

Наличие и актуальные цены на

# XLG-50-L-DA2

https://www.mean-well.ru/store/XLG-50-L-DA2/



## 50W Constant Power Mode with DALI-2 LED Driver XLG-50-DA2 series





















#### Features

- Constant Power mode output
- · Metal housing design with functional Ground
- · Built-in active PFC function
- Class 2 power unit(except for L type)
- Standby power consumption < 0.5W</li>
- IP67 rating for indoor or outdoor installations
- Surge protection with 6KV/4KV
- DALI-2 Dimming with minimum level 8%
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- · 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.

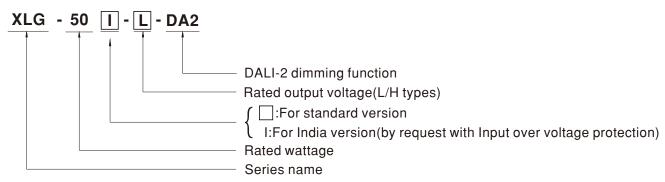
## GTIN CODE

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

## Description

XLG-50-DA2 series is a 50W AC/DC LED driver featuring the constant power mode output. XLG-50-DA2 operates from 90~305VAC. Thanks to the high efficiency up to 89%, the entire series is able to operate between -40 C ~85 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-50-DA2 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system.XLG-50-DA2 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
DA2	DALI-2 control technology with Io adjustable via built-in potentiometer	In Stock

File Name:XLG-50-DA2-SPEC 2025-02-21

## 50W Constant Power Mode with DALI-2 LED Driver XLG-50-DA2 series

#### **SPECIFICATION**

MODEL		XLG-50 -L-DA2	XL	G-50 -H-DA2			
	RATED CURRENT (Default)	700mA	105	i0mA			
ОИТРИТ	RATED POWER	50W	500	V			
	CONSTANT CURRENT REGION Note.2	60 ~ 142V	27 ·	~ 56V			
	FULL POWER CURRENT RANGE	350~700mA	900	)~1400mA			
	OPEN CIRCUIT VOLTAGE (max.)	160V 60V					
	CURRENT ADJ. RANGE	(Via the built-in potentiometer)  300~700mA  500~1400mA					
	CURRENT RIPPLE	5.0%(@ full load)					
ŀ	CURRENT TOLERANCE	±5%					
ŀ	SET UP TIME	500ms/230VAC, 1200ms/115VAC					
	SET OF TIME	90 ~ 305VAC 127 ~ 431VDC					
	VOLTAGE RANGE Note.4	(Please refer to "STATIC CHARACTERISTIC" section)					
INPUT	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR	PF≥0.97/115VAC, PF≥0.95/230VAC, PF≥0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)					
	TOTAL HARMONIC DISTORTION	THD<10%(@load≧50%/115VC,230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)					
	EFFICIENCY (Typ.) Note.15	90%	899	%			
0.	AC CURRENT	0.57A / 115VAC	7VAC				
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=350µs measured at 50	0% Ipeak) at 230VAC; Per N	EMA 410			
	MAX. No. of PSUs on 16A	7 units (circuit breaker of type B) / 12 units (circu	uit breaker of type C\ at 220\	/AC			
	CIRCUIT BREAKER	, , , ,	in breaker or type C) at 250 t	/AC			
	LEAKAGE CURRENT	<0.75mA / 277VAC					
	STANDBY POWER CONSUMPTION	Standby power consumption <0.5W (Dimming OFF)(For standard version)					
	SHORT CIRCUIT	Hiccup mode or Constant current limiting, recove	ers automatically after fault o	condition is removed			
DOTECTION	OVER TEMPERATURE	Stage 1: Derating to 75% loading; stage 2: Derating to 50% loading. recovers automatically after fault condition is removed					
ROTECTION	INPUT OVER VOLTAGE Note.7	320 ~ 370VAC (Shut down output voltage when the input voltage exceeds protection voltage, recovers automatically after fault condition is remove					
	INFOTOVER VOLTAGE NOTE.	Can survive input voltage stress of 440Vac for 48 hours					
ENVIRONMENT	WORKING TEMP.	Tcase=-40 $\sim$ +85 $^{\circ}$ C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)					
	MAX. CASE TEMP.	Tcase=+85°C					
	WORKING HUMIDITY	20~95%					
	STORAGE TEMP.	-40 ~ +80℃					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)					
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC AS/NZS IEC BS EN/EN61347-1, BS EN/EN61347-2-13 (EL) appendix J suitable for emergency installations(DC Input: 176-280Vdc) independent, AS/NZS BS EN/EN61347-2-13, BS EN/EN62384;IP67; IS 15885(Part2/Sec13)(for XLG-50I-DA2 only);GB19510.1, GB19510.14, EAC TP TC 004 approved					
	DALI STANDARDS	Comply with IEC62386-101, 102, 207, 251 for DA2 Type only, Device type 6(DT6)					
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC	C / 25°C / 70% RH				
		Parameter	Standard		Test Level/Note		
		Conducted	BS EN/EN55015(CISPI	R15) ,GB/T 17743			
	EMC EMISSION	Radiated	BS EN/EN55015(CISPF	R15) ,GB/T 17743			
		Harmonic Current	BS EN/EN61000-3-2 ,G	B17625.1	Class C @load≥50%		
		Voltage Flicker	BS EN/EN61000-3-3				
		50 51/51/6/5/5					
		BS EN/EN61547					
		Parameter	Standard		Test Level/Note		
			Standard BS EN/EN61000-4-2		Test Level/Note Level 3, 8KV air ; Level 2, 4KV contact		
		Parameter					
	EMC IMMUNITY	Parameter ESD	BS EN/EN61000-4-2		Level 3, 8KV air ; Level 2, 4KV contact		
	EMC IMMUNITY	Parameter ESD Radiated	BS EN/EN61000-4-2 BS EN/EN61000-4-3		Level 3, 8KV air ; Level 2, 4KV contact Level 3		
	EMC IMMUNITY	Parameter ESD Radiated EFT/Burst	BS EN/EN61000-4-2 BS EN/EN61000-4-3 BS EN/EN61000-4-4		Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3		
	EMC IMMUNITY	Parameter  ESD  Radiated  EFT/Burst  Surge	BS EN/EN61000-4-2 BS EN/EN61000-4-3 BS EN/EN61000-4-4 BS EN/EN61000-4-5		Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 4KV/Line-Line 6KV/Line-Earth		
	EMC IMMUNITY	Parameter  ESD  Radiated  EFT/Burst  Surge  Conducted	BS EN/EN61000-4-2 BS EN/EN61000-4-3 BS EN/EN61000-4-4 BS EN/EN61000-4-5 BS EN/EN61000-4-6		Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 4KV/Line-Line 6KV/Line-Earth Level 3		
	EMC IMMUNITY  MTBF	Parameter ESD Radiated EFT/Burst Surge Conducted Magnetic Field	BS EN/EN61000-4-2 BS EN/EN61000-4-3 BS EN/EN61000-4-4 BS EN/EN61000-4-5 BS EN/EN61000-4-6 BS EN/EN61000-4-8 BS EN/EN61000-4-11	HDBK-217F (25°ℂ)	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 4KV/Line-Line 6KV/Line-Earth Level 3 Level 4 >95% dip 0.5 periods, 30% dip 25 periods,		
OTHERS		Parameter  ESD  Radiated  EFT/Burst  Surge  Conducted  Magnetic Field  Voltage Dips and Interruptions	BS EN/EN61000-4-2 BS EN/EN61000-4-3 BS EN/EN61000-4-4 BS EN/EN61000-4-5 BS EN/EN61000-4-6 BS EN/EN61000-4-8 BS EN/EN61000-4-11	HDBK-217F (25°ℂ)	Level 3, 8KV air ; Level 2, 4KV contact Level 3 Level 3 4KV/Line-Line 6KV/Line-Earth Level 3 Level 4 >95% dip 0.5 periods, 30% dip 25 periods,		

#### NOTE

- Please refer to "DRIVING METHODS OF LED MODULE".

- 2. Treases relief to DRIVING METHODS OF LED MODULE".
  3. Tolerance: includes set up tolerance, line regulation and load regulation.
  4. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.
  5. 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.
  6. Based on IEC 62386-101/102 DALI power on timing and interruption regulations, the set up time needs to test with a DALI controller which can support for DALI power on function, otherwise the set up time will be longer than 500ms.
- 7. Input over voltage only for XLG-50I series, and I series without UL/CSA certificate.
- 7. Injut over voltage only for XLG-3ot series, and 1 series without of DVCSA certainstance.

  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°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 (to point (or TMP, per DLC), is about 75°C or less.

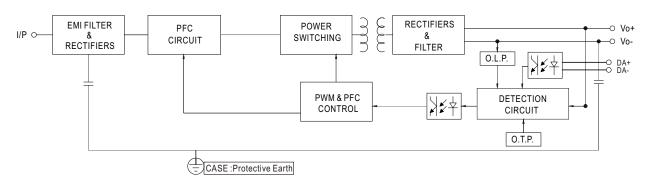
  12. Products sourced from the Americas regions may not have the CCC/PSE/BIS/KC logo. Please contact your MEAN WELL sales for more information.

  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. H type:RCM is on a voluntary basis. Non IC classification Independent LED control gear is not suitable for residential installations. L type:RCM is on a voluntary basis and meets relevant IEC or AS/NZS standards complying with AS/NZS 4417.1 15. The efficiency will drop 1% based on India version
- 16. 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. 17. This series 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

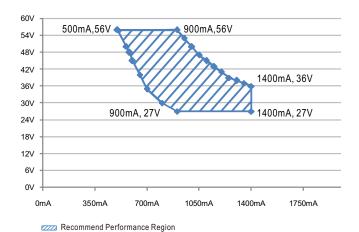
PFC fosc: 50~120KHz PWM fosc: 65KHz



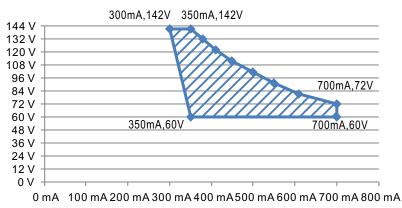
## ■ DRIVING METHODS OF LED MODULE

#### **※ I-V Operating Area**

#### ⊚ XLG-50-H-DA2



#### ⊚ XLG-50-L-DA2



Recommend Performance Region

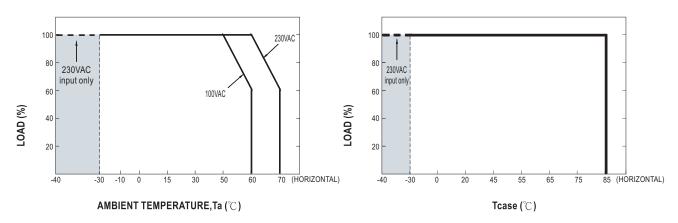
## **■ DIMMING OPERATION**



#### **\* DALI Interface**

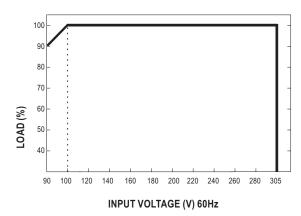
- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

## ■ OUTPUT LOAD vs TEMPERATURE



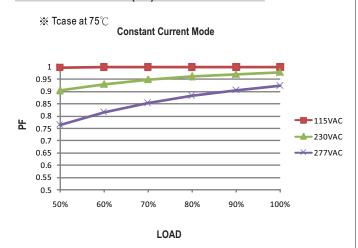
Note:1. The output current must be derated at ultra-high ambient temperature. 2.Below 120VAC@-30°C may has restart situation within 5s after power-on.

## ■ STATIC CHARACTERISTIC



\* De-rating is needed under low input voltage.

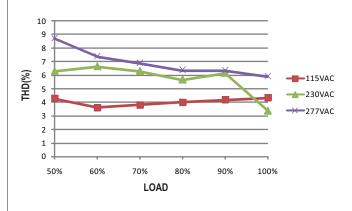
#### **■ POWER FACTOR (PF) CHARACTERISTIC**



## ■ TOTAL HARMONIC DISTORTION (THD)

※ XLG-50-H-DA2 Model, Tcase at 75°

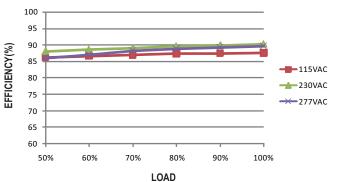
C



#### **■** EFFICIENCY vs LOAD

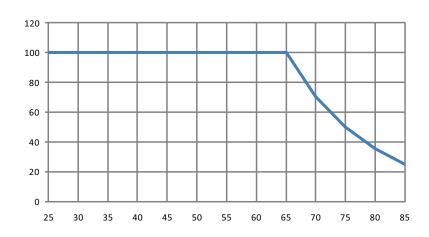
XLG-50-DA2 series possess superior working efficiency that up to 89% can be reached in field applications.

% XLG-50-H-DA2 Model, Tcase at 75 $^{\circ}$ C



## ■ LIFE TIME

LIFETIME(Kh)



Tcase (°C)

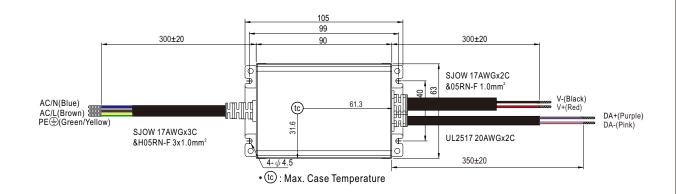


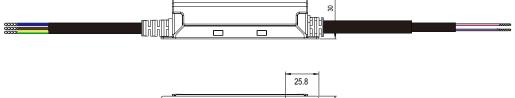
※ DA2-Type

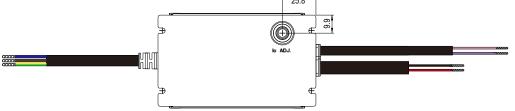
CASE NO.: 268A

Unit:mm

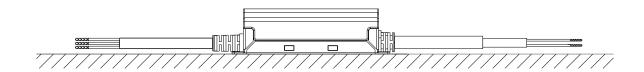
Tolerance:±1







## ■ Recommend Mounting Direction



## ■ INSTALLATION MANUAL

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