

SPECIFICATION

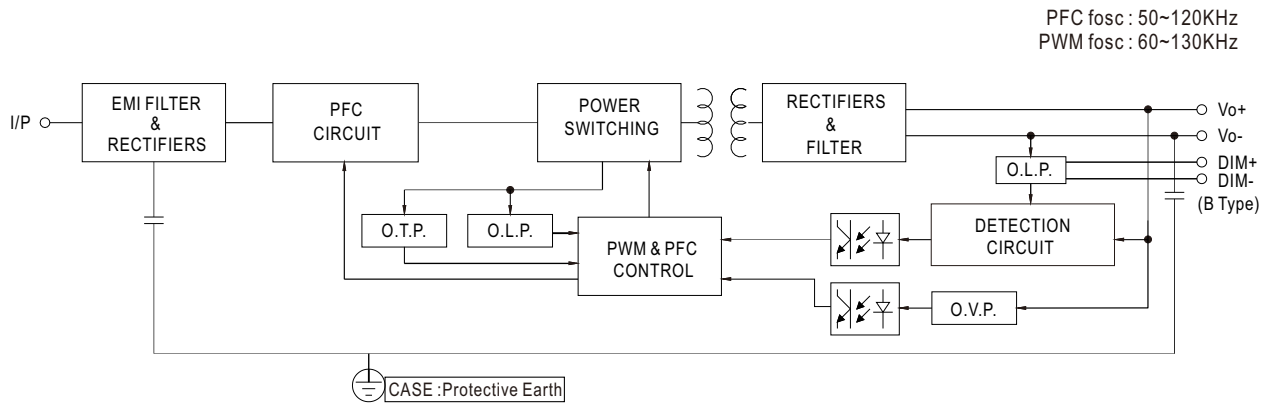
MODEL		ELG-150-C500	ELG-150-C700	ELG-150-C1050	ELG-150-C1400	ELG-150-C1750	ELG-150-C2100
OUTPUT	RATED CURRENT	500mA	700mA	1050mA	1400mA	1750mA	2100mA
	RATED POWER	100VAC ~ 180VAC					
		105W	105W	105W	105W	105W	105W
		200VAC ~ 305VAC					
		150W	149.8W	150.15W	149.8W	150.5W	151.2W
	CONSTANT CURRENT REGION ^{Note.2}	150 ~ 300V	107 ~ 214V	72 ~ 143V	54 ~ 107V	43 ~ 86V	36 ~ 72V
	OPEN CIRCUIT VOLTAGE _(max.)	315V	225V	151V	115V	94V	80V
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)					
	250 ~ 500mA	350 ~ 700mA	525 ~ 1050mA	700 ~ 1400mA	875 ~ 1750mA	1050 ~ 2100mA	
CURRENT RIPPLE	5.0% max. @rated current						
CURRENT TOLERANCE	±5.0%						
SET UP TIME ^{Note.4}	1600ms/115VAC 500ms/230VAC						
INPUT	VOLTAGE RANGE ^{Note.3}	100 ~ 305VAC 142 ~ 431VDC continue,320VAC for 24Hrs; 360VAC for 1Hr (Please refer to "STATIC CHARACTERISTIC" section)					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR _(Typ.)	PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)					
	TOTAL HARMONIC DISTORTION	THD< 20% (@load≥50%/115VC; @load≥60%/230VAC; @load≥75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)					
	EFFICIENCY _(Typ.)	92%	92%	92%	91%	91%	91%
	AC CURRENT _(Typ.)	1.7A / 115VAC 0.9A / 230VAC 0.7A/277VAC					
	INRUSH CURRENT _(Typ.)	COLD START 65A(twidth=485μs measured at 50% Ipeak)/230VAC; Per NEMA 410					
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC					
	LEAKAGE CURRENT	<0.75mA / 277VAC					
NO LOAD / STANDBY POWER CONSUMPTION	No load power consumption <0.5W for Blank / A -Type Standby power consumption <0.5W for B / AB / DA-Type						
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed					
	OVER VOLTAGE	320 ~ 360V	230 ~ 265V	155 ~ 180V	128 ~ 150V	96 ~ 106V	82 ~ 92V
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover					
ENVIRONMENT	WORKING TEMP.	Tcase=-40 ~ +90℃ (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)					
	MAX. CASE TEMP.	Tcase=+90℃					
	WORKING HUMIDITY	20 ~ 95% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 60℃)					
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12;BS EN/EN/AS/NZS 61347-1,BS EN/EN/AS/NZS 61347-2-13 independent, BS EN/EN62384; GB/T19510.1,GB/T19510.213,EAC TP TC 004,BIS IS15885(for 700A, 1050A,700DA only), IP65 or IP67; KC61347-1,KC61347-2-13 approved					
	DALI STANDARDS	Compliance to IEC62386-101,102,(207 by request) for DA Type only					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH					
	EMC EMISSION	Compliance to BS EN/EN55015,BS EN/EN61000-3-2 Class C (@load ≥ 60%) ; BS EN/EN61000-3-3; GB/T 17743 , GB17625.1;EAC TP TC 020; KC KN15 ,KN61547					
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 6KV, Line-Line 4KV), EAC TP TC 020; KC KN15 ,KN61547					
	MTBF	3102.4K hrs min. Telcordia SR-332 (Bellcore) ;308.5K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	219*63*35.5 mm (L*W*H)					
	PACKING	0.95Kg; 16pcs / 16.0kg / 0.77CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature. 2. Please refer to "DRIVING METHODS OF LED MODULE". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery. 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. (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 6. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 75℃ or less. 7. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com . 8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). 9. 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 10. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains. 11. 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						



105~150W Constant Current Mode LED Driver

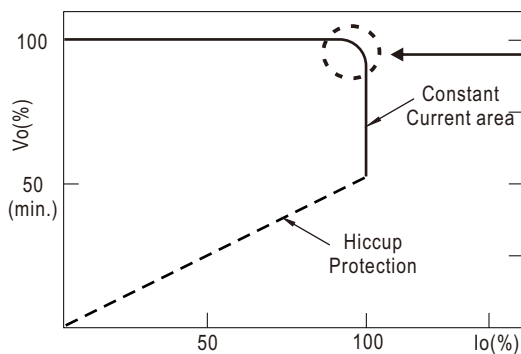
ELG-150-C series

■ BLOCK DIAGRAM



■ DRIVING METHODS OF LED MODULE

※ This series works in constant current mode to directly 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.

© This characteristic applies to Blank/A/B/AB-Type,
For DA-Type, the Constant Current area is 60%~100% Vo.



105~150W Constant Current Mode LED Driver

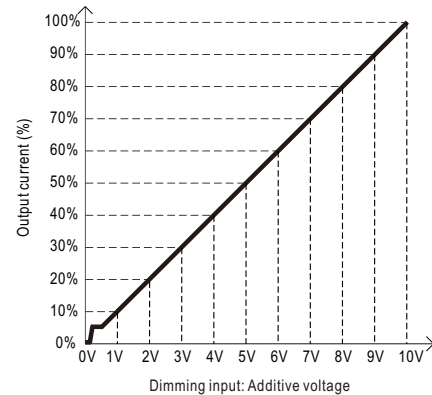
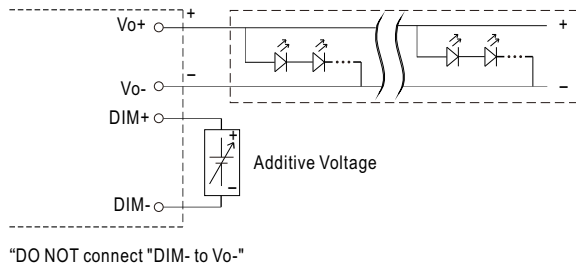
ELG-150-C series**■ DIMMING OPERATION**

* DIM+ for B/AB-Type
DA+ for DA-Type
* DIM- for B/AB-Type
DA- for DA-Type

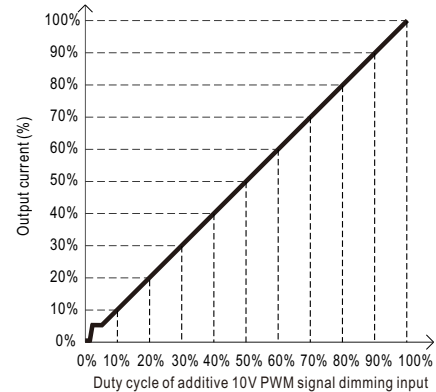
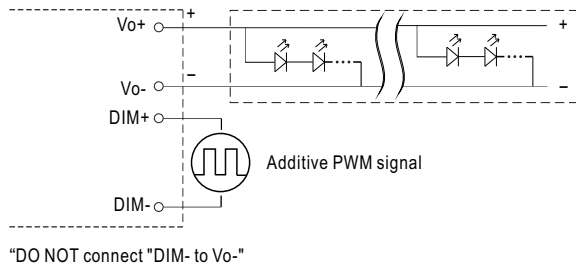
※ 3 in 1 dimming function (for B/AB-Type)

- 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 μ A (typ.)

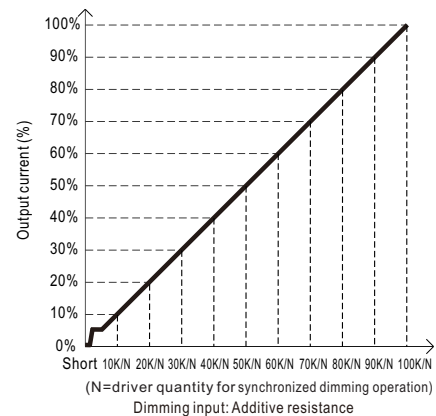
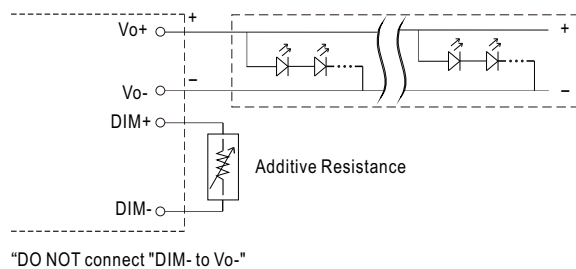
◎ Applying additive 0 ~ 10VDC



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



◎ Applying additive resistance:



Note : 1. Min. dimming level is about 8% and the output current is not defined when $0\% < I_{out} < 8\%$.

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

※ DALI Interface (primary side; for DA-Type)

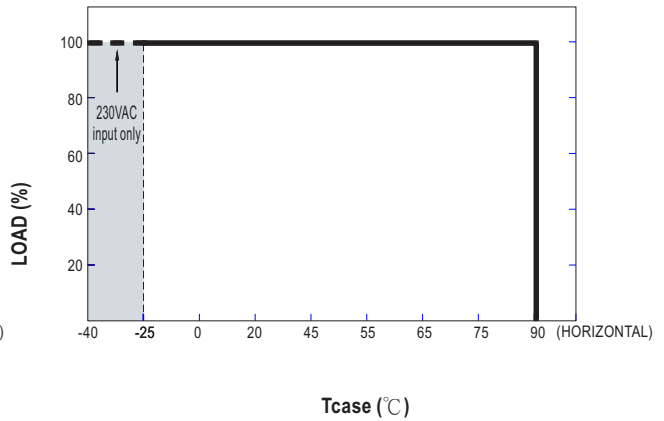
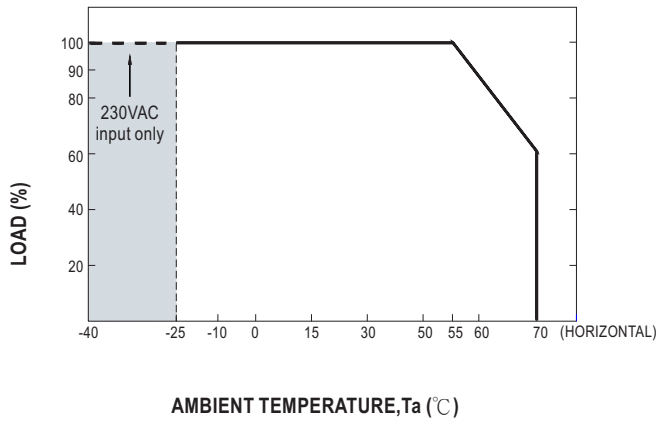
- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.



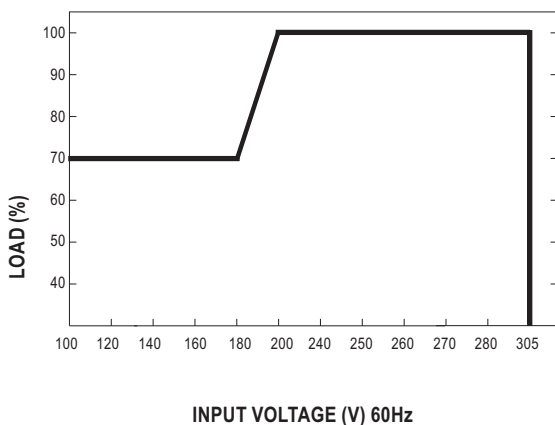
105~150W Constant Current Mode LED Driver

ELG-150-C series

■ OUTPUT LOAD vs TEMPERATURE(Note.7)



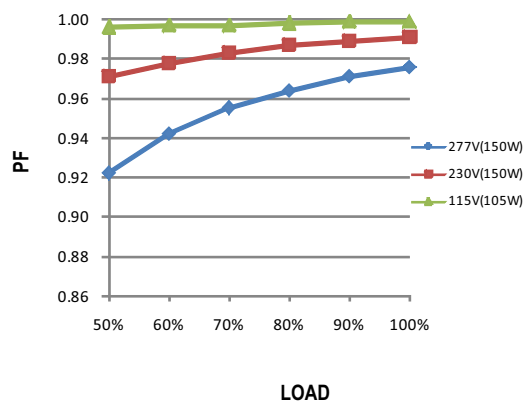
■ STATIC CHARACTERISTIC



※ De-rating is needed under low input voltage.

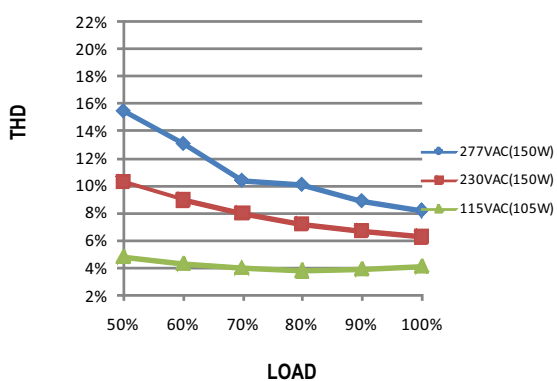
■ POWER FACTOR (PF) CHARACTERISTIC

※ Tcase at 75°C



■ TOTAL HARMONIC DISTORTION (THD)

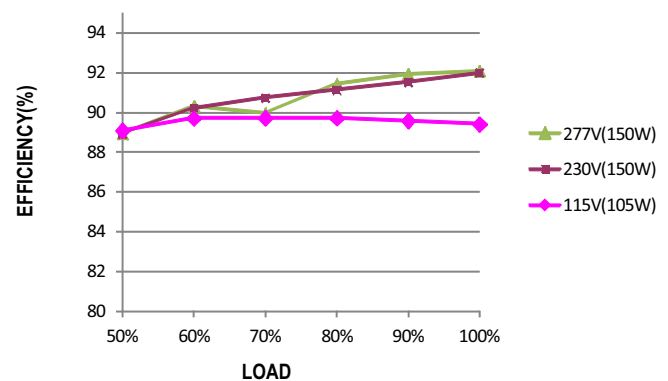
※ 500mA Model, Tcase at 75°C



■ EFFICIENCY vs LOAD

ELG-150-C series possess superior working efficiency that up to 92% can be reached in field applications.

※ 500mA Model, Tcase at 75°C

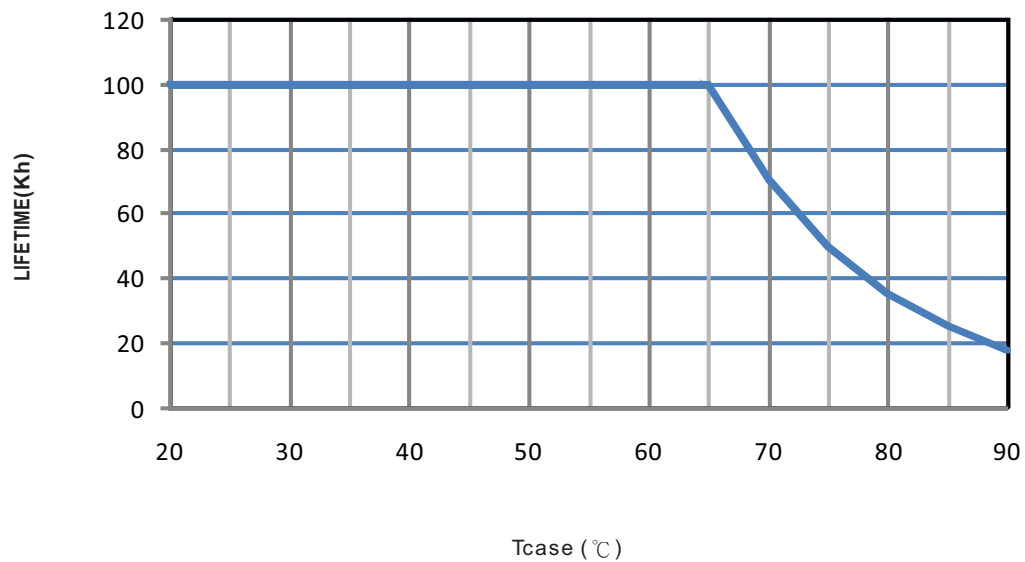




105~150W Constant Current Mode LED Driver

ELG-150-C series

■ LIFE TIME





105~150W Constant Current Mode LED Driver

ELG-150-C series

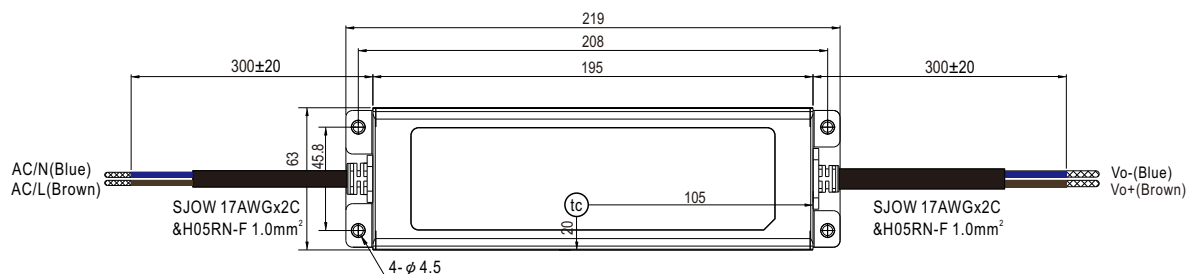
MECHANICAL SPECIFICATION

※ Blank-Type

CASE NO.: 237A

Unit:mm

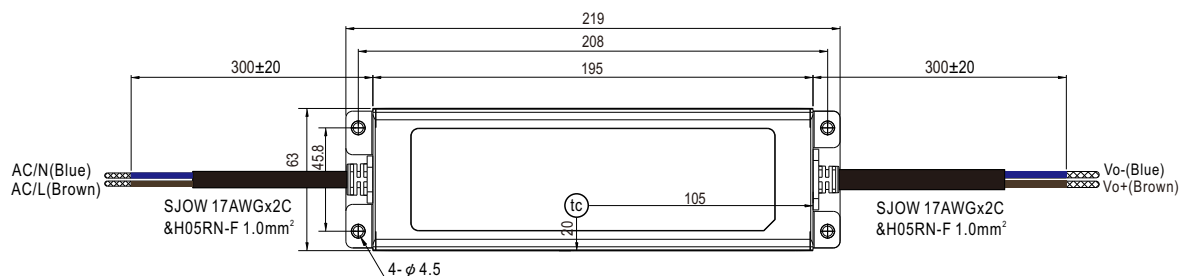
Tolerance:±1



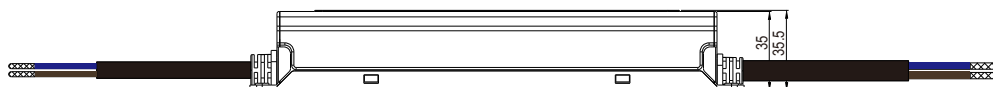
• (tc) : Max. Case Temperature



※ A-Type(except for 1750mA, 2100mA models)



• (tc) : Max. Case Temperature

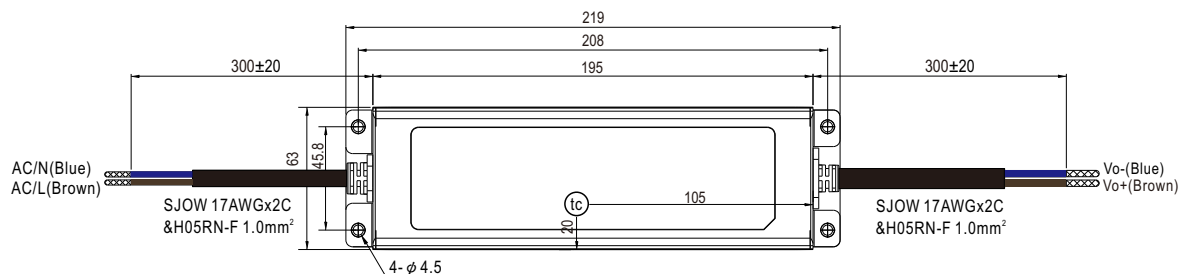




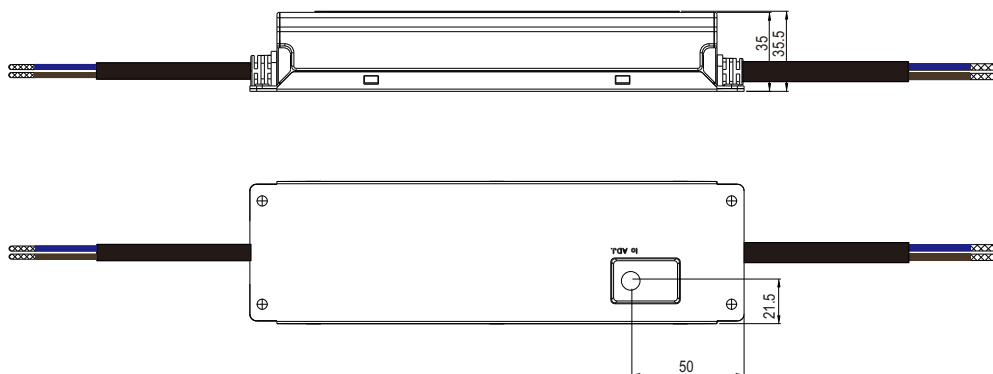
105~150W Constant Current Mode LED Driver

ELG-150-C series

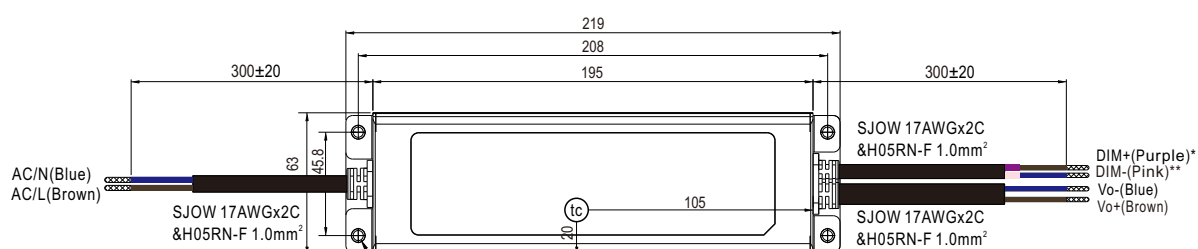
※ A-Type(for 1750mA, 2100mA models)



• (tc) : Max. Case Temperature

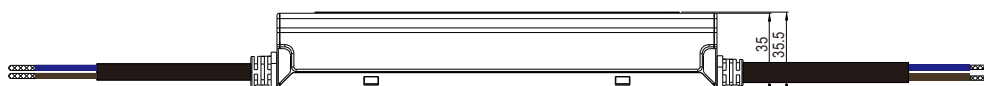


※ B/DA-Type



• (tc) : Max. Case Temperature

* DIM+ for B-Type
DA+ for DA-Type
*** DIM- for B-Type
DA- for DA-Type

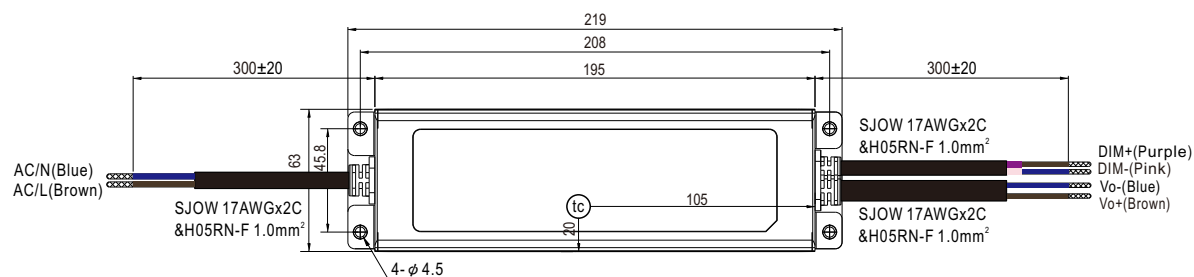




105~150W Constant Current Mode LED Driver

ELG-150-C series

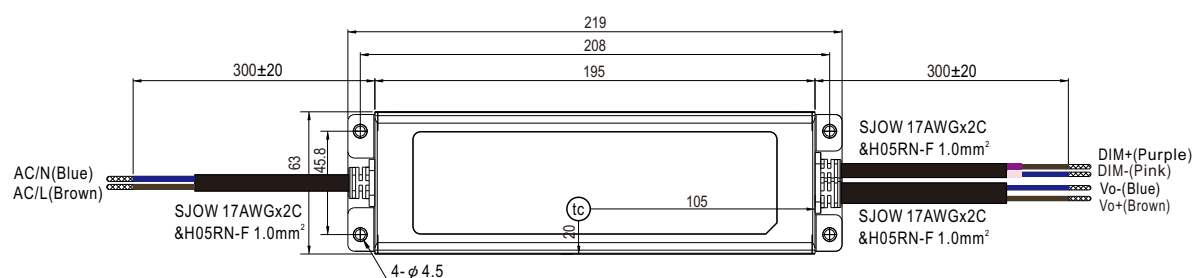
※ AB-Type(except for 1750mA, 2100mA models)



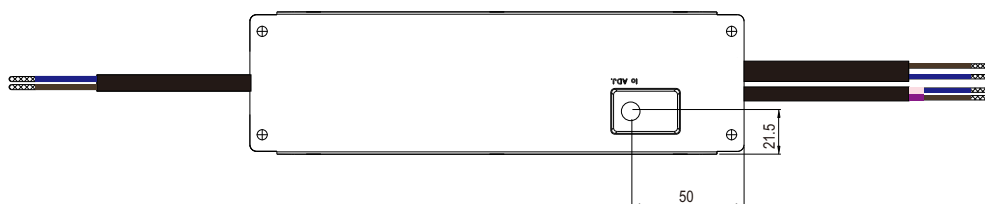
• (tc) : Max. Case Temperature



※ AB-Type(for 1750mA, 2100mA models)



• (tc) : Max. Case Temperature

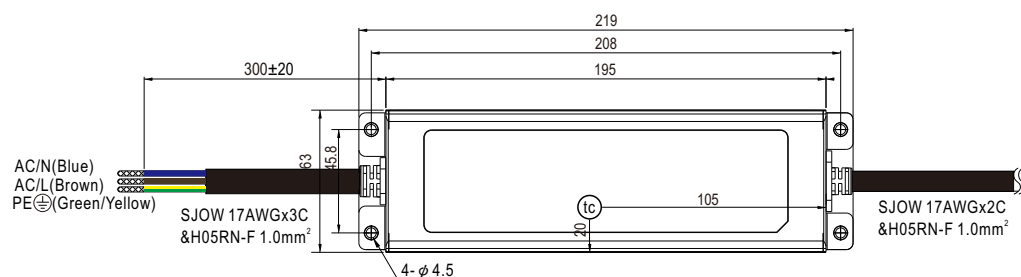




105~150W Constant Current Mode LED Driver

ELG-150-C series

※ **3Y Model (3-wire input)**



• (tc) : Max. Case Temperature

○ Note1: Please connect the case to PE for the complete EMC deliverance and safety use.

○ Note2: Please contact MEAN WELL for input wiring option with PE.

■ **Recommend Mounting Direction**

