



■ **Features**

- Metal housing design with functional Ground
- Class II design
- Constant Current mode output
- Built-in active PFC function
- No load / Standby power consumption <0.5W
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer;
- 3 in 1 dimming (dim-to-off); Smart timer dimming; DALI;
- Typical lifetime>50000 hours
- 5 years warranty

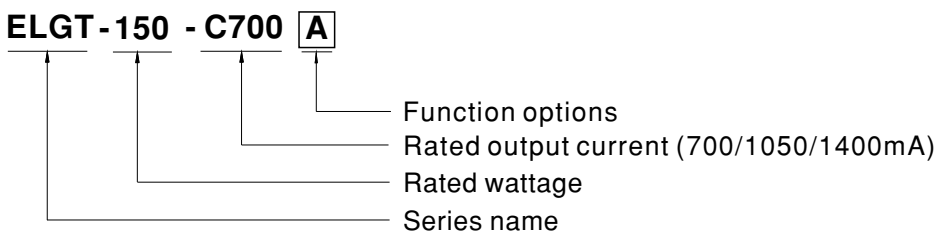
■ **Applications**

- LED street lighting
- LED harbor lighting
- LED bay lighting
- LED greenhouse lighting
- LED flood lighting
- Comply with class II application

■ **Description**

ELGT-150-C series is a 105~150W LED AC/DC classII driver featuring the constant current mode and high voltage output. ELGT-150-C operates from 100~305VAC and offers models with different rated current ranging between 700mA and 1400mA. Thanks to the high efficiency up to 92%, 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. ELGT-150-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**



Type	IP Level	Function	Note
Blank	IP67	Io fixed.	In Stock
A	IP65	Io adjustable through built-in potentiometer.	In Stock
B	IP67	3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
AB	IP65	Io adjustable through built-in potentiometer& 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
DA	IP67	DALI control technology.	In Stock
D2	IP67	Built-in Smart timer dimming and programmable function.	In Stock

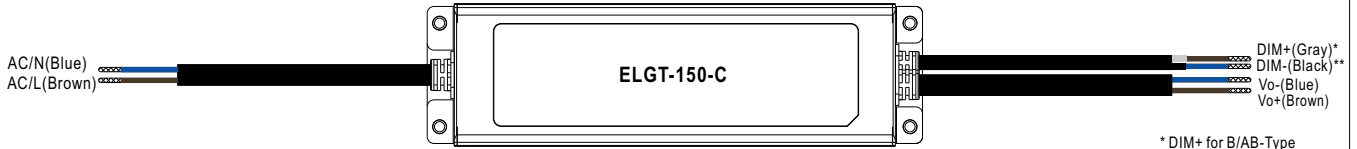


105~150W Class II Constant Current Mode LED Driver **ELGT-150-C series**

SPECIFICATION

MODEL		ELGT-150-C700 <input type="checkbox"/>	ELGT-150-C1050 <input type="checkbox"/>	ELGT-150-C1400 <input type="checkbox"/>	
OUTPUT	RATED CURRENT	700mA	1050mA	1400mA	
	RATED POWER	200VAC ~ 305VAC			
		149.8W	150.15W	149.8W	
		100VAC ~ 180VAC			
		105W	105W	105W	
	CONSTANT CURRENT REGION <small>Note.2</small>	107 ~ 214V	72 ~ 143V	54 ~ 107V	
	OPEN CIRCUIT VOLTAGE <small>(max.)</small>	225V	151V	115V	
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)			
		350 ~ 700mA	525 ~ 1050mA	700 ~ 1400mA	
	CURRENT RIPPLE	5.0% max. @rated current			
CURRENT TOLERANCE	±5.0%				
SET UP TIME <small>Note.4</small>	1600ms/115VAC	500ms/230VAC			
INPUT	VOLTAGE RANGE <small>Note.3</small>	100 ~ 305VAC 142 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR <small>(Typ.)</small>	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%/115VAC; @load ≥ 60%/230VAC; @load ≥ 75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)			
	EFFICIENCY <small>(Typ.)</small>	92%	92%	91%	
	AC CURRENT <small>(Typ.)</small>	1.7A / 115VAC	0.9A / 230VAC	0.7A/277VAC	
	INRUSH CURRENT <small>(Typ.)</small>	COLD START 65A (twid=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	<0.7mA / 240VAC			
	NO LOAD / STANDBY POWER CONSUMPTION	No load power consumption <0.5W for Blank / A / D2-Type Standby power consumption <0.5W for B / DA-Type			
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	230 ~ 265V	155 ~ 180V	128 ~ 150V	
		Shut down o/p voltage, re-power on to recover			
OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	Tcase=-40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)			
	MAX. CASE TEMP.	Tcase=+90°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	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes				
SAFETY & EMC	SAFETY STANDARDS	ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB19510.14; EAC TP TC 004; IP65 or IP67 approved			
	DALI STANDARDS	Compliance to IEC62386-101, 102, 207 for DA-Type only			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-CASE:3.75KVAC O/P-CASE:1.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 60%); EN61000-3-3; GB/T17743, GB17625.1; EAC TP TC 020			
	EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV); EAC TP TC 020			
OTHERS	MTBF	1098.95K hrs min. Telcordia SR-332 (Bellcore)	308.5Khrs min.	MIL-HDBK-217F (25°C)	
	DIMENSION	219*63*35.5 mm (L*W*H)			
	PACKING	0.95Kg; 16pcs / 16.0kg / 0.77CUFT			
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature. Please refer to "DRIVING METHODS OF LED MODULE". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. 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. 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. 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°C or less. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com 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 				

■ DIMMING OPERATION

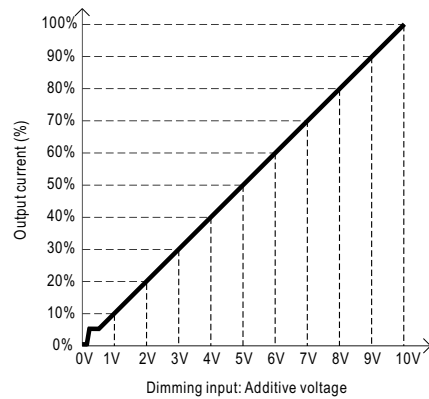
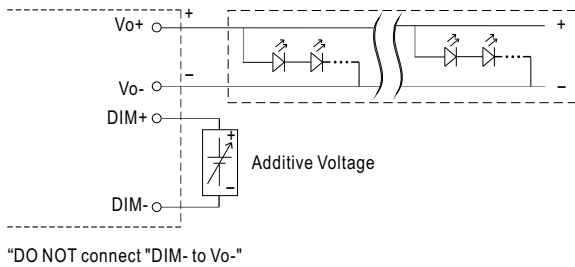


* DIM+ for B/AB-Type
 DA+ for DA-Type
 PROG for D2-Type
 * DIM- for B/AB-Type
 DA- for DA-Type
 PROG for D2-Type

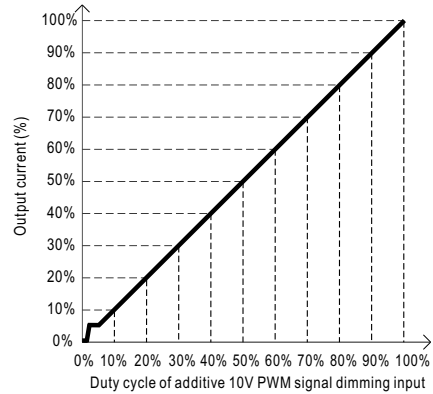
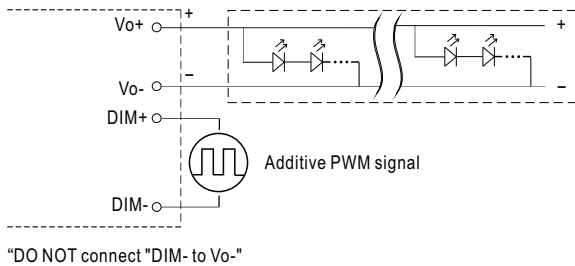
※ 3 in 1 dimming function (for B/AB-Type)

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.)

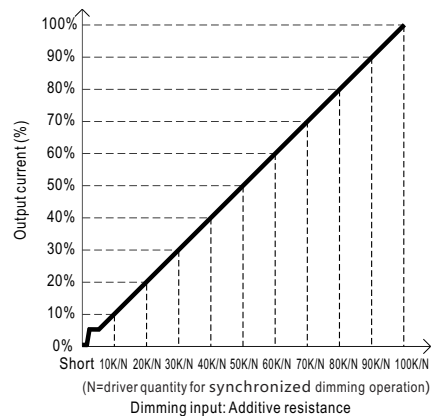
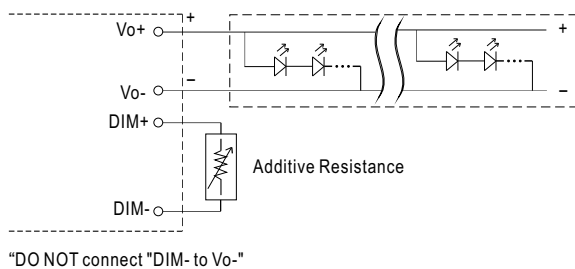
◎ Applying additive 0 ~ 10VDC



◎ 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 0kΩ or 0Vdc, or 10V PWM signal with 0% duty cycle.

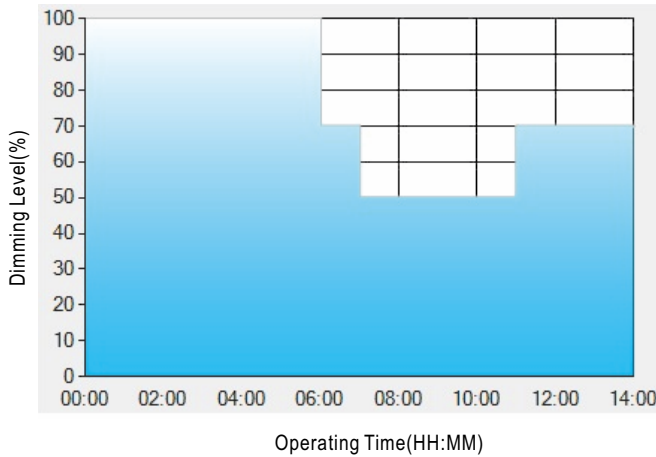
※ **DALI Interface (primary side; for DA-Type)**

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

※ **Smart timer dimming function (for D2-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 : ◉ D01-Type: the profile recommended for residential lighting



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

	T1	T2	T3	T4
TIME**	06:00	07:00	11:00	---
LEVEL**	100%	70%	50%	70%

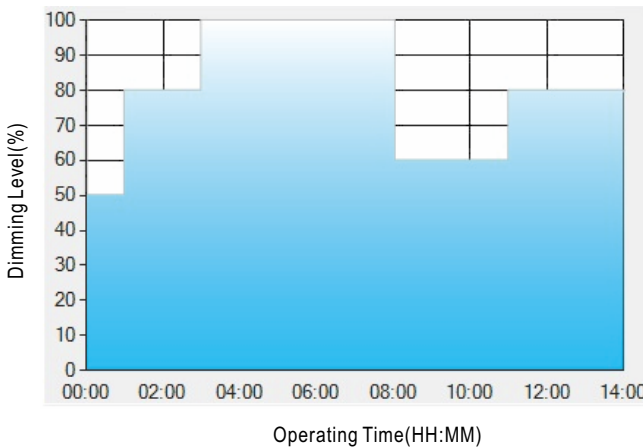
** : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

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 : ◉ D02-Type: the profile recommended for street lighting



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

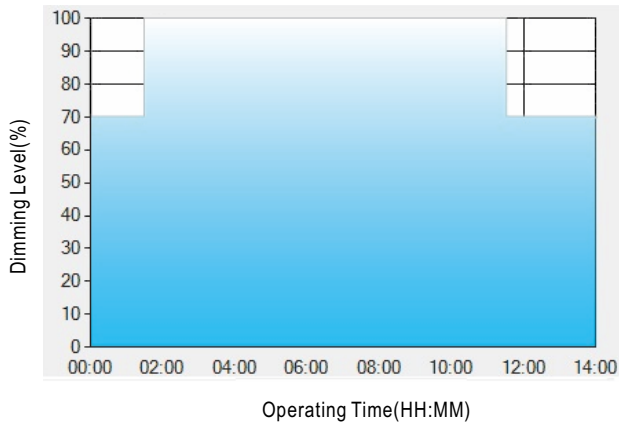
	T1	T2	T3	T4	T5
TIME**	01:00	03:00	8:00	11:00	---
LEVEL**	50%	80%	100%	60%	80%

** : 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.

Ex: © D03-Type: the profile recommended for tunnel lighting



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

	T1	T2	T3
TIME**	01:30	11:00	---
LEVEL**	70%	100%	70%

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

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

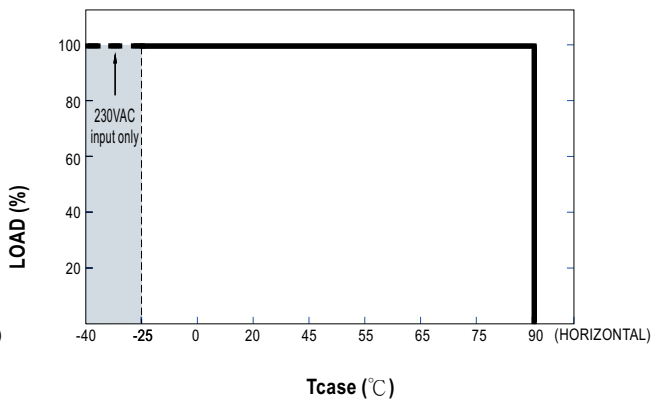
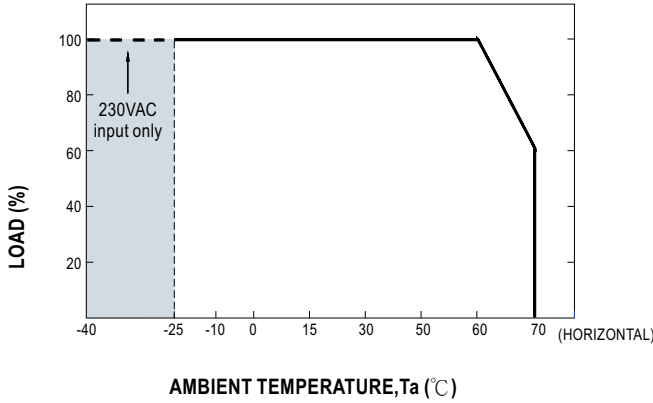
[1] The power supply will switch to the constant current level at 70% starting from 4:30pm.

[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.

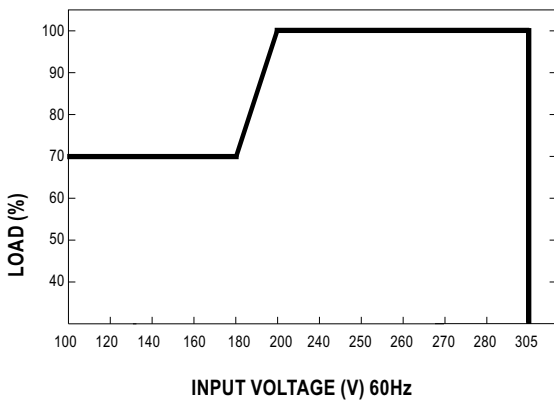
[3] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

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

■ **OUTPUT LOAD vs TEMPERATURE(NOTE 7.)**

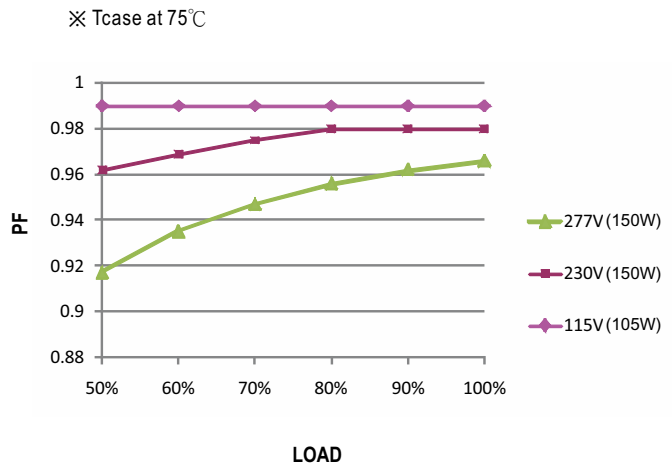


■ **STATIC CHARACTERISTIC**



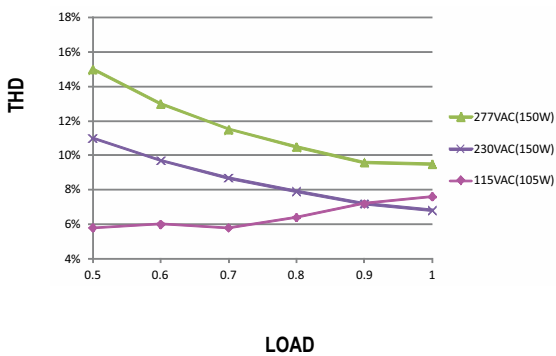
※ De-rating is needed under low input voltage.

■ **POWER FACTOR (PF) CHARACTERISTIC**



■ **TOTAL HARMONIC DISTORTION (THD)**

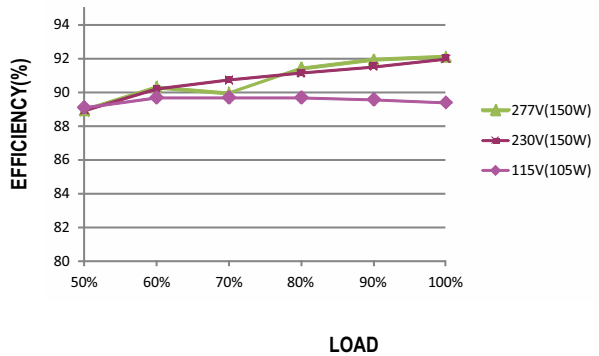
※ 700mA Model, Tcase at 75°C



■ **EFFICIENCY vs LOAD**

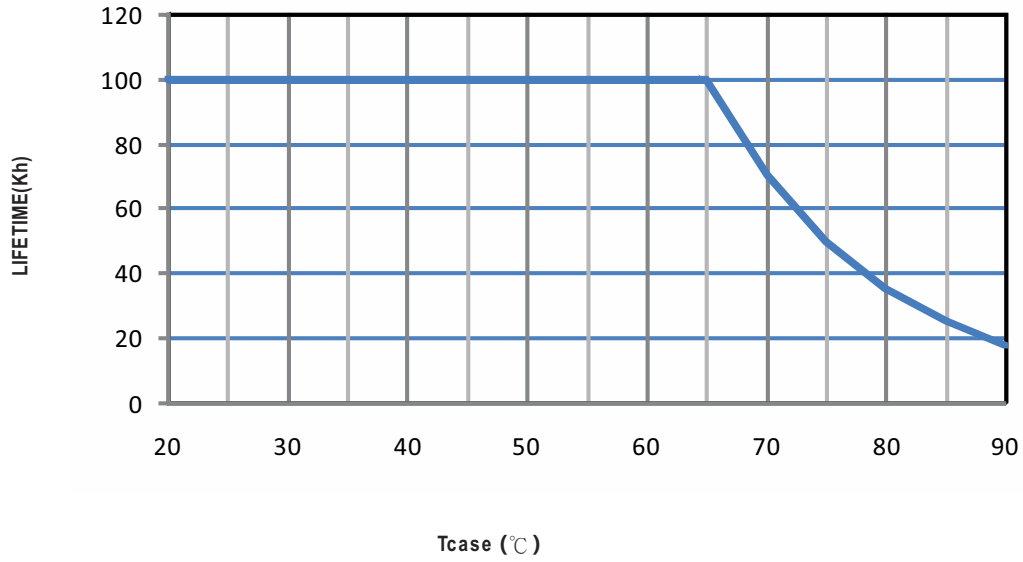
ELGT-150-C series possess superior working efficiency that up to 92% can be reached in field applications.

※ 700mA Model, Tcase at 75°C





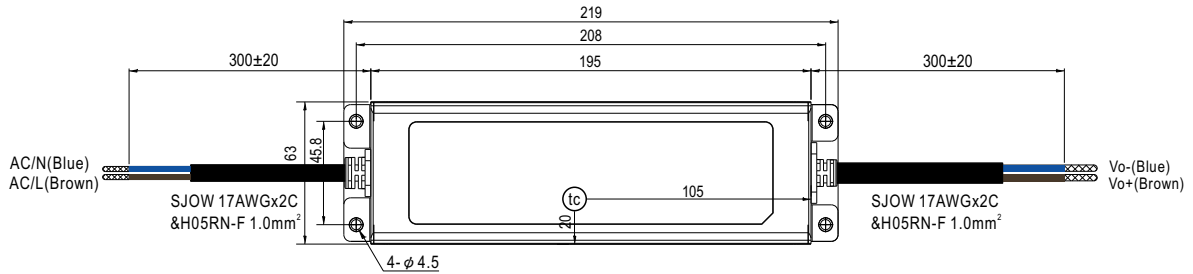
■ LIFE TIME



■ MECHANICAL SPECIFICATION

※ Blank-Type

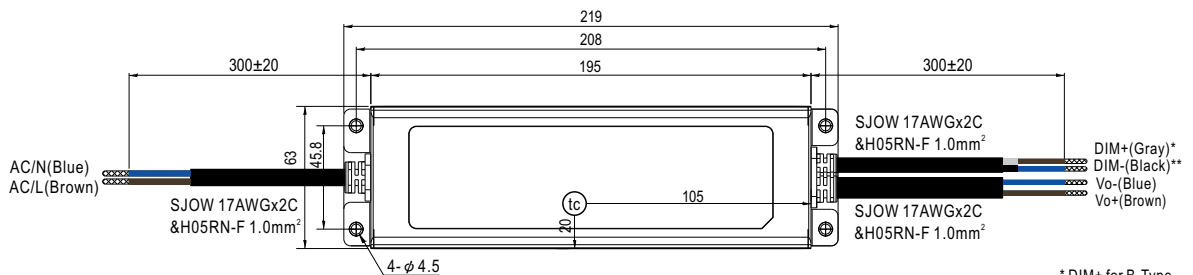
CASE NO.: 237A Unit:mm



·(tc) : Max. Case Temperature



※ B/DA/D2-Type

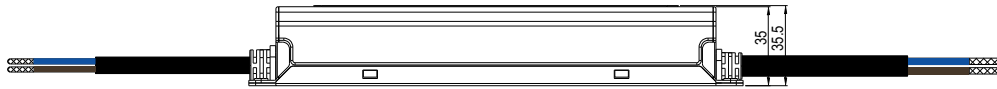
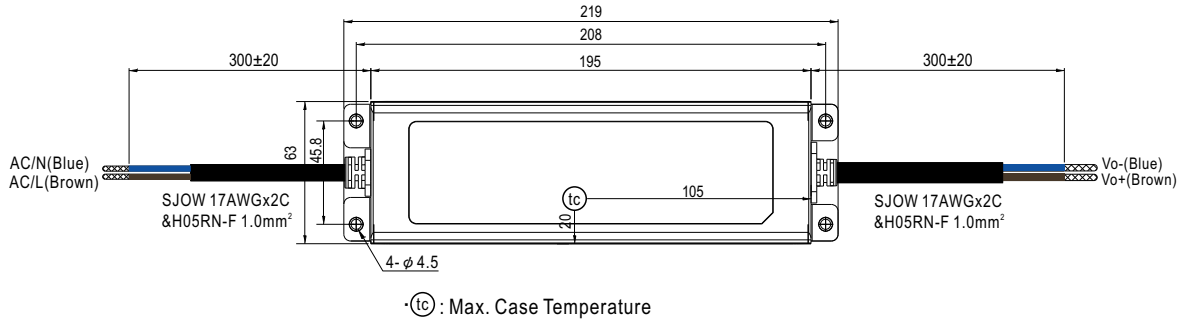


·(tc) : Max. Case Temperature

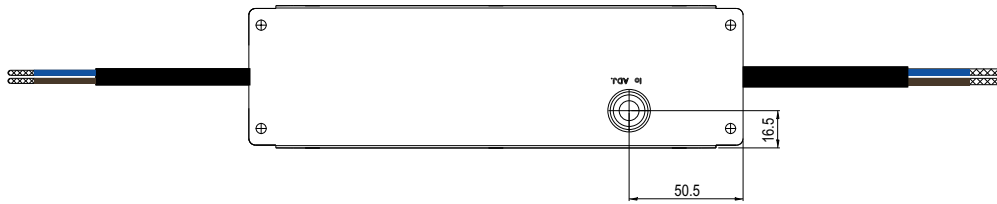
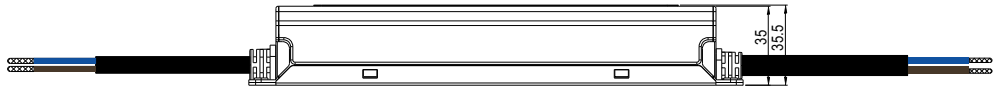
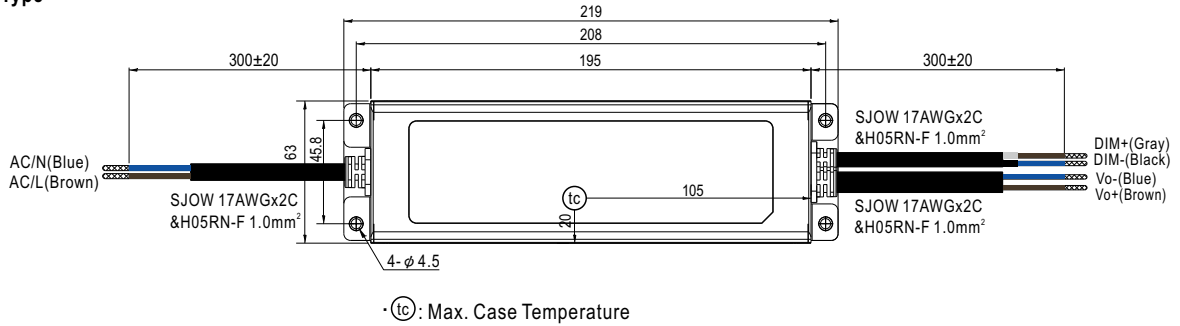
* DIM+ for B-Type
DA+ for DA-Type
PROG+ for D2-Type
* DIM- for B-Type
DA- for DA-Type
PROG- for D2-Type



※ **A-Type**



※ **AB-Type**



■ **MANUAL INSTALLATION**

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