



# DALI Controller/DALI Gateway

# DLC-02 series



DALI Controller



DALI Gateway



## Features

- DALI-2 multi-master application controller
- Two independent DALI Bus channels with built in DALI power supply (up to 250mA per bus)
- Connect up to 2×64 DALI ECGs/Driver and up to 2×12 DALI input devices
- Max16 scenes and group setting per channel
- LCD display, LED indicators and buttons for local operation
- Built in with 250V/5A×4 relay
- Easy installation and configuration via PC software or Web browser
- Multiple control effect based on the time event and input devices
- KNX to DALI gateway(KNX version)
- Support for DALI-2 devices with Part 207/208/301/302/303/304
- 5 years warranty

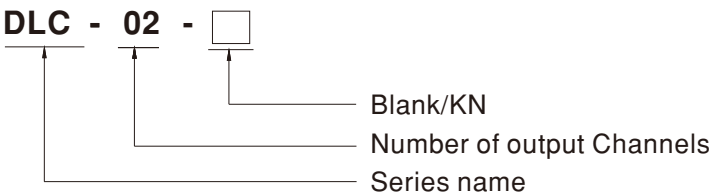
## Applications

- Office lighting
- Smart home lighting
- Luxury villas lighting
- LED indoor lighting
- Building automation system

## Description

DLC-02 is a multi-master application controller to obtain the information of the DALI-2 system from DALI input device and control the DALI ECGs to make a lighting effect.Devices in the DALI bus can be scan, configure and setting through the PC software. It is a simple way to install a DALI lighting system.As KNX to DALI gateway, DLC-02-KN is used to connect a digital DALI lighting system to the KNX installation. Thus, room-based lighting control is conveniently incorporated into the higher-level KNX building management system.The device transforms switch and dim commands from the connected KNX system into DALI telegrams and status information from the DALI bus into KNX telegrams.You can also easily commission the DALI via the integrated web server. For this purpose connect the DLC-02 directly to the IP network. Use a standard patch cable to connect the device to a switch, hub or router of the IP network. You can also use a WLAN access point as network coupler. This means you can commission the DALI via a portable note book, tablet PC or mobile phone.

## Model Encoding



| Type  | Description                | Note     |
|-------|----------------------------|----------|
| Blank | DALI-2 controller function | In stock |
| KN    | KNX to DALI gateway        | In stock |

## SPECIFICATION

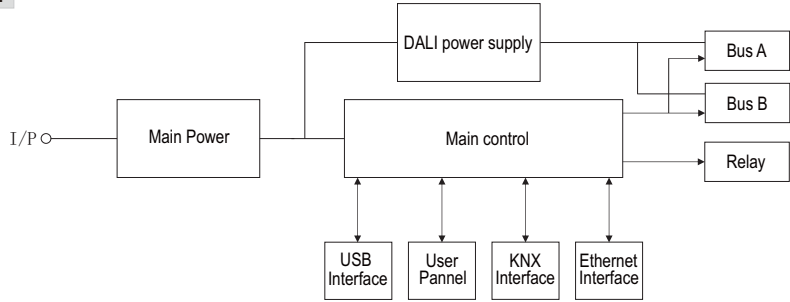
|                         |  |  |
|-------------------------|--|--|
| <b>MODEL</b>            |  | <b>DLC-02-</b> <input type="checkbox"/>  |
| <b>OUTPUT</b>           | <b>BUS VOLTAGE</b>   | Built-in DALI bus power supply; Voltage range : 2x16V  |
|                         | <b>GUARANTEED SUPPLY CURRENT</b>   | 2x240mA  |
|                         | <b>MAXIMUM SUPPLY CURRENT</b>  | 2x250mA  |
|                         | <b>RATED POWER</b>   | 7.68W  |
|                         | <b>SETUP,RISE TIME</b>   | 250ms/115VAC,50ms/230VAC   |
| <b>INPUT</b>            | <b>VOLTAGE RANGE</b>   | 100~305VAC, 140~430VDC,(class II )   |
|                         | <b>FREQUENCY RANGE</b>   | 47~63Hz  |
|                         | <b>AC CURRENT(Typ.)</b>  | 0.5A/115VAC 0.25A/230VAC   |
|                         | <b>INRUSH CURRENT(Typ.)</b>  | COLD START 45A/230VAC  |
| <b>PROTECTION</b>       | <b>SHORT CIRCUIT</b>   | Short circuit delay 0.7S shutdown,Restart period 5S, Retry time 0.7S                         |
| <b>FUNCTION</b>         | <b>USB INTERFACE</b>   | 1 USB slave connector , type-B   |
|                         | <b>DISPLAY</b>   | OLED display for easy operation  |
|                         | <b>INDICATOR</b>   | 2*LED indicators for BUS voltage; 4*LED indicators for relay ;1*LED indicators for power on. |
|                         | <b>GENERIC SETTING</b>   | Three buttons( MOVE, SET,ESC) on the front panel to set and view settings                    |
|                         | <b>KNX</b>   | DALI Gateway(KNX type)   |
|                         | <b>Ethernet</b>  | Control via web browser(RJ-45)   |
|                         | <b>Relay</b>   | 10A/125VAC ,5A/250VAC  |
| <b>ENVIRONMENT</b>      | <b>WORKING TEMP.</b>   | -25 ~ +45℃   |
|                         | <b>WORKING HUMIDITY</b>  | 5 ~ 93% RH non-condensing; comply with climatic EN50090-2-2                                  |
|                         | <b>STORAGE TEMP., HUMIDITY</b>   | -25 ~ +70℃ , 10 ~ 95% RH non-condensing  |
|                         | <b>VIBRATION</b>   | 5 ~ 150Hz, each along X, Y, Z axes according to EN50090-2-2                                  |
| <b>SAFETY &amp; EMC</b> | <b>SAFETY STANDARDS</b>  | DLC-02: Compliance to BS EN/EN61347-1, BS EN/EN61347-2-11                                    |
|                         |  | DLC-02-KN: Compliance to BS EN/EN63044-1, BS EN/EN63044-3                                    |
|                         | <b>DALI STANDARDS</b>  | Compliance to BS EN/EN62368-101,BS EN/EN62386-103  |
|                         | <b>EMC EMISSION</b>  | DLC-02: Compliance to BS EN/EN55015,Harmonic current class A                                 |
|                         |  | DLC-02-KN: Compliance to BS EN/EN63044-5-2, BS EN/EN63044-5-3(BS EN/EN50491-5-2/3)           |
|                         | <b>EMC IMMUNITY</b>  | DLC-02: Compliance to BS EN/EN61547  |
|                         |  | DLC-02-KN: Compliance to BS EN/EN63044-5-2, BS EN/EN63044-5-3(BS EN/EN50491-5-2/3)           |
| <b>OTHERS</b>           | <b>DIMENSION</b>   | 144*90*58.3mm (L*W*H)  |
|                         | <b>PACKING</b>   | 0.43Kg; 30pcs/13.9Kg/ 1.30CUFT   |
|                         | <b>DIN RAIL MOUNTING</b>   | 35 mm rail ; 8 units wide  |
|                         | <b>ENCLOSURE MATERIAL</b>  | ABS-V0   |
| <b>NOTE</b>             | <p>1. All parameters NOT specially mentioned are measured at 230VAC input and 25℃ of ambient temperature.</p> <p>2. Maximum allowable DALI driver is 64 per channel.</p> <p>3. The maximum allowable input device depends on the connected DALI drivers and the current requirement of input device.<br/>For example , if a 64 ECG is connected, the maximum driver current available in the DALI bus is 250mA-(2mA×64)=122mA.<br/>If the specific power consumption of an input device is 10mA then the maximum of input device should be 12 pcs.</p> <p>4. The devices may be operated only up to 2000m(6500ft).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p> |  |



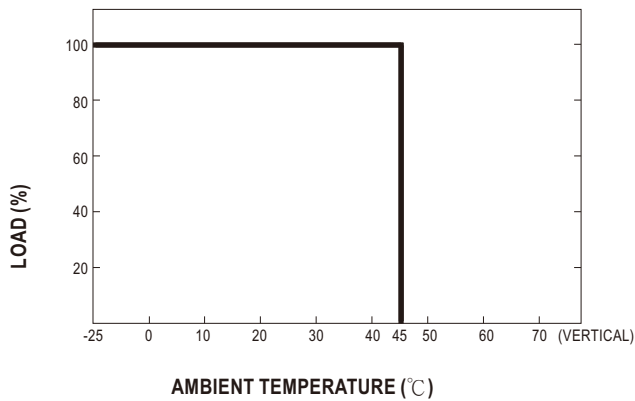
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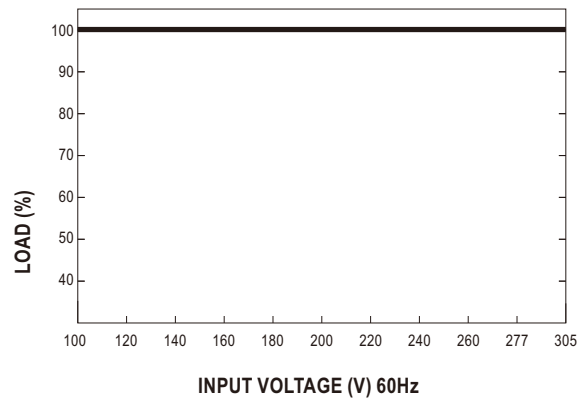
■ Block Diagram



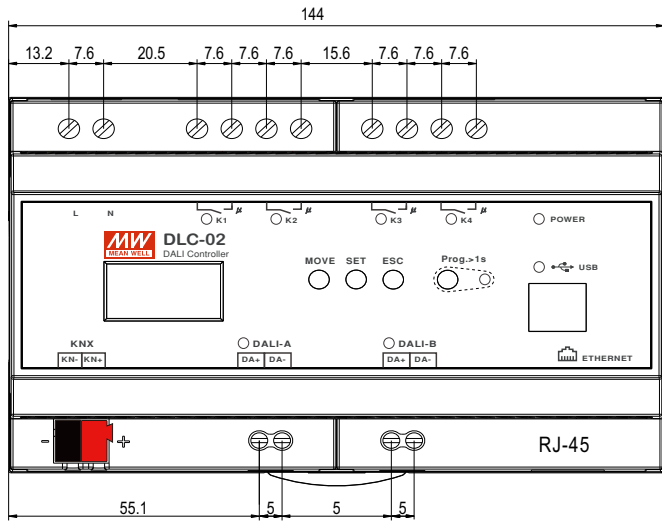
■ Derating Curve



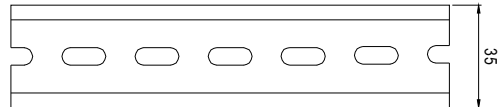
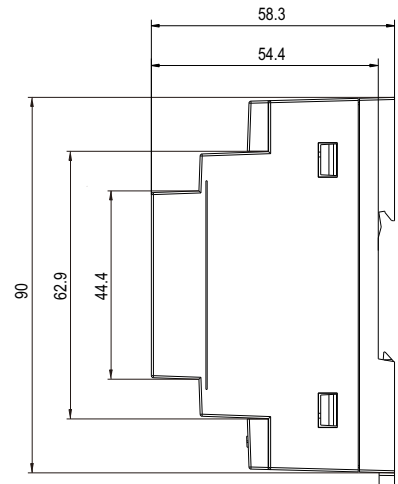
■ Static Characteristics



■ Mechanical Specification



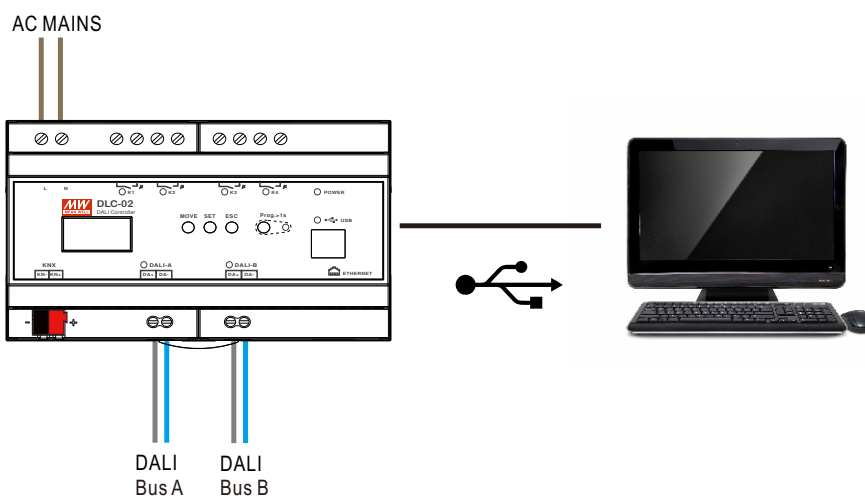
Case No. Unit:mm



ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15

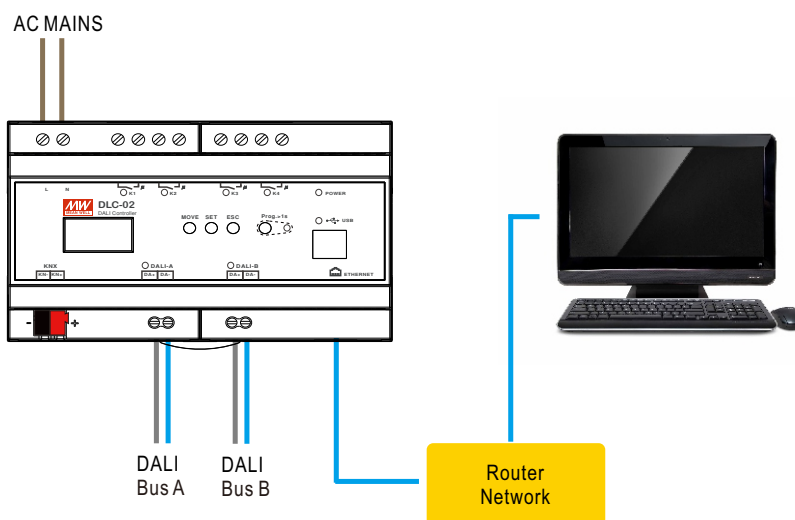
## ■ Program Setting

### ◎ Commission through PC soft ware

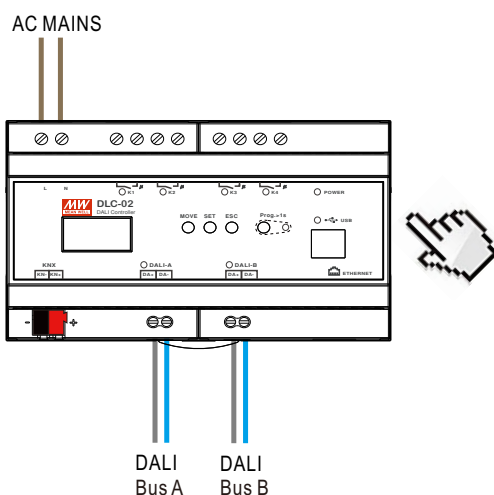


Soft ware provide by MEANWELL

### ◎ Commissioning the DLC-02 via website



### ◎ Local setting

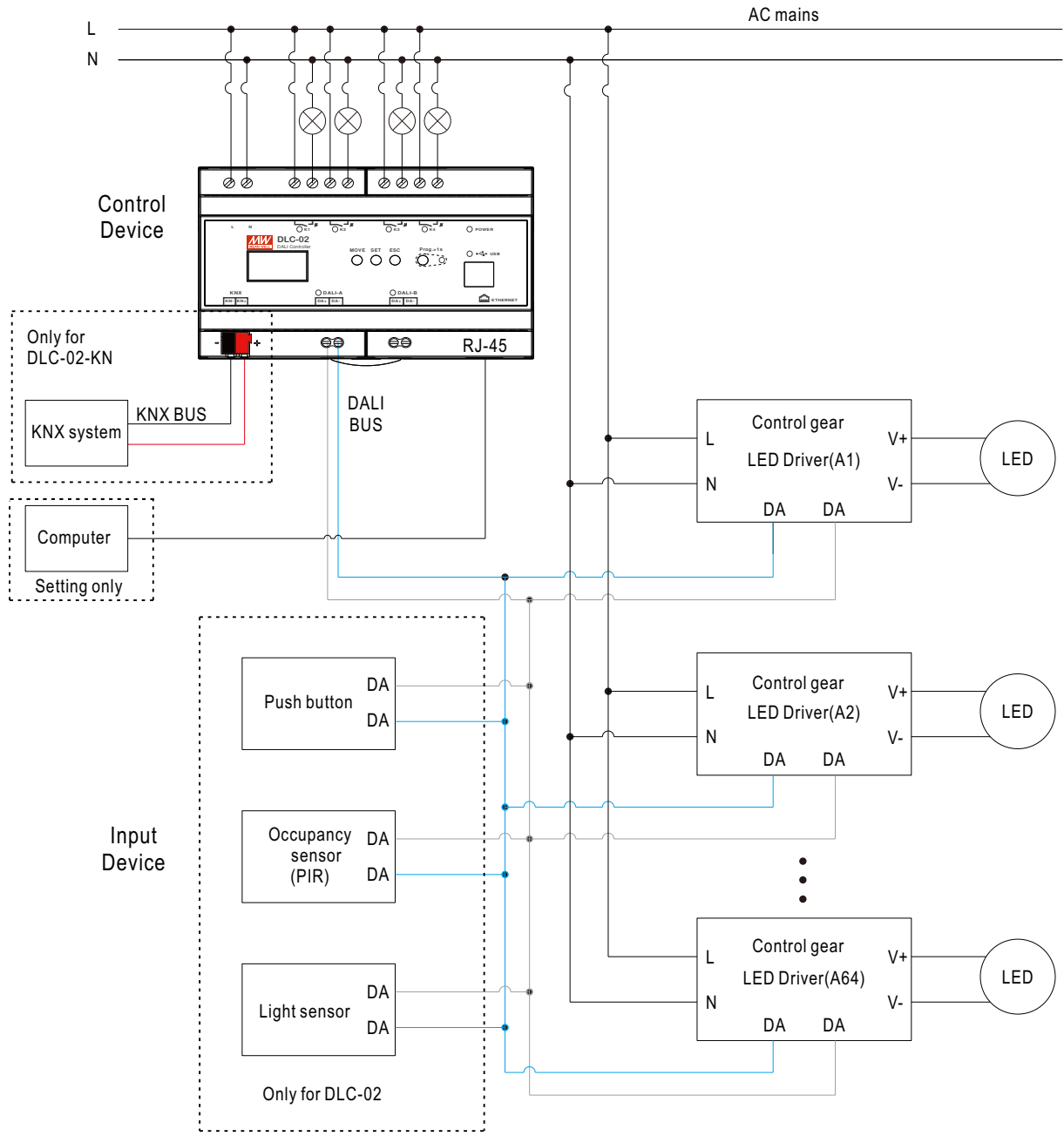




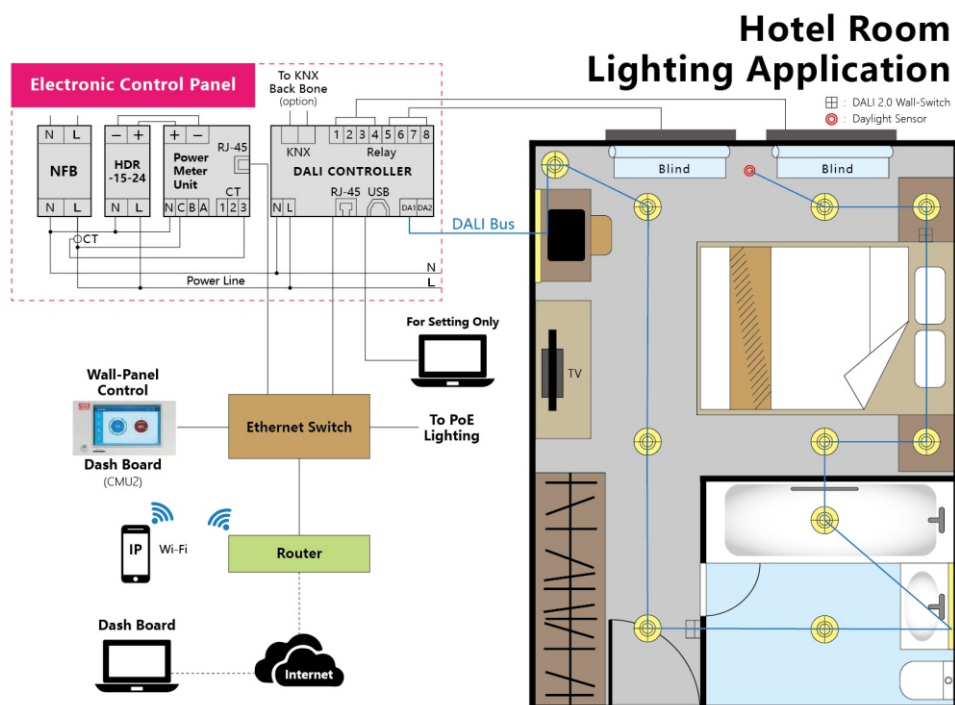
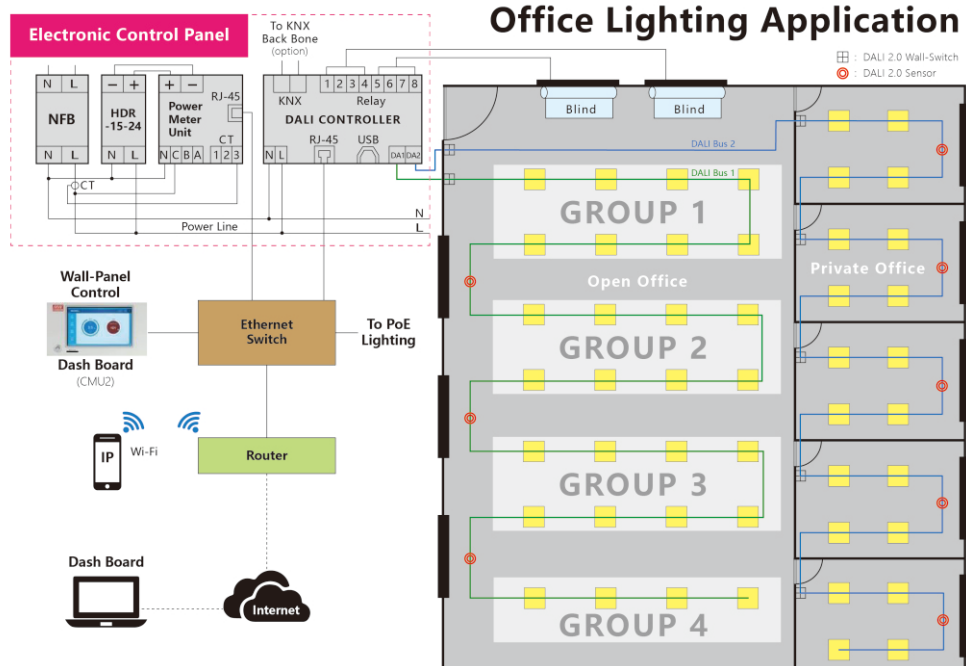
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■ Installation Diagram



## Digital Light Application



## Recommended Screwdriver, Wire and Torque Setting

1. Screwdriver (Width\*Thick): Slotted screwdriver 2.5\*0.4~3.5\*0.6
2. Wire: 1~2.5mm<sup>2</sup> solid core or 1~2.5mm<sup>2</sup> finely stranded
3. Torque: 0.8Nm

## Installation Manual

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

## Configuration and Commissioning

The application program (data base) for ETS can be downloaded via <http://www.meanwell.com/productCatalog.aspx>