MEAN WELL XLC-60 60W Multiple Stage Constant Power Owner's Manual

Contents

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in fact

- **Model:** XLC-60-12, XLC-60-24, XLC-60-48
- **DC Voltage Range:** 12V, 24V, 48V
- **No Load Voltage:** 12V, 24V, 48V
- **Default Output Current:** 5A, 2.5A, 1.25A
- **Rated Power:** 60W
- **Setup/Rise Time:** 800ms/150ms at 230VAC, 1000ms/150ms at 115VAC
- **Voltage Range:** 110-305VAC, 155-431VDC
- **Frequency range:** 47-63Hz
- **Power rating:** PF0.95 at 230VAC, PF0.9 at 277VAC (at full load)
- **Total harmonic difference:** THD < 20%

Product Usage Guidelines

installation:

1. Make sure the input power source matches the range voltage.
2. Connect the LED driver to the LED light fixture following the manufacturer’s instructions.
3. Protect all connections properly to avoid any electrical hazards.

Operation:

1. Apply power to the LED driver and make sure the LED light works properly.
2. If adjustments are needed, refer to the user manual for any setup instructions.

treatment:

1. Always check the driver LEDs for any signs of damage or wear.
2. Know the driver and the surrounding area to avoid dust accumulation that can affect performance.

FAQ

- **What should I do if the LED driver overheats?**

If the LED driver overheats, turn off the power immediately and let it cool down before trying to use it again. Check for any obstructions to ventilation and make sure there is good air flow around the driver.

- **Can I use this LED driver with dimmable LED lights?**
  Yes, this LED driver is compatible with dimmable LED lights. Be sure to follow the dimmer fitting instructions provided by the LED light manufacturer.

Features

- Constant power mode output with multiple stages selected by dip switch or NFC system (Type H)
- Constant voltage output mode e (12/24/48V)
- Plastic housing with class 11/2 and PFC design
- Flicker free, compliant with IEEE1789/ErP
- Standby power consumption <0.5W
- Meet the emergency electrical equipment (EL).
- Dimming level less than 1% (DALI-2 DT6)
- Dimming functions: 3 in 1 dimming (Dim-to-off) DALI-2 + Push dimming
- 5 years warranty

apparatus

- Recessed Light
- Bottom
- Light panel
- Business Light
- Decorative Light
- LED strip light
- Dali today Lighting

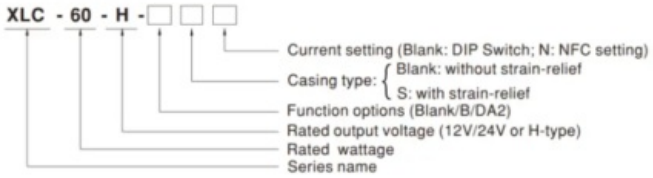
GTIN CODE

MW Research: **https://www.meanwell.com/serviceGTIN.aspx**

Description

XLC-60 Series is a 60W with constant power and constant voltage output LED driver. It can work from 110 ~ 305V AC and the output current is between 900 mA to 1700 mA selectable by dip switch or NFC system. Thanks to the high efficiency of up to 90%, it is able to work for -25 ° C ~ 90 ° C temperature under free air conditioning. The XLC-60 is designed based on the latest safety techniques with 3 in 1 and DALI-2 dimming. The XLC-60 can also be adjusted for brightness with a push button as a simple dimming method, thus providing design flexibility for LED lighting applications.

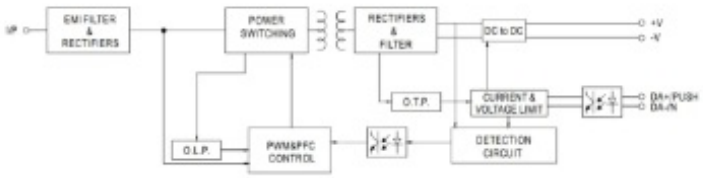
Run the template code



Type	Function	Note
Blank	H type output current selectable by dip-switch with constant power mode	In stock
	12, 24, 48V Constant voltage output	
B	H type output current selectable by dip-switch and built-in 3 in 1 dimming	
	12, 24, 48V Constant voltage output and built-in 3 in 1 Dimming(PWM Style output)	
DA2	H type output current selectable by dip-switch and built-in DALI-2 dimming	
	12, 24, 48V Constant voltage output and built-in DALI-2(PWM Style output)	

specification

LOCKING DIAGRAM

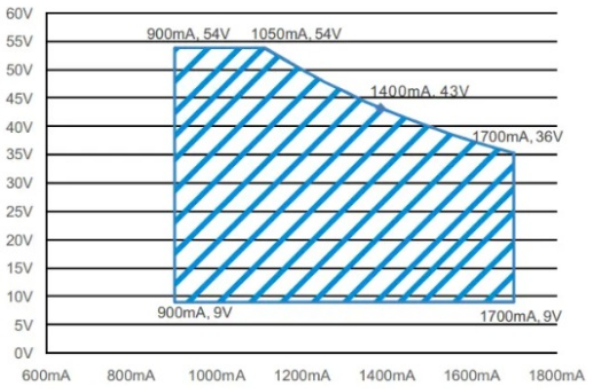


Driving method of LED MODULE

※ I-V Operating Area

◎ **XLC-60-H**

For 60W application



OR CONSTANT POWER

XLC-60-H is a multi-stag constant power driver, the selection of current output by DIP switch or NFC system is shown below.

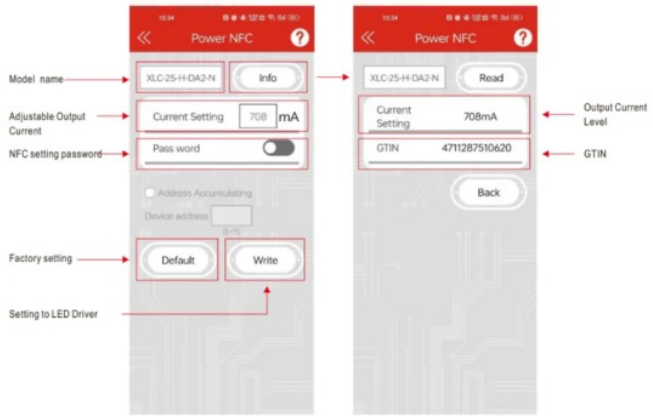
Look	Io DIP SW	1	2	3
9~54V	900mA	–	–	–
9~54V	1050mA	–	–	HE
9~50V	1200mA	–	HE	–
9~46V	1300mA	–	HE	HE
9~43V	1400mA (default)	HE	–	–
9~40V	1500mA	HE	–	HE
9~38V	1600mA	HE	HE	–
9~36V	1700mA	HE	HE	HE

NFC Service Description (Upon Request)

1. The current output of the NFC Status LED driver can be adjusted using NFC via a mobile phone APP Operation Phone Compatibility Install an NFC compatible smart mobile device or phone with Android TM 4.1 or IOS12 updates. Steps for current output via NFC
2. Download the Meanwell APP on the mobile device or mobile phone, and activate the NFC function.
3. Please check the NFC antenna position of the mobile phone.
4. Click Meanwell APP -> Top left menu -Installation manual/APP->PowerNFC, close the NFC LED driver sense mode and make sense.
5. The APP shows the performance parameters, and the relevant parameters are changed as needed.

1. Tap the APP write button and move the phone’s antenna quickly to the NFC detection position of the LED driver.
2. The writing is finished when the mobile phone shows “Success”

APP Function Description
APP interface:



To use through the APP available on the Apple Store and Google Play Store for iOS and Android. Find: GOOD MEANING on

Download on the App Store

ANDROID APP ON Google play

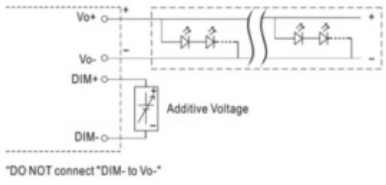
DIMMING operation

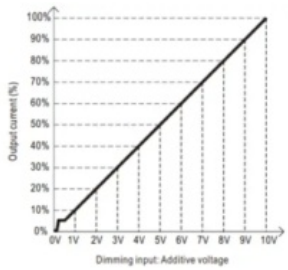
B type

3 in 1 dimming function

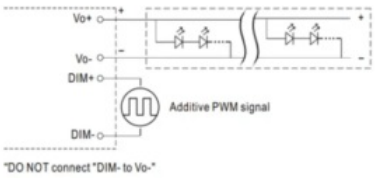
- The output current level can be adjusted using one of three parameters between DIM+ and DIM-: 0~10VDC, or 10V PWM signal or resistance.
- Connecting directly to the LEDs is recommended. It is not suitable to use with additional drivers.
- Dimming source current from power supply: 100m A (typ.)

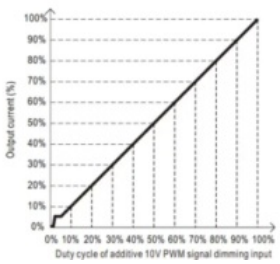
Additional equipment 0 ~ 10VDC



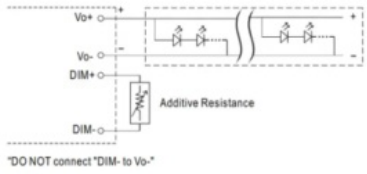


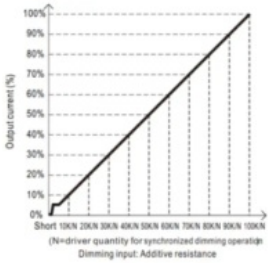
Using an additional 10V PWM signal (frequency range 100Hz ~ 3KHz):





Using replacement resistance: 0 ~ 100k S





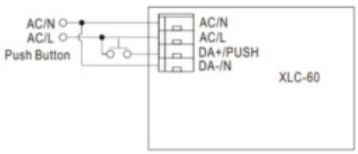
Note :

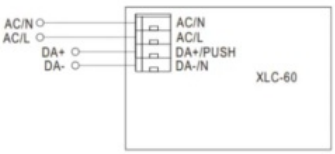
1. Min. the dimming level is about 6% and the current is not defined when 0% < Iout < 6%.
2. The output current can drop to 0% when the dimming input is about 0k2 or 0Vdc, or a 10V PWM signal with 0% efficiency.

DIMMING operation

DA2 type (DALI-2 digital dimming function)

Input wiring diagram





PUSH dimming (first group)

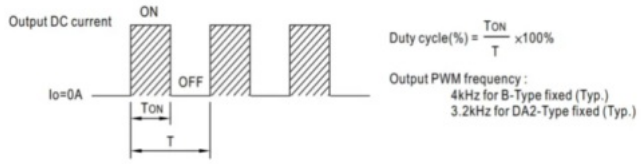
- The factory default dimming level is 100%.
- If the push action is less than 0.05 seconds, it will not result in a change for the driver's position.
- Up to 10 drivers can do PUSH dimming at the same time when using one common push button.
- The length of the cable from the push button to the last drive is 20 meters.

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

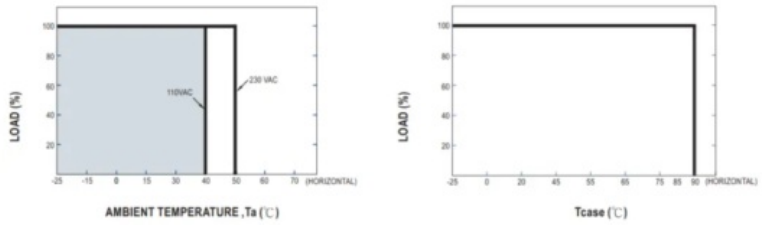
PWM OUTPUT DIMMING PROCEDURE

For 12V/24V/48V PWM style output dimming
Dimming is achieved by varying the duty cycle of the output current.

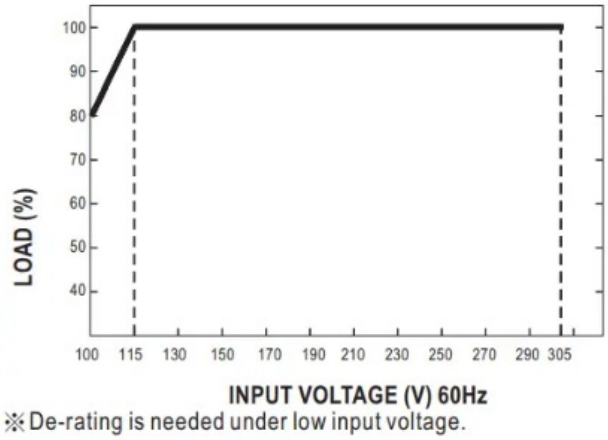
Dimming is achieved by varying the duty cycle of the output current.



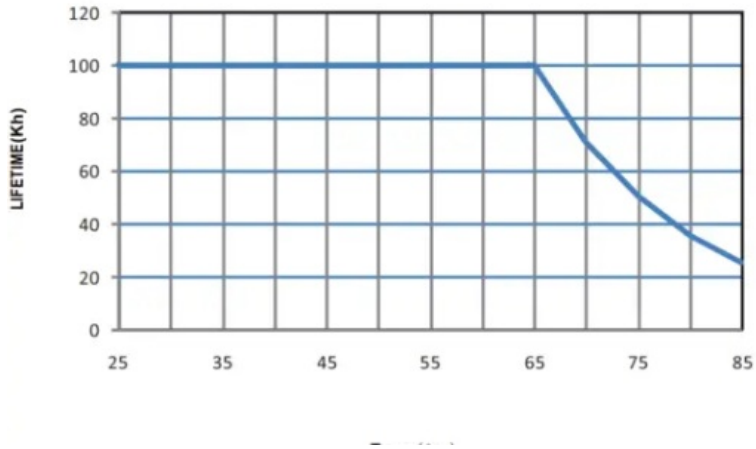
Output load vs temperature



THE SERVICES

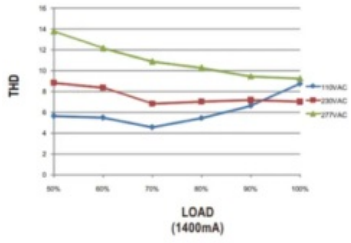


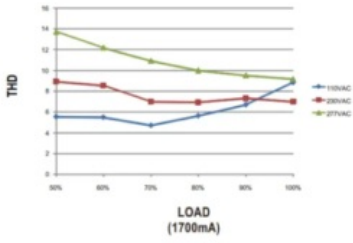
TIME OF LIFE



TOTAL HARMONIC DISTRIBUTION (THD)

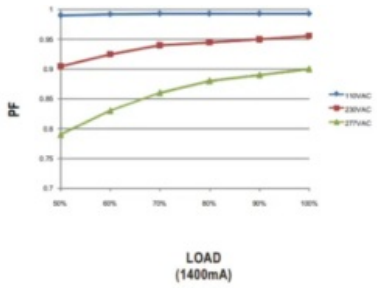
The temperature is 85 °C

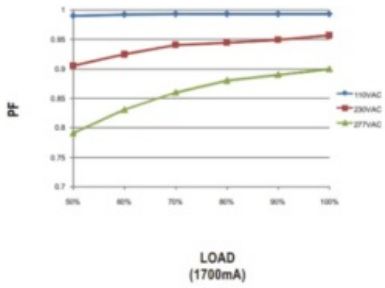




POWER FACTOR (PF) characteristic

The temperature is 85 °C

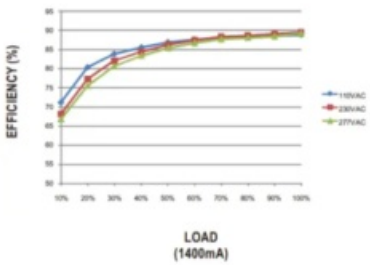


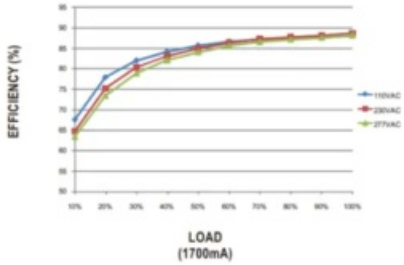


POWER vs LOAD

XLC-60 series has the highest efficiency of up to 89% can reach field applications.

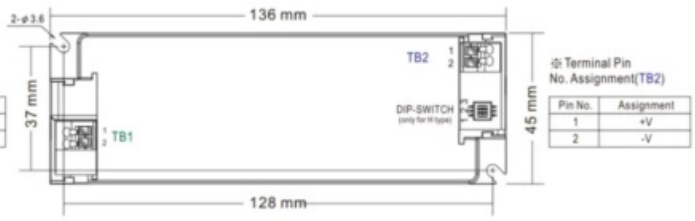
Temperature of 85C





SPECIAL PROGRAM

※ Blank type



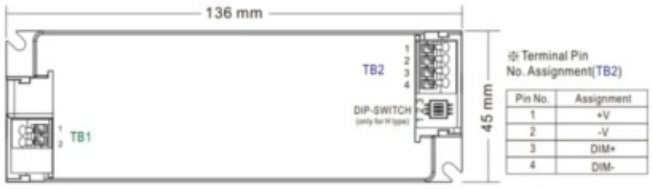
※ Terminal Pin No. Assignment(TB1)

Pin No.	Assignment
1	AC/N
2	AC/L

※ Terminal Pin No. Assignment(TB2)

Pin No.	Assignment
1	+V
2	-V

※ B type



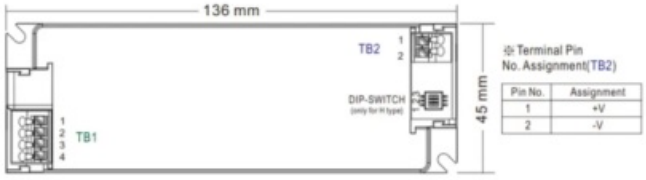
※ Terminal Pin No. Assignment(TB1)

Pin No.	Assignment
1	AC/N
2	AC/L

※ Terminal Pin No. Assignment(TB2)

Pin No.	Assignment
1	+V
2	-V
3	DIM+
4	DIM-

※ DA2 type



※ Terminal Pin No. Assignment(TB1)

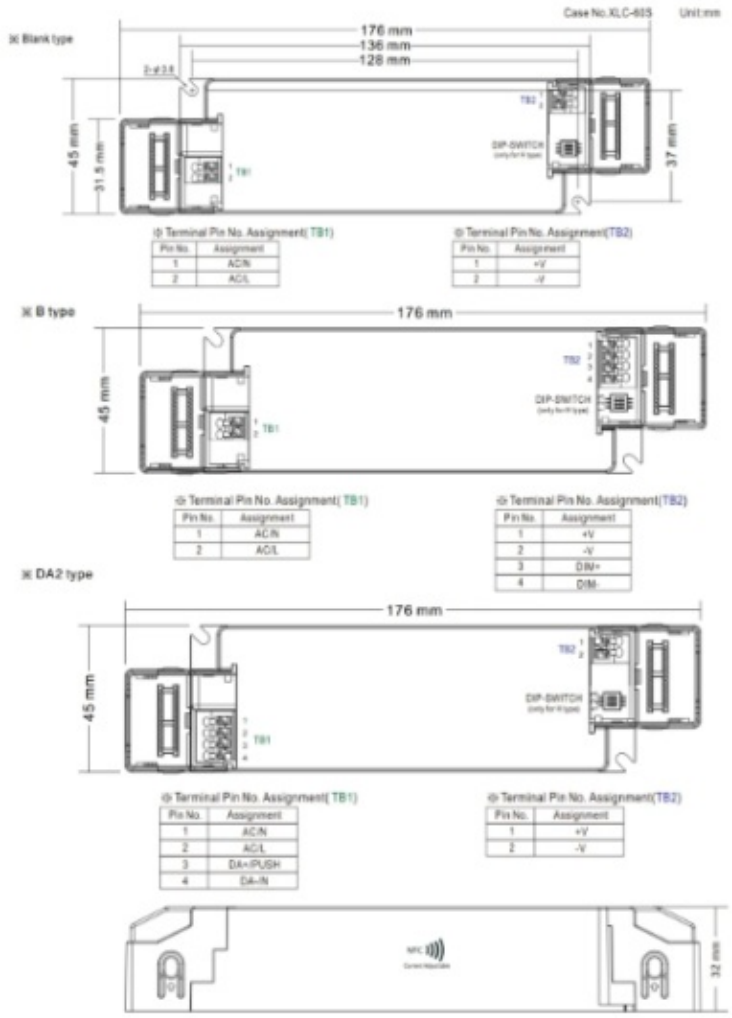
Pin No.	Assignment
1	AC/N
2	AC/L
3	DA+/PUSH
4	DA-/N

※ Terminal Pin No. Assignment(TB2)

Pin No.	Assignment
1	+V
2	-V

Item	Order No.	Quantity
Strain-relief cap	1**3XLC-RD 1**3XLC-RT	Each*2 pcs for 1 Set

SPECIAL PROGRAM



Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	AC/N
2	AC/L

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1	+V
2	-V

Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	AC/N
2	AC/L
3	DIM+
4	DIM-

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1	+V
2	-V

Terminal Pin No. Assignment (TB1)

Pin No.	Assignment
1	AC/N
2	AC/L
3	DA+/PUSH
4	DA-/N

Terminal Pin No. Assignment (TB2)

Pin No.	Assignment
1	+V
2	-V

Installation Manual

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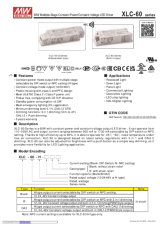
Documents / Resources

	MEAN WELL XLC-60 60W Multiple Stage Constant Power [pdf] Owner's Manual XLC-60 60W Multiple Stage Constant Power, XLC-60, 60W Multiple Stage Constant Power, Multiple Stage Constant Power, Stage Constant Power, Constant Power, Power

References

- User Manual