

Наличие и актуальные цены на

# **ELG-100-C350A**

https://www.mean-well.ru/store/ELG-100-C350A/



























#### Features

- Constant Current mode output
- · Metal housing design with functional Ground
- · Built-in active PFC function
- No load / Standby power consumption < 0.5W</li>
- 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.

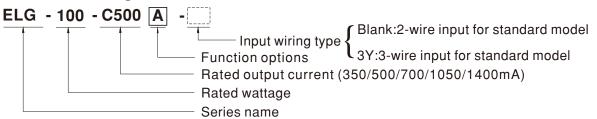
# GTIN CODE

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

# Description

ELG-100-C series is a 100W LED AC/DC driver featuring the constant current mode and high voltage output. ELG-100-C operates from 100~360VAC and offers models with different rated current ranging between 350mA and 1400mA. Thanks to the high efficiency up to 92%, with the fanless design, the entire series is able to operate for -40° ∼+90° 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-100-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	lo 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

File Name:ELG-100-C-SPEC 2024-10-11



#### **SPECIFICATION**

	ELG-100-C350	ELG-100-C500	ELG-100-C700	ELG-100-C1050	ELG-100-C1400		
RATED CURRENT	350mA	500mA	700mA	1050mA	1400mA		
	200VAC ~ 305VAC						
		100W	100.1W	99.75W	100.8W		
RATED POWER	100VAC ~ 180VAC				1.00000		
	70W	70W	70W	70.35W	70W		
CONSTANT CURRENT REGION Note.2	143 ~ 286V	100 ~ 200V	71 ~ 143V	48 ~ 95V	35 ~ 72V		
OPEN CIRCUIT VOLTAGE(max.)	297V	210V	149V	105V	75V		
CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)						
	175 ~ 350mA	250 ~ 500mA	350 ~ 700mA	525 ~ 1050mA	700 ~ 1400mA		
CURRENT RIPPLE	5.0% max. @rated current						
CURRENT TOLERANCE	±5.0%						
SET UP TIME Note.4	1000ms/115VAC						
VOLTAGE RANGE Note.3	100 ~ 305VAC 142 ~ 431VDC continue,320VAC for 24Hrs; 360VAC for 1Hr						
FREQUENCY RANGE	47 ~ 63Hz		,				
POWER FACTOR (Typ.)							
TOTAL HARMONIC DISTORTION	THD< 20%(@load≧50%/115VC; @load≧60%/230VAC; @load≧75%/277VAC)						
EFFICIENCY (Typ.)	92%	91%	91%	90%	90%		
AC CURRENT (Typ.)	1.1A / 115VAC 0.0	6A / 230VAC 0.5A/2	77VAC				
, , , ,							
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	No load power consumption <0.5W for Blank / A / Dx / D2-Type						
POWER CONSUMPTION	Standby power consumption <0.5W for B / AB / DA-Type						
SHORT CIRCUIT							
	305 ~ 333V	222 ~ 242V	154 ~ 174V	110 ~ 130V	79 ~ 95V		
OVER VOLTAGE	Shut down o/p voltag	je, re-power on to reco	over				
OVER TEMPERATURE							
WORKING TEMP.	. •						
MAX. CASE TEMP.	· ·						
WORKING HUMIDITY	20 ~ 95% RH non-condensing						
	′ -40 ~ +80°C, 10 ~ 95% RH						
TEMP. COEFFICIENT							
VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes						
	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; EAC TP TC 004;BIS IS15885(for 700A,1050A only);GB19510.1, GB19510.14; IP65 or IP67; KC61347 - 1, KC61347 - 2 - 13 approved						
SAFETY STANDARDS		CTPTC004;BIS IS15	885(for 700A,1050A onl	y);GB19510.1 , GB19510	0.14; IP65 or IP67;		
SAFETY STANDARDS  DALI STANDARDS	KC61347-1, KC6134	CTPTC 004;BIS IS15 7-2-13 approved	885(for 700A,1050A onl		).14; IP65 or IP67;		
	KC61347 - 1, KC6134 Compliance to IEC62	C TP TC 004;BIS IS15 7-2-13 approved 2386-101,102,(207 by			).14; IP65 or IP67;		
DALI STANDARDS WITHSTAND VOLTAGE	KC61347 - 1 , KC6134 Compliance to IEC62 I/P-O/P:3.75KVAC	C TP TC 004;BIS IS15 7-2-13 approved 2386-101,102,(207 by I/P-FG:2.0KVAC O	request) for DA Type o /P-FG:1.5KVAC		).14; IP65 or IP67;		
DALI STANDARDS	KC61347 - 1 , KC6134 Compliance to IEC6; I/P-O/P:3.75KVAC I/P-O/P, I/P-FG, O/P Compliance to BS EN	C TP TC 004;BIS IS15 .7 - 2 - 13 approved 2386-101,102,(207 by I/P-FG:2.0KVAC O -FG:100M Ohms / 500	request) for DA Type o /P-FG:1.5KVAC VDC / 25°C / 70% RH 1000-3-2 Class C (@ lo				
DALI STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE	KC61347 - 1 , KC6134 Compliance to IEC6; I/P-O/P:3.75KVAC I/P-O/P, I/P-FG, O/P Compliance to BS EN GB17625.1; EAC TP Compliance to BS EN/	C TP TC 004;BIS IS15 7-2-13 approved 2386-101,102,(207 by I/P-FG:2.0KVAC O FG:100M Ohms / 500 /EN55015,BS EN/EN6 TC 020; KC KN15, KN	request) for DA Type o /P-FG:1.5KVAC VDC / 25°C / 70% RH 1000-3-2 Class C (@ lo 61547 11; BS EN/EN61547, ligh N61547	nly	1000-3-3; GB/T 1774		
DALI STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION	KC61347 - 1 , KC6134 Compliance to IEC6: I/P-O/P:3.75KVAC I/P-O/P, I/P-FG, O/P Compliance to BS EN GB17625.1; EAC TP Compliance to BS EN/ Line-Line 4KV); EAC 1 3070.8K hrs min. Telc	CTPTC 004;BIS IS15 7-2-13 approved 2386-101,102,(207 by I/P-FG:2.0KVAC O -FG:100M Ohms / 500 /EN55015,BS EN/EN6 TC 020; KC KN15, KN EN61000-4-2,3,4,5,6,8, PTC 020; KC KN15, k ordia SR-332 (Bellcore	request) for DA Type o /P-FG:1.5KVAC VDC / 25°C / 70% RH 1000-3-2 Class C (@ lo 61547 11; BS EN/EN61547, ligh N61547	nly nad ≥ 60%) ; BS EN/EN6	1000-3-3; GB/T 1774 munity Line-Earth 6K\		
DALI STANDARDS WITHSTAND VOLTAGE ISOLATION RESISTANCE EMC EMISSION EMC IMMUNITY	KC61347 - 1 , KC6134 Compliance to IEC6: I/P-O/P:3.75KVAC I/P-O/P, I/P-FG, O/P Compliance to BS EN GB17625.1; EAC TP Compliance to BS EN/ Line-Line 4KV); EAC 1	CTPTC 004;BIS IS15 7-2-13 approved 2386-101,102,(207 by I/P-FG:2.0KVAC O -FG:100M Ohms / 500 VEN55015,BS EN/EN6 TC 020; KC KN15, KN EN61000-4-2,3,4,5,6,8, PTC 020; KC KN15, K ordia SR-332 (Bellcore	request) for DA Type o /P-FG:1.5KVAC VDC / 25°C / 70% RH 1000-3-2 Class C (@ lo 61547 11; BS EN/EN61547, ligh N61547	nly  pad ≥ 60%); BS EN/EN6  nt industry level (surge im	1000-3-3; GB/T 1774 munity Line-Earth 6K\		
	RATED POWER  CONSTANT CURRENT REGION Note 2 OPEN CIRCUIT VOLTAGE (max.) CURRENT ADJ. RANGE CURRENT RIPPLE CURRENT TOLERANCE SET UP TIME Note.4  VOLTAGE RANGE Note.3 FREQUENCY RANGE POWER FACTOR (Typ.)  TOTAL HARMONIC DISTORTION EFFICIENCY (Typ.) AC CURRENT (Typ.) INRUSH CURRENT (Typ.) INRUSH CURRENT (Typ.) MAX. No. of PSUs on 16A CIRCUIT BREAKER LEAKAGE CURRENT NO LOAD / STANDBY POWER CONSUMPTION SHORT CIRCUIT OVER VOLTAGE OVER TEMPERATURE WORKING TEMP. MAX. CASE TEMP. WORKING HUMIDITY STORAGE TEMP., HUMIDITY TEMP. COEFFICIENT VIBRATION	RATED CURRENT  RATED POWER    200VAC ~ 305VAC     100.1W     100VAC ~ 180VAC     70W     297V     Adjustable for A/AB-T     175 ~ 350mA     CURRENT ADJ. RANGE     CURRENT TOLERANCE     5.0% max. @rated cu     CURRENT TOLERANCE     ±5.0%     SET UP TIME     Note.4     1000ms/115VAC     VOLTAGE RANGE     Note.3     FREQUENCY RANGE     47 ~ 63Hz     POWER FACTOR (Typ.)     TOTAL HARMONIC DISTORTION     FF ≥ 0.97/115VAC, P (Please refer to "POW Please refer to "POW Please refer to "POW Please refer to "TOT Please refer to "Pow Please refer to "TOT Please refer to "TOT Please refer to "TOT Please refer to "TOT Please refer to "Pow Please refer to "TOT Please refer to "TOT Please refer to "Pow Please refer to "TOT Please refer to "Pow Please refer to "Pow Please refer to "Pow Please refer to "Pow Plea	RATED CURRENT         350mA         500mA           RATED POWER         200VAC ~ 305VAC           100.1W         100W           100.1W         100W           200VAC ~ 180VAC         70W           70W         70W           CONSTANT CURRENT REGION Note2         143 ~ 286V         100 ~ 200V           OPEN CIRCUIT VOLTAGE (max.)         297V         210V           Adjustable for A/AB-Type only (via built-in potential)         175 ~ 350mA         250 ~ 500mA           CURRENT RIPPLE         5.0% max. @rated current           CURRENT TOLERANCE         ±5.0%           SET UP TIME Note.4         1000ms/115VAC         500ms/230VAC           VOLTAGE RANGE Note.3         100 ~ 305VAC         142 ~ 431VDC continue (Please refer to "STATIC CHARACTERISTIC (Please refer to "POWER FACTOR (PF) CH/(Please refer to "POWER FACTOR (PF) CH/(Please refer to "POWER FACTOR (PF) CH/(Please refer to "TOTAL HARMONIC DISTORTION           FFEQUENCY (Typ.)         92%         91%           AC CURRENT (Typ.)         1.1A / 115VAC         0.6A / 230VAC         0.5A/23           INRUSH CURRENT (Typ.)         1.1A / 115VAC         0.6A / 230VAC         0.5A/23           INRUSH CURRENT (Typ.)         No load power consumption	RATED CURRENT   350mA   500mA   700mA   200VAC - 305VAC   100.1W   100.W   100.W	RATED CURRENT   350mA   500mA   700mA   1050mA		

# NOTE

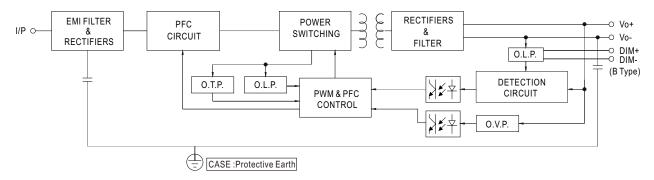
- 2. Please refer to "DRIVING METHODS OF LED MODULE". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery.
- 3. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.
- 4. Length of set up time is measured 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 (to point (or TMP, per DLC), is about 80°C 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°C/1000m with fanless models and of 5°C/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. D2 models need to be programmed in the state of loading.
- 11. 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.

  12. 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



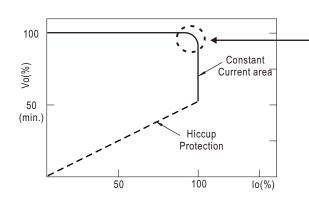
## ■ BLOCK DIAGRAM

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



# ■ DRIVING METHODS OF LED MODULE

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



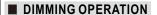
Typical output current normalized by rated current (%)

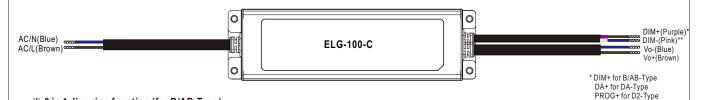
 In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

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

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

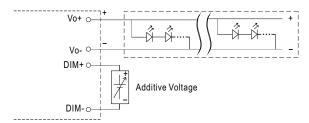






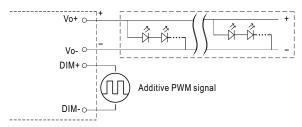
#### \* 3 in 1 dimming function (for B/AB-Type)

- 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: 100µA (typ.)
- O Applying additive 0 ~ 10VDC



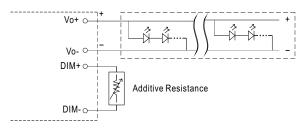
"DO NOT connect "DIM- to Vo-"

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

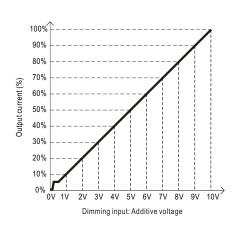


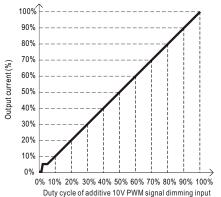
"DO NOT connect "DIM- to Vo-"

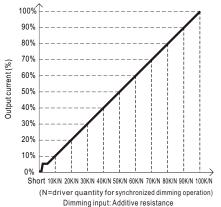
O Applying additive resistance:



"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  $0k\Omega$  or 0Vdc, or 10V PWM signal with 0% duty cycle.



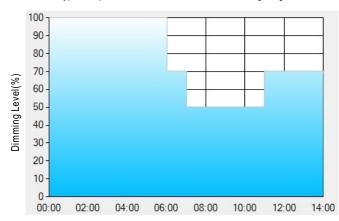
#### DALI Interface (primary side; for DA-Type)

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

#### **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%

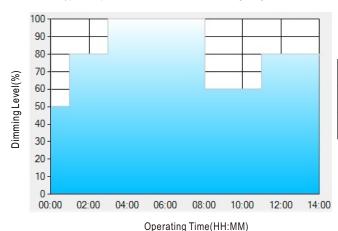
Operating Time(HH:MM)

- \*\*: 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%

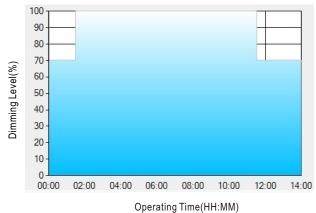
\*\*: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

^^: 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: O D03-Type: the profile recommended for tunnel lighting



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 5:00 am, which is 11:00 after the power supply turns on.

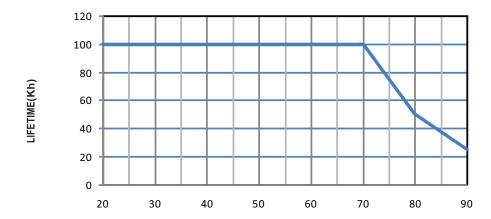
The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.



#### ■ OUTPUT LOAD vs TEMPERATURE(Note.7) 100 80 80 230VAC 230VAC input only input only LOAD (%) LOAD (%) 60 60 40 40 20 20 -40 30 60 70 (HORIZONTAL) 90 (HORIZONTAL) -40 10 30 50 70 80 AMBIENT TEMPERATURE, Ta (°℃) Tcase (°C) ■ STATIC CHARACTERISTIC **■ POWER FACTOR (PF) CHARACTERISTIC** ★ Tcase at 80° 100 90 0.96 80 0.94 LOAD (%) -277V(100W) 占 0.92 230V(100W) 60 0.9 **→** 115V(70W) 0.88 50 0.86 40 0.84 50% 60% 70% 80% 90% 100% 100 120 140 160 180 200 240 250 260 270 280 305 INPUT VOLTAGE (V) 60Hz LOAD ※ De-rating is needed under low input voltage. ■ TOTAL HARMONIC DISTORTION (THD) **■** EFFICIENCY vs LOAD ELG-100-C series possess superior working efficiency that up to 92% can be reached in field applications. imes 350mA Model, Tcase at 80 $^{\circ}$ C $\ \ \, \mbox{$\%$}$ 350mA Model, Tcase at 80 $^\circ \mbox{$\mathbb{C}$}$ 22% 94 20% 92 18% **EFFICIENCY(%)** 90 16% 277V (100W) 14% 88 욷 277VAC(100W) 12% 230VAC(100W) -230V (100W) 86 10% 115VAC(70W) 115V (70W) 84 8% 6% 82 4% 80 2% 60% 70% 100% 50% 80% 90% 50% 80% 90% 100% LOAD LOAD



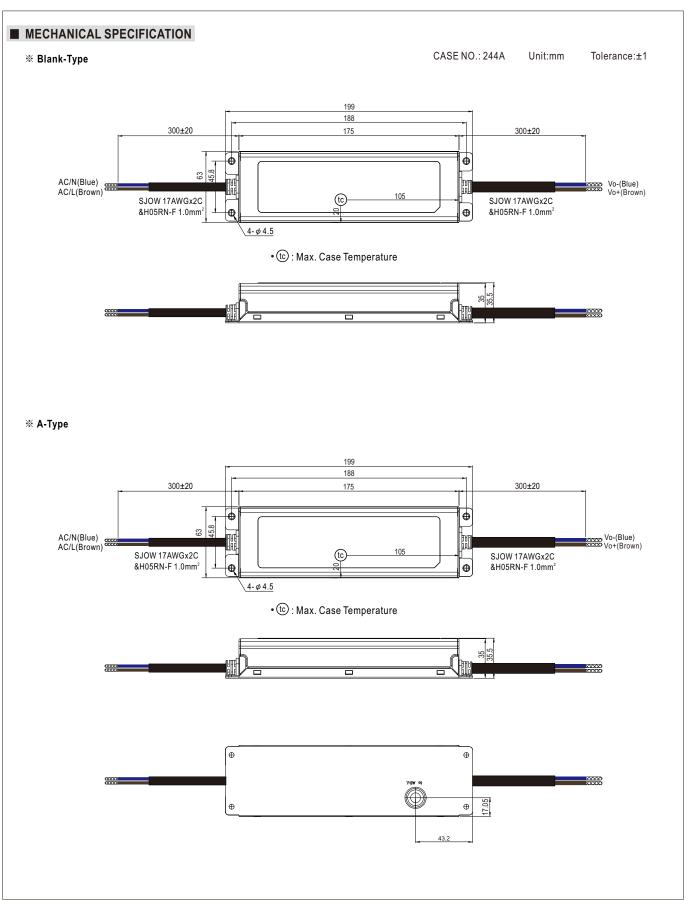
# **■** LIFE TIME



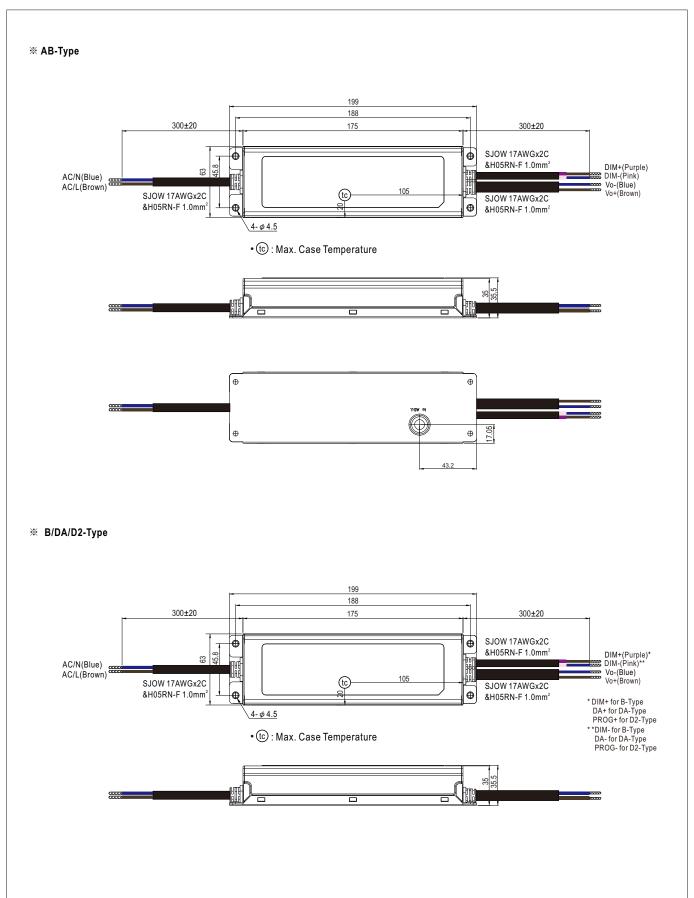
Tcase (°C)





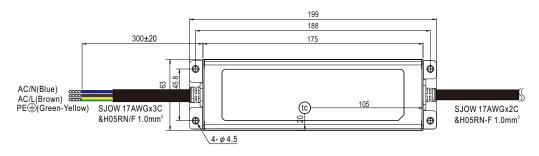






# 70~100W Constant Current Mode LED Driver

#### **X** 3Y Model (3-wire input)



• tc : Max. Case Temperature

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