



150W Constant Power Mode with DALI-2 LED Driver

XLG-150-DA2 series





















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
- DALI-2 Dimming with minimum level 8%
- 12V/250mA Auxiliary power available(optional)
- India (EESL) version with Input Over Voltage Protection can survive input voltage stress of 440Vac for 48 hours
- Protection functions: SCP/OTP
- Life time >50,000 hrs. and 5 years warranty

Applications Street lighting

- Floodlight Lighting
- · Stage lighting
- · Fishing lighting
- · Horticulture lighting
- Bay lighting
- Type HL for use in class I, Division 2

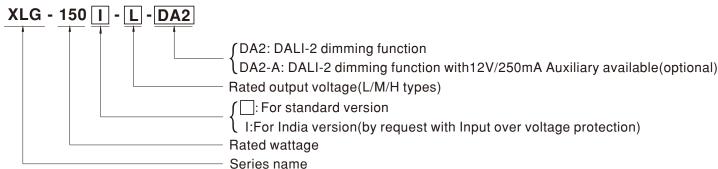
GTIN CODE

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

Description

XLG-150-DA2 series is a 150W LED AC/DC driver featuring the constant power mode with DALI-2 dimming function. XLG-150-DA2 operates from 100~305VAC and offers models with different rated current ranging between 700mA and 4170mA. Thanks to the high efficiency up to 93%, with the fanless design, the entire series is able to operate for -40 $^\circ$ C ~+90 $^\circ$ 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-150-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
DA2-A	DALI-2 control technology with Io adjustable via built-in potentiometer and auxiliary power 12V/250mA	by request

150W Constant Power Mode with DALI-2 LED Driver XLG-150-DA2 series

· - · · · · · · · · · · · · · · · · · · ·	XLG-150 -M- 1400mA 150W 60 ~ 107V 1400~2100mA 120V 700~2100mA	XLG-150 -H- 2800mA 150W 27 ~ 56V 2680~4170mA 65V	
VW ~214V V~1050mA VV a the built-in potentiometer) V~1050mA %(@ full load)	150W 60 ~ 107V 1400~2100mA 120V	150W 27~56V 2680~4170mA 65V	
VW ~214V V~1050mA VV a the built-in potentiometer) V~1050mA %(@ full load)	60~107V 1400~2100mA 120V	27 ~ 56V 2680~4170mA 65V	
0~1050mA DV a the built-in potentiometer) 0~1050mA %(@ full load)	1400~2100mA 120V	2680~4170mA 65V	
oV a the built-in potentiometer) 0~1050mA %(@ full load)	1400~2100mA 120V	65V	
a the built-in potentiometer) >~1050mA %(@ full load)			
0~1050mA %(@ full load)	700~2100mA	1400~4170mA	
%(@ full load)	700~2100mA	1400~4170mA	
· - · · · · · · · · · · · · · · · · · · ·			
· - · · · · · · · · · · · · · · · · · · ·	4.0%(@ full load)		
	±5%		
/@250mA tolerance +10% ripple 200m	nVn-n (only for DA2-A-type)		
12V@250mA tolerance ±10%, ripple 200mVp-p (only for DA2-A-type) 500ms/230VAC, 1200ms/115VAC			
4 100 ~ 305VAC 142VDC ~ 431VDC			
(Please refer to "STATIC CHARACTERISTIC" ang " DRIVING METHODS OF LED MODULE"section)			
47 ~ 63Hz			
$PF \ge 0.97 / 115VAC$, $PF \ge 0.95 / 230VAC$, $PF \ge 0.92 / 277VAC$ at full load			
(Please refer to "Power Factor Characteristic" section)			
Please refer to "TOTAL HARMONIC DISTORTION (THD)" section			
6		92%	
		3270	
	-		
COLD START 60A(twidth=500µs measured at 50% Ipeak) at 230VAC; Per NEMA 410 4 unit(circuit breaker of type B) / 6 units(circuit breaker of type C) at 230VAC			
<0.75mA/277VAC			
Standby power consumption <0.5W (Dimming OFF, Only for standard version DA2-type)			
	<u> </u>		
		vers automatically after fault condition is remove	
Can survive input voltage stress of 440Vac for 48 hours			
Stage 1: Derating to 75% loading; stage 2: Derating to 50% loading. recovers automatically after fault condition is removed			
Tcase=-40 ~ +90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)			
Tcase=+90℃			
20 ~ 95% RH non-condensing			
-40 ~ +80°C, 10 ~ 95% RH non-condensing			
±0.06%/℃ (0~60°C)			
10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes			
UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC BS EN/EN61347-1, BS EN/EN61347-2-13(EL) appendix J suitable for emergency installations(DC Input: 176-280Vdc) independent ,BS EN/EN62384; GB19510.1, GB19510.14; EAC TP TC 004; IS 15885(Part2/Sec13)(for XLG-150I-DA2 only); IP67 approved			
Comply with IEC62386-101,102,207,251,Device type 6(DT6)			
I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC			
I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH			
rameter	Standard	Test Level/Note	
nducted	BS EN/EN55015(CISPR15), GB/T 17743		
	, , , ,		
	, , , , ,	Class C @load≥50%	
	,		
EN/EN61547	33 217 217 1000-0-0	1	
rameter	Standard	Test Level/Note	
D		Level 3, 8KV air ; Level 2, 4KV contact	
		Level 2	
		Level 3	
		4KV/Line-Line 6KV/Line-Earth	
*		Level 2	
Juenc Lieia	D3 ΕΙΝ/ΕΙΝΟ Ι UUU-4-δ	Level 4	
tage Dips and Interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods	
<u> </u>	(Denotie), 213.3Kiiis IIIIII. WIL-DDBK-2	.111 (200)	
Kg;16pcs/13.4Kg/0.67CUFT	105°0 ()		
oned are measured at 230VAC input, rat S OF LED MODULE".	ed current and 25 C of ambient temperature.		
e, line regulation and load regulation.	CHARACTERISTIC" sections for details.	illy when the temperature	
8 C 8 A L n 7 r C 1 n C 8 8 7 n C 1	ase refer to "STATIC CHARACTERIST -63Hz ≥0.97 / 115VAC, PF≥0.95 / 230VAC, Fase refer to "Power Factor Characterist 0< 10% (@ load≥50% at 115VAC/23 ase refer to "TOTAL HARMONIC DIST 0 A/ 115VAC 1.0A / 230VAC 0.8A/2 D START 60A(twidth=500µs measured shit(circuit breaker of type B) / 6 units(circuit brea	ase refer to "STATIC CHARACTERISTIC" ang "DRIVING METHODS OF LED MODULE 163Hz 20.97 / 115VAC, PF≥0.95 / 230VAC, PF≥0.92 / 277VAC at full load ase refer to "Power Factor Characteristic" section) >> 10% (@ load ≥ 50% at 115VAC/230VAC, @ load ≥ 75% at 277VAC) ase refer to "TOTAL HARMONIC DISTORTION (THD)" section	

15. H/M 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

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.

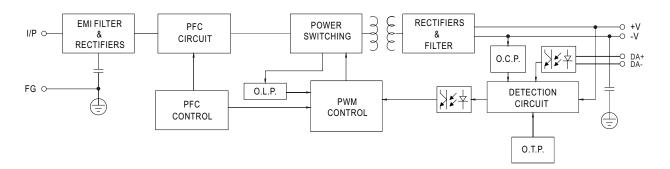
X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

File Name:XLG-150-DA2-SPEC



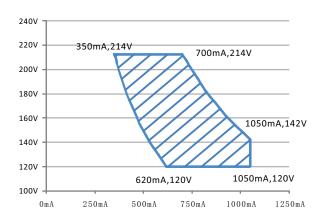
■ BLOCK DIAGRAM

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

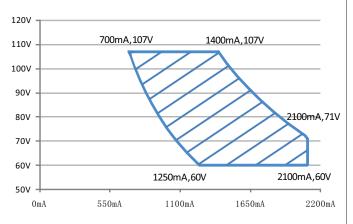


■ DRIVING METHODS OF LED MODULE

% I-V Operating Area

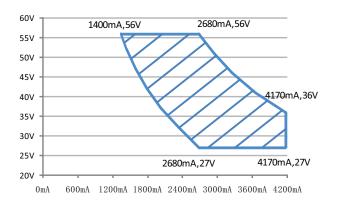


Recommend Performance Region



Recommend Performance Region

XLG-150-H-DA2



Recommend Performance Region



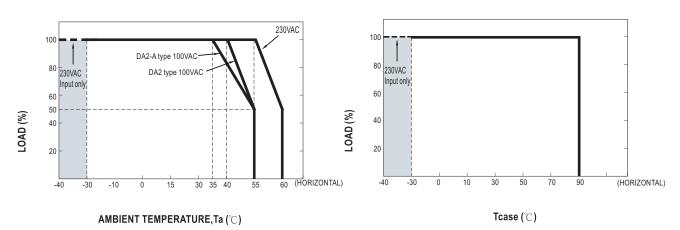
■ DIMMING OPERATION



*** DALI Interface**

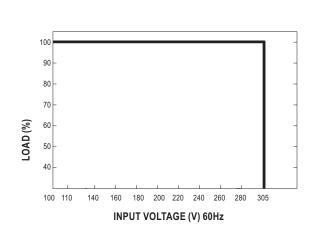
- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

■ 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.

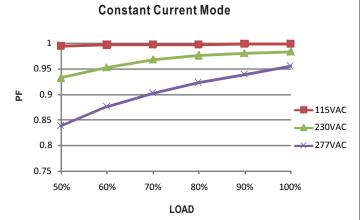
■ STATIC CHARACTERISTIC



■ POWER FACTOR (PF) CHARACTERISTIC

※ Tcase at 75°

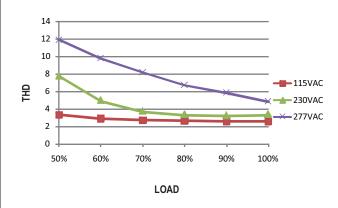
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■ TOTAL HARMONIC DISTORTION (THD)

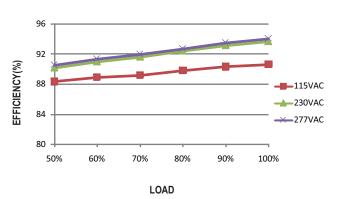
% XLG-150-L-DA2 Model, Tcase at 75 $^{\circ}$ C



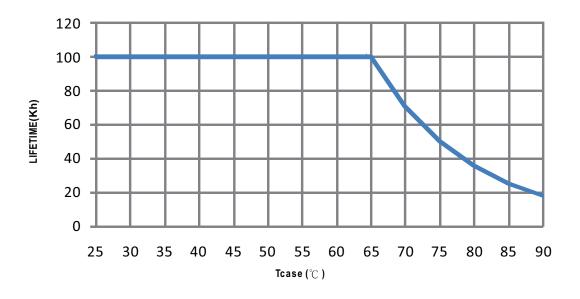
■ EFFICIENCY vs LOAD

XLG-150-DA2 series possess superior working efficiency that up to 93% can be reached in field applications.

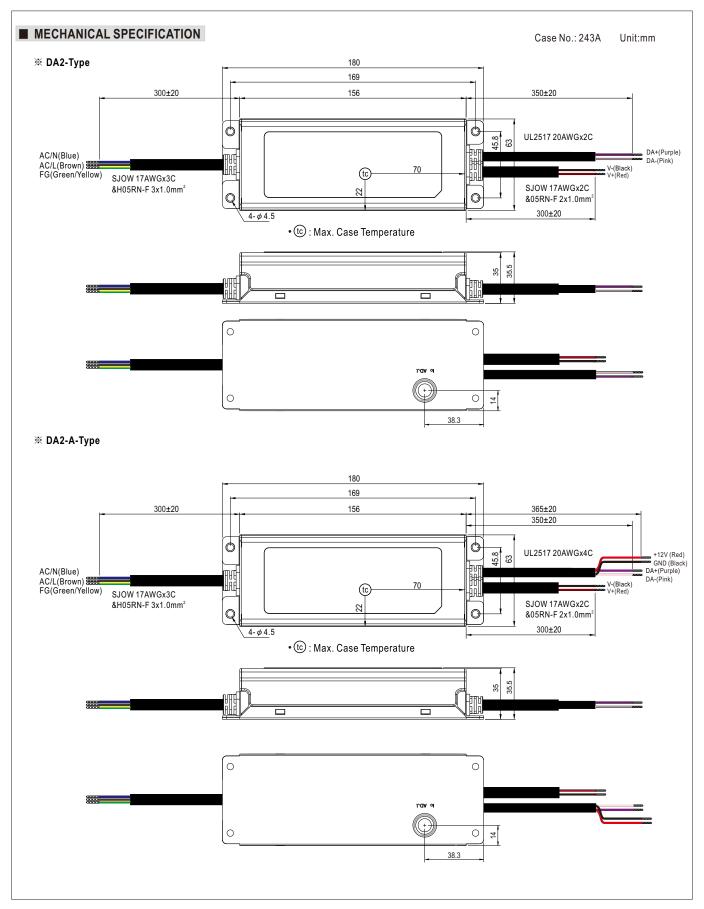
XLG-150-L-DA2 Model, Tcase at 75° C



■ LIFE TIME



150W Constant Power Mode with DALI-2 LED Driver XLG-150-DA2 series



■ Recommend Mounting Direction



■ INSTALLATION MANUAL

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