

Наличие и актуальные цены на

# **ELG-150-C1400A**

https://www.mean-

well.ru/store/ELG-150-C1400A/





























## Features

- Constant Current mode output
- · Metal housing design with functional Ground
- 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
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

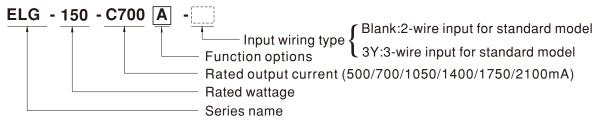
## GTIN CODE

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

# Description

ELG-150-C series is a 150W LED AC/DC driver featuring the constant current mode and high voltage output. ELG-150-C operates from 100~360VAC and offers models with different rated current ranging between 500mA and 2100mA. Thanks to the high efficiency up to 92%, with the fanless design, the entire series is able to operate for -40°C ~+85°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. ELG-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	lo fixed.	In Stock
Α	IP65	Io 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 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
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



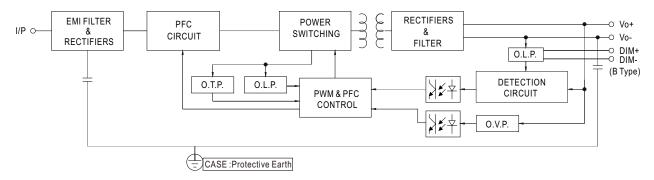
## **SPECIFICATION**

MODEL		ELG-150-C500	ELG-150-C700	ELG-150-C1050	ELG-150-C1400	ELG-150-C1750	ELG-150-C2100		
	RATED CURRENT	500mA	700mA	1050mA	1400mA	1750mA	2100mA		
		100VAC ~ 180VAC	,						
	RATED	105W	105W	105W	105W	105W	105W		
1	POWER	200VAC ~ 305VAC	,		T	1			
		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		
		Adjustable for A/AB-Type only (via built-in potentiometer)							
	CURRENT ADJ. RANGE	250 ~ 500mA	350 ~ 700mA	525 ~ 1050mA	700 ~ 1400mA	875 ~ 1750mA	1050 ~ 2100mA		
	CURRENT RIPPLE	5.0% max. @rated	current	-		1			
	CURRENT TOLERANCE	±5.0%							
	SET UP TIME Note.4	1600ms/115VAC 500ms/230VAC							
	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							
	FREQUENCY RANGE								
	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)							
NPUT	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	ı(twidth=485μs mea	asured at 50% Ipeak	)/230VAC; Per NEM	1A 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 / Dx / D2-Type Standby power consumption <0.5W for B / AB / DA-Type							
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed							
		320 ~ 360V	230 ~ 265V	155 ~ 180V	128 ~ 150V	96 ~ 106V	82 ~ 92V		
ROTECTION	OVER VOLTAGE				120 1001	00 1000	02 02 0		
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover Shut down o/p voltage, re-power on to recover							
	WORKING TEMP.			OUTPUT LOAD vs	TEMPERATURE" se	ection)			
	MAX. CASE TEMP.		( loude relet to	0011 01 20/12 10	TEMI ENVIONE 30	, ottorry			
		Tcase=+90°C 20 ~ 95% RH non-condensing							
NVIRONMENT	WORKING HUMIDITY STORAGE TEMP., HUMIDITY		•						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60							
	VIBRATION			d for 72min. each ale					
	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; GB19510.1,GB19510.14,EAC TP TC 004,BIS IS15885(for 700A,1050A,700DA only), IR65 or IR67; KC61347, 1 KC61347, 2 13 approved.							
	DALI STANDARDS	IP65 or IP67; KC61347-1,KC61347-2-13 approved   Compliance to IEC62386-101,102,(207 by request) for DA Type only							
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC							
EMC	ISOLATION RESISTANCE								
	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							
	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°C)							
OTHERS	DIMENSION	219*63*35.5 mm (	,						
	PACKING	0.95Kg; 16pcs / 16.0kg / 0.77CUFT							
NOTE	2. Please refer to "DRIVING METH 3. De-rating may be needed under 4. Length of set up time is measur 5. The driver is considered as a complete installation, the final er (as available on https://www.mes 6. This series meets the typical life 7. Please refer to the warranty stat 8. The ambient temperature derati 9. For any application note and IP https://www.meanwell.com/Uplo 10. To fulfill requirements of the lat	mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.  THODS OF LED MODULE". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery.  er low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.  ured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.  component that will be operated in combination with final equipment. Since EMC performance will be affected by the  equipment manufacturers must re-qualify EMC Directive on the complete installation again.  eanwell.com//Upload/PDF/EMI_statement_en.pdf)  fe expectancy of >50,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 75°C or less.  attement on MEAN WELL's website at http://www.meanwell.com.  titing of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).  P water proof function installation caution, please refer our user manual before using.  load/PDF/LED_EN.pdf  atest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.  Her build in using to comply with Type HL application.							



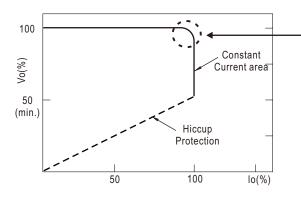
### ■ BLOCK DIAGRAM

PFC fosc: 50~120KHz PWM fosc: 60~130KHz



## ■ DRIVING METHODS OF LED MODULE

 $\frak{\%}$  This series works in constant current mode to directly drive the LEDs.



Typical output current normalized by rated current (%)

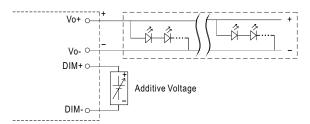
 In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

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



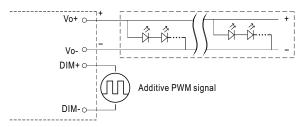
## **■ DIMMING OPERATION** 0 DIM+(Purple) AC/N(Blue) ELG-150-C AC/L(Brown) 0 0 \* DIM+ for B/AB-Type DA+ for DA-Type PROG+ for D2-Type \* 3 in 1 dimming function (for B/AB-Type) \*DIM- for B/AB-Type DA- for DA-Type PROG- for D2-Type

- · 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: 100µA (typ.)



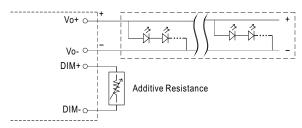
"DO NOT connect "DIM- to Vo-"

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

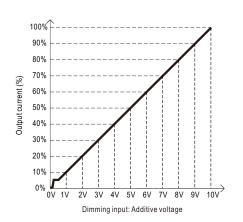


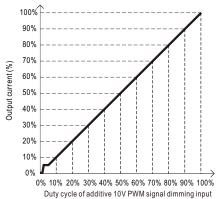
"DO NOT connect "DIM- to Vo-"

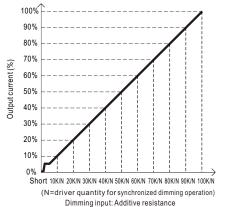
Applying additive resistance:



"DO NOT connect "DIM- to Vo-"







Note: 1. Min. dimming level is about 8% and the output current is not defined when 0% < Iout < 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.



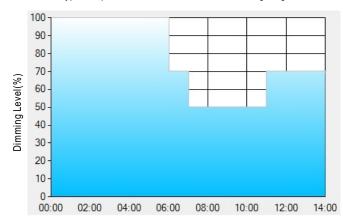
#### DALI Interface (primary side; for DA-Type)

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

#### **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: O D01-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%

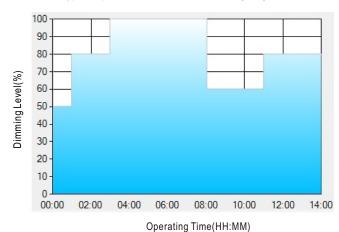
Operating Time(HH:MM)

- \*\*: 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%

#### operating rino(rinimin)

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

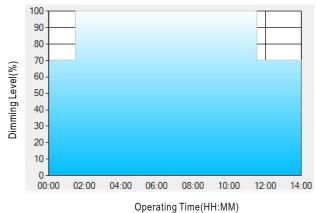
  Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:
- [1] The power supply will switch to the constant current level at 50% starting from 5:00pm.
- [2] The power supply will switch to the constant current level at 80% in turn, starting 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.



## 105~150W Constant Current Mode LED Driver

# ELG-150-C series





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.

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.

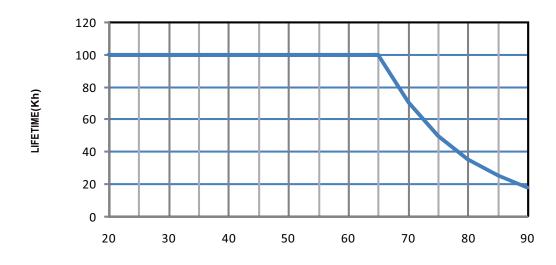
The constant current level remains till  $6:30\,\mathrm{am}$ , which is 14:00 after the power supply turns on.



#### ■ OUTPUT LOAD vs TEMPERATURE(Note.7) 100 100 90 80 80 230VAC 230VAC input only input only 60 LOAD (%) LOAD (%) 40 40 20 20 70 (HORIZONTAL) 90 (HORIZONTAL) 50 55 60 75 -40 -10 0 15 30 -40 20 45 55 65 AMBIENT TEMPERATURE,Ta (°C) Tcase (°C) ■ STATIC CHARACTERISTIC ■ POWER FACTOR (PF) CHARACTERISTIC ※ Tcase at 75° C 100 1.00 90 0.98 80 0.96 70 0.94 出 60 0.92 -230V(150W) LOAD (%) -115V(105W) 50 0.90 0.88 180 200 240 250 260 270 280 305 100 120 140 160 50% 60% 70% 80% 90% 100% **INPUT VOLTAGE (V) 60Hz** LOAD ※ De-rating is needed under low input voltage. ■ TOTAL HARMONIC DISTORTION (THD) **■** EFFICIENCY vs LOAD ELG-150-C series possess superior working efficiency that up to 92% can be reached in field applications. imes 500mA Model, Tcase at 75 $^{\circ}$ C % 500mA Model, Tcase at 75 $^{\circ}\mathrm{C}$ 22% 94 20% 92 18% EFFICIENCY(%) 16% 90 욷 14% <u>→</u>277V(150W) 277VAC(150W) 88 12% 230V(150W) 10% -230VAC(150W) ----115V(105W) 115VAC(105W) 8% 84 6% 4% 82 80 50% 60% 70% 80% 90% 100% 60% 100% 50% 70% 90% 80% LOAD LOAD

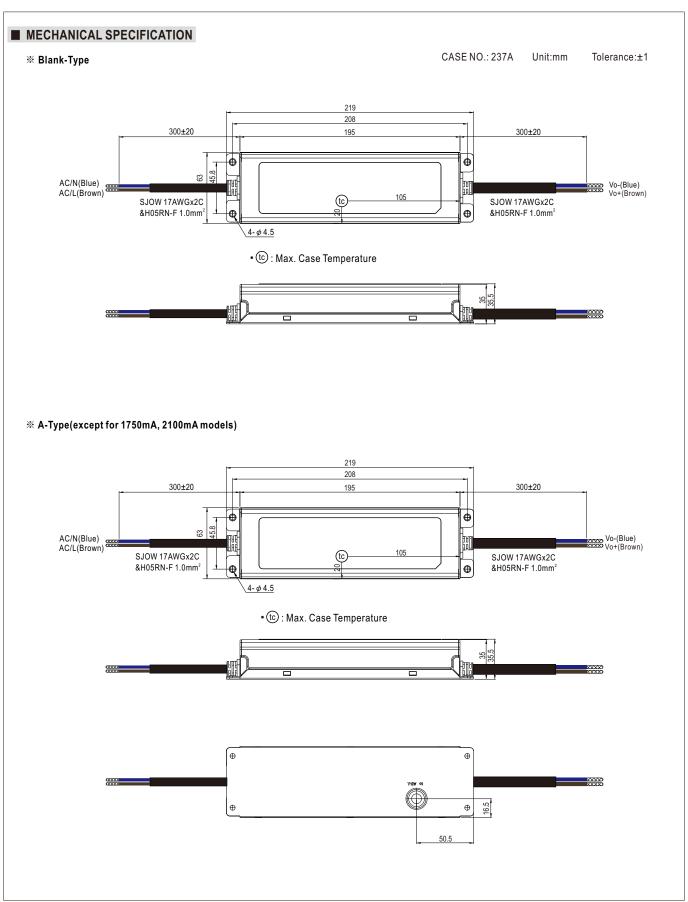


# ■ LIFE TIME

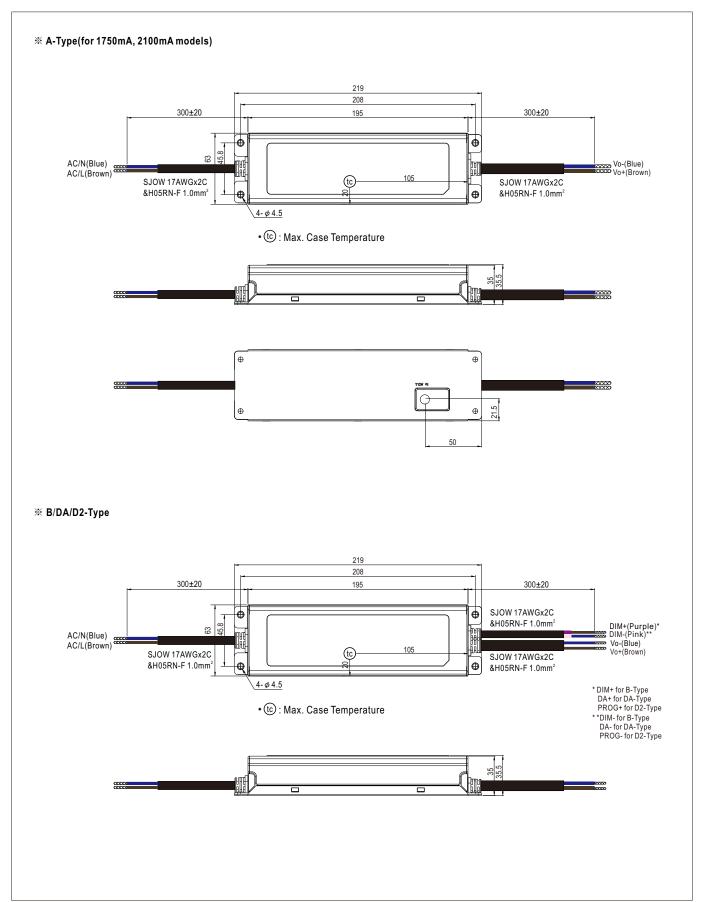


Tcase (°℃)

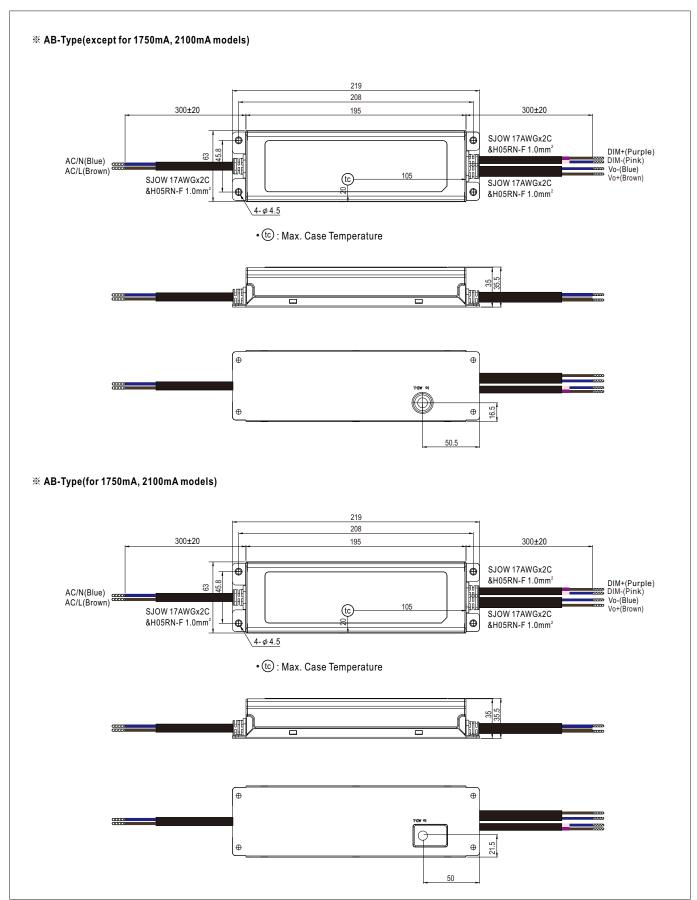




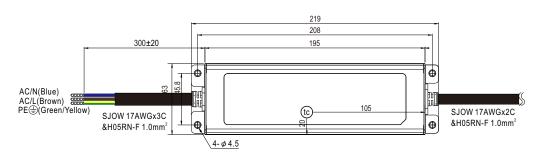








### ※ 3Y Model (3-wire input)



ullet (to): Max. Case Temperature

- O Note1: Please connect the case to PE for the complete EMC deliverance and safety use.
- $\ \, \bigcirc$  Note2: Please contact MEAN WELL for input wiring option with PE.

## ■ Recommend Mounting Direction



## **■ INSTALLATION MANUAL**

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