LCM-40, LCM-60 installation manual

Features

- 180~295VAC input only
- Built-in active PFC
- Output current level selectable by DIP switch
- Functions: 3 in 1 dimming (dim-to-off)
- Power supply synchronization function up to 10 units
- Temperature compensation function by external NTC
- Class Ⅱ power unit, ungrounded
- Built-in 12V/50mA auxiliary output
- Full plastic case enclosed
- Protections: Short circuit / Over voltage / Over temperature
- 3 year warranty
- Suitable for intelligent LED lighting

Wiring

- Housing with cable clamp for remote installation
- Use wires with an adequate cross-section (see 5)
- Use suitable mounting tools to do the wiring and mounting (see 5)
- Use a MCB (miniature circuit breaker) with an adequate current rating to protect the lighting system (see 6)

Environmental limitations

- Maximum ambient temperature must not exceed 60℃
- Always allow adequate ventilation clearances, 50mm, around the unit in use to prevent it from overheating
- Only install the unit in interior environments

Cautions

- This unit must be installed by a qualified electrician
- This unit is not suitable for applications that DC/DC converters are connected before LED lamps

Settings and connections

1. Output Current Level Settings

The LCM can provide various output currents by setting the DIP switch. The settings of the DIP switch are shown in the tables below.

LCM-40

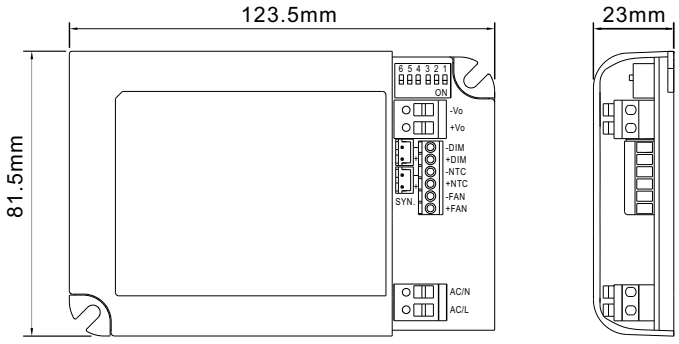
Voltage range	Selectable Current	1	2	3	4	5	6
2-100V	350mA	---	---	---	---	---	---
2-80V	500mA	ON	---	---	---	---	---
2-67V	600mA	ON	ON	---	---	---	---
2-57V	700mA*	ON	ON	ON	---	---	ON
2-45V	900mA	ON	ON	ON	ON	---	ON
2-40V	1050mA	ON	ON	ON	ON	ON	ON

LCM-60

Voltage range	Selectable Current	1	2	3	4	5	6
2-90V	500mA	---	---	---	---	---	---
2-90V	600mA	ON	---	---	---	---	---
2-86V	700mA*	ON	ON	---	---	---	---
2-67V	900mA	ON	ON	ON	---	---	ON
2-57V	1050mA	ON	ON	ON	ON	---	ON
2-42V	1400mA	ON	ON	ON	ON	ON	ON

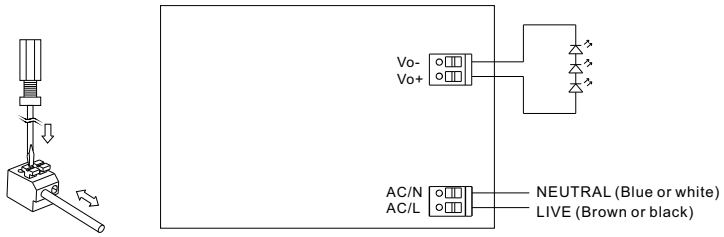
Note : 1.Factory default setting is 700mA.
2.Output voltage and output wattage must not exceed the rated values.

Terminal blocks assignment for LCM



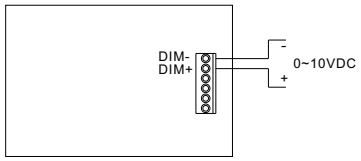
2. Connection of LED Lamps

Press down the "push button" by a slotted screw driver to insert or remove the cable.

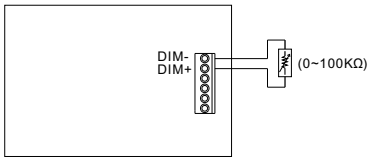


3. Connection of Dimming Functions

a. 0-10Vdc or 10V PWM

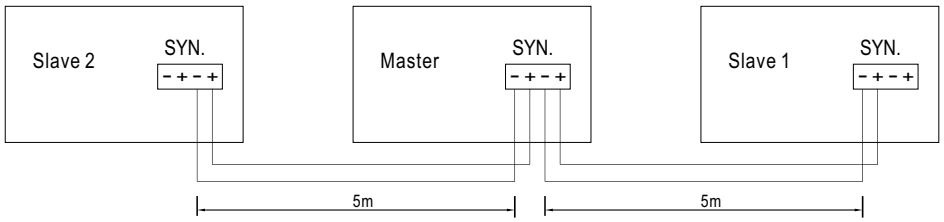


b. Resistance



c. Synchronization operation

- Synchronization up to 10 drivers (1 master + 9 slaves)
- Dimming operating range : 10%~100%



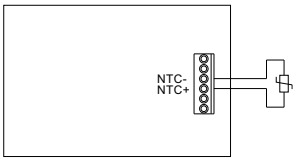
- Sync cable length : < 5m
- Sync cable type : Flat cable
- Sync cable cross section area : 22 – 24 AWG (0.2~0.3mm^2)

NOTE : 1. Please make sure all units are set to 100% dimming setting (factory default) before synchronizing.

2. For optional EO model: the master is EO and the salve could be standard model for economic arrangement.

3. Min. Dimming operating range depends on dimmer setting.

4. NTC Connection



5. Recommended Screwdriver, Wire and Torque Setting

Type	The cover (the blue one)	Screw terminal (FAN±, NTC±, DIM±)	Push terminal (ACL/N, Vo±)
Solid wire	-----	ϕ 0.404 - ϕ 0.643mm	ϕ 1.024 - ϕ 1.628mm
Stranded wire	-----	0.129 - 0.326mm^2	0.823 - 2.08mm^2
American wire gauge	-----	22 - 26AWG	14 - 18AWG
Wire stripping length	-----	7mm (0.27")	10mm (0.39")
Screwdriver	6mm Phillips	3mm Phillips	3mm Phillips
Recommended tightening torque	4.6 kgf-cm (4 lb-in)	2.88 kgf-cm (2.5 lb-in)	-----
Suggested push-down strength	-----	-----	3 - 4 kp (6.61-8.81 lbF)

6. Suggested Maximum Number of the LCM Units that can be Connected to a MCB (miniature circuit breaker) at 230Vac

Model	B10	B16	C10	C16
LCM-40	15	26	27	44
LCM-60	15	25	27	44

Note: These calculated values are based on MCB S201 series manufactured by ABB.