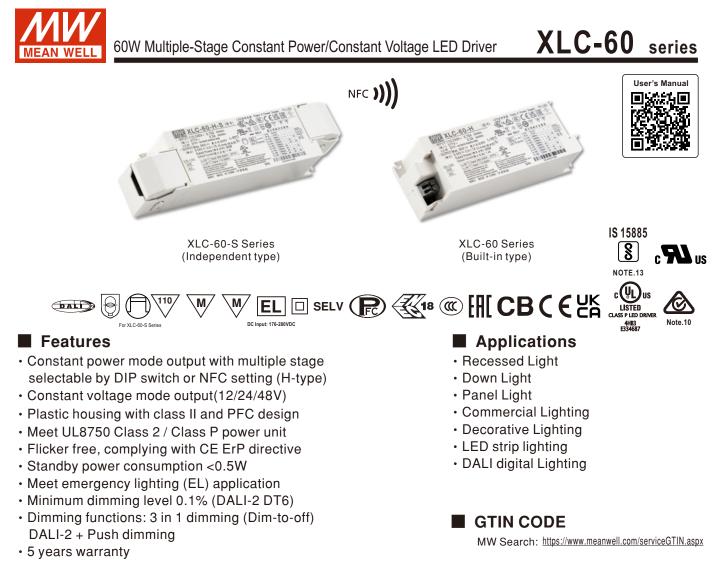


Наличие и актуальные цены на

# **XLC-60-24-DA2S**

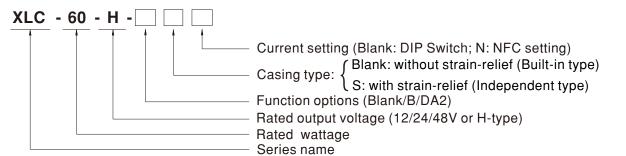
https://www.meanwell.ru/store/XLC-60-24-DA2S/



## Description

XLC-60 Series is a 60W with constant power and constant voltage output LED driver . It can operate from 100 ~ 305VAC and output current ranging between 900 mA to 1700 mA selectable by DIP switch or NFC setting. Thanks to high efficiency up to 90%, it is able to operate for  $-25^{\circ}$ C ~90°C case temperature under free air convection. XLC-60 is designed based on latest safety regulations with 3 in 1 and DALI-2 dimming. XLC-60 can also be adjusted for brightness with a push button as a simple way dimming, so it provides more flexibility for LED Lighting application.

## Model Encoding



Туре	Function	Note
Blank	H type output current selectable by DIP-switch or NFC setting.	
	12, 24, 48V Constant voltage output	
В	H type output current selectable by DIP-switch or NFC with 3 in 1 dimming	la stasla
	12, 24, 48V Constant voltage output and built-in 3 in 1 Dimming(PWM Style output)	In stock
DA2	H type output current selectable by DIP-switch or NFC with DALI-2 dimming	
	12, 24, 48V Constant voltage output and built-in DALI-2(PWM Style output)	

Note: NFC current setting is available for XLC-60-H type only.



## SPECIFICATION

MODEL		XLC-60-12-	XLC-60-24-	XLC-60-48-		
WODEL	DC VOLTAGE	12V	24V	48V		
OUTPUT	DEFAULT CURRENT	5A	2.5A	1.25A		
	RATED POWER	60W	60W	60W		
	SETUP, RISE TIME	800ms,180ms/230VAC ,1000ms,180ms/115	/AC			
	VOLTAGE RANGE	100 ~ 305VAC 155 ~400VDC				
	FREQUENCY RANGE	47~63Hz				
	POWER FACTOR	PF≥0.95/115VAC, PF≥0.95/230VAC, PF≥0.9/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)				
	TOTAL HARMONIC DISTORTION	THD<20%(@load ≥60%/230VAC; @load ≥75%/277VAC); THD<10%@load 100%/230VAC (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)				
NPUT	EFFICIENCY(Typ.)	86%	87%	88%		
	AC CURRENT	0.75A/115VAC, 0.35A/230VAC, 0.3A/277VAC				
	INRUSH CURRENT	COLD START 15A(twidth=310µs measured at 50% lpeak) at 230VAC; Per NEMA 410				
	MAX. NO. of PSUs on 16A CIRCUIT BREAKER	25 units (circuit breaker of type B) / 36 units (circuit breaker of type C) at 230VAC				
	LEAKAGE CURRENT STANDBY POWER Note5	<0.75mA / 277VAC				
	CONSUMPTION	Standby power consumption<0.5W (Dimming OFF, only for standard version B/DA2-type) 105~200% rated output power				
	OVERLOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed.				
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	14~17V     26~35V     52~63V       Shut down output voltage, re-power on to recover     52~63V				
	OVER TEMPERATURE	Shut down output voltage, recovers automatically after fault condition is removed				
	WORKING TEMP.	Tcase=-25~90°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)				
	MAX. CASE TEMP.	Tcase=90℃				
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP. , HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes UL8750(Class P), 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); BS EN/EN62384, BIS IS15885(Part2/Sec13)(NOTE 13), GB/T19510.1, GB/T19510.213, EAC TP TC 004 approved; Design refer to AS/NZS 61347-1, AS/NZS 61347-2-13				
	SAFETY STANDARDS					
	DALI STANDARDS	Comply with IEC62386-101, 102, 207				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC				
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% I	RH			
		Parameter	Standard	Test Level/Note		
	EMC EMISSION	Conducted	BS EN/EN55015(CISPR15) ,GB/T 17743			
SAFETY&EMC		Radiated	BS EN/EN55015(CISPR15),GB/T 17743			
SAFETT&EWIC		Harmonic Current	BS EN/EN61000-3-2 , GB17625.1	Class C @load≥60%		
		Voltage Flicker	BS EN/EN61000-3-3			
		BS EN/EN61547				
		Parameter	Standard	Test Level/Note		
	EMC IMMUNITY					
		ESD	BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact		
		Radiated	BS EN/EN61000-4-3	Level 2		
		EFT/Burst	BS EN/EN61000-4-4	Level 2		
		Surge	BS EN/EN61000-4-5	Level 3, 1KV/Line-Line		
		Conducted	BS EN/EN61000-4-6	Level 2		
		Magnetic Field	BS EN/EN61000-4-8	Level 2		
		Voltage Dips and Interruptions	BS EN/EN61000-4-11	70% residual voltage for 10 period, 0% residual voltage for 0.5 periods		
	FLICKER Note.9	PstLM ≤ 1, SVM ≤ 0.4				
	MTBF	4130.5K hrs min. Telcordia SR-332 (Bellcore)	317.7Khrs min. MIL-HDBK-217F (25°C)			
OTHERS	DIMENSION	176*45*32mm, 136*45*32mm (L*W*H)				
	PACKING	0.32Kg; 40pcs/13.8Kg/0.48CUFT(for XLC-60 Series); 0.39Kg; 40pcs/16.6Kg/0.61CUFT(for XLC-60-S Series);				
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature.</li> <li>De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.</li> <li>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.</li> <li>Current ripple is measured 50%~100% of maximum voltage under rated power delivery.</li> <li>Standby power consumption is measured at 230VAC.</li> <li>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)</li> <li>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).</li> <li>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.</li> <li>Flicker is measured at full load with the light source provided by MEAN WELL.</li> <li>For XLC-S series: RCM is on a voluntary basis. Non IC classification Independent LED control gear is not suitable for residential installations. For XLC(except -S) series: RCM is on a voluntary basis and meets relevant IEC or AS/NZS standards complying with AS/NZS 4417.1</li> <li>This series meets the typical life expectancy of 50000 hours of operation when Tcase,particularly tc point(or TMP,per DLC), is about 75°C or less.</li> <li>For more information, please contact with MEAN WELL sales.</li> <li>For ducts sourced from the China regions and some models sourced from India may not have the BIS logo,please refer to BIS certificate for details.</li> </ol>					
	and contact your MEAN	WELL sales for more information.	to https://www.meanwell.com/serviceDis			

File Name:XLC-60-SPEC 2025-01-24

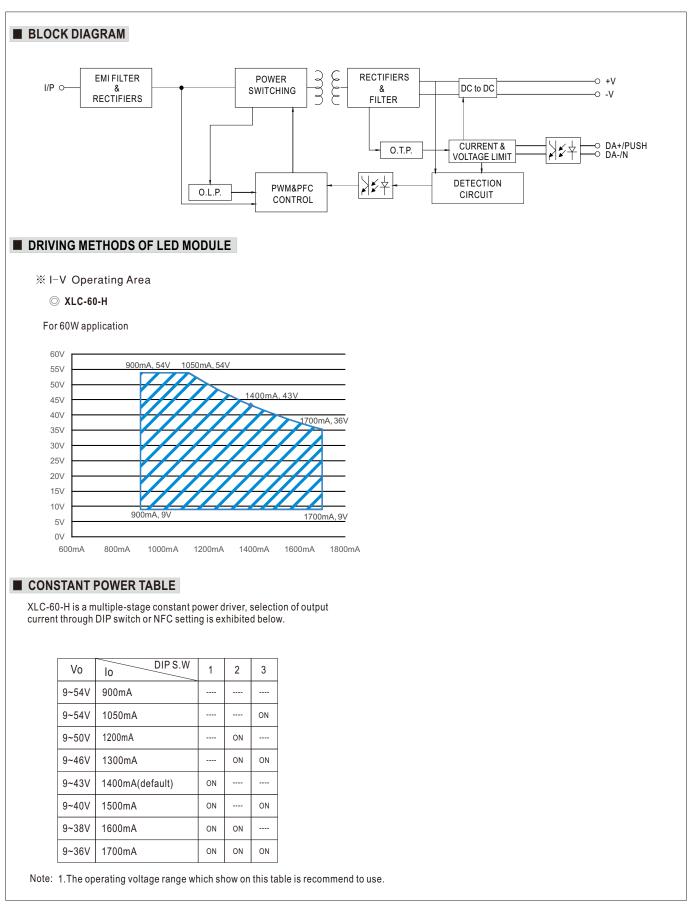


## SPECIFICATION

SPECIFICATIO	JN						
MODEL		ХLС-60-Н- 🗌 🗌 🗌					
	OPEN CIRCUIT VOLTAGE Note14	e14 60V					
	DEFAULT CURRENT	1400mA					
	CURRENT ADJ. RANGE	0.9~1.7A					
	(BY DIP SWITCH OR NFC)	0.0 1.17					
	CONSTANT CURRENT	9~54V					
OUTPUT	REGION						
	RATED POWER	60W					
	CURRENT RIPPLE Note4	<4%					
	CURRENT TOLERANCE	±5%					
	DIMMING RANGE	0~100%					
	SETUP, RISE TIME Note12	800ms,100ms/230VAC ,1000ms,100ms/115VAC					
	VOLTAGE RANGE	100 ~ 305VAC 155 ~400VDC					
	FREQUENCY RANGE	47~63Hz					
		PF≥0.95/115VAC, PF≥0.95/230VAC,PF≥0.9/277VAC@full load					
	POWER FACTOR	(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)					
	TOTAL HARMONIC	THD< 20%(@load ≥60%/230VAC; @load ≥75%/277VAC); THD<10%@load 100%/230VAC					
	DISTORTION	(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)					
INPUT	EFFICIENCY(Typ.) Note11	90%					
INPUT	AC CURRENT	0.75A/115VAC, 0.35A/230VAC, 0.3A/277VAC					
	INRUSH CURRENT	COLD START 15A(twidth=310µs measured at 50% lpeak) at 230VAC; Per NEMA 410					
	MAX. NO. of PSUs on 16A						
	CIRCUIT BREAKER	25 units (circuit breaker of type B) / 36 units (circuit breaker of type C) at 230VAC					
	LEAKAGE CURRENT	<0.75mA/277VAC					
	STANDBY POWER Note5	Standby power consumption <0 EW (Dimetion	ag off only for standard varian P/DA2 tune)				
	CONSUMPTION	Standby power consumption<0.5W (Dimming off, only for standard version B/DA2-type)					
	SHORT CIRCUIT	Hiccup mode, recovers automatically after f	ault condition is removed				
PROTECTION		DA2 type: Stage 1: Derating to 75% loading					
NOTECTION	OVER TEMPERATURE	Recovers automatically after fault condition	is removed				
		Blank & B type: Derating to lowest output levels	vel, Recovers automatically after fault condition is	s removed			
	WORKING TEMP.	Tcase=-25~90°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)					
	MAX. CASE TEMP.	Tcase=90°C					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60	)min. each along X. Y. Z axes				
			12; ENEC BS EN/EN61347-1, BS EN/EN61347-	2-13(EL) appendix J suitable			
	SAFETY STANDARDS	for emergency installations(DC input 176-280VDC); BS EN/EN62384, BIS IS15885(Part2/Sec13)(NOTE 13),					
		GB/T19510.1, GB/T19510.213, EAC TP TC 004 approved; Design refer to AS/NZS 61347-1, AS/NZS 61347-2-13					
	DALI STANDARDS	Comply with IEC62386-101, 102, 207					
	WITHSTAND VOLTAGE	U/P-O/P:3.75KVAC					
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70%	6 RH				
		Parameter	Standard	Test Level/Note			
		Conducted	BS EN/EN55015(CISPR15), GB/T 17743				
SAFETY&EMC	EMC EMISSION	Radiated	BS EN/EN55015(CISPR15), GB/T 17743				
		Harmonic Current	BS EN/EN61000-3-2 , GB17625.1	Class C @load≥60%			
		Voltage Flicker BS EN/EN61547	BS EN/EN61000-3-3				
		Parameter	Standard	Test Level/Note			
		ESD	BS EN/EN61000-4-2	Level 3, 8KV air ; Level 2, 4KV contact			
	EMC IMMUNITY	Radiated	BS EN/EN61000-4-3	Level 2			
		EFT/Burst	BS EN/EN61000-4-4	Level 2			
		Surge	BS EN/EN61000-4-5	Level 3, 1KV/Line-Line			
		Conducted Magnetic Field	BS EN/EN61000-4-6	Level 2 Level 2			
		Magnetic Field	BS EN/EN61000-4-8	70% residual voltage for 10			
		Voltage Dips and Interruptions	BS EN/EN61000-4-11	period, 0% residual voltage for 0.5 periods			
	FLICKER Note.9	$PstLM \leqslant 1, SVM \leqslant 0.4$	· ·				
	MTBF	4130.5K hrs min. Telcordia SR-332 (Bellcor	e) 317.7Khrs min. MIL-HDBK-217F (25°C)				
OTHERS	DIMENSION	4130.5K hrs min. Telcordia SK-352 (Belicore) 317.7Khrs min. Mill-HDBK-217F (25 C) 176*45*32mm , 136*45*32mm (L*W*H)					
	PACKING	0.32Kg; 40pcs/13.8Kg/0.48CUFT(for XLC-60 Series); 0.39Kg; 40pcs/16.6Kg/0.61CUFT(for XLC-60-S Series);					
		10.32 kg, 40 pcs 10.0 kg/0.4 cc - 0 cs res, $10.3$ kg, 40 pcs 10.0 kg/0.4 cc - 0 cs cs res, $10.3$ kg, 40 pcs 10.0 kg/0.4 cc - 0 cs cs res, $10.3$ kg, 40 pcs 10.0 kg/0.4 cc - 0 cs cs res, $10.3$ kg - 0 cs - 0					
			AC input, rated current and 25°C of ambient of ambient of ambient of the section				
			OFF the driver may lead to increase of the				
		d 50%~100% of maximum voltage und					
	5. Standby power consumption is measured at 230VAC.						
	6. 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)						
	7. 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). 8. 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.						
NOTE	9. Flicker is measured at full load with the light source provided by MEAN WELL.						
	10. For XLC-S series: RCM is on a voluntary basis. Non IC classification Independent LED control gear is not suitable for residential installations.						
	For XLC(except -S) series: RCM is on a voluntary basis and meets relevant IEC or AS/NZS standards complying with AS/NZS 4417.1.						
	11. Efficiency is measured at 1050mA/54V output set by DIP switch. 12. Based on IEC 62386-101/102 DALI power on timing and interruption regulations, the set up time needs to test with a DALI controller						
	12. 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 start up time will be higher than 0.5 second.						
	13. Products sourced from the China regions and some models sourced from India may not have the BIS logo, please refer to BIS certificate for details						
	and contact your MEAN WELL sales for more information.						
	14. Output hiccups under no-load condition (only for H-type). 15. This series meets the typical life expectancy of 50000 hours of operation when Tcase, particularly to point (or TMP, per DLC), is about						
	15. This series meets the typical life expectancy of 50000 hours of operation when Tcase, particularly tc point (or TMP, per DLC), is about 75°C or less.						
	75°C or less.		formation, please contact with MEAN WELL sales. jility Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.asp				
		ease contact with MEAN WELL sales.					
	and contact your MEAN 14. Output hiccups under no 15. This series meets the typ	WELL sales for more information. -load condition.(only for H-type).	·				



60W Multiple-Stage Constant Power/Constant Voltage LED Driver





## XLC-60 series

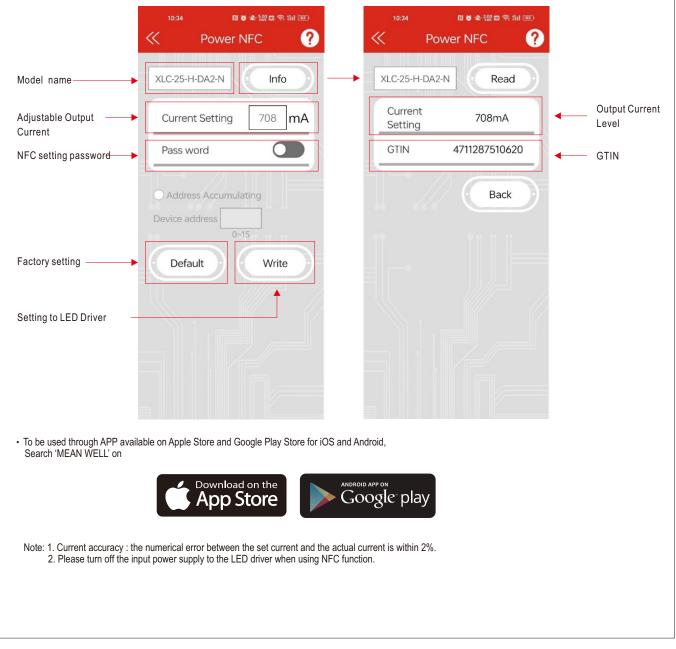
#### NFC Function Description

The output current of the NFC Mode LED driver can be adjusted using NFC via the mobile APP

- Operation Instruction:
- Compatible phone
- Install an NFC-compatible smart mobile device or phone with Android<sup>™</sup> 4.1 or IOS12 updates.
- · Steps for setting output current via NFC
- 1. Download Meanwell APP on mobile device or mobile phone, and enable NFC function.
- 2. Check the NFC antenna position of the mobile phone please.
- 3. Enter Meanwell APP -> Top left menu Installation Manual/APP-> PowerNFC, approach the LED driver NFC sensing position and perform sensing.
- 4. APP displays the functional parameters, and the relevant parameters are modified as required.
- 5. Tap the APP write button and quickly move the phone antenna close to the NFC sensing position of the LED driver.
- 6. The write completes when the mobile phone displays"Success".

#### APP Function Description:

※ APP Interface:



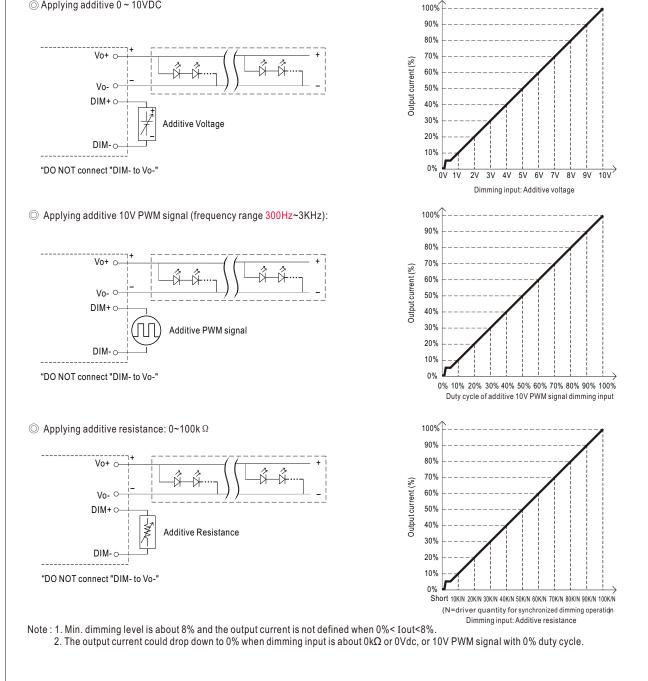


## XLC-60 series

## DIMMING OPERATION

#### O B type

- **※** 3 in 1 dimming function
- 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:  $100 \mu A (typ.)$
- Applying additive 0 ~ 10VDC

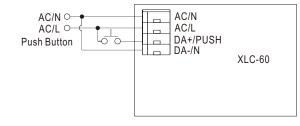


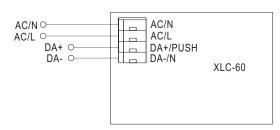


## DIMMING OPERATION

#### ◎ DA2 type (DALI-2 digital dimming function)

### **※** Input wiring diagram





#### **※**PUSH dimming (primary side)

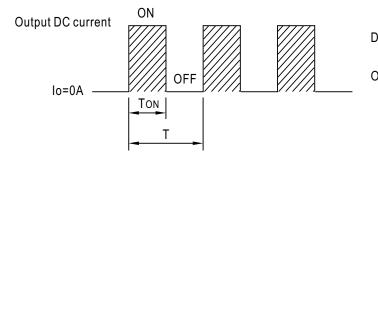
- The factory default dimming level is at 100%.
- If the push action lasts less than 0.05 sec., it will not lead to a change for the status of the driver.
- Up to 10 drivers can perform the PUSH dimming at the same time when utilizing one common push button.
- The maximum length of the cable from the push button to the last driver is 20 meters.

Action	Action duration	Function
Short Push	0.1~1s	Turn ON-OFF the driver
Double Click	Click twice in 1.5s	Set up the dimming level to 100%
Long Push	1.5~10s	Every Long Push changes the dimming direction, dimming up or down

### PWM OUTPUT DIMMING PRINCIPLE

#### **※** For 12V/24V/48V PWM style output dimming

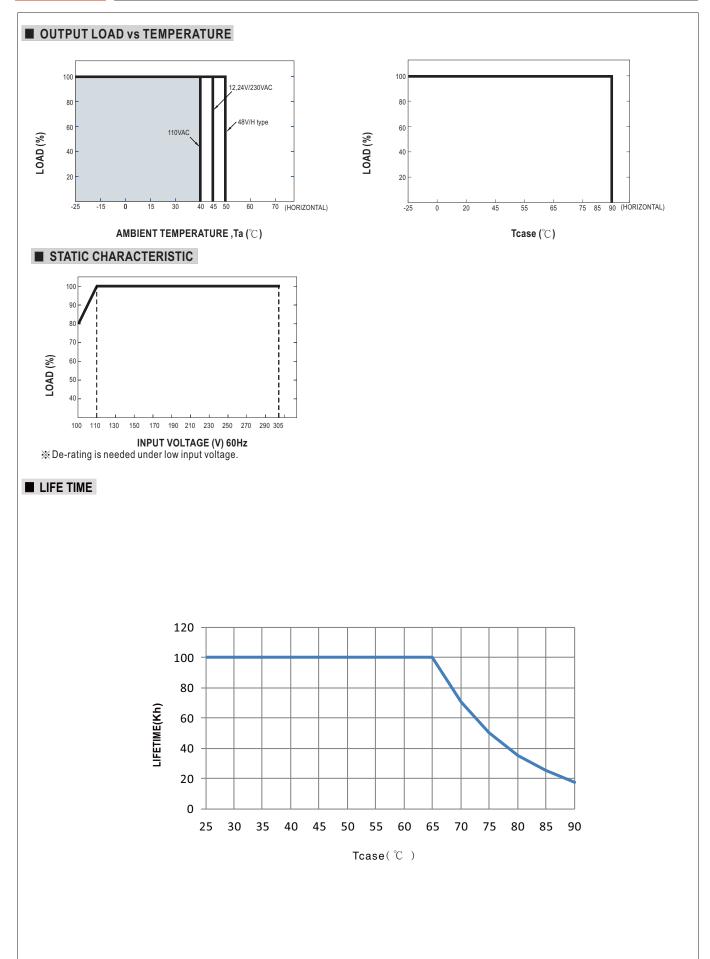
• Dimming is achieved by varying the duty cycle of the output current.



Outy cycle(%) = 
$$\frac{\text{TON}}{T} \times 100\%$$

Output PWM frequency : 4kHz for B-Type fixed (Typ.) 3.2kHz for DA2-Type fixed (Typ.)

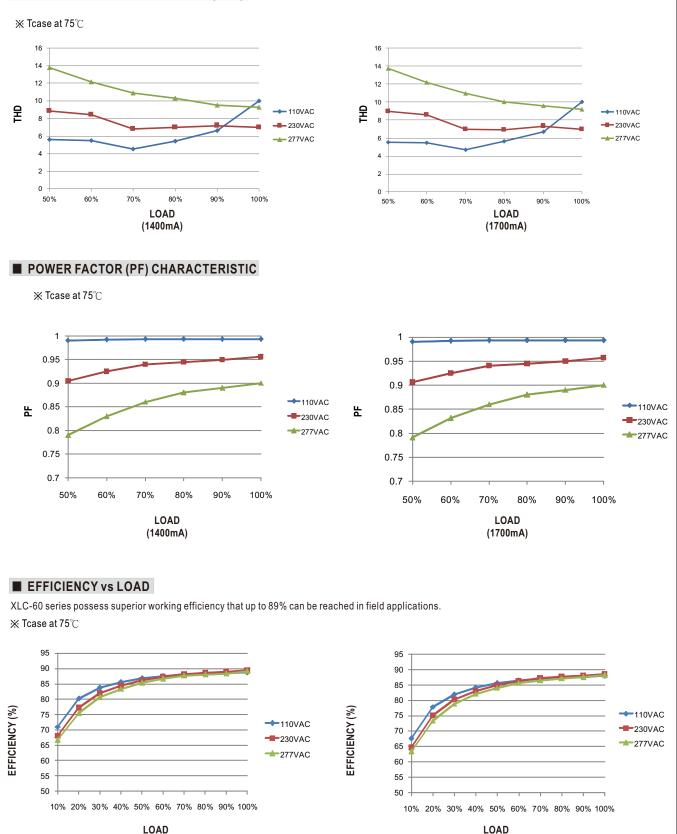






## TOTAL HARMONIC DISTORTION (THD)

(1400mA)

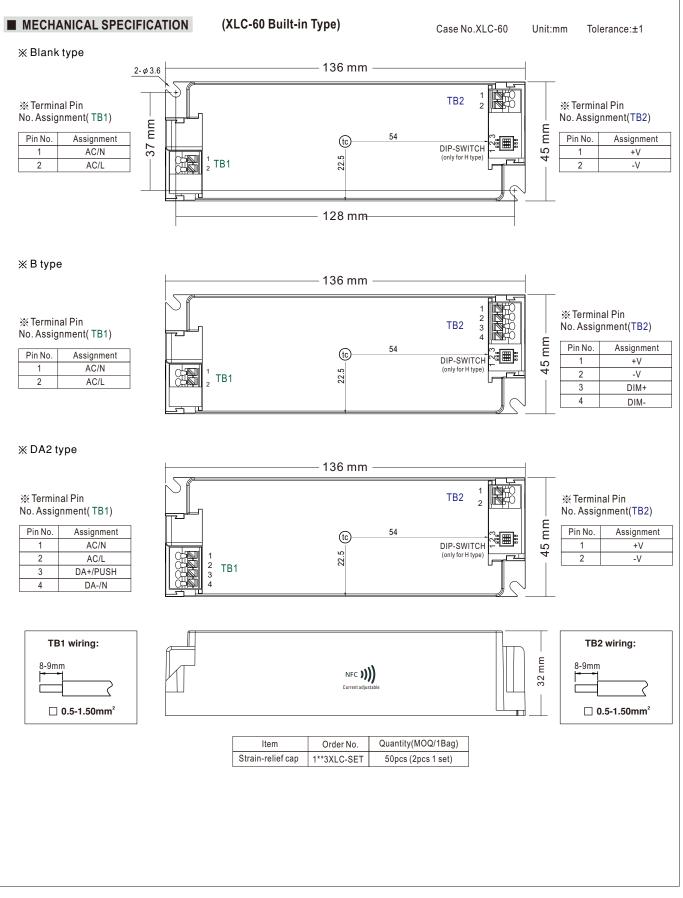


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(1700mA)



XLC-60 series



File Name:XLC-60-SPEC 2025-01-24



60W Multiple-Stage Constant Power/Constant Voltage LED Driver

XLC-60 series

