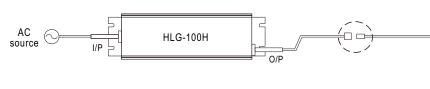




■ WATERPROOF CONNECTION

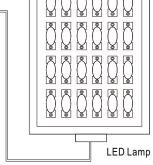
Waterproof connector

Water proof connector can be assembled on the output cable of HLG-100H to operate in dry/wet/damp or outdoor environment.

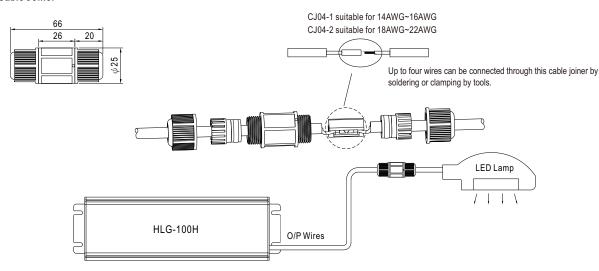


Size	Pin Configuration (Female)					
M12	000	000				
	4-PIN	5-PIN				
	5A/PIN	5A/PIN				
Order No.	M12-04	M12-05				
Suitable Current	10A max.	10A max.				

Size	Pin Configuration (Female)					
M15	00					
IVITO	2-PIN					
	12A/PIN					
Order No.	M15-02					
Suitable Current	12A max.					

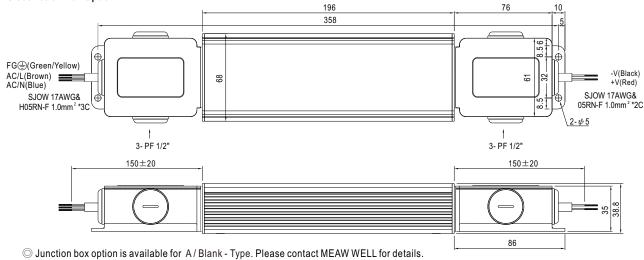


※ Cable Joiner



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

X Junction Box Option



■ INSTALLATION MANUAL

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



























Features

- · Constant Voltage + Constant Current mode output
- Metal housing with class | design
- · Built-in active PFC function
- IP67 / IP65 rating for indoor or outdoor installations
- · Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer 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.

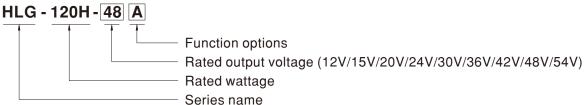
GTIN CODE

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

Description

HLG-120H series is a 120W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-120H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 93.5%, with the fanless design, the entire series is able to operate for -40°C ~ +80°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-120H is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

Model Encoding



Туре	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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



SPECIFICATION

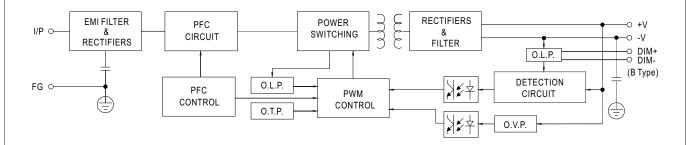
MODEL		HLG-120H-12	HLG-120H-15	HLG-120H-20	HLG-120H-24	HLG-120H-30	HLG-120H-36	HLG-120H-42	HLG-120H-48	HLG-120H-54	
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION Note.4		7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V	
	RATED CURRENT	10A	8A	6A	5A	4A	3.4A	2.9A	2.5A	2.3A	
	RATED POWER	120W	120W	120W	120W	120W	122.4W	121.8W	120W	124.2W	
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	
	THIT LE GIVOIDE (MAX.) Note.2		r A/AB-Type o				Zoomvp p	2001117 P	200111VP P	200111 V P P	
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V		17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V	
DUTPUT			r A/AB-Type o		1		33 .01		10 001	10 001	
	CURRENT ADJ. RANGE	5 ~ 10A	4 ~ 8A	3 ~ 6A	2.5 ~ 5A	2 ~ 4A	1.7 ~ 3.4A	1.4 ~ 2.9A	1.2 ~ 2.5A	1.1 ~ 2.3A	
	VOLTAGE TOLERANCE Note.3		±2.0%	±1.0%	±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%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
		1200ms,50m		00ms,50ms/2		1 - 0.0 /0	_ 0.0 /0				
	HOLD UP TIME (Typ.)	12ms / 115VA		001110,001110/2	00 1710						
	11025 01 111112 (1)	90 ~ 305VAC	127 ~ 431	1VDC							
	VOLTAGE RANGE Note.5		to "STATIC CH		IC" section)						
-	FREQUENCY RANGE	47 ~ 63Hz			,						
	TREGORNOT TO INCE		SVAC, PF≧0.9	5/230VAC_PF	≥0 93/277VA	C @ full load					
	POWER FACTOR (Typ.)		to "POWER FA			•					
				, ,		≥75% / 277VA	C)				
	TOTAL HARMONIC DISTORTION	,	to "TOTAL HA		. •		0)				
NPUT	EFFICIENCY (Typ.)	92%	92%	93%	93%	93%	93%	93%	93.5%	93.5%	
	AC CURRENT (Typ.)	1.4A / 115VA			.55A / 277VAC		0070	0070	00.070	00.070	
	INRUSH CURRENT (Typ.)		COLD START 60A(twidth=375µs measured at 50% Ipeak) at 230VAC; Per NEMA 410								
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	5 units (circuit breaker of type B) / 9 units (circuit breaker of type C) at 230VAC									
	LEAKAGE CURRENT	<0.75mA / 277VAC									
		95 ~ 108%									
	OVER CURRENT	Constant current limiting, recovers automatically after fault condition is removed									
	SHORT CIRCUIT					Ilt condition is r					
PROTECTION	OHORT OHOOTI	14 ~ 17V	18 ~ 21V	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 63V	59 ~ 65V	
I NOTEO HON	OVER VOLTAGE		o voltage with a						0. 001		
	OVER TEMPERATURE Note.9		-		<u>-</u>	erature goes do	own				
	WORKING TEMP.		• •			s TEMPERATU					
	MAX. CASE TEMP.	Tcase= +80°C	•								
	WORKING HUMIDITY		non-condensir	าต							
ENVIRONMENT	STORAGE TEMP HUMIDITY	-40 ~ +80°C.		٠.5							
	TEMP. COEFFICIENT	±0.03%/°C (0									
	VIBRATION			le period for	72min each al	ong X, Y, Z axe	3				
	SAFETY STANDARDS Note.8	UL8750(type" AS/NZS 6134	HL"), CSA C22 7-2-13(except	.2 No. 250.0-0 for AB-type) in	8, BS EN/EN 6 dependent;GB	1347-1, BS EN/ 19510.1,GB19 PTC 004,KC61	EN 61347-2-13 510.14,IP65 or	IP67, J61347-	1, J61347-2-13	(except for	
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75	KVAC I/P-F	G:2KVAC O	/P-FG:1.5KVA	(C					
EMC	ISOLATION RESISTANCE		G, O/P-FG:10								
	EMC EMISSION Note.8	Compliance to	BS EN/EN55	015, BS EN/EN	N55032 Class	B, BS EN/EN67 cept for D-type		s C (@ load≧	50%) ; BS EN/E	EN61000-3-3	
	EMC IMMUNITY	Compliance to	BS EN/EN61	000-4-2,3,4,5,0	6,8,11, BS EN/	EN61547, BS E 47(except for D	N/EN55024, li	ght industry lev	vel (surge immi	unity	
	MTBF		nin. Telcordia S			· ·	DBK-217F (25°	°C)			
OTHERS	DIMENSION	220*68*38.8n		,	,,		(==	,			
	PACKING		s/14.4Kg/0.8Cl	JFT							
	1 All parameters NOT specially	0					11 11				

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 0.1uf & 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
- 9. For OTP which triggered at light load/no load condition, proceed AC repower on to recovery.
- 10. 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.
- 11. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
- 12. 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).
- 13. 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
- 14. For A/AB type need to consider build in using to comply with Type HL application.
- 15. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

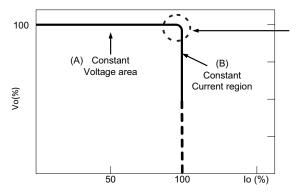
■ BLOCK DIAGRAM

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.

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

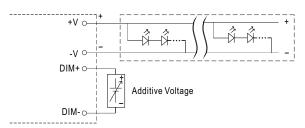


■ DIMMING OPERATION



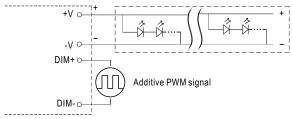
※ 3 in 1 dimming function (for B/AB-Type)

- $\cdot \ \, \text{Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:}$
 - 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: $100\mu A$ (typ.)
- O Applying additive 1 ~ 10VDC



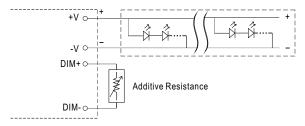
"DO NOT connect "DIM- to -V"

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

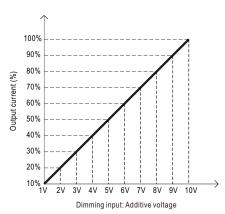


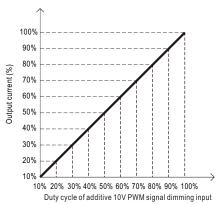
"DO NOT connect "DIM- to -V"

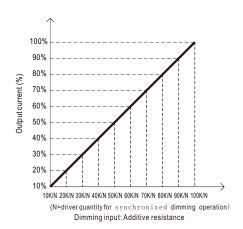
O Applying additive resistance:



"DO NOT connect "DIM- to -V"

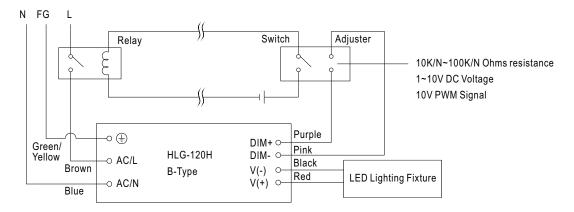








Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.

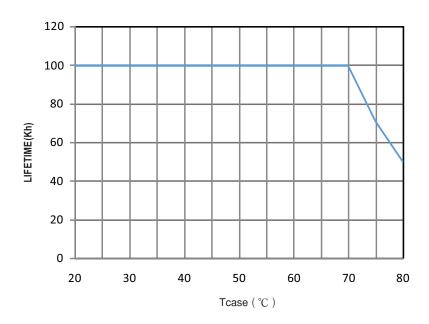


Using a switch and relay can turn ON/OFF the lighting fixture.

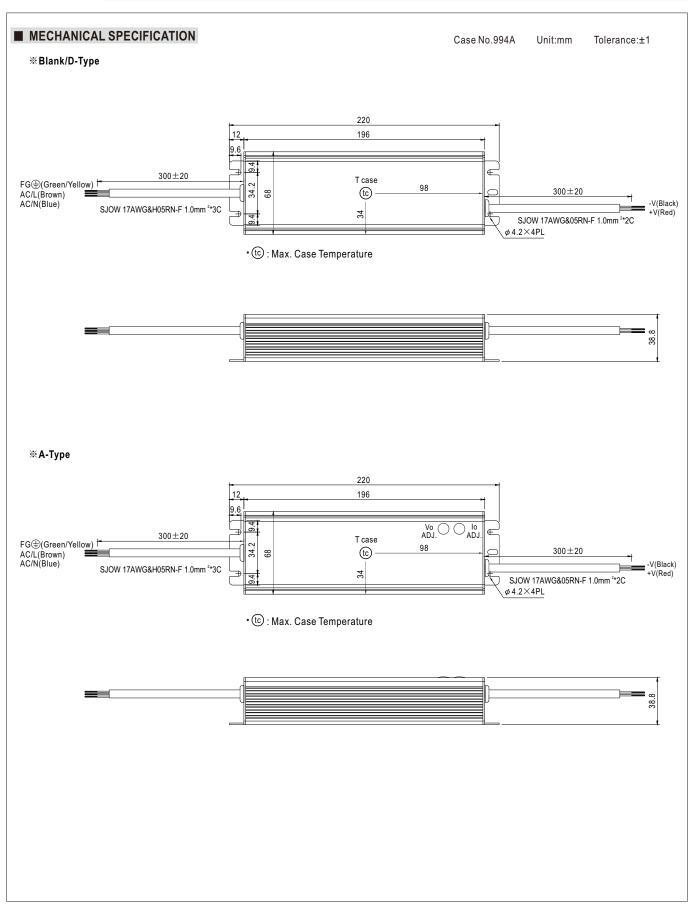


■ OUTPUT LOAD vs TEMPERATURE(Note.10) 100 100 80 80 60 60 LOAD (%) LOAD (%) 40 40 20 20 (HORIZONTAL) 80 (HORIZONTAL) -40 -25 Tcase (°C) AMBIENT TEMPERATURE, Ta (°C) ■ STATIC CHARACTERISTICS ■ POWER FACTOR(PF) CHARACTERISTIC ★ Tcase at 70°C **Constant Current Mode** 100 1.00 0.98 0.96 0 94 0.92 **-**277Vac 0.90 LOAD (%) 0.88 **−**230Vac 0.86 50 **├**115Vac 0.84 0.82 0.80 0.78 100 125 145 155 165 175 180 200 230 305 50% 60% 70% 80% 90% 100% INPUT VOLTAGE (V) 60Hz (120W) LOAD * De-rating is needed under low input voltage. ■ TOTAL HARMONIC DISTORTION (THD) **■** EFFICIENCY vs LOAD HLG-120H series possess superior working efficiency that up to 93.5% ¾ 48V Model, Tcase at 70°C can be reached in field applications. % 48V Model, Tcase at 70 $^{\circ}$ C 25 96 20 92 **EFFICIENCY (%)** 88 15 84 THD(%) 10 **►**230Vac 80 <u>►</u>115Vac 76 72 50% 60% 70% 100% 80% 90% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% LOAD LOAD

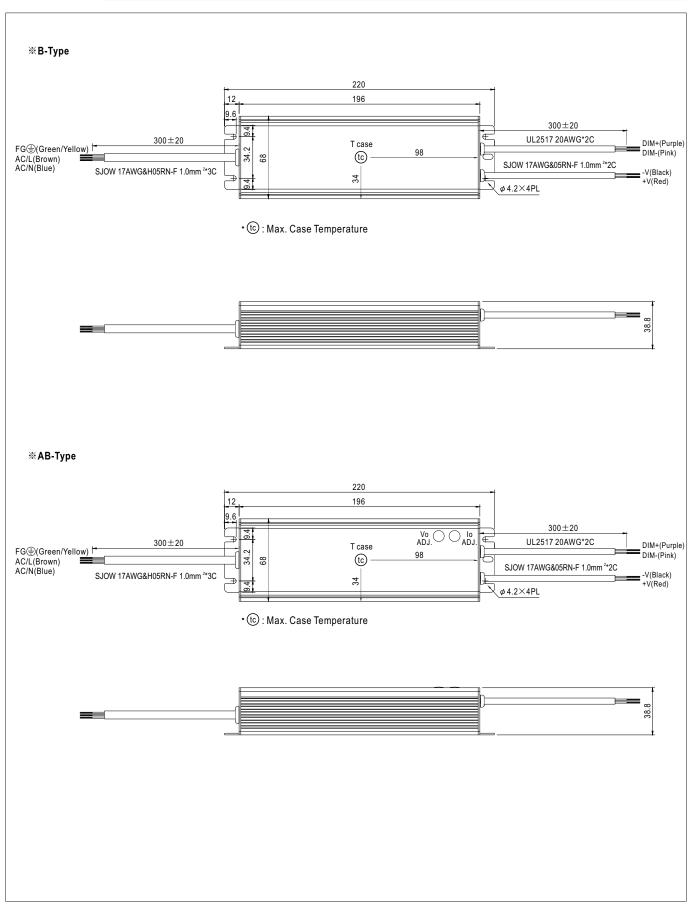
■ LIFE TIME









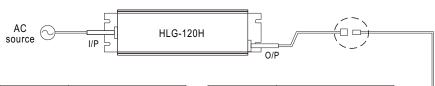




■ WATERPROOF CONNECTION

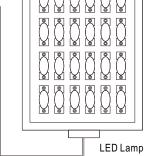
*** Waterproof connector**

Waterproof connector can be assembled on the output cable of HLG-120H to operate in dry/wet/damp or outdoor environment.

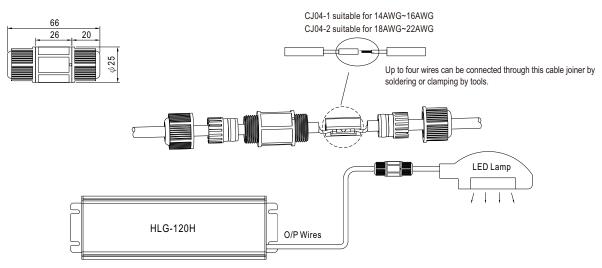


Size	Pin Configuration (Female)					
M12	000	000				
	4-PIN	5-PIN				
	5A/PIN	5A/PIN				
Order No.	M12-04	M12-05				
Suitable Current	10A max.	10A max.				

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.

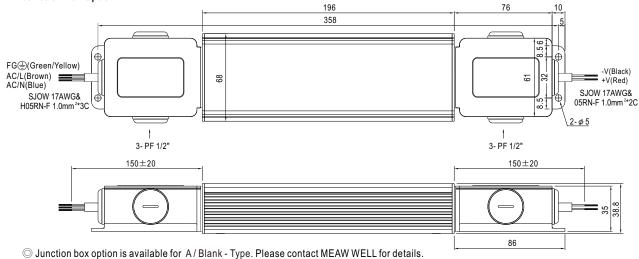


X Cable Joiner



© 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



























Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- 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-150H series is a 150W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-150H 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-150H 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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



SPECIFICATION

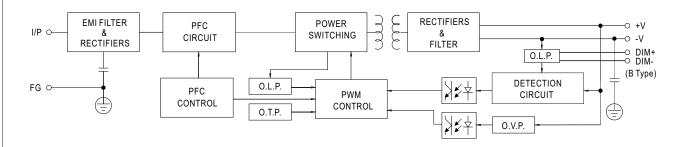
MODEL		HLG-150H-12	HLG-150H-15	HLG-150H-20	HLG-150H-24	HLG-150H-30	HLG-150H-36	HLG-150H-42	HLG-150H-48	HLG-150H-54			
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V			
	CONSTANT CURRENT REGION Note.4		7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V			
	RATED CURRENT	12.5A	10A	7.5A	6.3A	5A	4.2A	3.6A	3.2A	2.8A			
	RATED POWER	150W	150W	150W	151.2W	150W	151.2W	151.2W	153.6W	151.2W			
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p			
	KIPPLE & NOISE (IIIax.) Note.2			nly (via built-ir			200111Vp-p	200111V p-p	200111V p-p	200111Vp-p			
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V		17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V			
OUTPUT				nly (via built-ir			00 401	00 400	40 00V	143 30V			
	CURRENT ADJ. RANGE	-	6 ~ 10A	4.5 ~ 7.5A	3.8 ~ 6.3A	3 ~ 5A	2.5 ~ 4.2A	2.16 ~ 3.6A	1.92 ~ 3.2A	1.68 ~ 2.8A			
	VOLTAGE TOLERANCE Note.3		±2.0%	±1.0%	±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%			
						_ ± 0.5 /6	⊥0.070			1 - 0.3 /0			
		-	000ms,200ms/115VAC 500ms,200ms/230VAC 6ms / 115VAC, 230VAC										
	HOLD UP TIME (Typ.)		· ·	4)/D0									
	VOLTAGE RANGE Note.5	90 ~ 305VAC	127 ~ 431	IVDC IARACTERISTI	IC" cootion)								
	EDECUENCY DANCE	`	O STATIC CH	ANACIENISTI	ic section)								
	FREQUENCY RANGE	47 ~ 63Hz	V/A O. DE > 0.0	15/000\/AO DE	> 0 00/0771//	000111							
	POWER FACTOR (Typ.)		,	95/230VAC, PF		•							
				CTOR (PF) CH			0)						
INPUT	TOTAL HARMONIC DISTORTION			/ 115VAC,230			C)						
		`		ARMONIC DIS	1		I	T - 101	1	1			
	EFFICIENCY (Typ.)	91.5%	92%	93%	93%	93.5%	93.5%	94%	94%	94%			
	AC CURRENT (Typ.)		1.7A / 115VAC 0.75A / 230VAC 0.7A / 277VAC										
	INRUSH CURRENT (Typ.)	COLD START 65A(twidth=425)us measured at 50% Ipeak) at 230VAC; Per NEMA 410											
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 7 units (circuit breaker of type C) at 230VAC											
	LEAKAGE CURRENT	<0.75mA / 277VAC											
	OVER CURRENT	95 ~ 108%											
	OVER CORRENT	Constant current limiting, recovers automatically after fault condition is removed											
PROTECTION	SHORT CIRCUIT	Constant curr	Constant current limiting, recovers automatically after fault condition is removed										
PROTECTION	OVEDVOLTACE	14 ~ 17V	18 ~ 21V	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 63V	59 ~ 65V			
	OVER VOLTAGE	Shut down o/p voltage with auto-recovery or re-power on to recovery											
	OVER TEMPERATURE Note.9	Shut down o/p	voltage, reco	vers automatic	ally after temp	erature goes do	own						
	WORKING TEMP.	Tcase= -40 ~	+90°C (Pleas	e refer to "OU"	ΓPUT LOAD v	S TEMPERATU	JRE" section)						
	MAX. CASE TEMP.	Tcase= +90°C	2										
	WORKING HUMIDITY	20 ~ 95% RH	non-condensir	ng									
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 1	10 ~ 95% RH										
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 60°C)										
	VIBRATION	·		cle, period for 7	72min. each al	ong X, Y, Z axe	S						
		10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes III 8750(tyne"HI ") CSA C22 2 No. 250 0.08: RS EN/EN 61347-1 RS EN/EN 61347-2-13 AS/NZS 61347-1(except for AB-tyne) AS/											
	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.0-08; BS EN/EN 61347-1, BS EN/EN 61347-2-13, AS/NZS 61347-1(except for AB-type), AS/NZS 61347-2-13(except for AB-type) independent; GB19510.1, GB19510.14(except for D-type); IP65 or IP67; J61347-1, J61347-2-1											
		(except for D-type), BIS Is15885 (for A,B type only), EAC TP TC 004; KC61347-2-13(except for D-type) approved											
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC											
EMC	ISOLATION RESISTANCE			00M Ohms / 50									
	EMC EMISSION	Compliance to	BS EN/EN55	015, BS EN/EN 17743 , GB176	N55032 (CISPF	R32) Class B, B);			
	EMC IMMUNITY	Compliance to	BS EN/EN61	000-4-2,3,4,5,6 KV), EAC TP T	6,8,11, BS EN/	EN61547, BS E	EN/EN55024, li	· '	71 /	unity			
	MTBF			lia SR-332(Be				217F (25°C)					
	DIMENSION			114 011 002 (116	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	O. TIX III O IIIIII.	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-111 (20 0)					
OTHERS	- Dimension	228*68*38.8mm											
OTHERS	PACKING	1.15Kg: 12pcs	s/14.8Kg/0.8Cl	UFT									

- 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. For OTP which triggered at light load/no load condition, proceed AC repower on to recovery.

 10. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 80°C or less.
- 11. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com.
- 12. 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).
- 13. 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
- 14. For A/AB type need to consider build in using to comply with Type HL application.
- 15. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

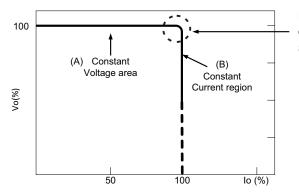
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.

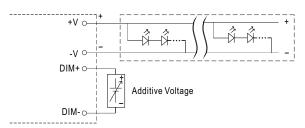


■ DIMMING OPERATION



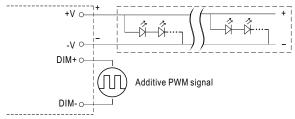
imes 3 in 1 dimming function (for B/AB-Type)

- $\cdot \ \mathsf{Output} \ \mathsf{constant} \ \mathsf{current} \ \mathsf{level} \ \mathsf{can} \ \mathsf{be} \ \mathsf{adjusted} \ \mathsf{by} \ \mathsf{applying} \ \mathsf{one} \ \mathsf{of} \ \mathsf{the} \ \mathsf{three} \ \mathsf{methodologies} \ \mathsf{between} \ \mathsf{DIM+} \ \mathsf{and} \ \mathsf{DIM-} \mathsf{ind} \ \mathsf{one} \ \mathsf{one$
 - 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: $100\mu A$ (typ.)
- O Applying additive 1 ~ 10VDC



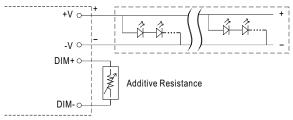
"DO NOT connect "DIM- to -V"

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

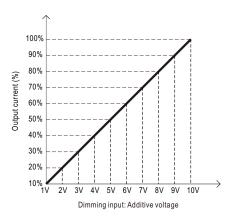


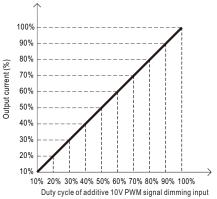
"DO NOT connect "DIM- to -V"

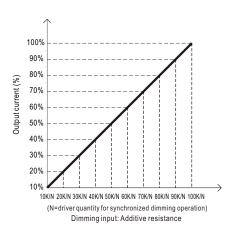
Applying additive resistance:



"DO NOT connect "DIM- to -V"

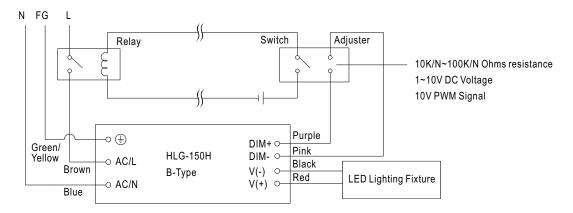






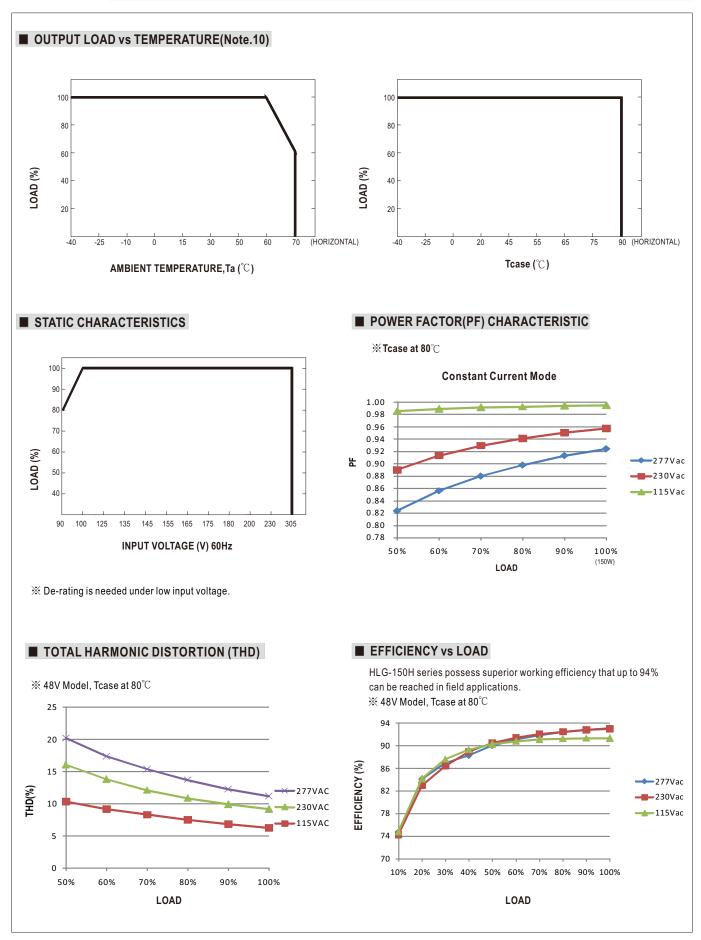


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



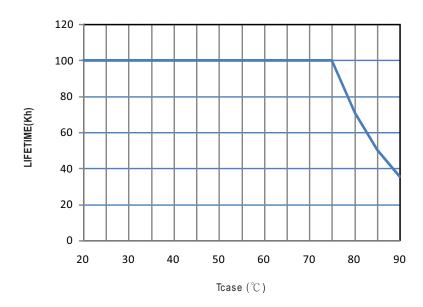
Using a switch and relay can turn ON/OFF the lighting fixture.



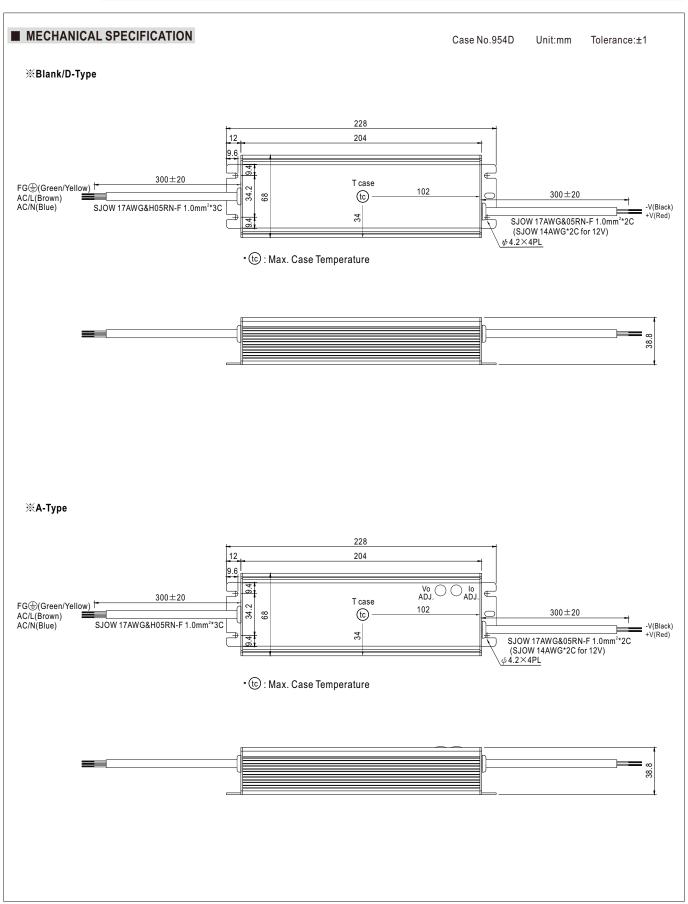




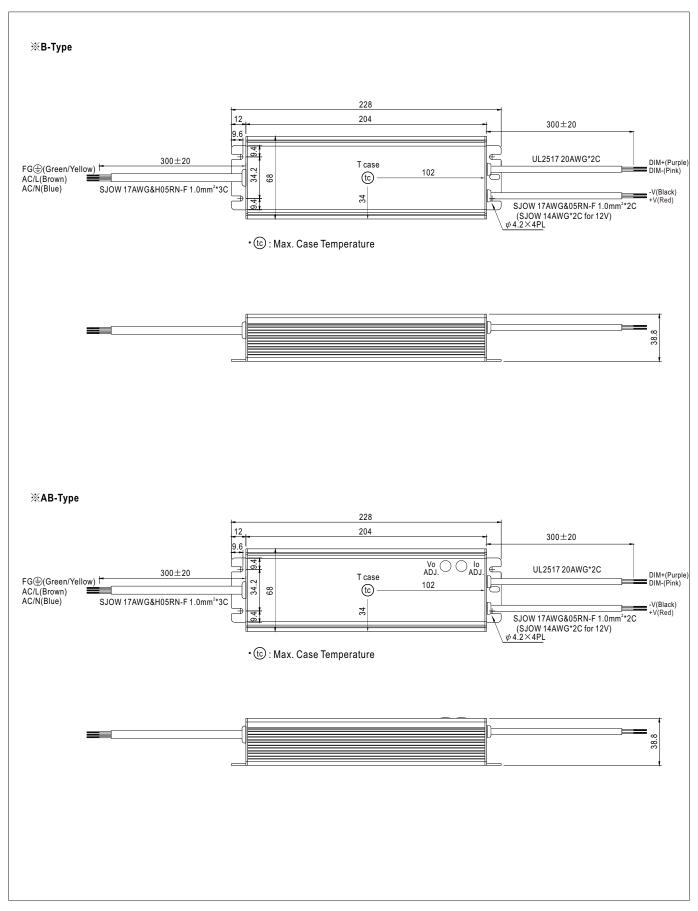
■ LIFE TIME









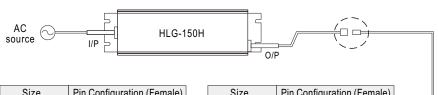




■ WATERPROOF CONNECTION

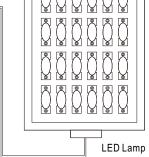
Waterproof connector

 $Waterproof connector can be assembled on the output cable of HLG-150H \ to operate in \ dry/wet/damp \ or outdoor \ environment.$

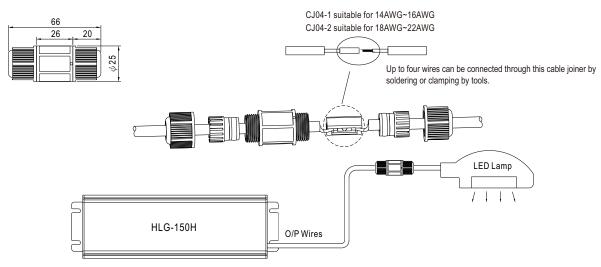


Size	Pin Configuration (Female)					
M12	000	000				
IVIIZ	4-PIN	5-PIN				
	5A/PIN	5A/PIN				
Order No.	M12-04	M12-05				
Suitable Current	10A max.	10A max.				

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.

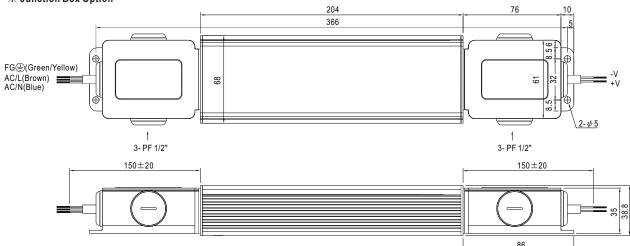


※ Cable Joiner



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

X Junction Box Option



O Junction box option is available for A/Blank - Type. Please contact MEAW WELL for details.

■ INSTALLATION MANUAL

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

























- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- 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.

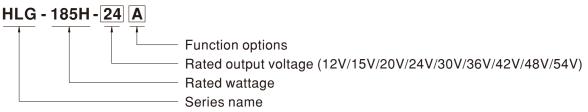
GTIN CODE

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

Description

HLG-185H series is a 185W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-185H 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-185H 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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



SPECIFICATION

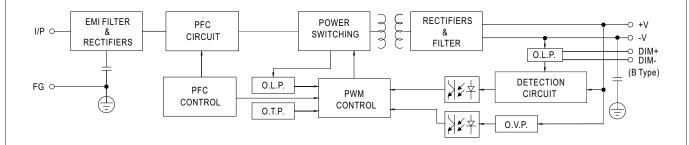
MODEL			HLG-185H-12	HLG-185H-15	HLG-185H-20	HLG-185H-24	HLG-185H-30	HLG-185H-36	HLG-185H-42	HLG-185H-48	HLG-185H-54		
	DC VOLTAGE		12V	15V	20V	24V	30V	36V	42V	48V	54V		
	CONSTANT CURREN	T REGION Note 4		7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V		
	RATED CURREN		13A	11.5A	9.3A	7.8A	6.2A	5.2A	4.4A	3.9A	3.45A		
	RATED POWER		156W	172.5W	186W	187.2W	186W	187.2W	184.8W	187.2W	186.3W		
	RIPPLE & NOISE	(max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p		
		(maxi) Note.2		r A/AB-Type o				200 p		Zoom vp p	20011179 9		
	VOLTAGE ADJ. R	RANGE	10.8 ~ 13.5V		17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V		
OUTPUT			Adjustable for			1				1.0 00.	1.0		
	CURRENT ADJ. I	RANGE	6.5 ~ 13A	5.75 ~ 11.5A		3.9 ~ 7.8A	3.1 ~ 6.2A	2.6 ~ 5.2A	2.2 ~ 4.4A	1.95 ~ 3.9A	1.72 ~ 3.45		
	VOLTAGE TOLER	RANCE Note.3		±2.0%	±1.0%	±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 REGULAT		±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP, RISE TIM		1000ms,200n		500ms,200ms		1 - 5.57			1 - 21270	1		
	HOLD UP TIME (16ms / 115VA		0000,2000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
	(· 7 F · /	90 ~ 305VAC	127 ~ 43	1VDC								
	VOLTAGE RANG	E Note.5		to "STATIC CH		IC" section)							
	FREQUENCY RA	NGE	47 ~ 63Hz			,							
	. ALGOLIOTICA			VAC, PF≧0.9	5/230VAC PF	≥0 92/277\/∆	C @ full load						
	POWER FACTOR	R (Typ.)		to "POWER FA			Ŭ						
			,		, ,		≥75% / 277VA	C)					
INPUT	TOTAL HARMONIC	DISTORTION		to "TOTAL HA				.0)					
	EFFICIENCY (Typ	n)	91.5%	92%	93%	93.5%	93.5%	93.5%	94%	94%	94%		
	AC CURRENT	12V	1.8A / 115VAC			.7A / 277VAC	30.070	00.070	0470	0470	0470		
	(Typ.)	15V ~ 54V	2.1A / 115VAC			.8A / 277VAC							
	INRUSH CURREN		2.1A / 115VAC 0.9A / 230VAC 0.8A / 277VAC COLD START 65A(twidth=445µs measured at 50% Ipeak) at 230VAC; Per NEMA 410										
	MAX. No. of PSU		OCLO OTTAIN OUT ILMONI-THOUGH INCOMEDIA AL OUTO IPERA) AL ZOUVINO, FEI INLIVIN 410										
	CIRCUIT BREAK		4 units (circuit breaker of type B) / 7 units (circuit breaker of type C) at 230VAC										
	LEAKAGE CURR		<0.75mA / 277VAC										
			95 ~ 108%										
	OVER CURRENT		Constant current limiting, recovers automatically after fault condition is removed										
	SHORT CIRCUIT	SHORT CIRCUIT		Constant current limiting, recovers automatically after fault condition is removed Constant current limiting, recovers automatically after fault condition is removed									
PROTECTION			14 ~ 17V	18 ~ 21V	23 ~ 27V	28 ~ 34V	34 ~ 38V	41 ~ 46V	47 ~ 53V	54 ~ 63V	59 ~ 65V		
TROTEOTION	OVER VOLTAGE							111 101		0. 001	111 111		
	OVER TEMPERA	TIIDE Note 0	Shut down o/p voltage with auto-recovery or re-power on to recovery Shut down o/p voltage, recovers automatically after temperature goes down										
	WORKING TEMP		Tcase= -40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)										
	MAX. CASE TEM		Tcase= +90°C (Please refer to "OUTPUT LOAD VS TEMPERATURE" section)										
ENVIRONMENT	WORKING HUMII		20 ~ 95% RH non-condensing										
LINVINONMENT			-40 ~ +80°C, 10 ~ 95% RH										
	TEMP. COEFFICI		±0.03%°C (0~60°C)										
	VIBRATION	LIVI	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes										
	VIBRATION						•		10/1/70 040	47.44			
	SAFETY STANDA	ARDS	UL8750(type"HL"), CSA C22.2 No. 250.0-08;BS EN/EN 61347-1,BS EN/EN 61347-2-13, AS/NZS 61347-1(except for AB-type), AS/NZS 61347-2-13(except for AB-type) independent; GB19510.1, GB19510.14 (except for D-type); IP65 or IP67; J61347-1, J61347-2-13(except for D-type), EAC TP TC 004, KC61347-1, KC61347-2-13(except for D-type) approved										
SAFETY &	WITHSTAND VOL	TAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC										
EMC	ISOLATION RESI		I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH										
EIVIC	EMC EMISSION		1/P-O/P, 1/P-FG, O/P-FG: 100M Offins / 500VDC / 25 C / 70% RH Compliance to BS EN/EN55015, BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class C (@ load ≥ 50%); BS EN/EN61000-3-3, GB/T 17743, GB17625.1(except for D-type), EAC TP TC 020, KSC 9815(except for D-type)										
	1		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, KSC 9547(except for D-type)										
	EMC IMMUNITY												
	EMC IMMUNITY MTBF		2184.8K hrs n				· '	L-HDBK-217F	(25°C)				
OTHERS				nin. Telcord			· '	L-HDBK-217F	(25℃)				

- 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. For OTP which triggered at light load/no load condition, proceed AC repower on to recovery.
- 10. 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.
- 11. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com.
- 12. 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).
- 13. 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
- 14. For A/AB type need to consider build in using to comply with Type HL application.
- 15. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- ※ Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



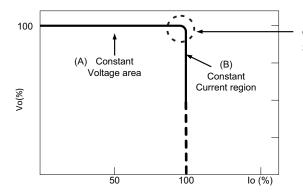
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.

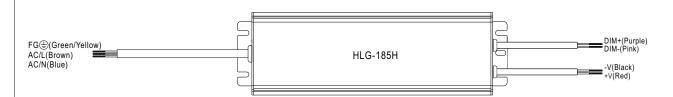


Typical output current normalized by rated current (%)

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

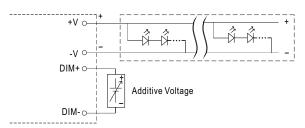
Should there be any compatibility issues, please contact MEAN WELL.

■ DIMMING OPERATION



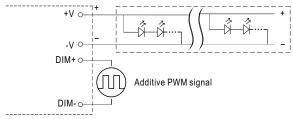
¾ 3 in 1 dimming function (for B/AB-Type)

- · 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: $100\mu A$ (typ.)
- O Applying additive 1 ~ 10VDC



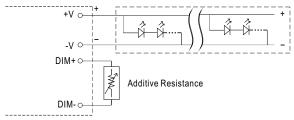
"DO NOT connect "DIM- to -V"

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

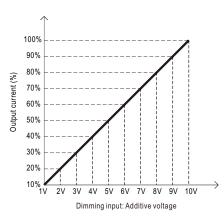


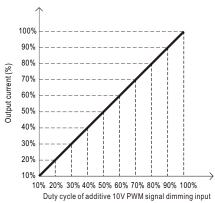
"DO NOT connect "DIM- to -V"

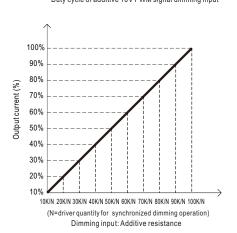
O Applying additive resistance:



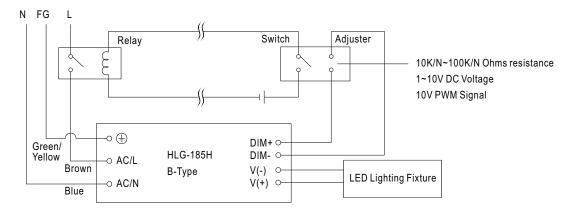
"DO NOT connect "DIM- to -V"





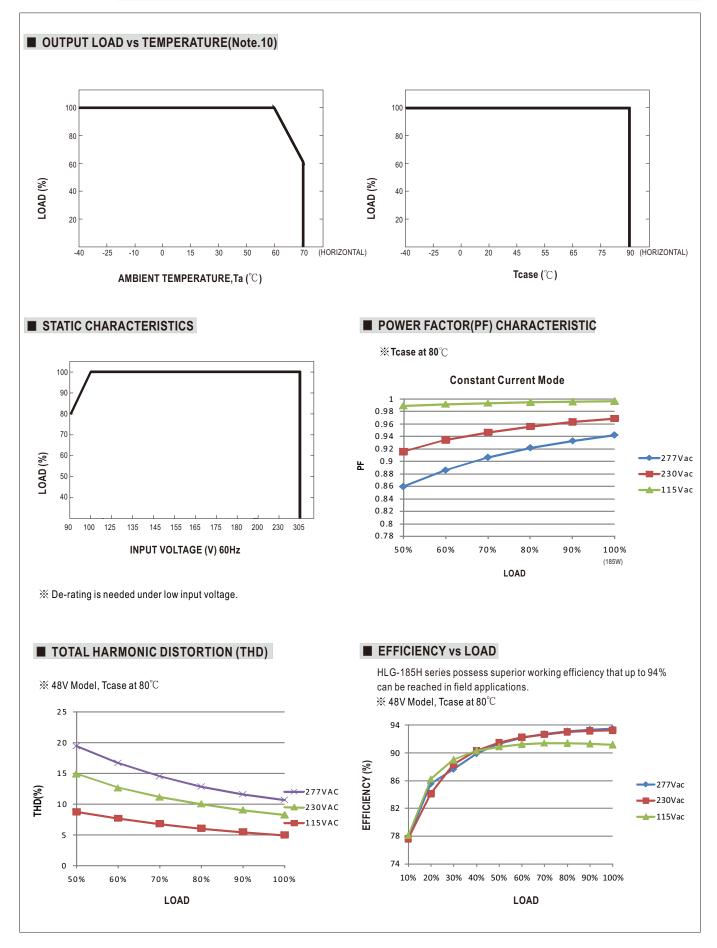


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



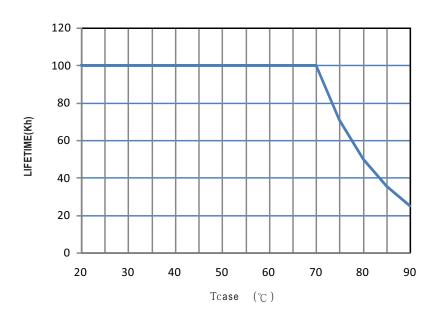
Using a switch and relay can turn ON/OFF the lighting fixture.



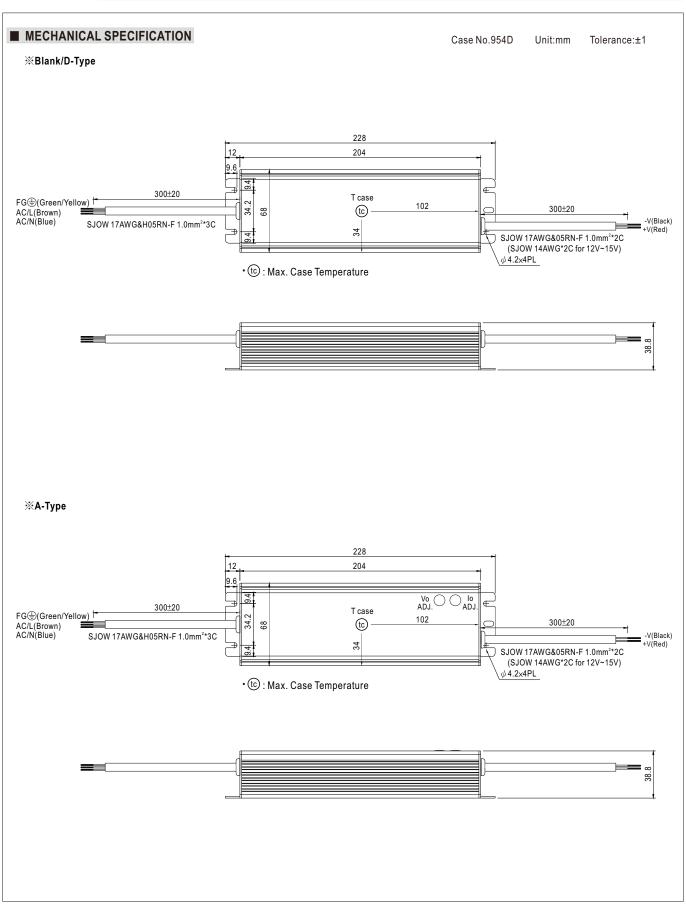




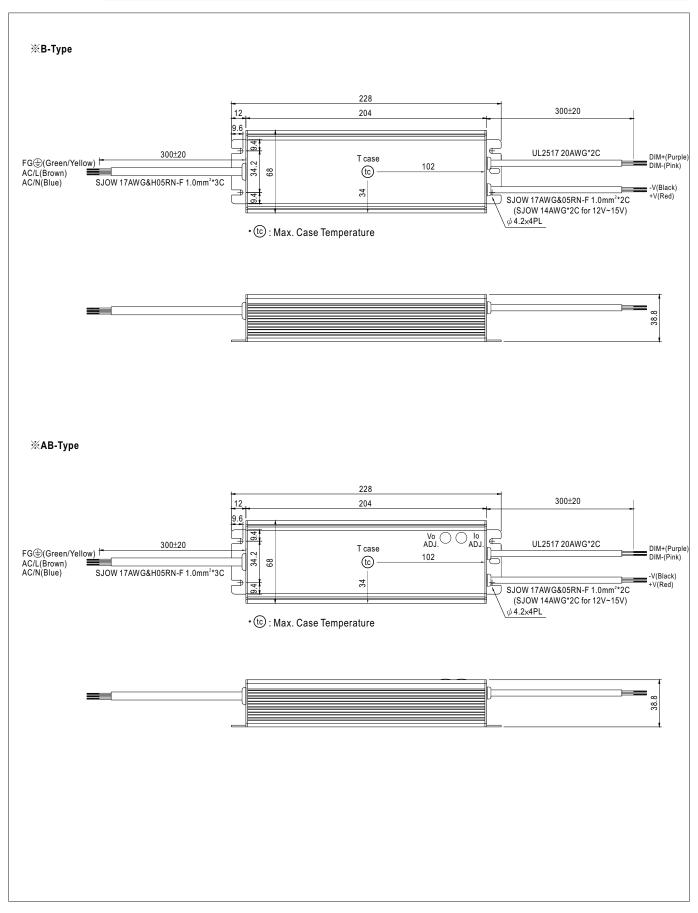
■ LIFE TIME









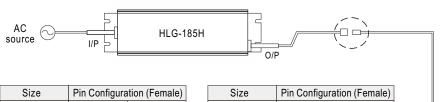




■ WATERPROOF CONNECTION

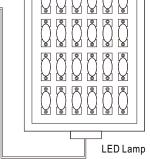
Waterproof connector

 $Waterproof connector \ can be assembled \ on \ the \ output \ cable \ of \ HLG-185H \ to \ operate \ in \ dry/wet/damp \ or \ outdoor \ environment.$

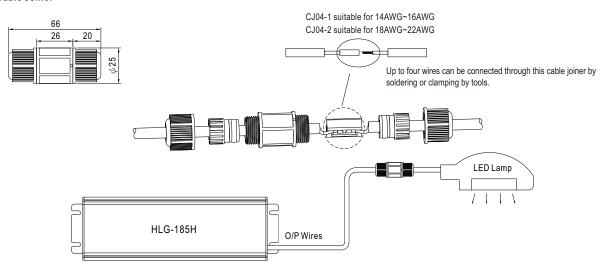


Size	Pin Configuration (Female)				
M12	000	000			
IVITZ	4-PIN	5-PIN			
	5A/PIN	5A/PIN			
Order No.	M12-04	M12-05			
Suitable Current	10A max.	10A max.			

Size	Pin Configuration (Female)		
M15	00		
MITO	2-PIN		
	12A/PIN		
Order No.	M15-02		
Suitable Current	12A max.		

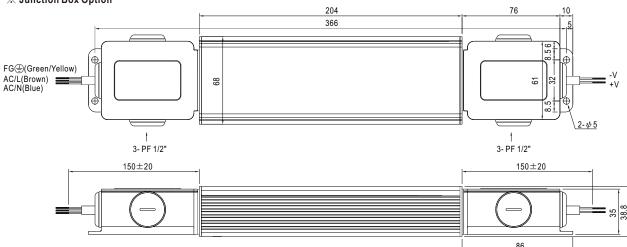


※ Cable Joiner



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

% Junction Box Option



 $\bigcirc \ \, \text{Junction box option is available for } \ \, \text{A/Blank-Type. Please contact MEAW WELL for details.}$

■ INSTALLATION MANUAL

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























Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- 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.

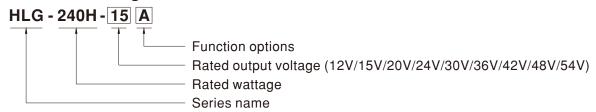
■ GTIN CODE

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

■ Description

HLG-240H series is a 240W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-240H operates from $90 \sim 305 \text{VAC}$ and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 93.5%, with the fanless design, the entire series is able to operate for -40°C \sim +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-240H 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 and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (1~10Vdc, 10V PWM signal and resistance)	In Stock
С	C 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-240H-12	HLG-240H-15	HLG-240H-20	HLG-240H-24	HLG-240H-30	HLG-240H-36	HLG-240H-42	HLG-240H-48	HLG-240H-54
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.4		7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V
	RATED CURRENT	16A	15A	12A	10A	8A	6.7A	5.72A	5A	4.45A
	RATED POWER	192W	225W	240W	240W	240W	241.2W	240.24W	240W	240.3W
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p
	() 10101			only (via built			200p p	200p p	20019 P	осотрр
	VOLTAGE ADJ. RANGE	11.2 ~ 12.8V		, ,	22.4 ~ 25.6V		33.5 ~ 38.5V	39 ~ 45V	44.8 ~ 51.2V	50 ~ 57V
OUTPUT	CURRENT ADJ. RANGE VOLTAGE TOLERANCE Note.3			only (via built			1	144	1.110 01121	00 0.1
		8 ~ 16A	7.5 ~ 15A	6 ~ 12A	5 ~ 10A	4 ~ 8A	3.3 ~ 6.7A	2.86 ~ 5.72A	2.5 ~ 5A	2.23 ~ 4.45
			±2.0%	±1.0%	±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%
		1000ms,80ms/115VAC 500ms,80ms/230VAC								_ 0.070
	HOLD UP TIME (Typ.)									
	VOLTAGE RANGE Note.5	15ms / 115VAC, 230VAC 90 ~ 305VAC 127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)								
	FREQUENCY RANGE	47 ~ 63Hz								
	I REQUEROT RANGE		\/ΔC DE>0.0	95/230VAC @ fu	ull load					
	POWER FACTOR (Typ.)			.CTOR (PF) CH		C" coction)				
		,					<u>C)</u>			
INPUT	TOTAL HARMONIC DISTORTION	THD< 20% (@ load≥50% / 115VAC,230VAC; @ load≥75% / 277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)								
INPUI	EFFICIENCY (Turn)	,			· · ·		00.50/	00 50/	020/	02.50/
	EFFICIENCY (Typ.)	90%	90%	91.5%	92.5%	92.5%	92.5%	92.5%	93%	93.5%
	AC CURRENT (Typ.)	4A / 115VAC	2A / 230V		/ 277VAC	2001/40 D N	ENA 440			
	INRUSH CURRENT (Typ.)	COLD START 75A(twidth=570µs 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/27	7VAC							
	OVER CURRENT	95 ~ 108%								
	OVER CURRENT	Constant current limiting, recovers automatically after fault condition is removed								
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed								
PROTECTION	OVED VOLTAGE	13.5 ~ 18V	17.5 ~ 21.5V	23.5 ~ 27.5V	27 ~ 34V	33 ~ 39V	43 ~ 49V	48 ~ 54V	55 ~ 63V	60 ~ 67V
	OVER VOLTAGE	Shut down an	d latch off o/p	voltage, re-pow	ver on to recov	er				
	OVER TEMPERATURE	Shut down o/	p voltage, rec	overs automat	ically after ten	nperature goe	s down			
	WORKING TEMP.	Tcase= -40 ~	+90°C (Pleas	e refer to "OU"	TPUT LOAD vs	s TEMPERATI	JRE" section)			
	MAX. CASE TEMP.	Tcase= -40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section) Tcase= +90°C								
	WORKING HUMIDITY	20 ~ 95% RH	non-condensir	ng						
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C,								
	TEMP. COEFFICIENT	±0.03%/°C (
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes								
	SAFETY STANDARDS	UI1012, CAN/CSA-C22.2 No. 107.1-01, 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 (except for HLG-240H C type); IEC/UL/BS EN/EN 62368-1(except for AB,D type), UL8750;GB19510.1,GB19510.14(except for C-type);IP65 or IP67;J61347-1,J61347-2-13(except for C,D-type), BIS IS15885(for 48V only), EAC TP TC 004,KC61347-1,KC61347-2-13(except for AB,C,D-type) approved								
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75	KVAC I/P-F	G:2KVAC O	/P-FG:1.5KVA	.C				
EMC	ISOLATION RESISTANCE									
LINO	EMC EMISSION	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH Compliance to BS EN/EN55015, BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class C (@ load≥50%); BS EN/EN61000-3-3,GB/T 17743, GB17625.1,EAC TP TC 020;KC KN15,KN61547(except for AB,C,D-type)								
	EMC IMMUNITY	Compliance to	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;KC KN15,KN61547(except for AB,C,D-type)							
OTHERS	MTBF	2015.1K hrs n	nin. Telcord	ia SR-332 (Bel	lcore); 176.4K	hrs min. M	IL-HDBK-217F	(25°℃)		
	DIMENSION	244.2*68*38.8mm (L*W*H)(HLG-240H-Blank/A/B) 251*68*38.8mm (L*W*H)(HLG-240H C-Type)								
	PACKING		, ,,	UFT(HLG-240-			cs/15.8Kg/1.16	- , ,		
				•	,		of ambient temp		•. ,	

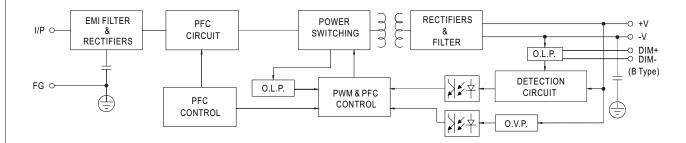
NOTE

- 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 (tc) 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. For A/AB type need to consider build in using to comply with Type HL application.
- 14. Products sourced from the Americas regions may only have the UL, CE and UKCA logos. Please contact your MEAN WELL sales for more information.
- X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

HLG-240H series

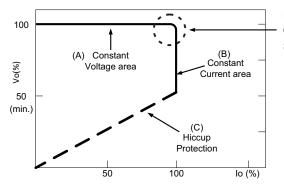
■ BLOCK DIAGRAM

Fosc: 100KHz



■ 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.



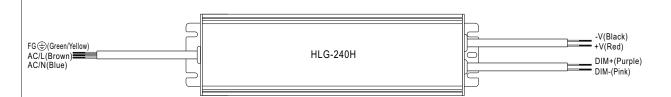
Typical output current normalized by rated current (%)

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.

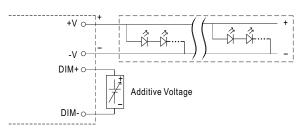


■ DIMMING OPERATION



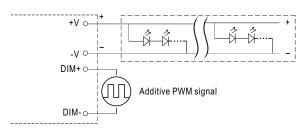
imes 3 in 1 dimming function (for B/AB-Type)

- $\cdot \ \, \text{Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:}$
 - 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: $100\mu A$ (typ.)
- O Applying additive 1 ~ 10VDC



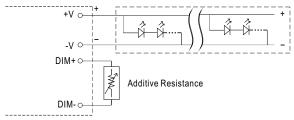
"DO NOT connect "DIM- to -V"

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

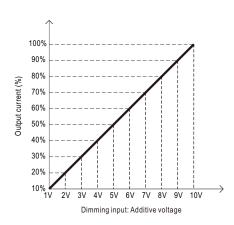


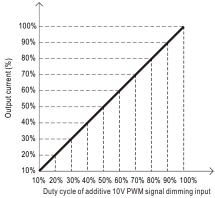
"DO NOT connect "DIM- to -V"

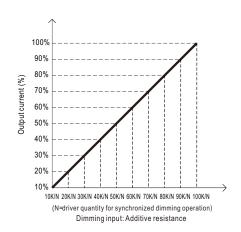
O Applying additive resistance:



"DO NOT connect "DIM- to -V"



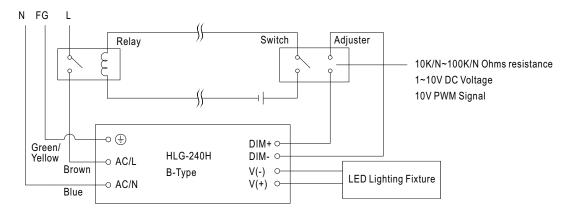






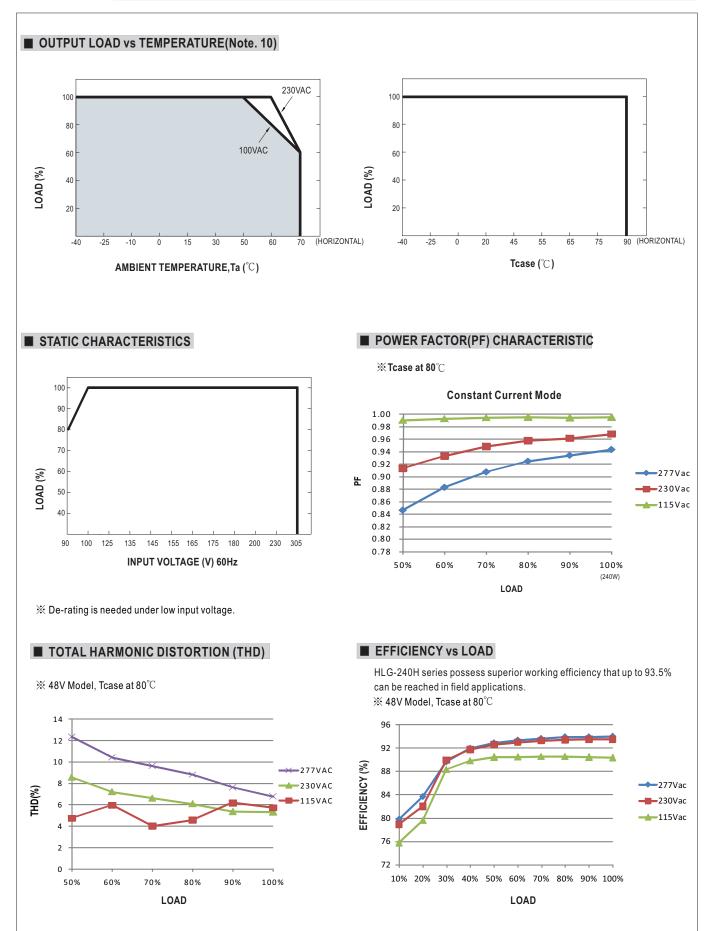


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



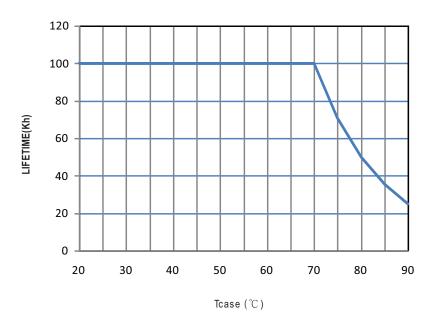
Using a switch and relay can turn ON/OFF the lighting fixture.



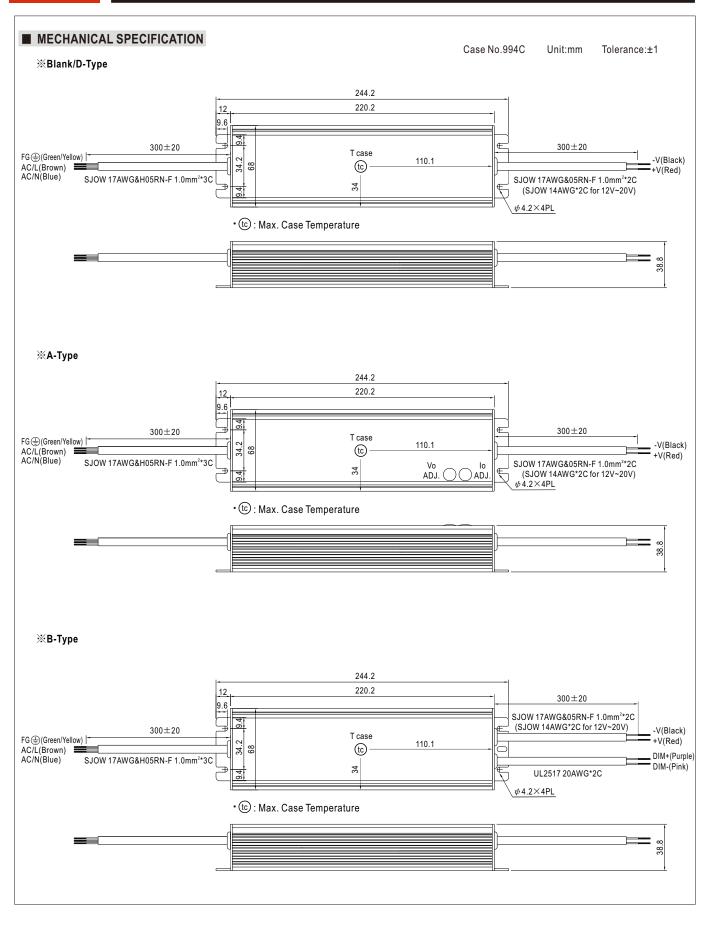


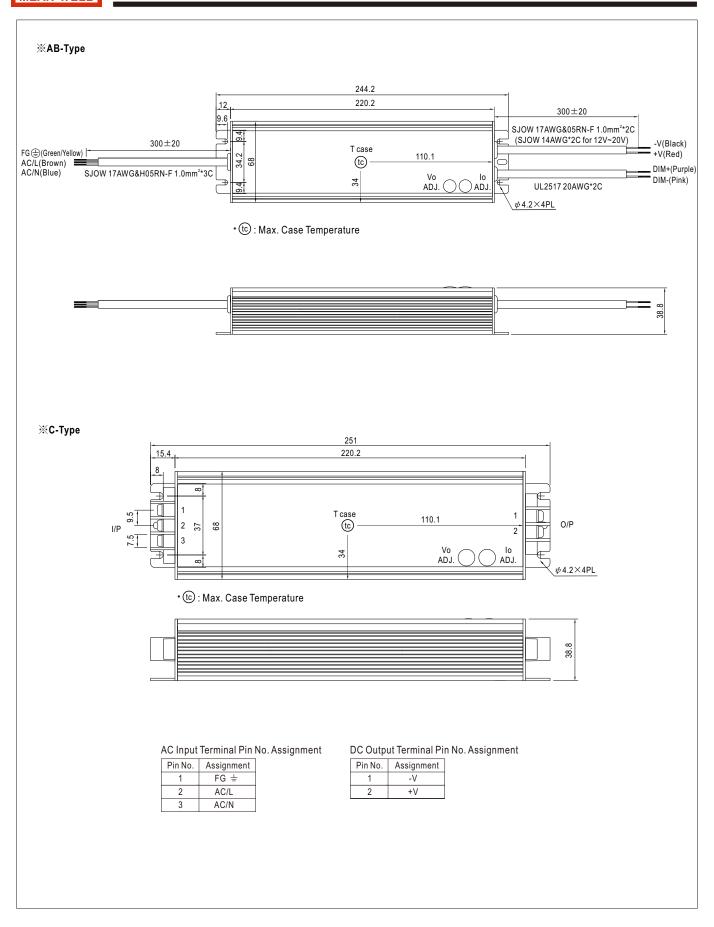


■ LIFE TIME







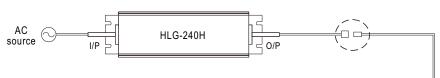




■ WATERPROOF CONNECTION

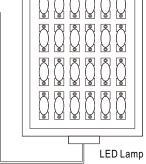
Waterproof connector

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

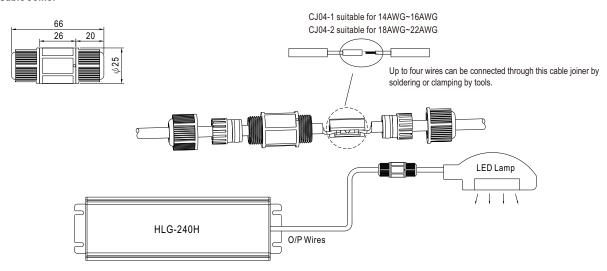


Size	Pin Configuration (Female)				
M12	000	000			
IVIIZ	4-PIN	5-PIN			
	5A/PIN	5A/PIN			
Order No.	M12-04	M12-05			
Suitable Current	10A max.	10A max.			

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.

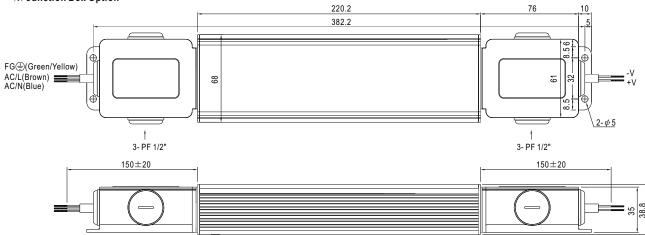


X Cable Joiner



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

X Junction Box Option



 $\bigcirc \ \, {\sf Junction\,box\,option\,is\,available\,for\,\,A/\,Blank\,-\,Type.\,Please\,contact\,MEAW\,WELL\,for\,details.}$

■ INSTALLATION MANUAL

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



































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.

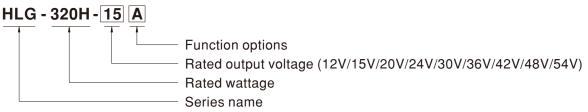
■ GTIN CODE

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° C $\sim +90^{\circ}$ 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

		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
	CONSTANT CURRENT REGION Note.4	6~12V	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
	(potentiometer)		200p p		20016 6	осс грр
	VOLTAGE ADJ. RANGE	10.8 ~ 13.5V		17 ~ 22V	21 ~ 26V	26 ~ 32V	32 ~ 39V	38 ~ 45V	43 ~ 52V	49 ~ 58V
DUTPUT					i-in potentiome		02 001	100 101	10 021	10 001
	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 ~ 5.95
	VOLTAGE TOLERANCE Note.3		±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		00ms,80ms/2				± 0.5 /0	1 - 0.5 /6	1 - 0.576
	HOLD UP TIME (Typ.)	15ms / 115VA		1001115,001115/2	30740					
	HOLD OF TIME (Typ.)	90 ~ 305VAC	•	IVDC						
	VOLTAGE RANGE Note.5		127 ~ 431	ARACTERISTI	(C" coction)					
	EDEQUENCY DANCE	,	O STATIC CH	ANACIENISTI	ic section)					
	FREQUENCY RANGE	47 ~ 63Hz	V/A O. DE > 0.0	5/000\/AO DE	> 0 0 4 10 7 7 1 4 0	201111				
	POWER FACTOR (Typ.)				≥0.94/277VA0	•				
		,		. ,	ARACTERISTI	,				
	TOTAL HARMONIC DISTORTION					≧75% / 277VA	C)			
INPUT		`			TORTION (TH					
	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.)	3.5A / 115VAC			1.45A / 277VAC					
	INRUSH CURRENT(Typ.)	COLD START	70A(twidth=101	0μs measured	at 50% Ipeak) at	230VAC; Per N	IEMA 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/27	7VAC							
	OVED CURRENT Note 4	95 ~ 108%								
	OVER CURRENT Note.4	Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed								
						22 271/	40 ~ 46V	46.5 ~ 53V	53.5 ~ 60V	59 ~ 65V
PROTECTION		14 ~ 17V	17.5 ~ 21V	22.5 ~ 27V	27 ~ 33V	33 ~ 37V				'
PROTECTION	OVER VOLTAGE	14 ~ 17V			27 ~ 33V ver on to recove		10 101			
PROTECTION	OVER VOLTAGE	14 ~ 17V Shut down an	d latch off o/p	voltage, re-pow	1	er	10 101			
PROTECTION	OVER VOLTAGE OVER TEMPERATURE	14 ~ 17V Shut down an Shut down an	d latch off o/p v	voltage, re-pow voltage, re-pow	ver on to recove	er				
PROTECTION	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP.	14 ~ 17V Shut down an Shut down an	d latch off o/p od latch off o/p od latch off o/p od +90°C (Pleas	voltage, re-pow voltage, re-pow	ver on to recove	er er				
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP.	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C	d latch off o/p v d latch off o/p v +90°C (Pleas	voltage, re-pow voltage, re-pow e refer to "OU"	ver on to recove	er er				
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90 °C 20 ~ 95% RH	d latch off o/p v d latch off o/p v +90°C (Pleas C non-condensir	voltage, re-pow voltage, re-pow e refer to "OU"	ver on to recove	er er				
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY	$14 \sim 17V$ Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C,	d latch off o/p v d latch off o/p v +90°C (Pleas c non-condensir 10 ~ 95% RH	voltage, re-pow voltage, re-pow e refer to "OU"	ver on to recove	er er				
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ $+80$ °C, ± 0.03 %°C (d latch off o/p v d latch off o/p v +90°C (Pleas C non-condensir 10 ~ 95% RH 0 ~ 50°C)	voltage, re-pow voltage, re-pow e refer to "OU"	ver on to recove ver on to recove TPUT LOAD vs	er er s TEMPERATU	RE" section)			
PROTECTION	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%/°C (10 ~ 500Hz, 5	d latch off o/p v d latch off o/p v +90°C (Pleas C non-condensin 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc	voltage, re-pow voltage, re-pow e refer to "OU"	ver on to recove ver on to recove TPUT LOAD vs	er er s TEMPERATU	RE" section)	NOINTO 64247	2 42 independ	lont
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%/°C (10 ~ 500Hz, 5 UL8750(type"	d latch off o/p v d latch off o/p v +90°C (Pleas c non-condensin 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22	voltage, re-pow voltage, re-pow e refer to "OU" ng	ver on to recove ver on to recove TPUT LOAD vs 72min. each alc 8; BS EN/EN/A	ong X, Y, Z axes	RE" section)			lent;
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%/°C (10 ~ 500Hz, 5 UL8750(type" GB19510.1,G	d latch off o/p v d latch off o/p v +90°C (Pleas C non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP	voltage, re-pow voltage, re-pow e refer to "OU" ng ele, period for 7 2.2 No. 250.0-0 65 or IP67 (exc	ver on to recove ver on to recove TPUT LOAD vs 72min. each alc 8; BS EN/EN/A	ong X, Y, Z axes S/NZS 61347- 20H C-type); J6	RE" section) 8 1, BS EN/EN/A 11347-1, J6134	17-2-13 (excep	t for C-type),	•
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%/°C (10 ~ 500Hz, 5 UL8750(type" GB19510.1,G EAC TP TC 00	d latch off o/p v d latch off o/p v +90°C (Pleas c) non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 04;KC61347-1	voltage, re-pow voltage, re-pow e refer to "OU" ng ele, period for 7 2.2 No. 250.0-0 65 or IP67 (exc, KC61347-2-13	ver on to recove ver on to recove TPUT LOAD vs 72min. each alc 18; BS EN/EN/A cept for HLG-3; 8(except for AB	ong X, Y, Z axes S/S/NZS 61347- 20H C-type); J6 ,C-type), BIS IS	RE" section) 8 1, BS EN/EN/A 11347-1, J6134	17-2-13 (excep	t for C-type),	,
NVIRONMENT	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%°C (10 ~ 500Hz, 5 UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75	d latch off o/p v d latch off o/p v +90°C (Pleas c) non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-F6	voltage, re-pow voltage, re-pow e refer to "OU" ng ele, period for 7 2.2 No. 250.0-0 6 So or 1P67 (exc KC61347-2-13 G:2KVAC O	ver on to recove ver on to recove TPUT LOAD vs 72min. each alc 18; BS EN/EN/A cept for HLG-32 8(except for AB	ong X, Y, Z axes S/NZS 61347- 20H C-type); J6 ,C-type), BIS IS	RE" section) 8 1, BS EN/EN/A 11347-1, J6134	17-2-13 (excep	t for C-type),	,
ENVIRONMENT	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%'°C (10 ~ 500Hz, 5 UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75I I/P-O/P, I/P-F	d latch off o/p v +90°C (Pleas C non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-F(G, O/P-FG:10	voltage, re-pow voltage, re-pow e refer to "OU" ng le, period for 7 2.2 No. 250.0-0 65 or IP67 (ext KC61347-2-13 3:2KVAC O/	rer on to recove yer on to recove TPUT LOAD vs 72min. each alc 8; BS EN/EN/A cept for HLG-32 8(except for AB /P-FG:1.5KVA	ong X, Y, Z axes S/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C	RE" section) S 1, BS EN/EN/A 51347-1, J6134 S 15885(Part2)	17-2-13 (excep /Sec13) (NOTE	t for C-type), E 13) approved	,
	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE	14 ~ 17V Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%'°C (10 ~ 500Hz, 5 UL8750(type" GB19510.1,G EAC TP TC 00 I/P-O/P:3.75I I/P-O/P, I/P-F Compliance to	d latch off o/p v +90°C (Pleas C) non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-FG, O/P-FG:10 D BS EN/EN55	voltage, re-pow voltage, re-pow e refer to "OU" ng ele, period for 7 2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 G:2KVAC 0/	rer on to recove yer on to recove TPUT LOAD vs 72min. each alc 8; BS EN/EN/A cept for HLG-32 8(except for AB /P-FG:1.5KVA	ong X, Y, Z axes S/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C 70% RH	RE" section) S 1, BS EN/EN/A 51347-1, J6134 S 15885(Part2)	17-2-13 (excep /Sec13) (NOTE	t for C-type), E 13) approved	,
ENVIRONMENT	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%/°C (10 ~ 500Hz, 5 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	d latch off o/p v d latch off o/p v +90°C (Pleas c non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 14;KC61347-1 KVAC I/P-F(G, O/P-FG:10 D BS EN/EN55 00-3-3,GB/T 1 D BS EN/EN61	voltage, re-pow voltage, re-pow e refer to "OU" ng cle, period for 7 2.2 No. 250.0-0 65 or IP67 (exc KC61347-2-13 3:2KVAC O/ 00M Ohms / 50 0015, BS EN/EN 7743 , GB1762	rer on to recove ver on to recove rer on to recove reput LOAD vs reput LOAD vs reput for HLG-32 recept for AB reput for HLG-32 recept for AB recept for AB r	ong X, Y, Z axes S/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C 70% RH	RE" section) S 1, BS EN/EN/A 1347-1, J6134 S 15885(Part2)	17-2-13 (excep /Sec13) (NOTE	t for C-type), E 13) approved (@ load≧50%);
NVIRONMENT	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%/°C (10 ~ 500Hz, 5 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	d latch off o/p v d latch off o/p v +90°C (Pleas c non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-F0 CG, O/P-FG:10 DBS EN/EN55 100-3-3, GB/T 1 DBS EN/EN61 V, Line-Line 2	voltage, re-pow voltage, re-pow e refer to "OU" 19 19 2.2 No. 250.0-0 65 or IP67 (exc, KC61347-2-13 G:2KVAC O/ 100M Ohms / 50 0015, BS EN/EN 7743 , GB176; 000-4-2,3,4,5,6 (V), EAC TP To	rer on to recove ver on to recove rer on to recove reput LOAD vs reput LOAD vs reput for HLG-32 recept for AB reput for HLG-32 recept for AB recept for AB r	ong X, Y, Z axes as/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C 70% RH 32) Class B, B C 020 EN61547, BS E	RE" section) S 1, BS EN/EN/A 1347-1, J6134 S 15885(Part2)	47-2-13 (excep /Sec13) (NOTE 0-3-2 Class C ght industry lev	t for C-type), E 13) approved (@ load≧50%);
ENVIRONMENT	OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION SAFETY STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY	14 ~ 17V Shut down an Shut down an Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +80°C, ± 0.03%°C (10 ~ 500Hz, 5 UL8750(type* GB19510.1,G EAC TP TC 00 I/P-O/P, I/P-F Compliance to BS EN/EN610 Compliance to Line-Earth 4K	d latch off o/p v d latch off o/p v +90°C (Pleas c non-condensir 10 ~ 95% RH 0 ~ 50°C) G 12min./1cyc HL"), CSA C22 B19510.14; IP 04;KC61347-1 KVAC I/P-F0 05, O/P-FG:10 0 BS EN/EN55 00-3-3,GB/T 1 0 BS EN/EN61 V, Line-Line 28 nin. Telcord	voltage, re-pow voltage, re-pow e refer to "OU" 19 19 2.2 No. 250.0-0 65 or IP67 (exc, KC61347-2-13 G:2KVAC O/ 100M Ohms / 50 0015, BS EN/EN 7743 , GB176; 000-4-2,3,4,5,6 (V), EAC TP To	rer on to recover on to recover on to recover or to recove	ong X, Y, Z axes as/NZS 61347- 20H C-type); J6 ,C-type), BIS IS C 70% RH 32) Class B, B C 020 EN61547, BS E	S EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/E	47-2-13 (excep /Sec13) (NOTE 0-3-2 Class C ght industry lev	t for C-type), E 13) approved (@ load≧50%);

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.

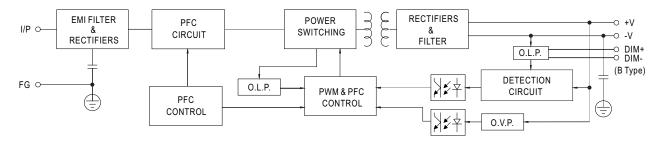
 11. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

 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 more information.
- 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



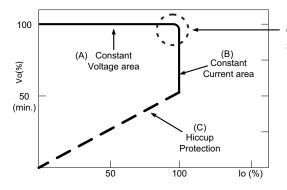
■ BLOCK DIAGRAM

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.



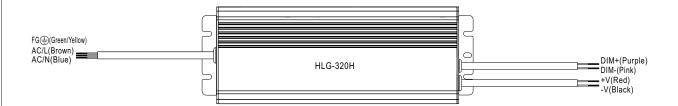
Typical output current normalized by rated current (%)

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.

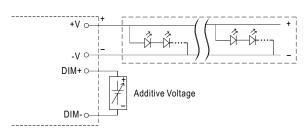


■ DIMMING OPERATION



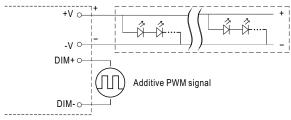
※ 3 in 1 dimming function (for B/AB-Type)

- 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



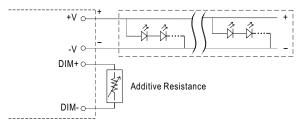
"DO NOT connect "DIM- to -V"

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

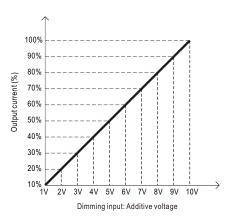


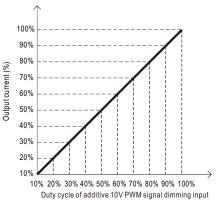
"DO NOT connect "DIM- to -V"

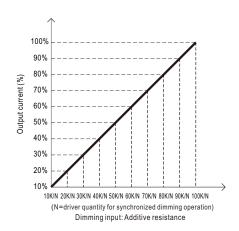
Applying additive resistance:



"DO NOT connect "DIM- to -V"

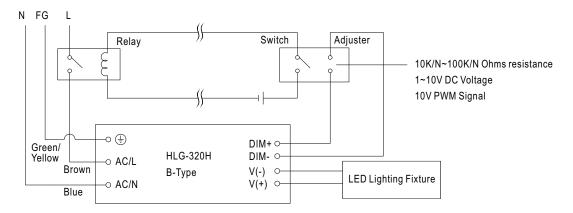






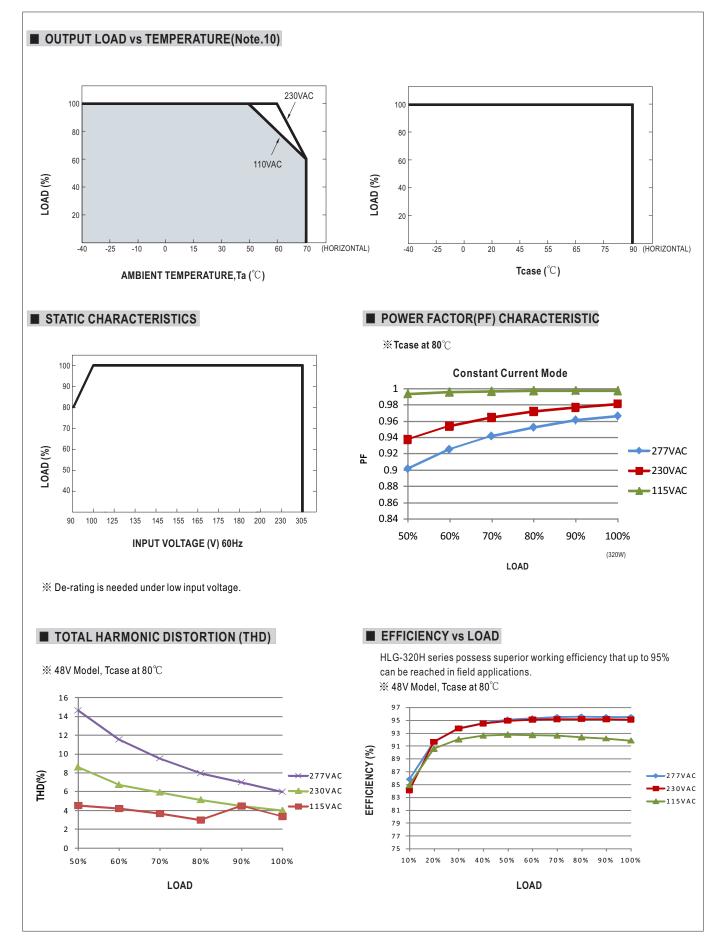


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact MEAN WELL for other options.



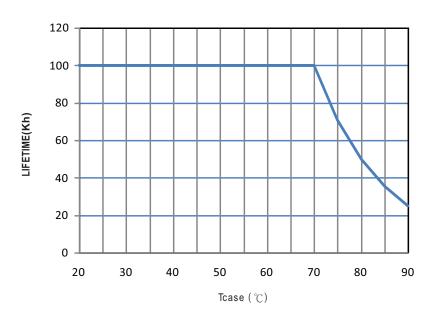
Using a switch and relay can turn ON/OFF the lighting fixture.



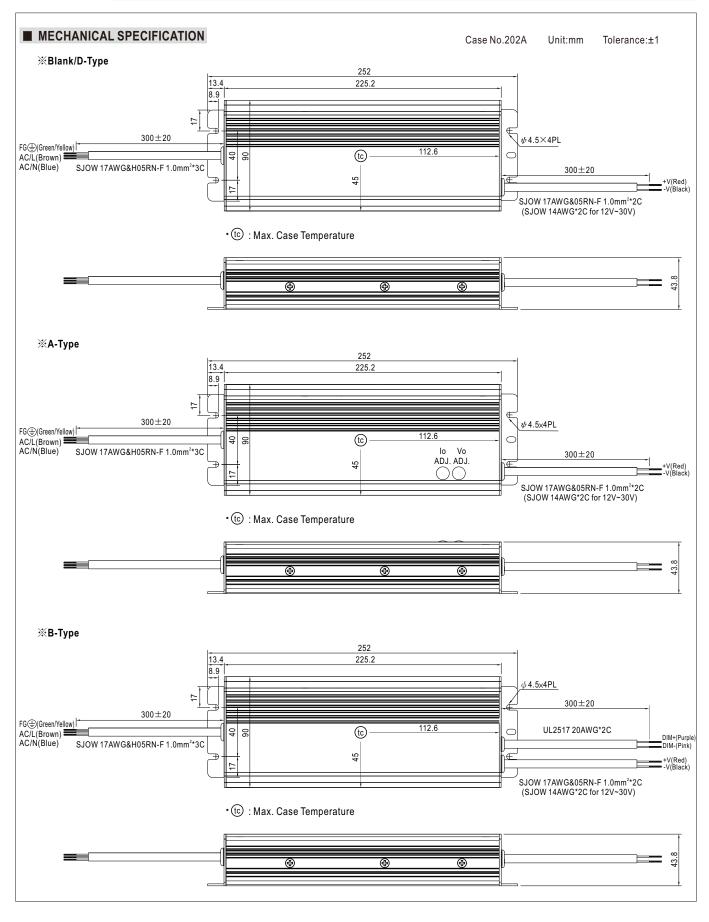




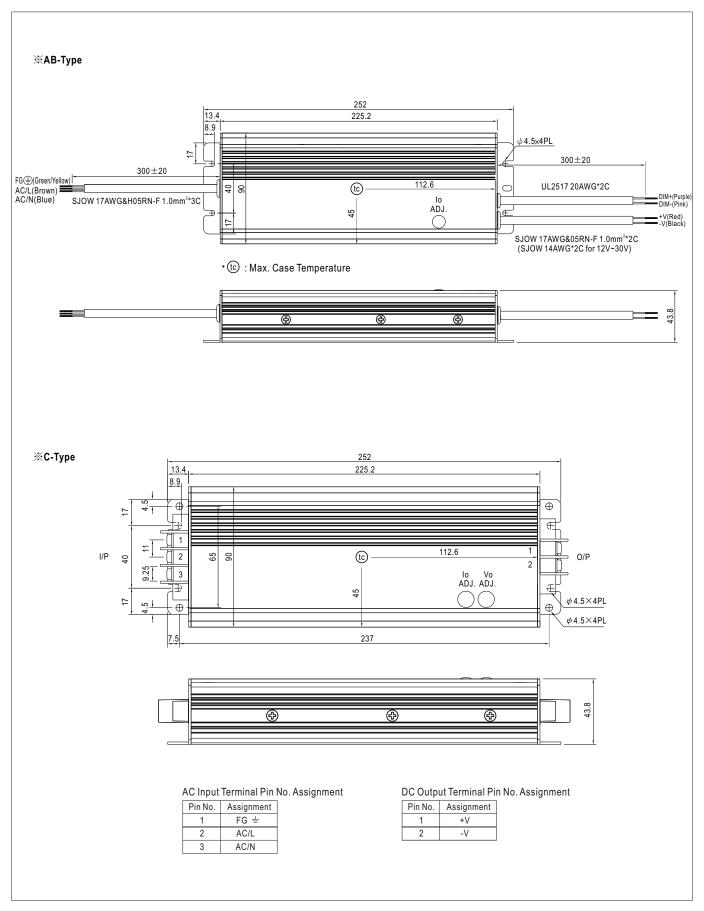
■ LIFETIME









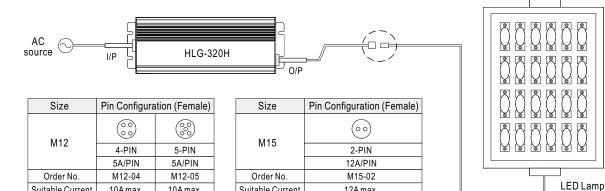




■ WATERPROOF CONNECTION

$\frak{\%}$ Waterproof connector

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



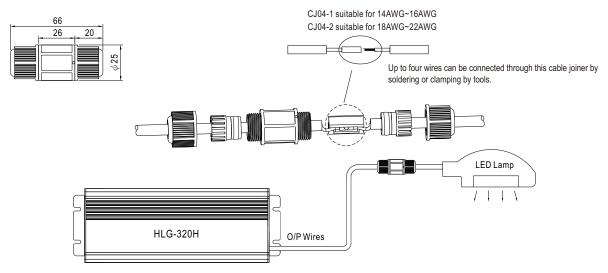
Suitable Current

X Cable Joiner

Suitable Current

10A max.

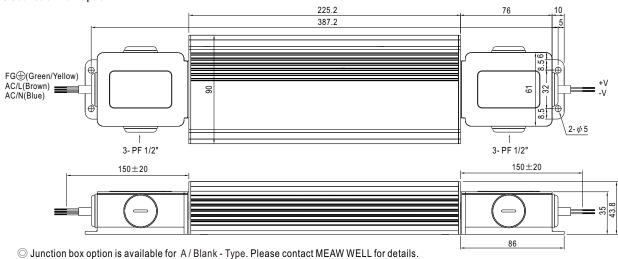
10A max.



12A max

O 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

















Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- Built-in active PFC function
- IP67 / IP65 design for indoor or outdoor installations
- · Function options: output adjustable via potentiometer; 3 in 1 dimming (dim-to-off, isolated design); smart timer dimming; junction box
- Typical lifetime > 62000 hours
- 7 years warranty (Note.9)

Applications

- · LED Harbour
- LED greenhouse lighting
- · LED statium lighting
- LED mining lighting
- Type "HL" for use in Class I , Division 2 hazardous(Classified) location

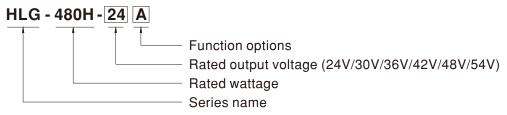
■ GTIN CODE

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

Description

HLG-480H series is a 480W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-480H operates from 90 ~ 305VAC and offers models with different rated voltage ranging between 24V and 54V. Thanks to the high efficiency up to 95.5%, 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-480H 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 (0~10VDC, 10V PWM signal and resistance)	In Stock
AB	IP65	Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
Dx	IP67	Built-in Smart timer dimming function by user request.	By request
D2	IP67	Built-in Smart timer dimming and programmable function.	In Stock



SPECIFICATION

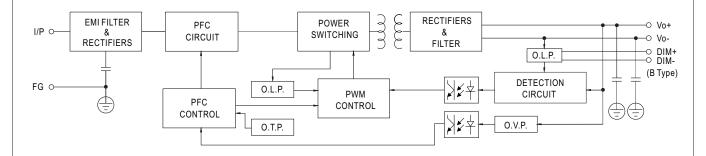
WODEL			HLG-480H-24	HLG-480H-30	HLG-480H-36	HLG-480H-42	HLG-480H-48	HLG-480H-54		
	DC VOLTAGE		24V	30V	36V	42V	48V	54V		
	CONSTANT CURRENT	REGION Note.4	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V		
	RATED CURRENT		20A	16A	13.3A	11.4A	10A	8.9A		
	RATED POWER		480W	480W	478.8W	478.8W	480W	480.6W		
	RIPPLE & NOISE (I	max.) Note.2	200mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p		
			Adjustable for A/AB	-Type only (via built-i	n potentiometer)					
	VOLTAGE ADJ. RA	ANGE	20.4 ~ 25.2V	25.5 ~ 31.5V	30.6 ~ 37.8V	35.7 ~ 44.1V	40.8 ~ 50.4V	45.9 ~ 56.7V		
UTPUT			Adjustable for A/AB	-Type only (via built-i	n potentiometer)	1	'	1		
	CURRENT ADJ. RA	ANGE	10 ~ 20A		6.6 ~ 13.3A	5.7 ~ 11.4A	5 ~ 10A	4.4 ~ 8.9A		
	VOLTAGE TOLERA	NCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	LINE REGULATION	N	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	LOAD REGULATIO	DN .	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	SETUP. RISE TIME	IME Note.6 500ms, 80ms 115VAC/230VAC (Typ.) 16ms 115VAC/230VAC 90 ~ 305VAC 127 ~ 431VDC								
F			-							
		,,,								
	VOLTAGE RANGE	Note.5			C" section) ≥0.95/277VAC @ full load ARACTERISTIC" section) /AC,277VAC)					
ŀ	FREQUENCY RAN	(Please refer to "STATIC CHARACTERISTIC" section) EQUENCY RANGE 47 ~ 63Hz WER FACTOR (Typ.) PF≥0.98/115VAC, PF≥0.97/230VAC, PF≥0.95/277VAC @ full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)								
POW		J=		PF≥0 97/230\/∆C PF	=≥0 95/277\/ΔC.@ fo	ull load				
	POWER FACTOR ((Typ.)			· ·					
				()		ction)				
	TOTAL HARMONIC D	DISTORTION	, ,		,	action)	94.5% 95% 95% 95%			
NDIIT	FFFICIENCY	230\/∆C	,		1 ,		04 5%	95%		
NFOI	: : :									
						95.5%	95%	95%		
	, , , ,									
- F		,								
	MAX. NO. of PSUs	on 16A		of type B) / 3units(circ	cuit breaker of type C) at 230VAC				
			95 ~ 108%							
	OVER CURRENT									
	SHORT CIRCUIT		·							
ROTECTION			27 ~ 33V	33 ~ 40V	40 ~ 50V	46 ~ 55V	53 ~ 63V	60 ~ 70V		
DC VOLTAGE 24V 30V 36V 42V 48V 24										
	OVER TEMPERAT	URF	· · · · · · · · · · · · · · · · · · ·	• • •		42V				
		OILL	-	- :	•	IPERATURE" section)			
)		(1 10000 10101 10 00	OT LOAD VOTEIV	LIVITORE 3600011	<i>)</i>			
H				ondensing						
:NI\/ID∩NIMENT ⊢					ıa					
DC VOLTAGE REGION/MAIL 24V 30V 36V 42V 42V 42V 42V 52V 52V 53V 15 - 30V 15 - 30V										
		RDS	UL8750(type"HL"), (GB19510.14,GB195	CSA C22.2 No. 250.13 510.1;IP65 or IP67, EA	B-12; ENEC BS EN/E AC TP TC 004,AS/NZ	N61347-1, BS EN/EN6 S IEC 61347.2.13:2013	3,AS/NZS 61347.1:20	16;KC61347-1,		
			,			347-2-13(H29)(except	for Dx type)approved			
_	ISOLATION RESIS	TANCE	· · · ·							
	EMC EMISSION		GB17625.1, EAC T	30V 36V 42V 48V 54V 15 - 30V 18 - 36V 21 - 42V 24 - 48V 27 - 54V 16A 13.3A 11.4A 10A 8.9A 480W 478.8W 478.8W 480.6W 480.6W 200mVp-p 250mVp-p 250mVp-p 250mVp-p 350mVp-p 25.5 - 31.5V 30.6 - 37.8V 35.7 - 44.1V 40.8 - 50.4V 45.9 - 56.7V VAB-Type only (via built-in potentiometer) 25.5 - 31.5V 30.6 - 37.8V 35.7 - 44.1V 40.8 - 50.4V 45.9 - 56.7V VAB-Type only (via built-in potentiometer) 8 - 16A 6.6 - 13.3A 5.7 - 11.4A 5 - 10A 4.4 - 8.9A ± 1.0% ± 1.0% ± 1.0% ± 1.0% ± 1.0% ± 1.0% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5% ± 0.5%						
	EMC IMMUNITY						, ,			
			1105 01(1	Tolografia SD 222/Poll	Icore) · 95 1K hrs mir	MII_HDBK_217E	(25°C)			
	MTBF		1185.9K hrs min.	Telcolula SN-332(Bell	10016), 33.410111311111	1. WIL-HODIK-2171 ((200)			
_	MTBF DIMENSION		262*125*43.8mm (L	,	10016), 33.41(111311111	i. Wile-HDDIX-2171	(20 0)			

- 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 to 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. 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 File Name:HLG-480H-SPEC 2024-10-11



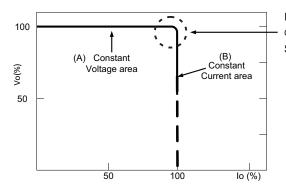
■ BLOCK DIAGRAM

PFC fosc : 45KHz PWM fosc : 55KHz



■ 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.

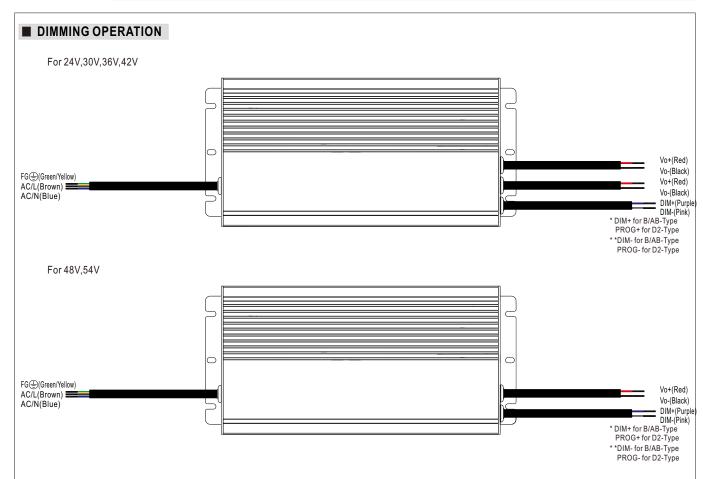


Typical output current normalized by rated current (%)

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.

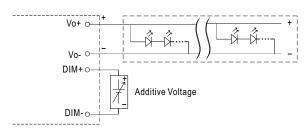




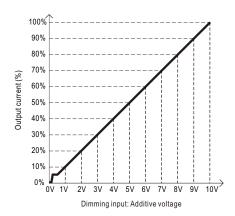
imes 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:
 0 ~ 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: $100\mu A$ (typ.)

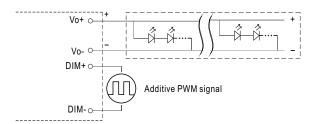
O Applying additive 0 ~ 10VDC



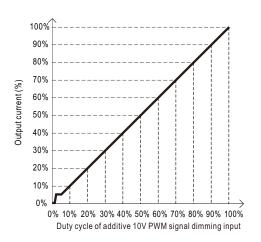
"DO NOT connect "DIM- to Vo-"



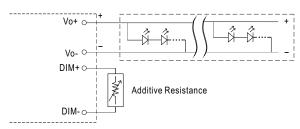




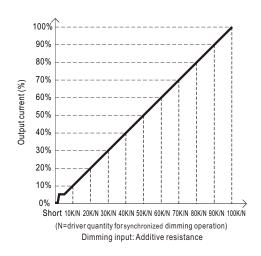
"DO NOT connect "DIM- to Vo+"



O Applying additive resistance:



"DO NOT connect "DIM- to Vo-"



Note: 1. Min. dimming level is about 6% and the output current is not defined when 0% < Iout < 6%.

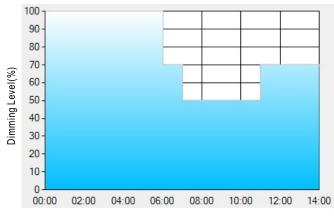
2. The output current could drop down to 0% when dimming input is about 0k Ω or 0Vdc, or 10V PWM signal with 0% duty cycle.



X Smart timer dimming function (for Dxx-Type by User definition)

MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level to perform up to 14 consecutive hours. 3 dimming profiles hereunder are defined accounting for the most frequently seen applications. If other options may be needed, please contact MEAN WELL for details.

Ex: OD01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart timer dimming software program:

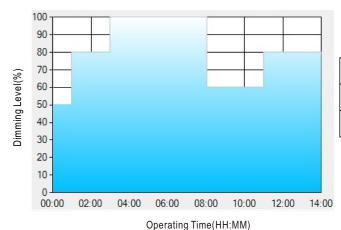
	T1	T2	Т3	T4
TIME**	06:00	07:00	11:00	
LEVEL**	100%	70%	50%	70%

Operating Time(HH:MM)

- **: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.
 - Example: If a residential lighting application adopts D01-Type, when turning on the power supply at 6:00pm, for instance:
- [1] The power supply will switch to the constant current level at 100% starting from 6:00pm.
- [2] The power supply will switch to the constant current level at 70% in turn, starting from 0:00am, which is 06:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 50% in turn, starting from 1:00am, which is 07:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

 The constant current level remains till 8:00am, which is 14:00 after the power supply turns on.

Ex: O D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart timer dimming software program:

	T1	T2	Т3	T4	T5
TIME**	01:00	03:00	8:00	11:00	
LEVEL**	50%	80%	100%	60%	80%

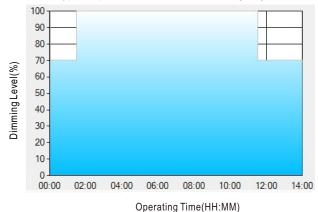
**: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:

- [1] The power supply will switch to the constant current level at 50% starting from 5:00pm.
- [2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 100% in turn, starting from 8:00pm, which is 03:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 60% in turn, starting from 1:00am, which is 08:00 after the power supply turns on.
- [5] The power supply will switch to the constant current level at 80% in turn, starting from 4:00am, which is 11:00 after the power supply turns on. The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.







Set up for D03-Type in Smart timer dimming software program:

	T1	T2	Т3
TIME**	01:30	11:00	
LEVEL**	70%	100%	70%

 ** : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

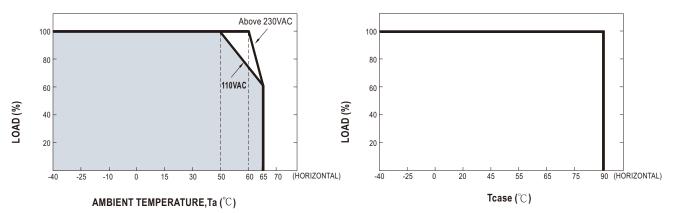
 $\textbf{Example: If a tunnel lighting application adopts D03-Type, when turning on the power supply at 4:30pm, for instance: \\$

- [1] The power supply will switch to the constant current level at 70% starting from 4:30pm.
- [2] The power supply will switch to the constant current level at 100% in turn, starting from 6:00pm, which is 01:30 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.



■ OUTPUT LOAD vs TEMPERATURE(Note.10)

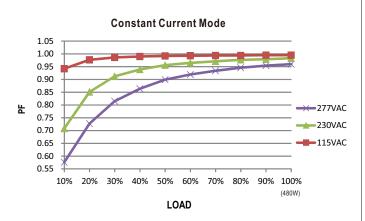


○ If HLG-480H operates in constant current mode with the rated current, the maximum workable Ta is 60°C.(Typ. 230VAC)

■ STATIC CHARACTERISTICS

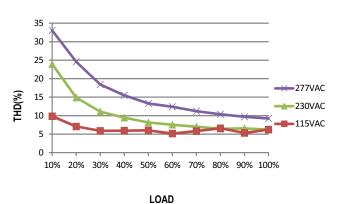
■ POWER FACTOR(PF) CHARACTERISTIC





■ TOTAL HARMONIC DISTORTION (THD)

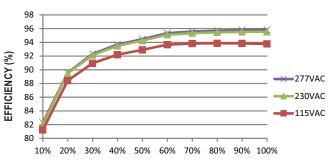
¾ 42V Model, Tcase at 75°C



■ EFFICIENCY vs LOAD

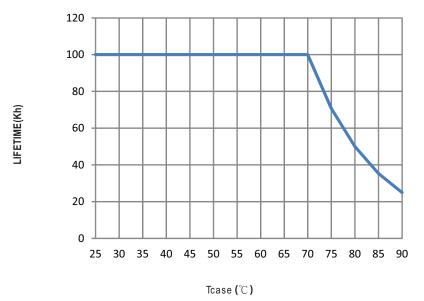
HLG-480H series possess superior working efficiency that up to 95.5% can be reached in field applications.

¾ 42V Model, Tcase at 75°C

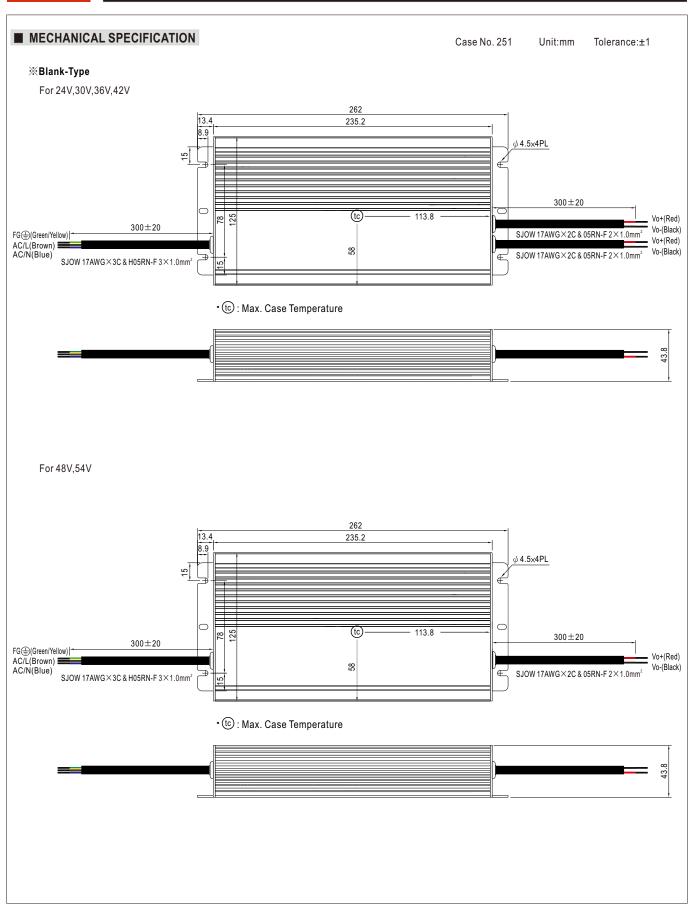


LOAD

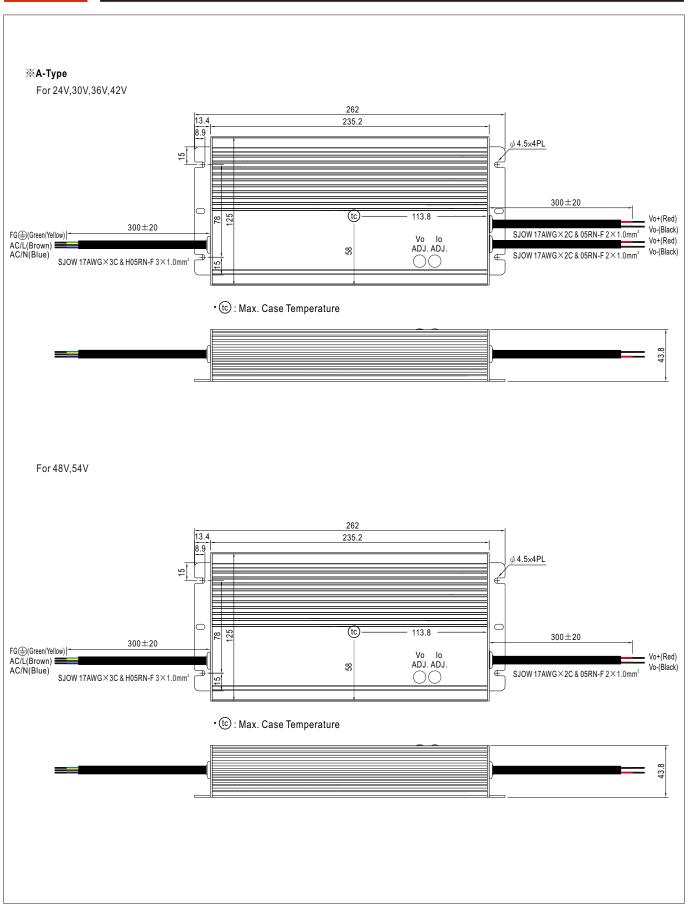
■ LIFE TIME



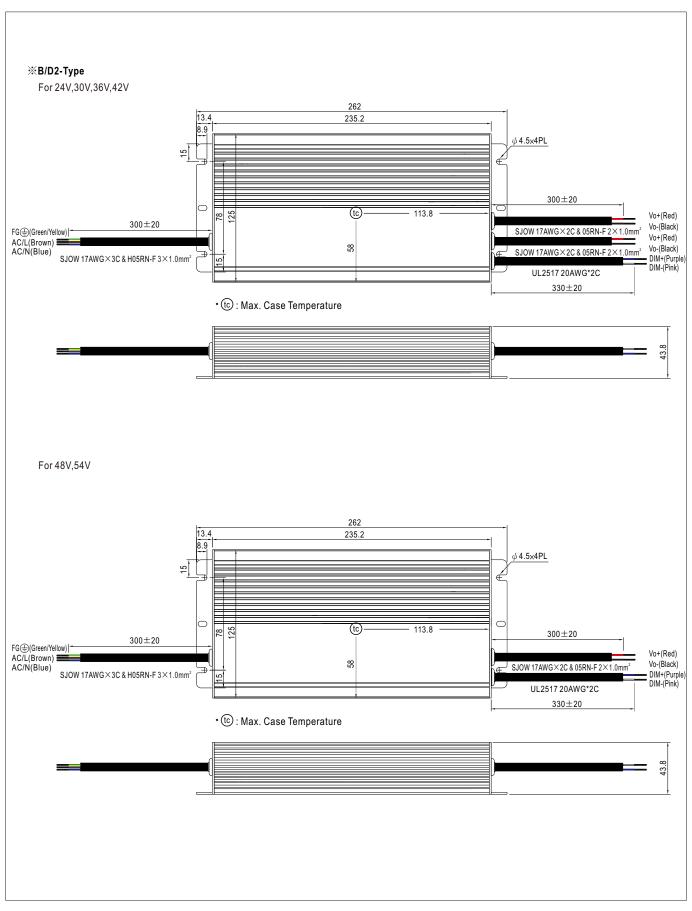
HLG-480H series



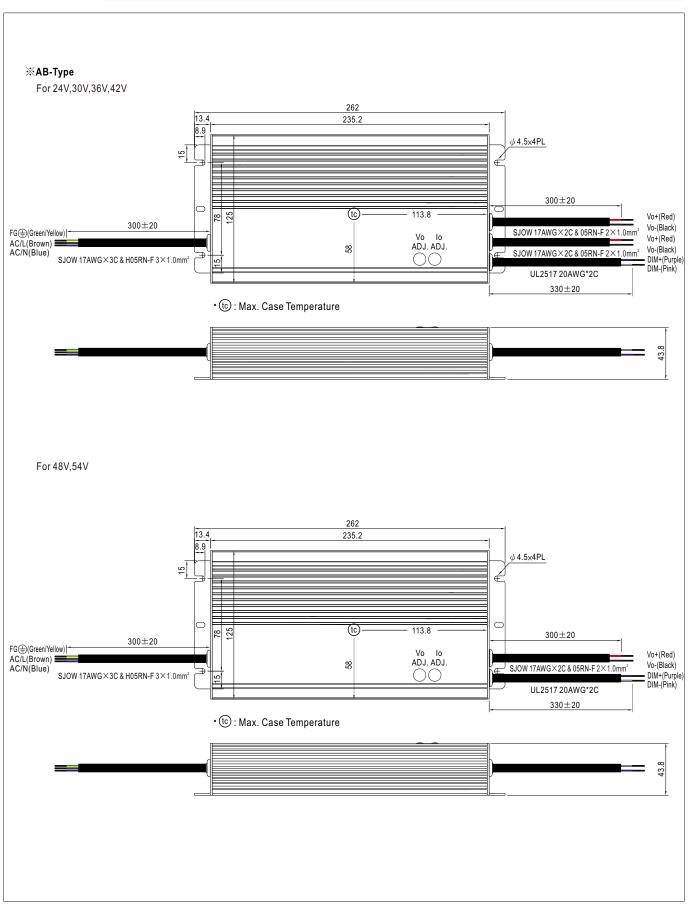


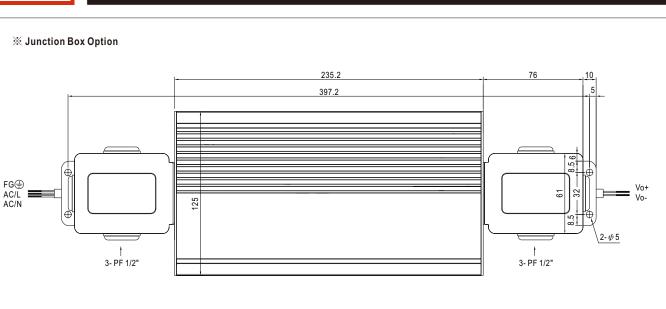














 $\ \bigcirc$ Junction box option is available for all types. Please contact MEAW WELL for details.

■ INSTALLATION MANUAL

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









Features

- Constant Voltage + Constant Current mode output
- Metal housing with class I design
- Standby power consumption <0.5W at remote off
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer;
 3 in 1 dimming (dim-to-off)
- Typical lifetime > 62000 hours
- 7 years warranty

Applications

- · 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.

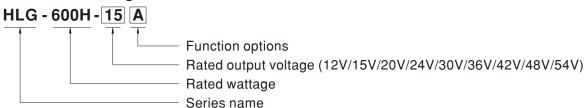
■ GTIN CODE

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

Description

HLG-600H series is a 600W AC/DC LED driver featuring the dual mode constant voltage and constant current output. HLG-600H operates from $90 \sim 305 \text{VAC}$ and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 96%, 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-600H is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

■ Model Encoding



Туре	IP Level	Function	Note
Α	IP65	Io and Vo adjustable through built-in potentiometer	In Stock
В	IP67	3 in 1 dimming function (0~10VDC, 10V PWM signal and resistance)	In Stock
AB	IP65	Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (0~10VDC,10V PWM signal and resistance)	In Stock
Blank	IP67	Io and Vo fixed	In Stock



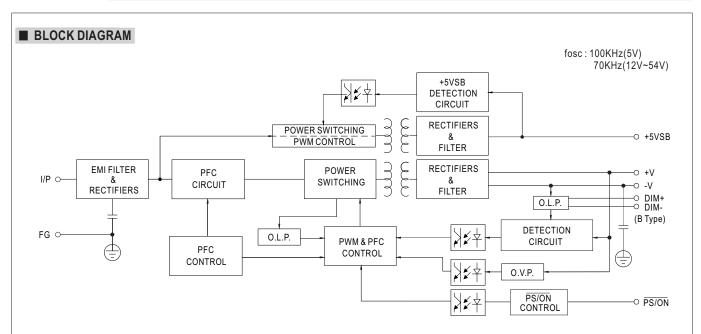
SPECIFICATION

			HLG-600H-12	HLG-600H-15	HLG-600H-20	HLG-600H-24	HLG-600H-30	HLG-600H-36	HLG-600H-42	HLG-600H-48	HLG-600H-54
	DC VOLTAGE		12V	15V	20V	24V	30V	36V	42V	48V	54V
	CONSTANT CURRENT	T REGION Note.4	6 ~12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	15 ~ 30V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V
	RATED CURREN	Γ	40A	36A	28A	25A	20A	16.7A	14.3A	12.5A	11.2A
	RATED POWER		480W	540W	560W	600W	600W	601.2W	600.6W	600W	604.8W
	RIPPLE & NOISE	(max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p
			Adjustable fo	r A/AB-Type c	nly (via built-ir	n potentiomete	er)	•		-	
	VOLTAGE ADJ. R	ANGE	10.2 ~ 12.6V	12.7 ~ 15.8V	17 ~ 21V	20.4 ~ 25.2V	25.5 ~ 31.5V	30.6 ~ 37.8V	35.7 ~ 44.1V	40.8 ~ 50.4V	45.9 ~ 56.
DUTPUT					nly (via built-ir	n potentiomete	er)	1	1		
	CURRENT ADJ. RANGE		20 ~ 40A	18 ~ 36A	14 ~ 28A	12.5 ~ 25A	10 ~ 20A	8.3 ~ 16.7A	7.1 ~ 14.3A	6.2 ~ 12.5A	5.6 ~ 11.2/
	VOLTAGE TOLER	ANCE Note.3		±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 REGULATI		±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIM		500ms, 80ms					_ 0.070	_ 0.070		= 0.070
	HOLD UP TIME (T		15ms / 115VA		VAO						
	TIOLD OF TIME (I	ур.)	90 ~ 305VAC	· · · · · · · · · · · · · · · · · · ·	1\/DC						
	VOLTAGE RANGI	E Note.5			IARACTERIST	IC" section)					
	EDECUENCY DA	NCE	-	.0 STATIC CI	IANACILNIOI	io section)					
	FREQUENCY RA	NGE	47 ~ 63Hz	1/AC DE > 2/	DE (0.20) (A.O. DE	>0.00/077\/A	0 @ 6.1111				
	POWER FACTOR	(Typ.)			95/230VAC, PF		_				
			,		ACTOR (PF) CH		, ,				
	TOTAL HARMONIC	DISTORTION	, , ,	-	/115VAC, 230\		,				
,		T	`	I	ARMONIC DIS	· ·	· · · ·		I	I	
INPUT	EFFICIENCY	230VAC	92%	93.5%	94.5%	95%	95%	95.5%	96%	96%	96%
	(Typ.)	277VAC	92.5%	93.5%	94.5%	95%	95%	95.5%	96%	96%	96%
	AC CURRENT (Ty		7A / 115VAC	3.3A / 23		A / 277VAC					
	INRUSH CURREN	IT(Typ.)	COLD START	70A(twidth=100	00µs measured	at 50% Ipeak) at	t 230VAC; Per N	NEMA 410			
	MAX. No. of PSUs CIRCUIT BREAKI		1 unit (circuit breaker of type B) / 2 units (circuit breaker of type C) at 230VAC								
	LEAKAGE CURR	ENT	<0.75mA/277VAC								
	STANDBY POWER C	ONSUMPTION	<0.5W at remote off								
	OVER CURRENT N		95 ~ 108%								
	OVER CURRENT	Note.4	Constant current limiting, recovers automatically after fault condition is removed								
	SHORT CIRCUIT		Constant curr	ent limiting, re	covers automa	tically after fau	It condition is r	emoved			
ROTECTION			13 ~ 16V	16.5 ~ 20.5V	22 ~ 26V	26 ~ 30V	32.5 ~ 36.5V	39.5 ~ 43.5V	46 ~ 50V	52.5 ~ 56.5V	59 ~ 63V
	OVER VOLTAGE		Shut down o/	voltage, re-p	ower on to reco	ver					
	OVER TEMPERA	TURE	Chut down o/	n voltage re-n							
			Silut down on		ower on to reco	over					
	KEMOTE ON/OF	F CONTROL	Power on : "Hi		ower on to reco		ow" <0 ~ 0.5V or	Short circuit			
FUNCTION			Power on : "Hi	gh" >2 ~ 5V or	Open circuit	Power off: "Lo	ow" <0 ~ 0.5V or	Short circuit			
FUNCTION	5V STANDBY	FCONTROL	Power on : "Hi 5VsB: 5V@0.5	gh" >2 ~ 5V or iA; tolerance ±	Open circuit ±5%, ripple : 10	Power off: "Lo 0mVp-p(max.)					
UNCTION	5V STANDBY WORKING TEMP.	FCONTROL	Power on : "Hi 5VsB: 5V@0.5 Tcase= -40 ~	gh" >2 ~ 5V or iA; tolerance ± +90°C (Pleas	Open circuit	Power off: "Lo 0mVp-p(max.)					
FUNCTION	5V STANDBY WORKING TEMP. MAX. CASE TEM	F CONTROL P.	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C	gh" >2 ~ 5V or iA; tolerance ∃ +90°C (Pleas	Open circuit ±5%, ripple : 10 se refer to "OU"	Power off: "Lo 0mVp-p(max.)					
FUNCTION	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIL	P. DITY	Power on: "Hi 5Vsb: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH	gh" > 2 ~ 5V or A; tolerance = +90°C (Pleas non-condensi	Open circuit ±5%, ripple : 10 se refer to "OU ⁻	Power off: "Lo 0mVp-p(max.) TPUT LOAD v					
	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMID STORAGE TEMP.	P. DITY , HUMIDITY	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C,	gh" >2 ~ 5V or iA; tolerance = +90°C (Please conon-condensing = 75% RH r	Open circuit ±5%, ripple : 10 se refer to "OU"	Power off: "Lo 0mVp-p(max.) TPUT LOAD v					
	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIL STORAGE TEMP. TEMP. COEFFICII	P. DITY , HUMIDITY	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%°C (gh">2 ~ 5V or 6A; tolerance \pm +90°C (Pleas conon-condensing 10 ~ 95% RH r 10 ~ 55°C)	Open circuit ±5%, ripple : 10 se refer to "OU" ng non-condensing	Power off: "Lo 0mVp-p(max.) TPUT LOAD vs	s TEMPERATU	JRE" section)			
	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMID STORAGE TEMP.	P. DITY , HUMIDITY	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5	gh" >2 ~ 5V or A; tolerance \pm +90°C (Please non-condension of the second of the	Open circuit ±5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for	Power off: "Lo 0mVp-p(max.) TPUT LOAD v:	s TEMPERATU	JRE" section)			
	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMID STORAGE TEMP. TEMP. COEFFICIT VIBRATION	P. DITY , HUMIDITY	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L	gh" >2 ~ 5V or A; tolerance = +90°C (Please non-condensi 10 ~ 95% RH r 0 ~ 55°C) GG 12min./1cyc/JL8750(type"H	Open circuit ±5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2	Power off: "Lo 0mVp-p(max.) TPUT LOAD v: 3 72min. each ali 2 No. 250.13-1:	ong X, Y, Z axe 2, ENEC BS EN	JRE" section) s		7-2-13 indeper	ndent,
	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIL STORAGE TEMP. TEMP. COEFFICII	P. DITY , HUMIDITY	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623	gh" >2 ~ 5V or A; tolerance = +90°C (Please non-condensi 10 ~ 95% RH r 0 ~ 55°C) GG 12min./1cyc JL8750(type"H 384, IP65 or IP	Open circuit ±5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2	Power off: "Lo 0mVp-p(max.) TPUT LOAD vi	ong X, Y, Z axe 2, ENEC BS EN BB19510.1,GB1	JRE" section) s J/EN61347-1, E	TP TC 004,	7-2-13 indeper	ndent,
NVIRONMENT -	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIE STORAGE TEMP. TEMP. COEFFICIT VIBRATION SAFETY STANDA	P. DITY , HUMIDITY ENT RDS Note.7	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095	gh" >2 ~ 5V or iA; tolerance = +90°C (Please connon-condensi 10 ~ 95% RH r i0 ~ 55°C) iG 12min./1cyo jL8750(type"H i884, IP65 or IP i0.1(by CB)(AE	Open circuit ±5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except),	Power off: "Lo 0mVp-p(max.) TPUT LOAD vs 9 72min. each all 2 No. 250.13-12 161347-2-13, G KC61347-1, Kd	ong X, Y, Z axe 2, ENEC BS EN 6B19510.1,GB1 C61347-2-13(e	JRE" section) s J/EN61347-1, E	TP TC 004,	7-2-13 indeper	ndent,
NVIRONMENT	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMID STORAGE TEMP. TEMP. COEFFICIT VIBRATION	P. DITY , HUMIDITY ENT RDS Note.7	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P:3.75	gh" >2 ~ 5V or iA; tolerance = +90°C (Please conon-condensi 10 ~ 95% RH r i0 ~ 55°C) iG 12min./1cyc JL8750(type"H i884, IP65 or IP io.1(by CB)(AE KVAC I/P-F	Open circuit 5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except), G:2KVAC O.	Power off: "Lo 0mVp-p(max.) TPUT LOAD vs 9 72min. each al 2 No. 250.13-12 161347-2-13, G KC61347-1, K/ /P-FG:1.5KVA	ong X, Y, Z axe 2, ENEC BS EN 8B19510.1,GB1 C61347-2-13(e	JRE" section) s J/EN61347-1, E	TP TC 004,	7-2-13 indepe	ndent,
ENVIRONMENT -	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIE STORAGE TEMP. TEMP. COEFFICIT VIBRATION SAFETY STANDA	P. DITY , HUMIDITY ENT RDS Note.7	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P:3.75	gh" >2 ~ 5V or iA; tolerance = +90°C (Please conon-condensi 10 ~ 95% RH r i0 ~ 55°C) iG 12min./1cyc JL8750(type"H i884, IP65 or IP io.1(by CB)(AE KVAC I/P-F	Open circuit ±5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except),	Power off: "Lo 0mVp-p(max.) TPUT LOAD vs 9 72min. each al 2 No. 250.13-12 161347-2-13, G KC61347-1, K/ /P-FG:1.5KVA	ong X, Y, Z axe 2, ENEC BS EN 8B19510.1,GB1 C61347-2-13(e	JRE" section) s J/EN61347-1, E	TP TC 004,	7-2-13 indeper	ndent,
	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIE STORAGE TEMP. TEMP. COEFFICIT VIBRATION SAFETY STANDA	P. DITY , HUMIDITY ENT RDS Note.7	Power on: "Hi 5Vss: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P:3.75 I/P-O/P, I/P-F Compliance to	gh" >2 ~ 5V or iA; tolerance = +90°C (Please non-condensi 10 ~ 95% RH r 0 ~ 55°C) iG 12min./1cyr JL8750(type" H 884, IP65 or IP iO.1(by CB)(AE KVAC I/P-F G, O/P-FG:11 o BS EN/EN55	Open circuit 5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except), G:2KVAC O.	Power off: "Lc 0mVp-p(max.) TPUT LOAD vs 9 72min. each al. 2 No. 250.13-1; 161347-2-13, G KC61347-1, Ki /P-FG:1.5KVA 00VDC / 25°C/ N61000-3-2 Cl	ong X, Y, Z axe 2, ENEC BS EN 3B19510.1,GB1 C61347-2-13(e CC 70% RH	JRE" section) s s J/EN61347-1, E 9510.14, EAC xcept for AB ty	TP TC 004, pe) approved		
ENVIRONMENT :	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIE STORAGE TEMP. TEMP. COEFFICIT VIBRATION SAFETY STANDA WITHSTAND VOL ISOLATION RESI	P. DITY , HUMIDITY ENT RDS Note.7 TAGE STANCE	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P:3.75 I/P-O/P, I/P-F Compliance to GB/T 17743,6	gh" >2 ~ 5V or iA; tolerance = +90°C (Please conon-condensi 10 ~ 95% RH i 0 ~ 55°C) 6G 12min./1cyc JL8750(type"H 384, IP65 or IP i0.1(by CB)(AE KVAC I/P-F G, O/P-FG:11 o BS EN/EN55 GB17625.1, KS	Open circuit 5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except), G:2KVAC O 00M Ohms / 50 5015, BS EN/EN S C 9815, KS C	Power off: "Lc 0mVp-p(max.) TPUT LOAD vs 9 72min. each all 2 No. 250.13-1; J61347-2-13, G KC61347-1, KV /P-FG:1.5KVA 00VDC / 25°C/ N61000-3-2 CI 9547	ong X, Y, Z axe 2, ENEC BS EN BB19510.1,GB1 C61347-2-13(e C 70% RH ass C (@ loads	JRE" section) s J/EN61347-1, E 9510.14, EAC xcept for AB ty	TP TC 004, pe) approved N/EN61000-3-3	B, EAC TP TC 0	120;
ENVIRONMENT -	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIE STORAGE TEMP. TEMP. COEFFICIT VIBRATION SAFETY STANDA WITHSTAND VOL ISOLATION RESI	P. DITY , HUMIDITY ENT RDS Note.7 TAGE STANCE	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P:3.75 I/P-O/P, I/P-F Compliance to GB/T 17743,C	gh" >2 ~ 5V or iA; tolerance = +90°C (Please = -90°C) (Pl	Open circuit 5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except), G:2KVAC O 00M Ohms / 50 5015, BS EN/EN S C 9815, KS C 1000-4-2,3,4,5,	Power off: "Lc 0mVp-p(max.) TPUT LOAD vs 9 72min. each all 2 No. 250.13-1: 161347-2-13, G KC61347-1, Kv 7P-FG:1.5KVA 100VDC / 25°C/ N61000-3-2 Cl 9547 6,8,11, BS EN/	ong X, Y, Z axe 2, ENEC BS EN 6B19510.1,GB1 C61347-2-13(e .C 70% RH ass C (@ loads	S I/EN61347-1, E 9510.14, EAC xcept for AB ty ≥50%); BS EN	TP TC 004, pe) approved N/EN61000-3-3	B, EAC TP TC 0	120;
ENVIRONMENT -	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIL STORAGE TEMP. TEMP. COEFFICII VIBRATION SAFETY STANDA WITHSTAND VOL ISOLATION RESI: EMC EMISSION EMC IMMUNITY	P. DITY , HUMIDITY ENT RDS Note.7 TAGE STANCE	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P, I/P-F Compliance to GB/T 17743, C Compliance to Line-Earth 4K	gh" >2 ~ 5V or A; tolerance = +90°C (Please = +90°C (Please = 10 ~ 95% RH r	Open circuit ±5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 167, J61347-1, J 3 type except), G:2KVAC O, 00M Ohms / 50 5015, BS EN/EN S C 9815, KS C 1000-4-2,3,4,5, KV), EAC TP T	Power off: "Lc 0mVp-p(max.) TPUT LOAD v: 72min. each al 2 No. 250.13-1: 161347-2-13, G KC61347-1, KVA 100VDC / 25°C / N61000-3-2 Cl 9547 6,8,11, BS EN/ C 020; KS C 98	ong X, Y, Z axe 2, ENEC BS EN 6B19510.1,GB1 C61347-2-13(e C 70% RH ass C (@ load	S I/EN61347-1, E 9510.14, EAC xcept for AB ty	TP TC 004, pe) approved V/EN61000-3-3	B, EAC TP TC 0	120;
SAFETY & EMC	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMID STORAGE TEMP. TEMP. COEFFICIT VIBRATION SAFETY STANDA WITHSTAND VOL ISOLATION RESIDENCE EMC EMISSION EMC IMMUNITY MTBF	P. DITY , HUMIDITY ENT RDS Note.7 TAGE STANCE	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P:3.75 I/P-O/P, I/P-F Compliance to GB/T 17743, C Compliance to Line-Earth 4K 913.4K hrs mi	gh" >2 ~ 5V or iA; tolerance = +90°C (Please non-condensi 10 ~ 95% RH r 0 ~ 55°C) iG 12min./1cyr JL8750(type"H 884, IP65 or IP iO.1(by CB)(AE KVAC I/P-F G, O/P-FG:11 o BS EN/EN55 GB17625.1, KS o BS EN/EN61 kV, Line-Line 2 in. Telcordia	Open circuit 5%, ripple: 10 se refer to "OU" ng non-condensing cle, period for 7 IL"), CSA C22.2 67, J61347-1, J 3 type except), G:2KVAC O 00M Ohms / 50 5015, BS EN/EN S C 9815, KS C 1000-4-2,3,4,5,	Power off: "Lc 0mVp-p(max.) TPUT LOAD v: 72min. each al 2 No. 250.13-1: 161347-2-13, G KC61347-1, KVA 100VDC / 25°C / N61000-3-2 Cl 9547 6,8,11, BS EN/ C 020; KS C 98	ong X, Y, Z axe 2, ENEC BS EN 6B19510.1,GB1 C61347-2-13(e C 70% RH ass C (@ load	S I/EN61347-1, E 9510.14, EAC xcept for AB ty	TP TC 004, pe) approved V/EN61000-3-3	B, EAC TP TC 0	120;
NVIRONMENT -	5V STANDBY WORKING TEMP. MAX. CASE TEM WORKING HUMIL STORAGE TEMP. TEMP. COEFFICII VIBRATION SAFETY STANDA WITHSTAND VOL ISOLATION RESI: EMC EMISSION EMC IMMUNITY	P. DITY , HUMIDITY ENT RDS Note.7 TAGE STANCE	Power on: "Hi 5VsB: 5V@0.5 Tcase= -40 ~ Tcase= +90°C 20 ~ 95% RH -40 ~ +85°C, ±0.03%/°C (10 ~ 500Hz, 5 UL60950-1, L BS EN/EN623 AS/NZS 6095 I/P-O/P, I/P-F Compliance to GB/T 17743, C Compliance to Line-Earth 4K	gh" >2 ~ 5V or iA; tolerance = +90°C (Pleas connon-condensi 10 ~ 95% RH r i0 ~ 55°C) iG 12min./1cyo JL8750(type"H i884, IP65 or IP i0.1(by CB)(AE KVAC I/P-F iG, O/P-FG:11 io BS EN/EN55 GB17625.1, KS io BS EN/EN61 iv, Line-Line 2 in. Telcordia imm (L*W*H)	Open circuit E5%, ripple: 10 se refer to "OU" Ing Ing Inon-condensing IL"), CSA C22.2 IGT, J61347-1, J Stype except), IG:2KVAC O OOM Ohms / 50 SC 9815, KS C 1000-4-2,3,4,5,1 KV), EAC TP T a SR-332 (Bello	Power off: "Lc 0mVp-p(max.) TPUT LOAD v: 72min. each al 2 No. 250.13-1: 161347-2-13, G KC61347-1, KVA 100VDC / 25°C / N61000-3-2 Cl 9547 6,8,11, BS EN/ C 020; KS C 98	ong X, Y, Z axe 2, ENEC BS EN 6B19510.1,GB1 C61347-2-13(e C 70% RH ass C (@ load	S I/EN61347-1, E 9510.14, EAC xcept for AB ty	TP TC 004, pe) approved V/EN61000-3-3	B, EAC TP TC 0	120;

NOTE

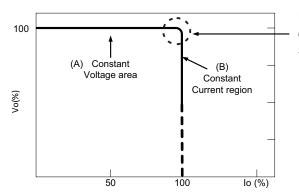
- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25° C of ambient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
- 3. Tolerance : includes set up tolerance, 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 model certified for CCC(GB19510.14, GB19510.1, GB17743 and GB17625.1) is an optional model . Please contact MEAN WELL for details.
- 8. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (to point (or TMP, per DLC), is about 75°C or less.
- 9. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
- 10. The driver is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."
 (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
- 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).
- 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. 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
 File Name: HLG-600H-SPEC 2024-11-29





■ 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.

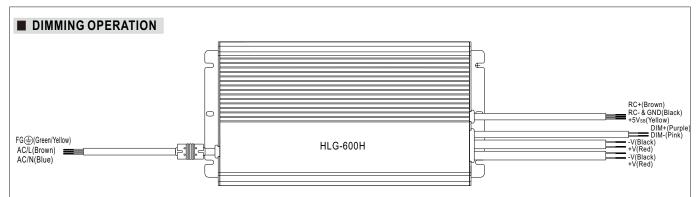


Typical output current normalized by rated current (%)

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

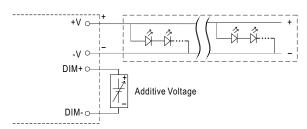
Should there be any compatibility issues, please contact MEAN WELL.





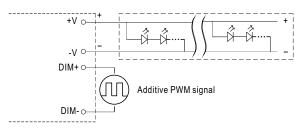
※ 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:
 0 ~ 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: $100\mu A$ (typ.)
- O Applying additive 0 ~ 10VDC



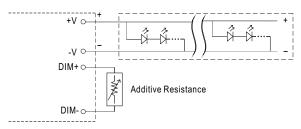
"DO NOT connect "DIM- to -V"

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

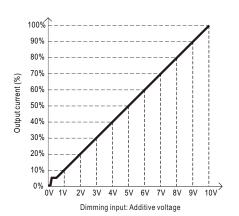


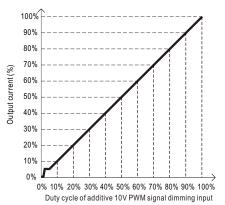
"DO NOT connect "DIM- to -V"

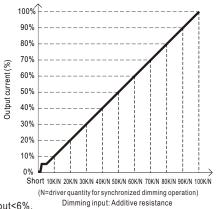
Applying additive resistance:



"DO NOT connect "DIM- to -V"



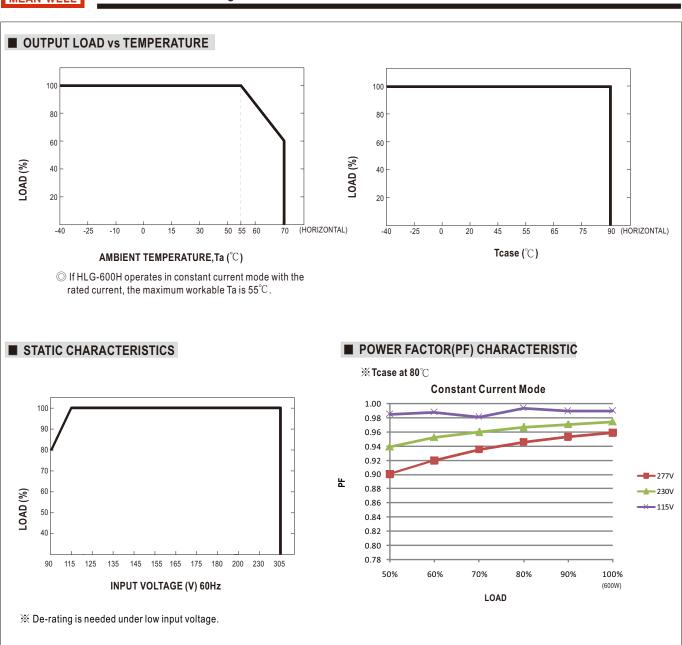




Note: 1. Min. dimming level is about 6% and the output current is not defined when 0% < Iout < 6%.

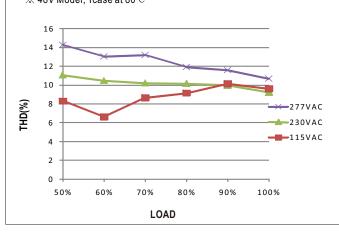
2. The output current could drop down to 0% when dimming input is about $0 \, \text{k} \, \Omega$ or $0 \, \text{Vdc}$, or $10 \, \text{V}$ PWM signal with $0 \, \text{\%}$ duty cycle.





■ TOTAL HARMONIC DISTORTION (THD)

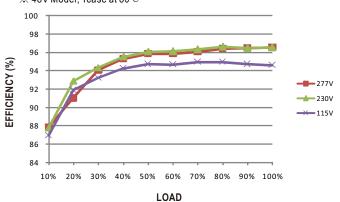
¾ 48V Model, Tcase at 80°C



■ EFFICIENCY vs LOAD

HLG-600H series possess superior working efficiency that up to 96% can be reached in field applications.

¾ 48V Model, Tcase at 80°C





■ LIFETIME

