





■ Features

- Wide input range 100~305V AC(Class I)
- Full power output at 70~100% Constant power mode operation
- Metal case with IP67, suitable for outdoor application
- 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
- Life time >50,000 hrs. and 5 years warranty

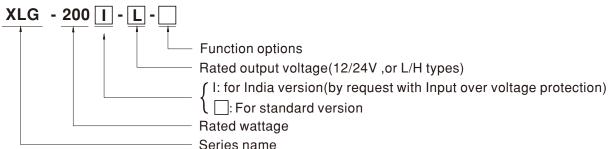
Applications

- 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

■ Description

XLG-200 series is a 200W LED AC/DC driver featuring the constant power mode. XLG-200 operates from 100~305VAC and offers models with different rated current ranging between 700mA and 16A. Thanks to the high efficiency up to 94%, 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-200 series comply with the latest version of IEC61347/GB7000.1-2015 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



Туре	Function	Note
Blank	Io 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

Note: 12V and 24V models without AB type

200W Constant Voltage + Constant Current LED Driver

SPECIFICATION

MODEL		XLG-200 -12		XLG-200 🗌 -24- 🗌			
	DC VOLTAGE	12V		24V			
	CONSTANT CURRENT REGION Note.2	8.4~ 12V		16.8~ 24V			
	RATED CURRENT	16A		8.3A			
	RATED POWER	192W 199.2W					
	RIPPLE & NOISE (max.) Note.3						
	OUDDENT AD L DANGE	Adjustable for A-Type only (via the built-in potentiometer)					
	CURRENT ADJ. RANGE	8 ~ 16A		4.15 ~ 8.3A			
OUTPUT	VOLTAGE TOLERANCE Note.4	±3.0%		±2.0%			
5011 01	LINE REGULATION	±0.5%		±0.5%			
	LOAD REGULATION	±2%		±1%			
	SETUP, RISE TIME Note.6	500ms, 100ms/230VAC, 1200ms, 100ms/115VAC					
	HOLD UP TIME (Typ.)	10ms/ 230VAC 10ms/ 115VAC					
	VOLTACE DANCE Note 5	100 ~ 305VAC 142 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)					
	VOLTAGE RANGE Note.5						
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR	$PF \ge 0.97/115VAC, PF \ge 0.95/230VAC, F$	PF≧0.92/277VAC@full load				
	TOTAL HARMONIC DISTORTION	THD<10%(@load≥50%/115VC,230VAC; @load≥75%/277VAC)					
NPUT	EFFICIENCY (Typ.)	92%		94%			
	AC CURRENT	2.2A / 115VAC 1.1A / 230VAC 0.9	A/277VAC				
	INRUSH CURRENT(Typ.)	COLD START 65A(twidth=550μs measu	ired at 50% Ipeak) at 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 POWER CONSUMPTION	No load power consumption <0.5W(for standard version)					
		95~108%					
	OVER CURRENT	Hiccup mode or constant current limiting	g, recovers automatically after	fault condition is remov	ed		
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed					
ROTECTION		13.5 ~ 18V 27 ~ 34V Shut down output voltage, re-power on to recover					
	OVER VOLTAGE						
	INDUT OVER VOLTAGE	320 ~ 390VAC. (Shut down output voltage when the input voltage exceeds protection voltage recovers automatically after fault condition is removed.)					
	INPUT OVER VOLTAGE Note.7	can survive input voltage stress of 440Vac for 48 hours					
	OVER TEMPERATURE	Hiccup mode, recovers automatically after fault condition is removed					
	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					
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +90°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)					
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period fo	or 72min. each along X, Y, Z ax	es			
	SAFETY STANDARDS Note.7	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB19510.14; EAC TP TC 004;IP67 approved					
EMC SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC					
SAFEIIQ	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH					
	TOOL/HTOK KLOIO I/AKOL	Parameter	Standard		Test Level/Note		
		Conducted	EN55015(CISPR15),G	B/T17743			
	EMC EMISSION	Radiated	EN55015(CISPR15),G				
		Harmonic Current	EN61000-3-2 ,GB/T176		Class C @load≥50%		
		Voltage Flicker	EN61000-3-3	,20.1			
		EN61547					
l		Parameter	Standard		Test Level/Note		
		ESD	EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact		
		Radiated	EN61000-4-3		Level 3		
	EMC IMMUNITY	EFT/Burst	EN61000-4-3		Level 3		
					4KV/Line-Line 6KV/Line-Earth(6K/10K option		
		Surge	EN61000-4-5		` '		
		Conducted Magnetic Field	EN61000-4-6		Level 3 Level 4		
		Magnetic Field	EN61000-4-8		>95% dip 0.5 periods, 30% dip 25 periods,		
	MTDF	Voltage Dips and Interruptions	EN61000-4-11		>95% interruptions 250 periods		
ATUE DO	MTBF	749.06K hrs min. Telcordia SR-332 (Bellcore); 200.67Khrs min. MIL-HDBK-217F (25°C)					
OTHERS	DIMENSION	199*63*35.5mm (L*W*H)					
	PACKING	0.85Kg;16pcs /14.2Kg /0.72CUFT					
NOTE	 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". Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. 						

- 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.

 9. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 70°C or less.

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

10. Prease felief to the warranty statement of MEAN WELL'S website at http://www.hieamwell.com/
11.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).

12.Products sourced from the Americas regions may not have the CCC/PSE/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.



SPECIFICATION

MODEL		XLG-200L	XLG-200					
	RATED CURRENT	700mA	3500mA					
ОИТРИТ	RATED POWER	200W	200W					
	CONSTANT CURRENT REGION Note.2	142 ~285V	27 ~ 56\					
	FULL POWER CURRENT RANGE	700~1050mA	3500~55	50mA				
	OPEN CIRCUIT VOLTAGE (max.)	300V	60V					
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via the built-in potentiometer)						
	CONTRACT ABOUTOUT	350~1050mA	1750~55	50mA				
	CURRENT RIPPLE	3.0%(@ Load≥50% rated voltage)					
	CURRENT TOLERANCE	±5%						
	SET UP TIME Note.4	500ms/230VAC, 1200ms/115VAC						
	VOLTAGE RANGE Note.3	100 ~ 305VAC 142VDC ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" ang " DRIVING METHODS OF LED MODULE"section)						
	EDECUENCY DANCE	,	RISTIC ang DRIVING METHODS O	- LED MODULE section)				
	FREQUENCY RANGE	47 ~ 63Hz	O DE > 0.00 / 077\/AO -+ f-III					
	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						
INPUT	EFFICIENCY (Typ.)	94%	93%					
01	AC CURRENT (Typ.)	2.2A / 115VAC 1.1A / 230VAC	0.9A / 277VAC					
	INRUSH CURRENT(Typ.)	COLD START 65A(twidth=550µs measur		410				
	MAX. NO. of PSUs on 16A		· · · · · · · · · · · · · · · · · · ·					
	CIRCUIT BREAKER	3 unit(circuit breaker of type B) / 6 unit	s(circuit breaker of type C) at 230VAC					
	LEAKAGE CURRENT	<0.75mA / 277VAC						
	STANDBY	Standby nower consumption < 0.5	Chandles account to a CEW for AD Time / Direction OFF / for a total of the control of the contro					
	POWER CONSUMPTION	Standby power consumption <0.5W for AB-Type(Dimming OFF)(for standard version)						
	SHORT CIRCUIT	Hiccup mode or Constant current limiti	ing,recovers automatically after fault o	ondition is removed				
	OVER VOLTAGE	301 ~ 360V	61 ~ 78\					
PROTECTION	OVER VOLIAGE	Shut down output voltage, re-power on to recovery						
	INPUT OVER VOLTAGE Note.5	320 ~ 390VAC (Shut down output voltage when the input voltage exceeds protection voltage, recovers automatically after fault condition is remove						
	OVER TEMPERATURE	can survive input voltage stress of 440Vac for 48 hours						
	OVER TEMPERATURE	Hiccup mode, recovers automatically after fault condition is removed Tcase=-40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)						
	WORKING TEMP. MAX. CASE TEMP.	Tcase=+90°C						
		20 ~ 95% RH non-condensing						
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH non-condensing						
	TEMP. COEFFICIENT	±0.03%°C (0 ~ 60°C)						
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period	for 72min each along X V 7 aves					
	VIDIOTION			2-13 independent EN62384:				
	SAFETY STANDARDS Note.5	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB19510.14; EAC TP TC 004;IP67 approved						
	WITHSTAND VOLTAGE	1/P-O/P:3.75KVAC						
SAFETY &	ISOLATION RESISTANCE	I/P-O/P. I/P-FG. O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH						
EMC	EMC EMISSION	,	Compliance to EN55015, EN61000-3-2 Class C (@ load ≥ 50%); EN61000-3-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level (surge immunity Line-Earth 6 KV, Line-Line 4KV)(10K/6KV option)						
		Parameter	Standard	Test Level/Note				
		Conducted	EN55015(CISPR15),GB/T17	743				
	EMC EMISSION	Radiated	EN55015(CISPR15),GB/T17	743				
		Harmonic Current	EN61000-3-2 ,GB/T17625.1	Class C @load≥50%				
		Voltage Flicker	EN61000-3-3					
		EN61547						
	EMC IMMUNITY	Parameter	Standard	Test Level/Note				
		ESD	EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact				
		Radiated	EN61000-4-3	Level 3				
		EFT/Burst	EN61000-4-4	Level 3				
		Surge	EN61000-4-5	4KV/Line-Line 6KV/Line-Earth(6K/10K opt				
		Conducted	EN61000-4-6	Level 3				
		Magnetic Field	EN61000-4-8	Level 4				
		Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods >95% interruptions 250 periods				
	MTBF	749.06Khrs min. Telcordia SR-332(B	ellcore); 200.67Khrs min. MIL-HDB	<-217F (25°C)				
OTHERS	MTBF DIMENSION	749.06Khrs min. Telcordia SR-332(Br 199*63*35.5mm (L*W*H)	ellcore); 200.67Khrs min. MIL-HDB	K-217F (25℃)				
OTHERS		,	ellcore); 200.67Khrs min. MIL-HDB	<-217F (25°C)				

- 2 Please refer to "DRIVING METHODS OF LED MODULE"
- 2. Flease feller to "Driving Michael OF LED MidDULE".

 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. Input over voltage only for XLG-200 I series ,and I series without UL/CSA certificate.
- 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.

 7. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 70°C or less.

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

- 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).

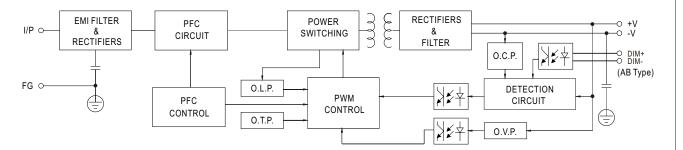
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- 12.For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf
- 13. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.



■ BLOCK DIAGRAM

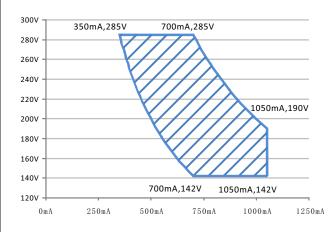
PFC fosc: 50~120KHz PWM fosc: 60~130KHz



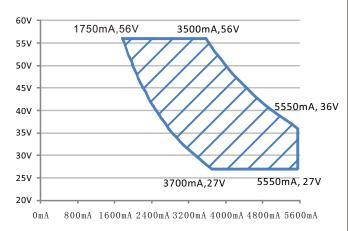
■ DRIVING METHODS OF LED MODULE

% I-V Operating Area

XLG-200-L



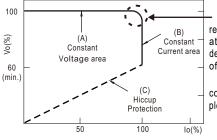
Recommend Performance Region



Recommend Performance Region

XLG-200-12,24

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.



 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 please contact MEAN WELL.

Typical output current normalized by rated current (%)

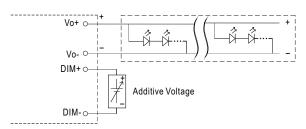


■ DIMMING OPERATION



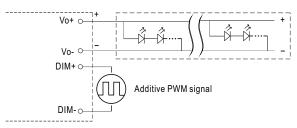
※ 3 in 1 dimming function (for AB-Type)

- 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 μ A (typ.)



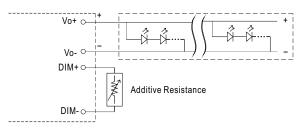
"DO NOT connect "DIM- to Vo-"

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

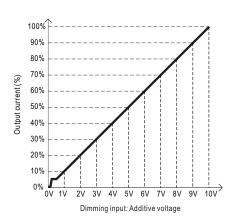


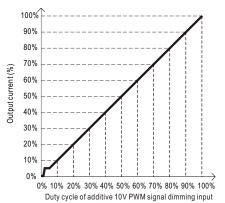
"DO NOT connect "DIM- to Vo-"

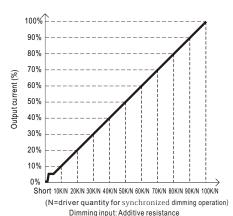
Applying additive resistance:



"DO NOT connect "DIM- to Vo-"





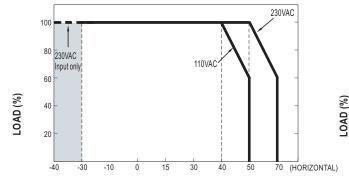


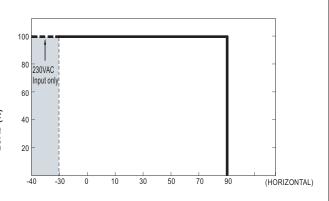
Note: 1. Min. dimming level is about 8% and the output current is not defined when 0% I out <8%.

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.



■ OUTPUT LOAD vs TEMPERATURE



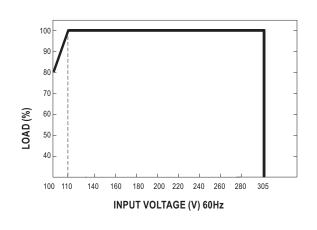


AMBIENT TEMPERATURE, Ta (°C)

Tcase (°C)

If XLG-200 operates in Constant Power mode with the rated current the maximum workable Ta is $50\,^{\circ}\mathrm{C}$ (Typ. 230VAC) or $40\,^{\circ}\mathrm{C}$ (typ.110VAC) Below 110VAC@30°C may retry to 2nd setup

■ STATIC CHARACTERISTIC

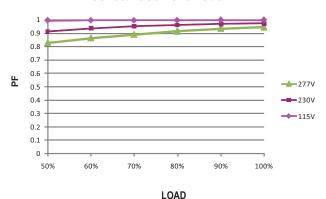


■ POWER FACTOR (PF) CHARACTERISTIC

※ Tcase at 75°

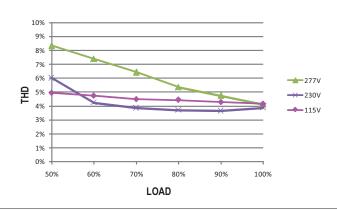
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■ TOTAL HARMONIC DISTORTION (THD)

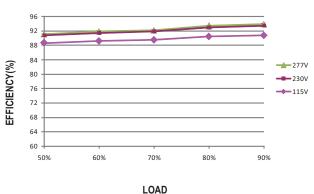
※ XLG-200-L Model. Tcase at 75°C



■ EFFICIENCY vs LOAD

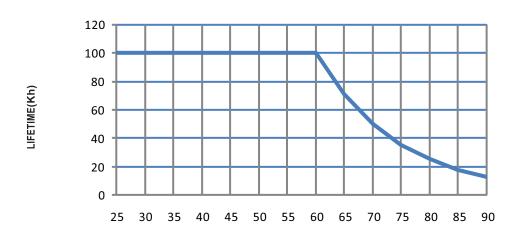
XLG-200 series possess superior working efficiency that up to 94% can be reached in field applications.

※ XLG-200-L Model. Tcase at 75°C



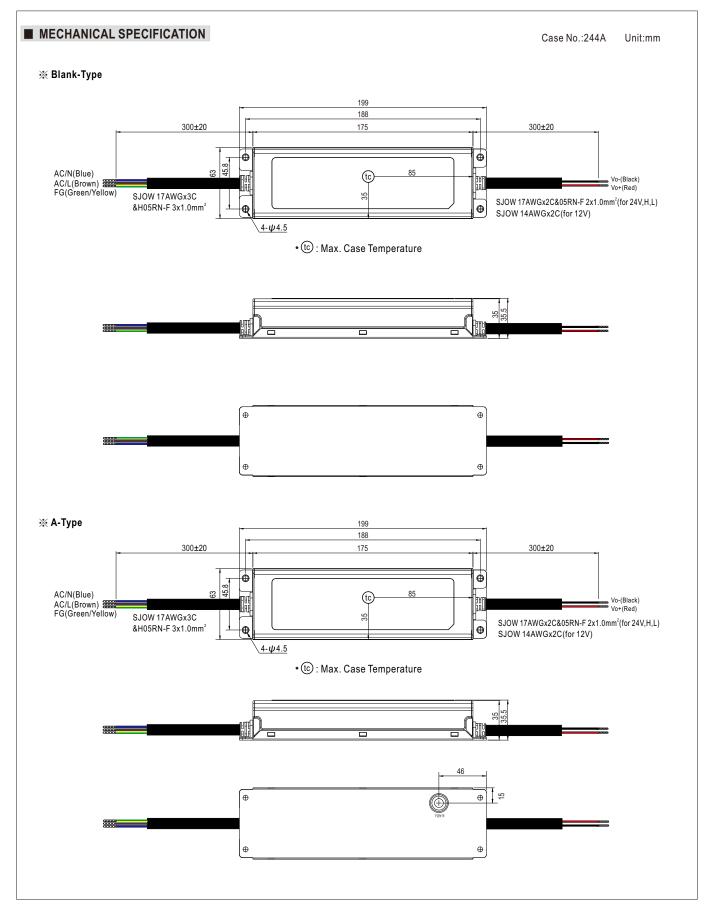


■ LIFE TIME

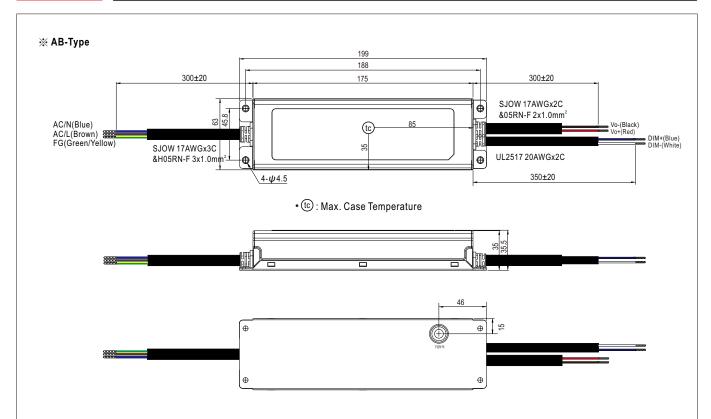


Tcase ($^{\circ}$ C)









■ INSTALLATION MANUAL

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