





Features

- · Constant Power mode output
- · Metal housing design with functional Ground
- Built-in active PFC function
- · Class 2 power unit
- No load / Standby power consumption <0.5W
- IP67 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer
 3 in 1 dimming function (Dim to off and Isolation design)
- Typical lifetime>50000 hours
- 5 years warranty

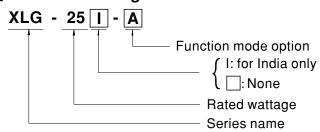
Applications

- · LED street lighting
- LED architectural lighting
- · LED bay lighting
- · LED floodlighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

Description

XLG-25 series is a 25W AC/DC LED driver featuring the constant power mode output. XLG-25 operates from $90\sim305$ VAC. Thanks to the high efficiency up to 88%, The entire series is able to operate between $-40^{\circ}\text{C}\sim85^{\circ}\text{C}$ wide case temperature range with air convection. The design of metal housing and Ip67 ingress protection level allows this series to fit both indoor and outdoor applications.XLG-25 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.XLG-25 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 users and luminaire system during installation.

■ Model Encoding



Type	IP Level	Function	Note
Α	IP67	Io adjustable through built in potentiometer.	In Stock
AB	IP67	Io adjustable through built in potentiometer 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock



SPECIFICATION

MODEL		XLG-25				
	RATED CURRENT	700mA				
	CONSTANT CURRENT REGION Note.2	te.2 22~54V				
	RATED POWER Note.5	90VAC ~ 305VAC				
OUTPUT	CURRENT RIPPLE	5.0% max. @rated current				
		57V				
	OPEN CIRCUIT VOLTAGE (max.)					
	CURRENT ADJ. RANGE	0.25 ~ 1.05A				
	SETUP, RISE TIME Note.3	500ms, 100ms/115VAC, 230VAC				
	VOLTAGE RANGE Note.4	90 ~ 305VAC (Please refer to "STATIC CHARACTERISTIC" se				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR	$\label{eq:problem} \begin{split} PF &\geq 0.97/115VAC, PF \geq 0.95/230VAC, PF \geq 0.92/277VAC \\ & (Please\ refer\ to\ "POWER\ FACTOR\ (PF)\ CHARACTERISTIC"\ section) \end{split}$				
	TOTAL HARMONIC DISTORTION	THD< 10%(@load≧50%/115VC,230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)				
INPUT	EFFICIENCY (Typ.) Note.10	88%				
	AC CURRENT	0.29A / 115VAC				
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=350µs measured at 50% Ipeak) at 230VAC; Per NEMA 410				
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	5 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 230VAC				
	LEAKAGE CURRENT	<0.75mA / 277VAC				
	NO LOAD / STANDBY	No load power consumption <0.5W for A,<0.75W for I series				
	POWER CONSUMPTION	Standby power consumption < 0.5W for AB				
	OVER POWER	110-150% Over Power Protection, recovers automatically after fault condition is removed				
	OVER CURRENT	Constant current limiting, recovers automatically after fault condition is removed				
	SHORT CIRCUIT	Constant current limiting, recovers automatically after fault condition is removed				
PROTECTION	OVER TEMPERATURE	Hiccup mode, recovers automatically after fault condition is removed				
	INPUT OVER VOLTAGE Note.8	320 ~ 370VAC (Shut down output voltage when the input voltage exceeds protection voltage) can survive input voltage stress of 440Vac for 48 hours				
	WORKING TEMP	· · ·				
	WORKING TEMP.	Tcase=-40 ~ +85°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)				
	MAX. CASE TEMP.	Tcase=+85°C				
ENVIRONMENT	WORKING HUMIDITY	20 ~ 95% RH non-condensing				
	STORAGE TEMP.	-40°C				
	TEMP. COEFFICIENT	±0.03%/°C (0~60°C)				
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes				
	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC AS/NZS IEC EN61347-1, AS/NZS EN61347-2-13 independent, EN62384; IP67; GB19510.1, GB19510.14, EAC TP TC 004(for XLG-25I only) approved				
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC				
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH				
		Parameter	Standard	Test Level/Note		
		Conducted	EN55015(CISPR15)			
	EMC EMISSION	Radiated	EN55015(CISPR15)			
	Ling Lingston	Harmonic Current	EN61000-3-2	Class C @load≥50%		
		Voltage Flicker	EN61000-3-3			
		EN55024 , EN61204-3, EN61000-6-2	EN01000-0-0			
		Parameter	Standard	Test Level/Note		
		ESD	EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact		
	EMC IMMUNITY	Radiated FET/Burst	EN61000-4-3	Level 3		
	EMC IMMUNITY	EFT/Burst	EN61000-4-4	Level 3		
		Surge	EN61000-4-5	4KV/Line-Line 6KV/Line-Earth(6K/10K option)		
		Conducted	EN61000-4-6	Level 3		
		Magnetic Field	EN61000-4-8	Level 4		
	мтрг	Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
	MTBF	1305.62 K hrs min. Telcordia SR-332 (Bellcore)	399.88Khrs min. MIL-HDBK-217F (25°C)			
OTHERS	DIMENSION	105*63*30mm (L*W*H)				
	PACKING	0.41Kg;24pcs/ 10.5Kg/0.68CUFT for A-type				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.					

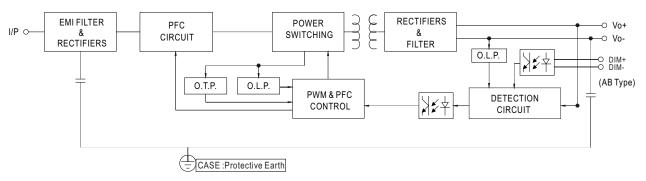
NOTE

- 2. Please refer to "DRIVING METHODS OF LED MODULE".
- 3. 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.
- 4. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.
- 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.
- 6. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (ⓑ point (or TMP, per DLC), is about 70° C or less.
- 7. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
- 8. Only for XLG-25 I series
- 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. Only for XLG-25-A
- 11.Products sourced from the Americas regions may not have the CCC logo. Please contact your MEAN WELL sales for more information.
- 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

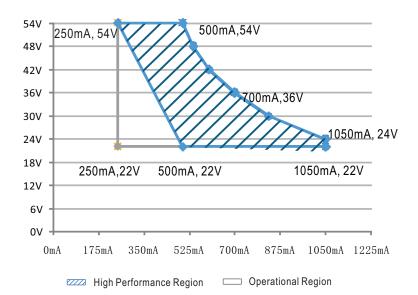


■ Block Diagram

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



■ DRIVING METHODS OF LED MODULE



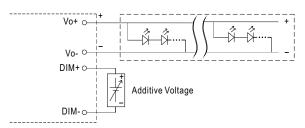


■ DIMMING OPERATION



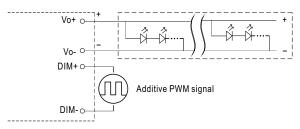
※ 3 in 1 dimming function (for AB-Type)

- 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: 100µA (typ.)



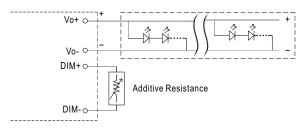
"DO NOT connect "DIM- to Vo-"

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

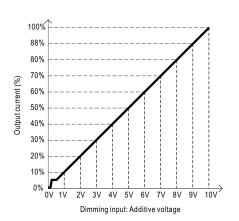


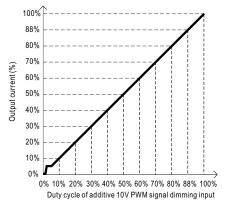
"DO NOT connect "DIM- to Vo-"

Applying additive resistance:



"DO NOT connect "DIM- to Vo-"





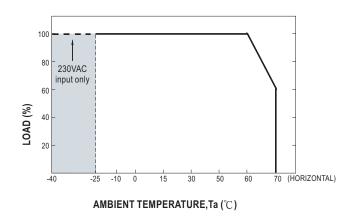
100%
88%
80%
70%
60%
40%
30%
20%
Short 10KN 20KN 30KN 40KN 50KN 60KN 70KN 80KN 90KN 100KN (N=driver quantity for synchronized dimming operation)
Dimming input: Additive resistance

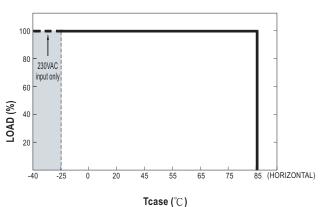
Note: 1. Min. dimming level is about 8% and the output current is not defined when 0% < Iout < 8%.

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.

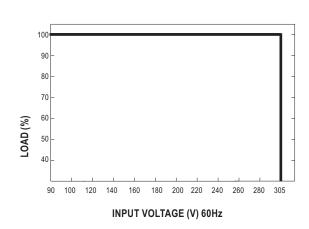


■ OUTPUT LOAD vs TEMPERATURE



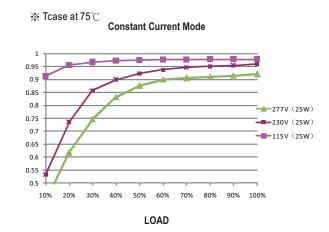


■ STATIC CHARACTERISTIC

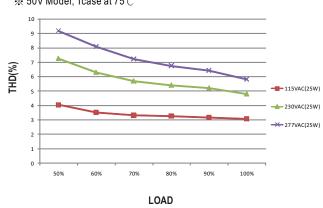


 $\ensuremath{\,\%\,}\xspace \ensuremath{\,\text{De-rating}}\xspace \ensuremath{\,\text{is}}\xspace \ensuremath{\,\text{needed}}\xspace$ under low input voltage.

■ POWER FACTOR (PF) CHARACTERISTIC

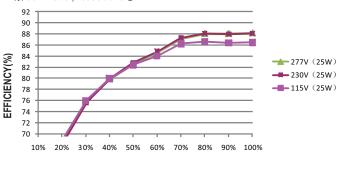


■ TOTAL HARMONIC DISTORTION (THD)



■ EFFICIENCY vs LOAD

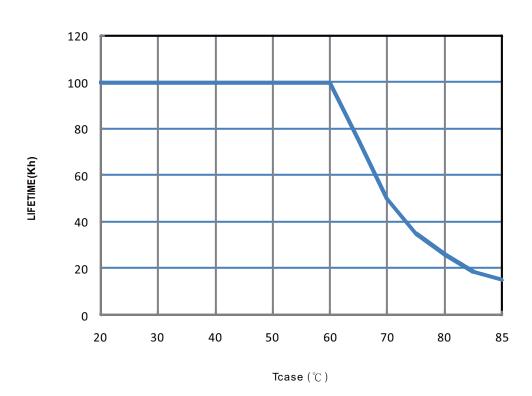
 $\rm XLG\text{-}25$ series possess superior working efficiency that up to 88% can be reached in field applications.



LOAD



■ LIFE TIME

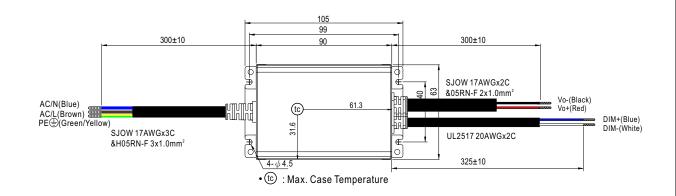


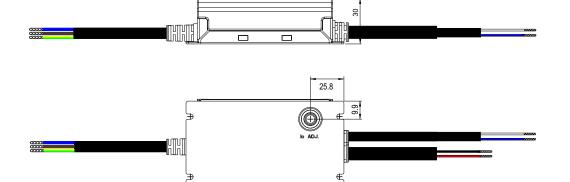


■ Mechanical Specification CASE NO.: 268A Unit:mm **※** A-Type 105 300±10 300±10 90 | | |-63 40 AC/N(Blue) AC/L(Brown) PE (Green/Yellow) 61.3 Vo-(Black) Vo+(Red) (tc SJOW 17AWGx3C SJOW 17AWGx2C &H05RN-F 3x1.0mm² &05RN-F 2x1.0mm² • tc : Max. Case Temperature 30 25.8 9.6



※ AB-Type





■ Installation Manual

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