

Наличие и актуальные цены на

# **XLG-100I-12-A**

https://www.meanwell.ru/store/XLG-100I-12-A/















# Features

- Wide input range 100~305VAC( Class I )
- Full power output at 70~100% Constant power mode operation
- Metal case with IP67, suitable for outdoor application
- LVLE(H type), Class 2(24V) power unit
- Surge protection with 6KV/4KV (10KV/6KV optional)
- 3 in 1 dimming function (Dim to off and Isolation design)
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- Protection functions: OVP/SCP/OCP/OTP
- Comply with UL Class P
- Life time >50,000 hrs. and 5 years warranty

# Applications

- · Skyscraper lighting
- · Street lighting
- · Floodlight Lighting
- Stage lighting
- · Fishing lighting
- · Horticulture lighting
- Bay lighting
- DMX power supply
- Type HL for use in class I, Division 2

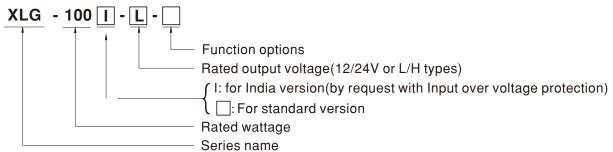
# GTIN CODE

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

# Description

XLG-100 series is a 100W LED AC/DC driver featuring the constant power mode.XLG-100 operates from 100~305VAC and offers models with different rated current ranging between 700mA and 8000mA. 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 ingress protection level allows this series to fit both indoor and outdoor applications. Moreover the innovative environment-adaptive capability allows this series to reliably light on the LEDs for all kinds of application environments in almost any spots that may install LED luminaires in the world. XLG-100 series comply with the latest version of IEC61347/GB19510.1 and UL8750 international safety regulations. The output and dimming circuit are also completely in accordance with the new regulations with isolation to ensure the safety of both user and luminaire system during installation.

# ■ Model Encoding



Type	Function	Note
Blank	lo and Vo fixed. (For harsh environment)	By request
Α	lo adjustable via built-in potentiometer	In Stock
AB	Io adjustable via built-in potentiometer +3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
CV	CV-type only with constant voltage function and only for 12V and 24V models, lo and Vo are fixed.	By request

Note: 1.12V and 24V models without the AB type

2.India version needs MOQ for production, please consult MEANWELL for detail



#### **SPECIFICATION**

MODEL	Allon	XLG-100 -12-	XI C	6-100□-24-□				
		12V	24V					
	DC VOLTAGE			041/				
	CONSTANT CURRENT REGION Note.2			~ 24V				
	RATED CURRENT (Default)	8A	4A					
	RATED POWER	96W	96W	-M				
	RIPPLE & NOISE (max.) Note.3							
	CURRENT ADJ RANGE	Adjustable for A-Type only (via the built-in potentiometer)						
		4~8A	2~4A					
OUTPUT	VOLTAGE TOLERANCE Note.4		±2.09					
	LINE REGULATION	±0.5%	±0.59					
	LOAD REGULATION	±2% ±1%						
	SETUP, RISE TIME Note.6	500ms, 100ms/230VAC, 1200ms, 100ms/115VAC						
	HOLD UP TIME (Typ.)	12ms/ 230VAC 12ms/ 115VAC						
	VOLTAGE RANGE Note.5	100 ~ 305VAC 142 ~ 431VDC						
		(Please refer to STATIC CHARACTERISTIC Section)						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR	$PF \!\! \geq \!\! 0.97/115 VAC, PF \!\! \geq \!\! 0.95/230 VAC, PF \!\! \geq \!\! 0.92/277 VAC \!\! \otimes \!\! full \ load$						
	TOTAL HARMONIC DISTORTION	THD<10%(@load≧50%/115VAC,230VAC; @load≧75%/277VAC)						
NPUT	EFFICIENCY (Typ.)	92%	92%					
	AC CURRENT	1.1A / 115VAC 0.5A / 230VAC 0.42A/277VA	iC .					
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=300µs measured at 50% lpeak) at 230VAC; Per NEMA 410						
	MAX. No. of PSUs on 16A							
	CIRCUIT BREAKER	8 units (circuit breaker of type B) / 14 units (circuit breaker of type C) at 230VAC						
	LEAKAGE CURRENT	<0.75mA / 277VAC						
	NO LOAD	No load power consumption <0.5W(for star	adard varsion)					
	POWER CONSUMPTION	No load power consumption <0.500(for star	idard version)					
		110 ~ 160% for CV type, 95~108% for other type						
	OVER CURRENT	CV-type: Hiccup mode only; Other type: Hiccup o	r constant current limiting; Recov	vers automatically at	ter fault condition is removed			
	SHORT CIRCUIT	CV-type: Hiccup mode only; Other type: Hiccup or						
ROTECTION		13.5~18V 27~34V						
	OVER VOLTAGE	Shut down output voltage, re-power on to recover						
		320 ~ 390VAC (Shut down output voltage when the input voltage exceeds protection voltage, recovers automatically after fault condition is removed)						
	INPUT OVER VOLTAGE	Can survive input voltage stress of 440Vac for 48 hours(Input over voltage only for XLG-100I series)						
	OVER TEMPERATURE	Shut down output voltage, re-power on to recover						
	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						
ENVIDONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT							
	VIBRATION	±0.03%/°C (0 ~ 60°C)						
	VIDRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes						
	SAFETY STANDARDS Note.7	GB19510.1, GB19510.14;EAC 1P 1C 004;J61347-1(H29), J61347-2-13(H29), KC61347-1,KC61347-2-13,						
		IS15885(Part2/Sec13)(for XLG-100I type only); NOM-058-SCFI-2017(except for Blank type); IP67 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					
		Parameter	Standard		Test Level/Note			
		Conducted	BS EN/EN55015(CISPR15),G	GB/T 17743				
EMC	EMC EMISSION	Radiated	BS EN/EN55015(CISPR15) ,G					
SAFETY &	LING LINIOSION	Harmonic Current	BS EN/EN61000-3-2, GB176		Class C @load≥50%			
		Voltage Flicker	BS EN/EN61000-3-3					
		BS EN/EN61547						
	EMC IMMUNITY	Parameter	Standard		Test Level/Note			
		ESD	BS EN/EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact			
		Radiated	BS EN/EN61000-4-3		Level 3			
		EFT/Burst	BS EN/EN61000-4-4		Level 3			
		Surge	BS EN/EN61000-4-4		4KV/Line-Line 6KV/Line-Earth(6K/10K option)			
					, , ,			
		Conducted  Magnetic Field	BS EN/EN61000-4-6		Level 3			
		Magnetic Field	BS EN/EN61000-4-8		Level 4 >95% dip 0.5 periods, 30% dip 25 periods,			
		Voltage Dips and Interruptions	BS EN/EN61000-4-11		>95% interruptions 250 periods			
	MTBF	2782.6K hrs min. Telcordia SR-332 (Bellcore)	; 276.4Khrs min. MIL-HDBI	K-217F (25°ℂ)				
OTHERS	DIMENSION	140*63*32mm (L*W*H)						
	PACKING	0.58Kg;24pcs /15Kg /0.85CUFT						
NOTE	All parameters NOT specially     Please refer to "DRIVING ME	mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature. THODS OF LED MODULE". (Except for CV-type)						

- 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". (Except for CV-type)

  3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.

  4. Tolerance: includes set up tolerance, line regulation and load regulation.

  5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.

  6. 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.

  7. Only CE/ENEC/CB is available for CV-type, XLG-1001 series without UL/CSA certificate.

  8. 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)

  9. 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).

  10. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com

  11. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (© point (or TMP, per DLC), is about 80℃ or less.

  12. Products sourced from the Americas regions may not have the PSE/CCC/BIS/KC logo. Please contact your MEAN WELL sales for more information.

  13. 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

  14. To fulfill requirements of the latest ErP regulation for lighting fixture, this LED driver can only be used behind a switch without permanently connected to the mains.

  15. If you need the NOM (Mexico) certificate, Please contact MEA



#### SPECIFICATION

MODEL		XLG-100		XLG-100H				
	RATED CURRENT (Default)	700mA		2100mA				
	RATED POWER	100W		100W				
	CONSTANT CURRENT REGION	71 ~ 142V		27 ~ 56V				
	FULL POWER CURRENT RANGE	700~1050mA		1750~2780mA				
UTPUT	OPEN CIRCUIT VOLTAGE (max.)	149V	60V					
	CURRENT ADJ. RANGE	350~1050mA		875~2780mA				
	CURRENT RIPPLE	3.0%(@rated current)						
	CURRENT TOLERANCE	±5%						
	SET UP TIME	500ms/230VAC, 1200ms/115VAC						
	VOLTAGE RANGE Note.5	100 ~ 305VAC 142VDC ~ 431VDC						
		(Please refer to "STATIC CHARACTERISTIC" ang " DRIVING METHODS OF LED MODULE"section)						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF≥0.97 / 115VAC, PF≥0.95 / 230VAC, PF≥0.92 / 277VAC at full load (Please refer to "Power Factor Characteristic" section)						
		,						
	TOTAL HARMONIC DISTORTION	THD<10% (@ load≥50% at 115VAC/230VAC ,@load≥75% at 277VAC) Please refer to "TOTAL HARMONIC DISTORTION (THD)" section						
INDUT	EEEICIENCV (Typ.)							
INPUT	AC CURRENT (Typ.)							
	INRUSH CURRENT(Typ.)	1.1A / 115VAC 0.5A / 230VAC 0.42A / 277VAC COLD START 50A(twidth=300µs measured at 50% lpeak) at 230VAC; Per NEMA 410						
	MAX. NO. of PSUs on 16A	COLD START JUAN (WINDER - 200 μS ITTERSULED AT 200 (PEAK) AT 2200 AO, FEIT INEMA 410						
	CIRCUIT BREAKER	8 unit(circuit breaker of type B) / 14 units(circ	cuit breaker of type C) at 230V	AC				
	LEAKAGE CURRENT	<0.75mA/277VAC						
		NOTO WITH A STEEL AND						
	STANDBY POWER CONSUMPTION	Standby power consumption <0.5W for AB-Type(Dimming OFF)(for standard version)						
		405 4500/						
	OVER POWER	105 ~ 150%  Hiccup mode, recovers automatically after fa	ault condition is removed					
	SHORT CIRCUIT	Hiccup mode or Constant current limiting, re		t condition is removed				
	SHOKI CIKCUII	160 ~ 220V	covers automatically after faul					
ROTECTION	OVER VOLTAGE	160 ~ 220V   66 ~ 90V   Shut down output voltage, re-power on to recover						
				taction valtage receive	re automatically after fault condition is removed			
	INPUT OVER VOLTAGE	320 ~ 390VAC (Shut down output voltage when the input voltage exceeds protection voltage, recovers automatically after fault condition is removed)  Can survive input voltage stress of 440Vac for 48 hours(Input over voltage only for XLG-100I series)						
	OVER TEMPERATURE	Shut down output voltage, re-power on to recover						
	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						
NVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH non-condensing						
	TEMP. COEFFICIENT	±0.03%/℃ (0~60℃)						
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72	2min. each along X, Y, Z axes					
	SAFETY STANDARDS Note.7	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN/EN61347-1, BS EN/EN61347-2-13 independent, BS EN/EN62384; GB19510.1, GB19510.14; EAC TP TC 004; J61347-1 (H29), J61347-2-13 (H29), KC61347-1, KC61347-2-13, IS15885(Part2/Sec13)(for XLG-100I type only); NOM-058-SCFI-2017(except for Blank type); IP67 approved						
AFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/F	P-FG:1.5KVAC					
MC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500	VDC / 25°C / 70% RH					
		Parameter	Standard		Test Level/Note			
		Conducted	BS EN/EN55015(CISPF	R15) ,GB/T 17743				
	EMC EMISSION	Radiated	BS EN/EN55015(CISPF	R15) ,GB/T 17743				
		Harmonic Current	BS EN/EN61000-3-2,0	B17625.1	Class C @load≥50%			
		Voltage Flicker	BS EN/EN61000-3-3					
	EMC IMMUNITY	BS EN/EN61547						
		Parameter	Standard		Test Level/Note			
		ESD	BS EN/EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact			
		Radiated	BS EN/EN61000-4-3		Level 3			
		EFT/Burst	BS EN/EN61000-4-4		Level 3			
		Surge	BS EN/EN61000-4-5		4KV/Line-Line 6KV/Line-Earth(6K/10K option)			
		Conducted	BS EN/EN61000-4-6		Level 3			
		Magnetic Field	BS EN/EN61000-4-8		Level 4			
		Voltage Dips and Interruptions	BS EN/EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
	MEDE	0700 0K has sain	070 414	L LIDDIK 0475 (05°= )	- 30 /0 III.GITUPIIOIIS 200 PEIIOUS			
OTHERS	MTBF	2782.6K hrs min. Telcordia SR-332 (Bello	core); 276.4Khrs min. M	L-HDBK-217F (25°C)				
	PACKING	140*63*32mm (L*W*H) 0.58Ka:24pcs /15Ka:/0.85CLIET						
ОТЕ	1. All parameters NOT specially     2. Please refer to "DRIVING ME     3. Ripple & noise are measured     4. Tolerance : includes set up tol     5. De-rating may be needed und     6. Length of set up time is meas     7. XLG-1001 series without UL/C     8. The driver is considered as a	at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.  lerance, line regulation and load regulation.  ler 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.						

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. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com

11. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 80°C or less.

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13. 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

14. To fulfill requirements of the latest ErP regulation for lighting fixture, this LED driver can only be used behind a switch without permanently connected to the mains.

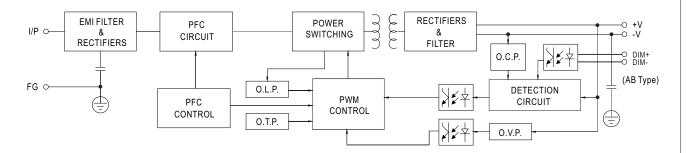
15. If you need the NOM (Mexico) certificate, Please contact MEAN WELL sales representative for details.

26. Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



#### ■ BLOCK DIAGRAM

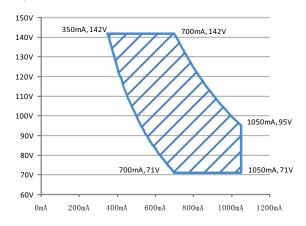
PFC fosc: 50~120KHz PWM fosc: 60~130KHz



#### ■ DRIVING METHODS OF LED MODULE

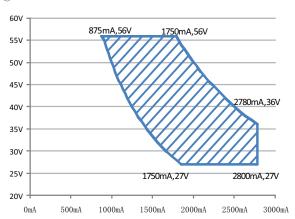
#### **%** I-V Operating Area

#### 



Recommend Performance Region

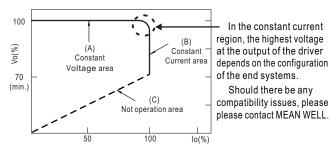
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Recommend Performance Region

#### **◎ XLG-100-12,24**

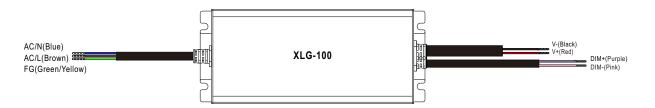
This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs, except for CV-type.



Typical output current normalized by rated current (%)

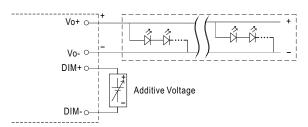


### **■ DIMMING OPERATION**



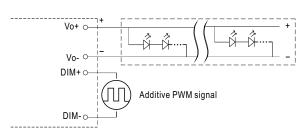
#### ※ 3 in 1 dimming function (for AB-Type)

- 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  $\mu$  A (typ.)



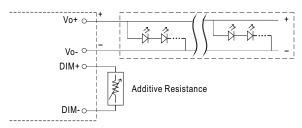
"DO NOT connect "DIM- to Vo-"

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

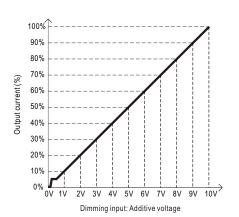


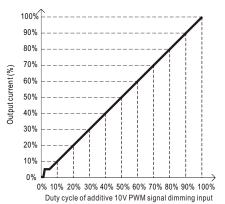
"DO NOT connect "DIM- to Vo-"

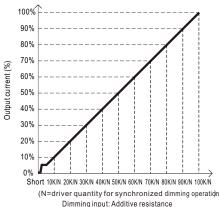
Applying additive resistance:



"DO NOT connect "DIM- to Vo-"





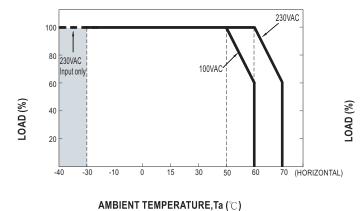


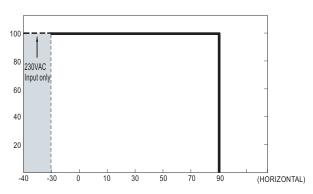
Note: 1. Min. dimming level is about 8% and the output current is not defined when 0% < Iout < 8%.

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.



### ■ OUTPUT LOAD vs TEMPERATURE





Tcase (°C)

If XLG-100 operates in Constant Current mode with the rated current the maximum workable Ta is  $60\,^{\circ}\mathrm{C}$  (Typ. 230VAC) or  $50\,^{\circ}\mathrm{C}$  (Typ.100VAC).

Below 110VAC@-30°C may has restart situation within 5s after power-on.

### ■ STATIC CHARACTERISTIC

# 100 90 80 70 60 50 40 100 110 180 200 220 240 260 280

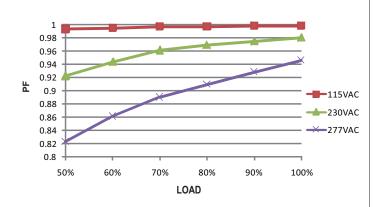
INPUT VOLTAGE (V) 60Hz

# ■ POWER FACTOR (PF) CHARACTERISTIC

※ Tcase at 75°

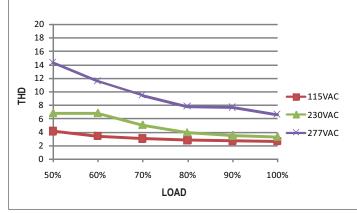
C

#### **Constant Current Mode**



# ■ TOTAL HARMONIC DISTORTION (THD)

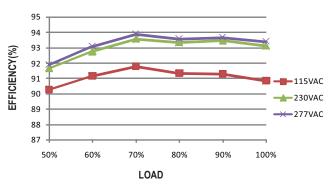
#### ※ XLG-100-L Model, Tcase at 75℃



#### **■** EFFICIENCY vs LOAD

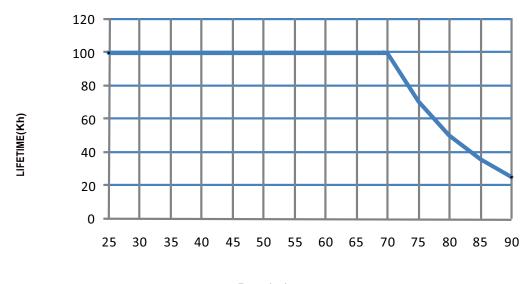
XLG-100 series possess superior working efficiency that up to 92.5% can be reached in field applications.

※ XLG-100-L Model. Tcase at 75°C



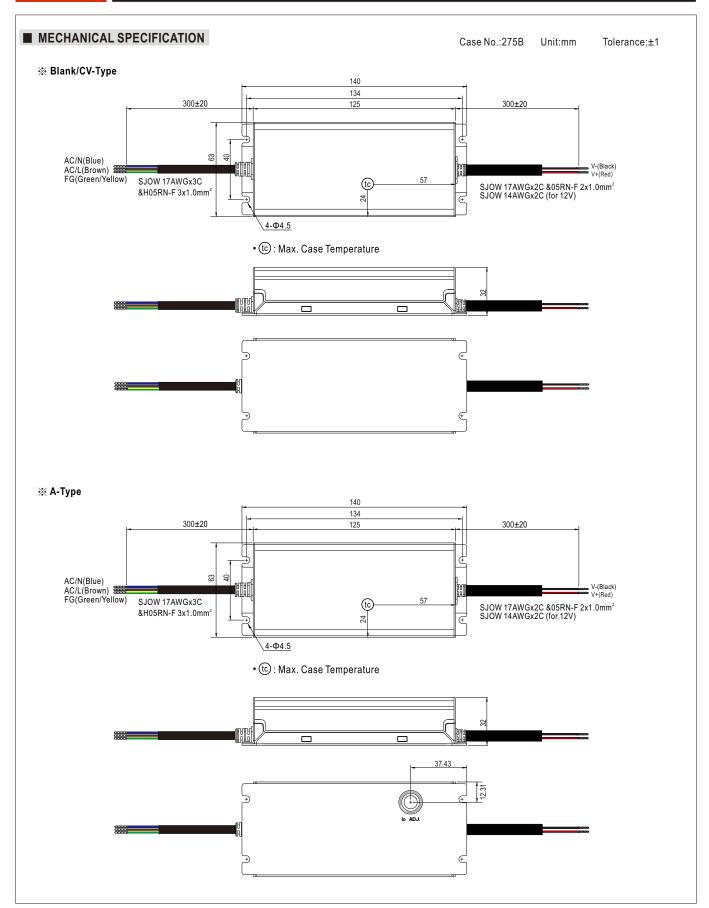


# ■ LIFE TIME



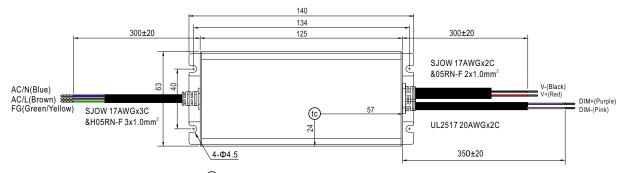
Tcase (°€)



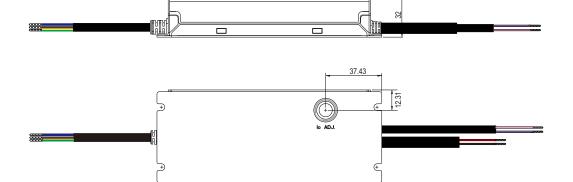




### ※ AB-Type



• tc : Max. Case Temperature



## ■ Recommend Mounting Direction



### **■ INSTALLATION MANUAL**

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