



■ Features

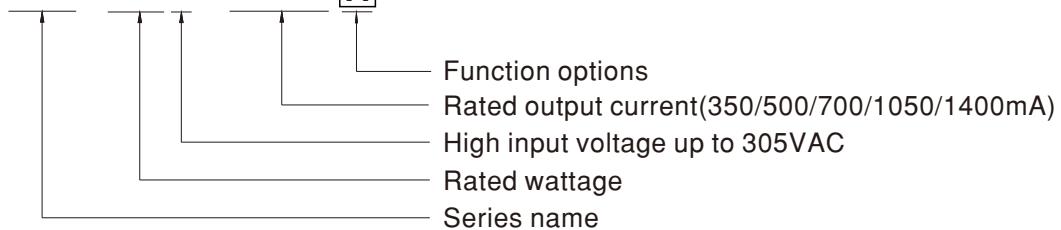
- Constant Current mode output
- Metal housing with Class I design
- Built-in active PFC function
- IP67 / IP65 design for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming; Timer dimming
- Typical lifetime >62000 hours
- 7 years warranty

■ Description

HLG-120H-C series is a 150W AC/DC LED driver featuring the constant current mode and high voltage output. HLG-120H-C operates from 90~305VAC and offers models with different rated current ranging between 350mA and 1400mA. Thanks to the high efficiency up to 94%, with the fanless design, the entire series is able to operate for -40°C ~ +90°C case temperature under free air convection. The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. HLG-120H-C is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.

■ Model Encoding

HLG - 120H - C500 [A]



Type	IP Level	Function	Note
A	IP65	Io adjustable through built-in potentiometer.	In Stock
B	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
D	IP67	Timer dimming function, contact MEAN WELL for details(safety pending).	By request



150W Constant Current Mode LED Driver

HLG-120H-C series

SPECIFICATION

MODEL	HLG-120H-C350	HLG-120H-C500	HLG-120H-C700	HLG-120H-C1050	HLG-120H-C1400			
OUTPUT	RATED CURRENT	350mA	500mA	700mA	1050mA			
	RATED POWER	150.5W	150W	150.5W	155.4W			
	CONSTANT CURRENT REGION Note.2	215 ~ 430V	150V ~ 300V	107V ~ 215V	74V ~ 148V			
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)						
		175 ~ 350mA	250 ~ 500mA	350 ~ 700mA	525 ~ 1050mA			
	CURRENT RIPPLE	8.0% max. @rated current						
	CURRENT TOLERANCE	±5%						
INPUT	SET UP TIME	Note.4	1000ms / 115VAC	500ms / 230VAC				
	VOLTAGE RANGE	Note.3	90 ~ 305VAC	127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)				
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF ≥ 0.98/115VAC, PF ≥ 0.96/230VAC, PF ≥ 0.93/277VAC @full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)						
	TOTAL HARMONIC DISTORTION	THD < 20% (@ load ≥ 50% /115VAC, 230VAC; @ load ≥ 75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)						
	EFFICIENCY (Typ.)	94%	94%	94%	94%			
	AC CURRENT (Typ.)	1.6A / 115VAC	0.8A / 230VAC	0.7A / 277VAC				
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=600/ μ s measured at 50% Ipeak) at 230VAC; Per NEMA 410						
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC						
	LEAKAGE CURRENT	<0.75mA / 277VAC						
PROTECTION	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed						
	OVER VOLTAGE	475 ~ 495V	335 ~ 355V	240 ~ 260V	165 ~ 175V			
		Shut down o/p voltage with auto-recovery or re-power on to recovery						
ENVIRONMENT	OVER TEMPERATURE	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 TEMP.	Tcase=+90°C						
	WORKING HUMIDITY	10 ~ 95% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)						
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes						
	SAFETY STANDARDS Note.6	UL8750, CSA C22.2 No. 250.13-12, BS EN/EN/AS/NZS 61347-1, BS EN/EN/AS/NZS 61347-2-13, BS EN/EN62384 independent,GB19510.1, GB19510.14, IP65 or IP67, J61347-1, J61347-2-13(for A type only), EAC TP TC 004 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC	I/P-FG:2KVAC	O/P-FG:1.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH						
	EMC EMISSION	Note.6	Compliance to BS EN/EN55015, BS EN/EN61000-3-2 Class C (@ load ≥ 50%) ; BS EN/EN61000-3-3,GB17743 and GB17625.1, EAC TP TC 020					
OTHERS	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 2KV), EAC TP TC 020						
	MTBF	652.2K hrs min. Telcordia SR-332 (Bellcore) ; 191.1K hrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	220*68*38.8mm (L*W*H)						
NOTE	PACKING	1.04Kg; 12pcs/13.5Kg/0.8CUFT						
	1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.							
	2. Please refer to "DRIVING METHODS OF LED MODULE".							
	3. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.							
	4. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.							
	5. 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.							
	6. 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.							
	7. This series meets the typical life expectancy of >62,000 hours of operation when Tcase, particularly (t_c) point (or TMP, per DLC), is about 80°C or less.							
	8. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com							
	9. 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).							
	10. 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							
	※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx							

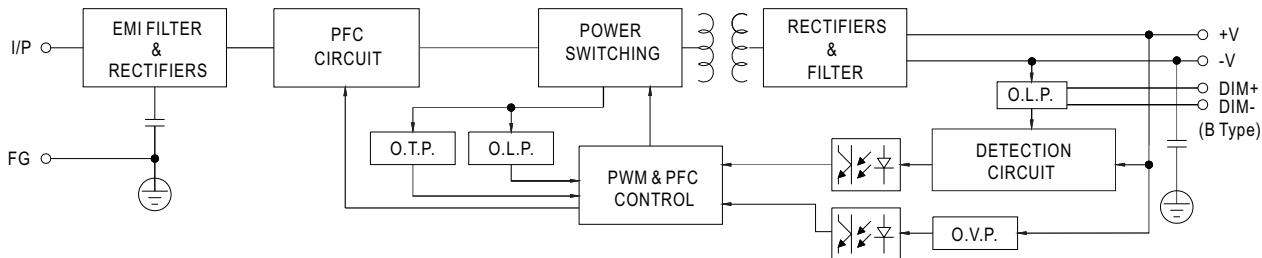


150W Constant Current Mode LED Driver

HLG-120H-C series

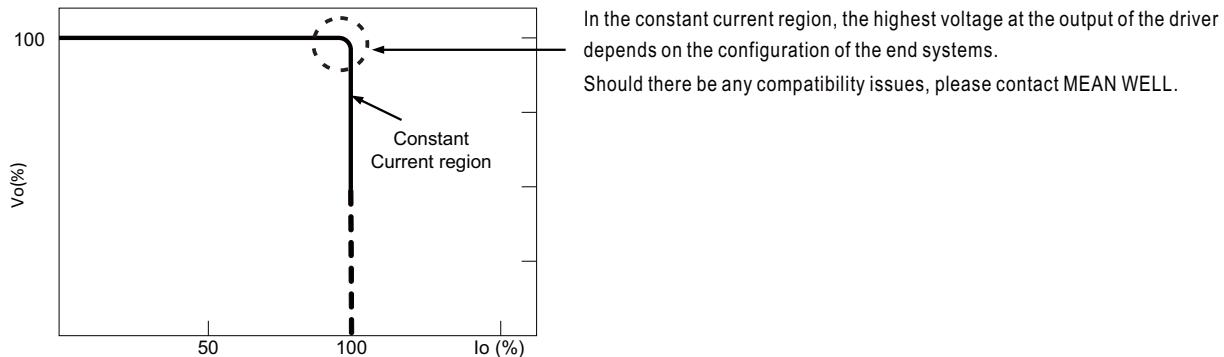
■ BLOCK DIAGRAM

PFC fosc : 70KHz
PWM fosc : 60KHz

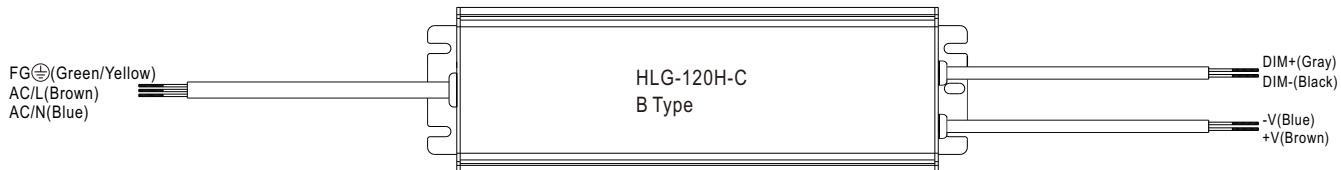


■ DRIVING METHODS OF LED MODULE

※ This series works in constant current mode to directly drive the LEDs.



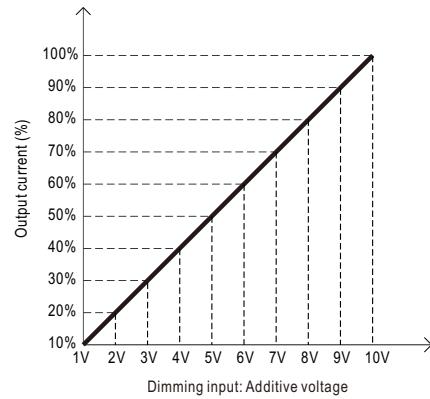
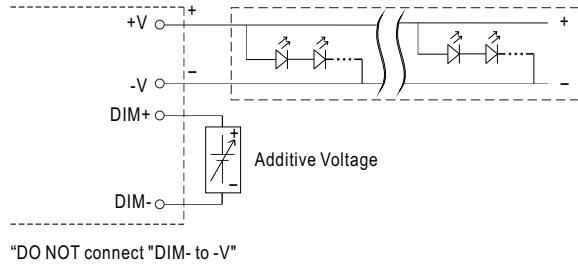
■ DIMMING OPERATION



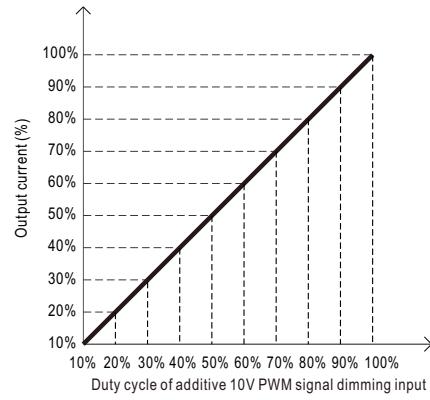
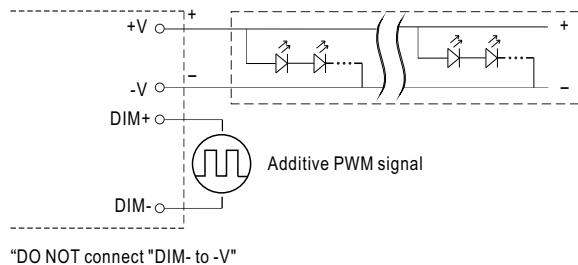
※ 3 in 1 dimming function (for B/AB-Type)

- 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.)

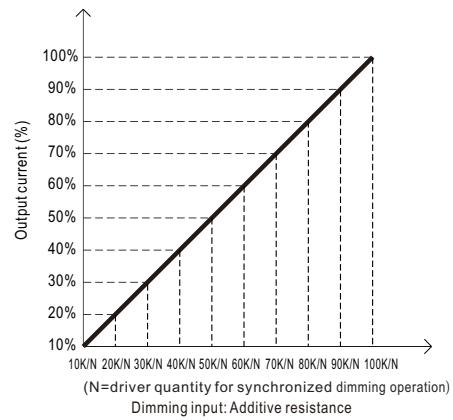
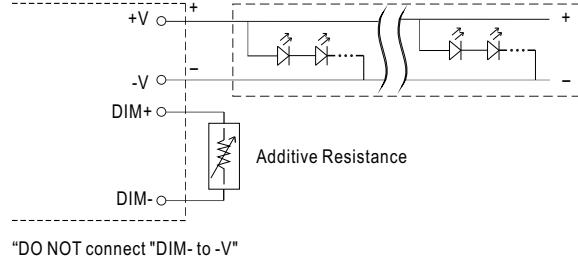
◎ Applying additive 1 ~ 10VDC



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



◎ Applying additive resistance:

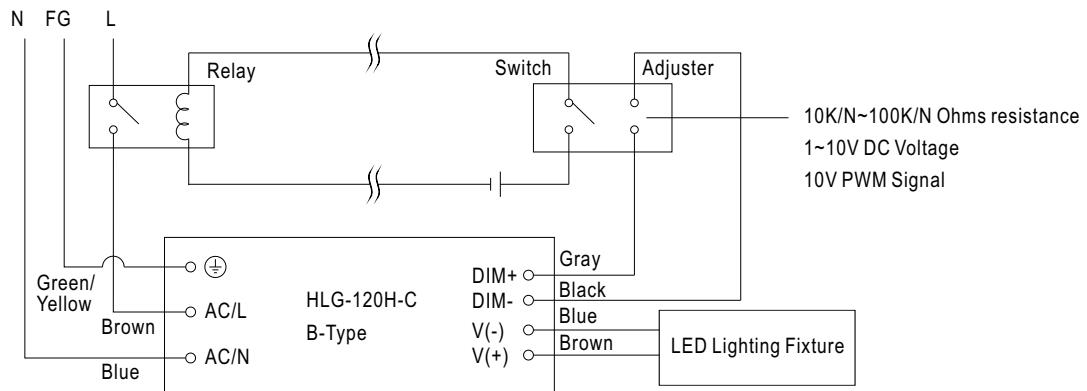




150W Constant Current Mode LED Driver

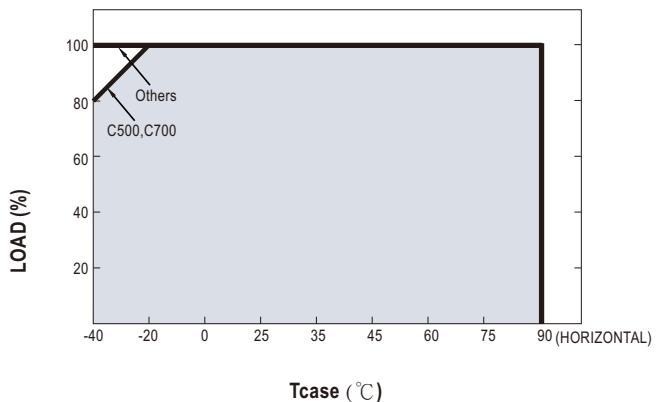
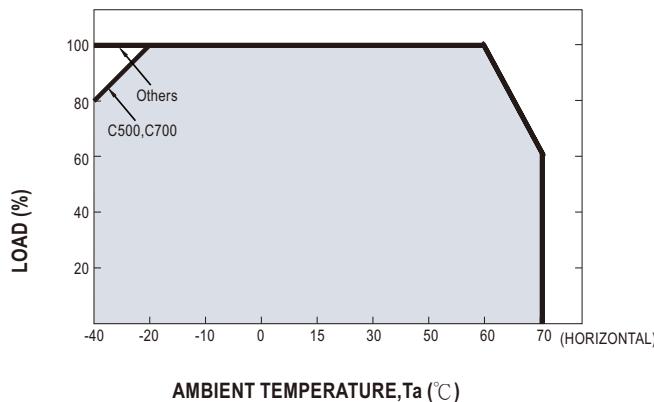
HLG-120H-C series

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.

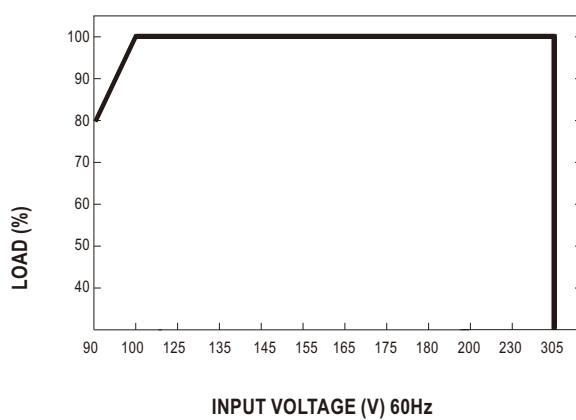


Using a switch and relay can turn ON/OFF the lighting fixture.

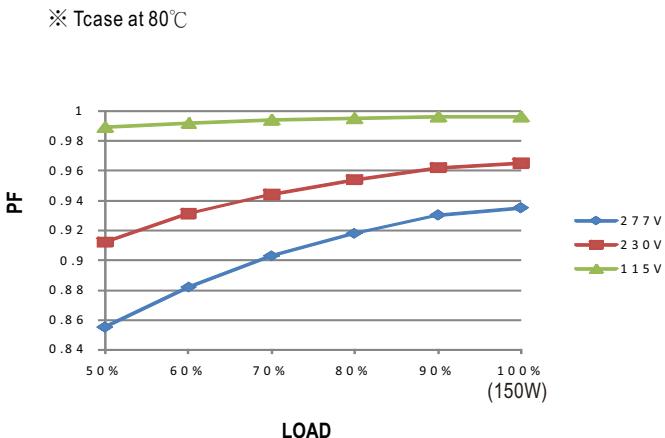
■ OUTPUT LOAD vs TEMPERATURE (Note.8)



■ STATIC CHARACTERISTIC

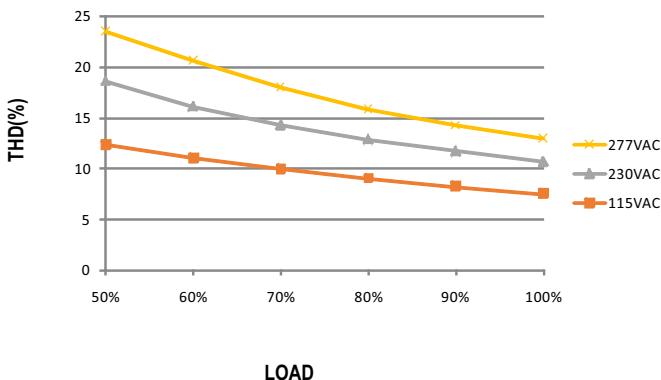


■ POWER FACTOR (PF) CHARACTERISTIC



■ TOTAL HARMONIC DISTORTION (THD)

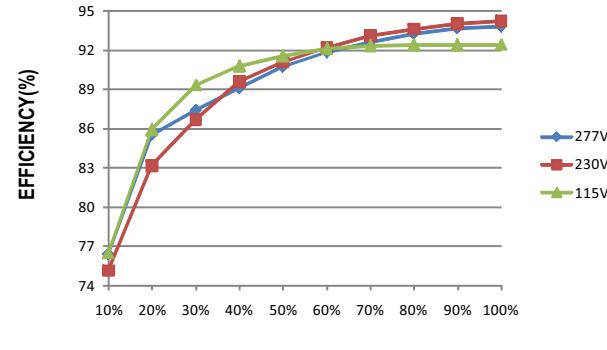
※ 700mA Model, Tcase at 80°C



■ EFFICIENCY vs LOAD

HLG-120H-C series possess superior working efficiency that up to 94% can be reached in field applications.

※ 700mA Model, Tcase at 80°C

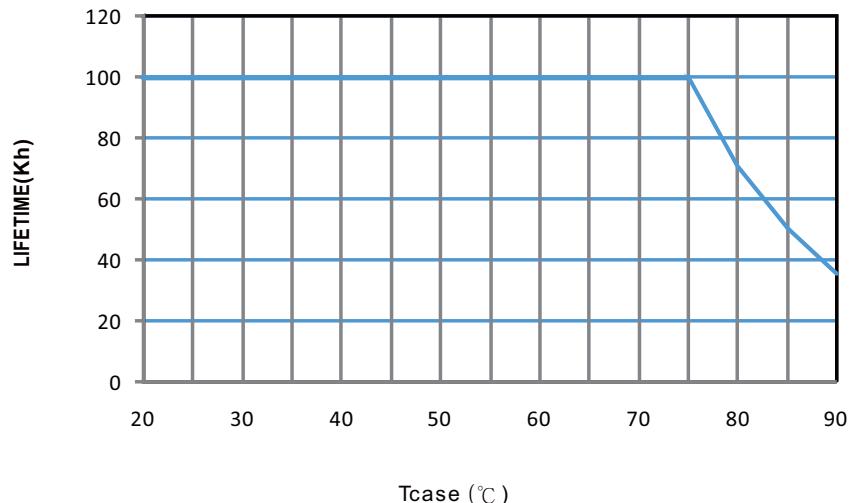




150W Constant Current Mode LED Driver

HLG-120H-C series

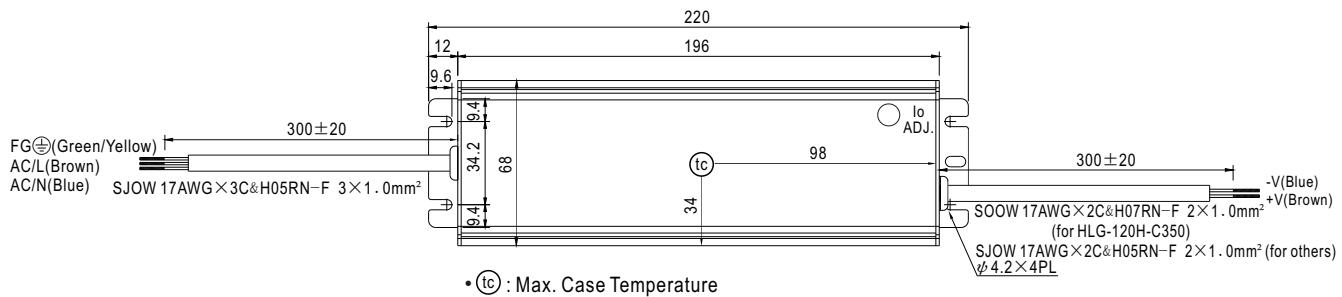
■ LIFE TIME



■ MECHANICAL SPECIFICATION

Case No.994 Unit:mm

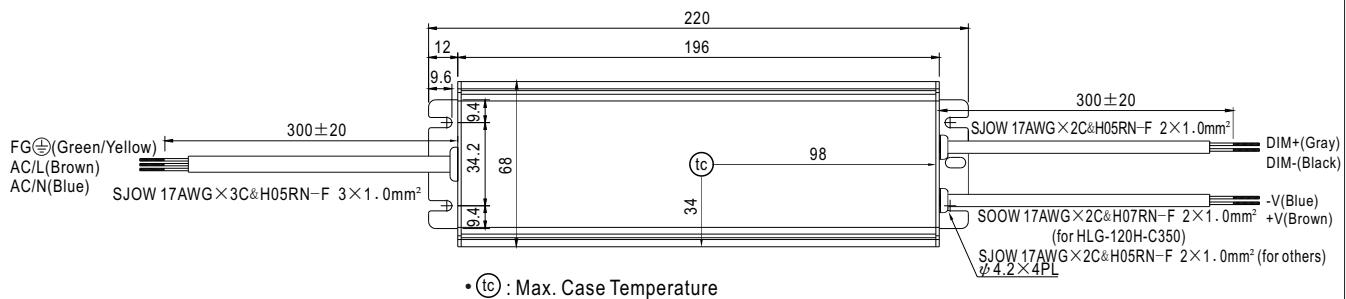
※ A-Type



• (tc) : Max. Case Temperature



※ B-Type



• (tc) : Max. Case Temperature

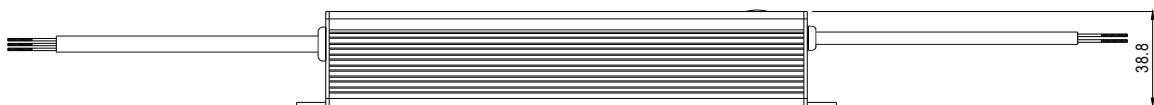
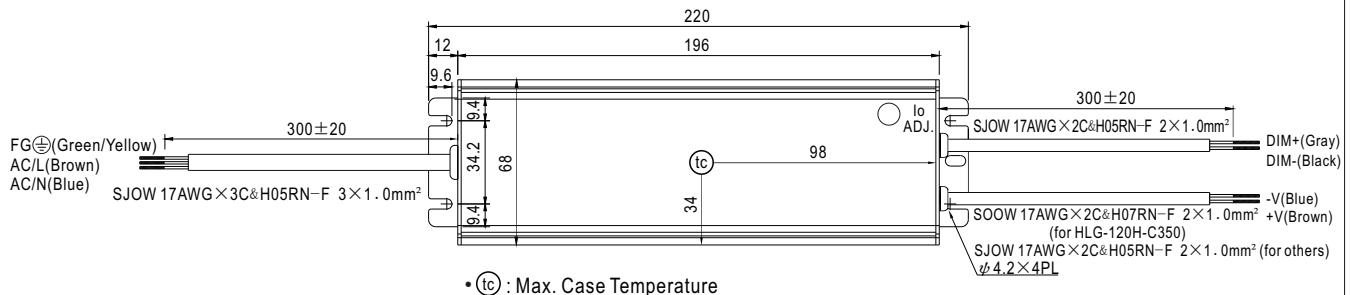




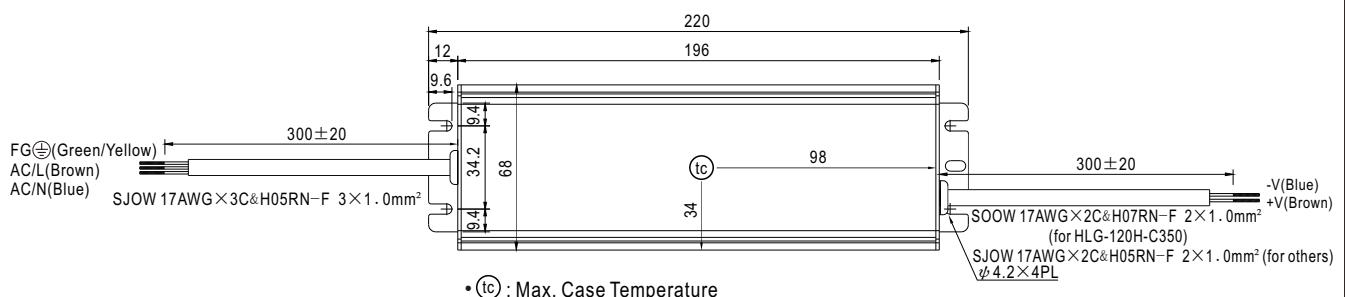
150W Constant Current Mode LED Driver

HLG-120H-C series

※ AB-Type



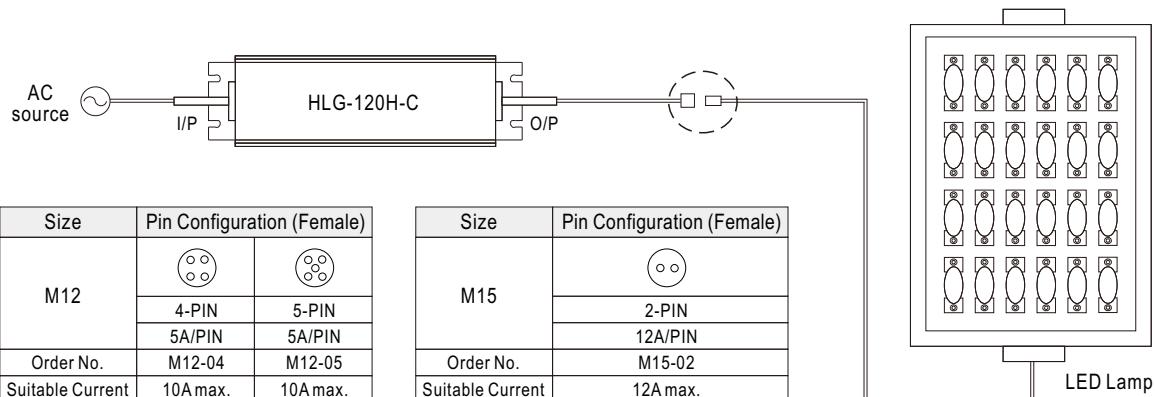
※ D-Type



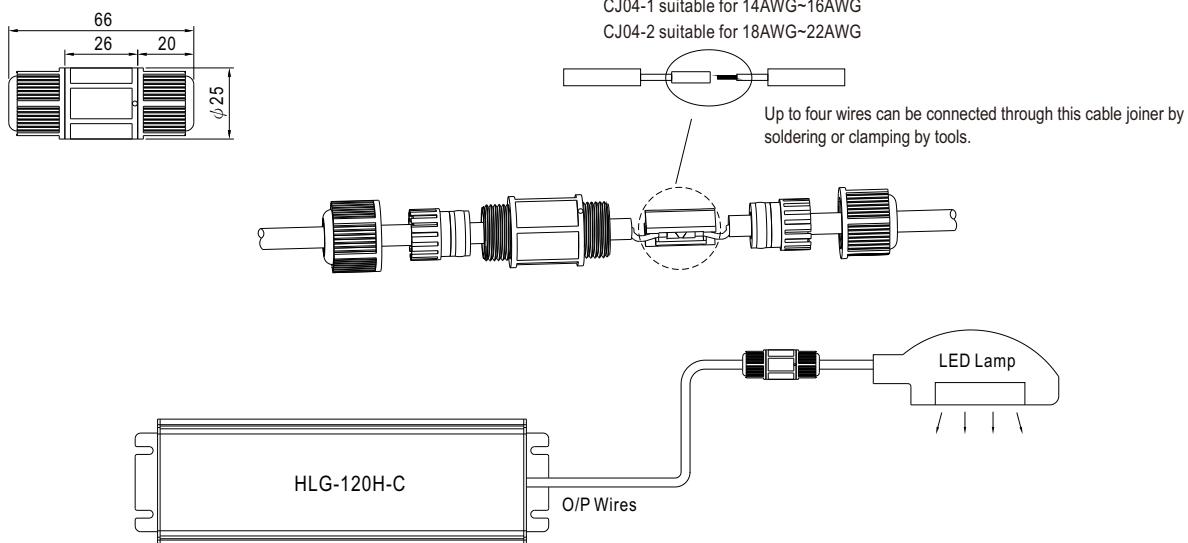
■ WATERPROOF CONNECTION

◎ Waterproof connector

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



◎ 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>