MDL-6CH Installation Manual

Model No: MDL-6CH-VV-XXXXX; VV=36, 48; XXXXX=PDZFR, RDZFR, PDFR, PDZDS, RDZDS, PDDS)

Features:

- Universal AC input: 100 ~ 240 VAC
- Protection type: reverse polarity
- Fully insulated plastic housing
- It has DALI dimming interface, optional with ZigBee wireless dimming interface.
- Suitable for indoor LED lighting and compatible with IEC-62386(DALI) standard and with ZigBee 2007 PRO standard
- Efficiency can be as high as 86%±1% at full load.
- Dimming output stable without flashing and dimming range from 3% to 100%
- Optional PIR sensing module to achieve dimming automatically
- Optional PIR+IR sensing module to implement IR setting ZigBee addressing
- 1 year warranty.

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 the indoor environments.

Cautions:

- Please do not install LED power supplies in places with high ambient temperature or close to fire source. Please refer to the specifications about the maximum ambient temperature limitations.
- Output current and output wattage must not exceed the rated values on the specifications.
- The control gear has mains-connected windings. Double or reinforced insulation shall be kept from input/output terminals to user accessible part during the final system assembly.
- The control gear does not rely upon the luminary enclosure for protection against accidental contact with live parts.
- Installation must be performed by skilled technicians who are informed about the standards and technical requirements of the appliance and its proper installation.

Settings and connections:

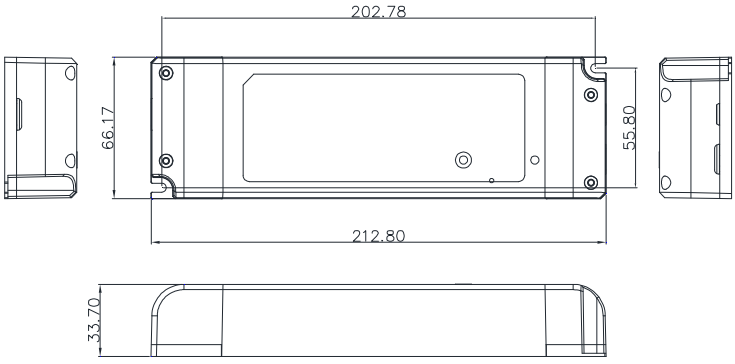
1. **Select the correct model**

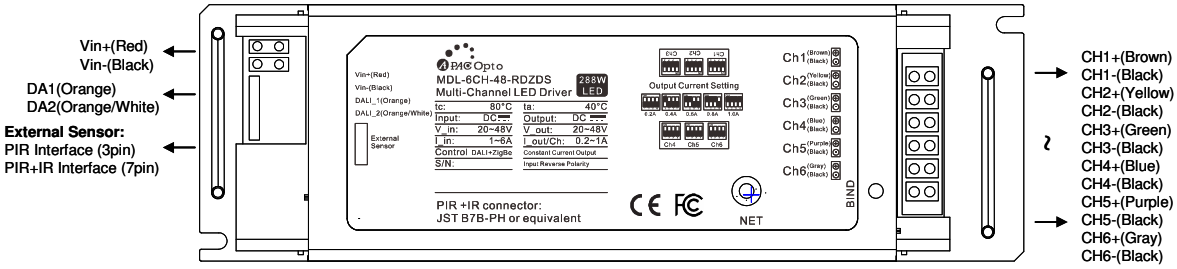
According to lighting device requirement, select one suitable for LED driver model. (LED driver input: 20 ~ 48VDC/2A Maximum)

MDL-6CH Model

Model	Input/Output Voltage(VDC)	Output Current(mA)/Ch	Output Current Setting	Sensor	Control Interface
MDL-6CH-48-PDZFR	20 ~ 48 / 20 ~ 48	937.5	None	PIR	DALI+ZigBee
MDL-6CH-48-RDZFR	20 ~ 48 / 20 ~ 48	937.5	None	PIR+IR	DALI+ZigBee
MDL-6CH-48-PDFR	20 ~ 48 / 20 ~ 48	937.5	None	PIR	DALI

2. **Terminal blocks assignment for MDL-6CH** (units: mm; Base fixing screw diameter: 4mm)





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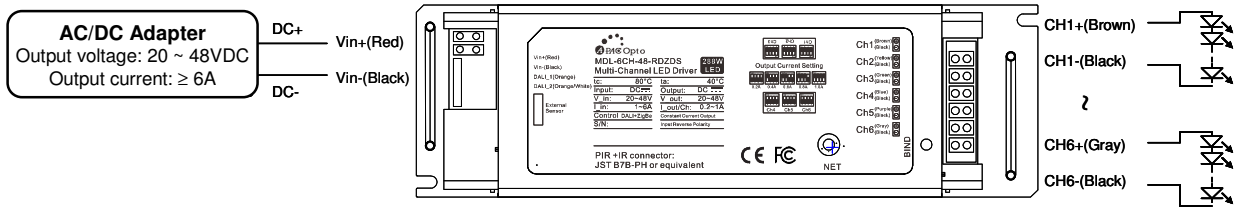
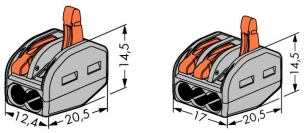
3. Connection of LED Lamps

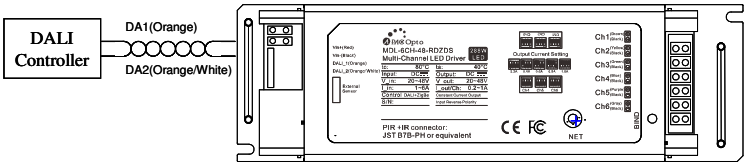
LED driver uses outlet wire to connect with LED lamps directly. The wire connected type can be twisted but suggest using a connector. The connector specification is as WAGO222-412 or WAGO222-413 and wire diameter is AWG28-12 to accomplish wire insertion and removed.



WAGO222-412 WAGO222-413



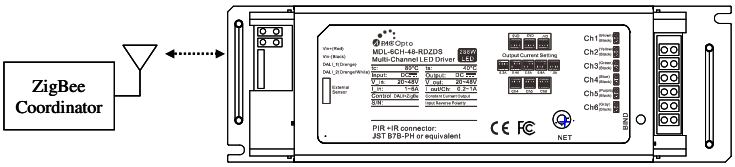
4. Connection of DALI Dimming Interface



Attentions: 1. The maximum has 64 devices and 16 scenes in a DALI bus.

2. The maximum DALI wire length is 300m in a loop. (wire specification: 14AWG or 1.5mm^2 or 14AWG cable)

5. ZigBee Wireless Dimming Interface (DZ Model)

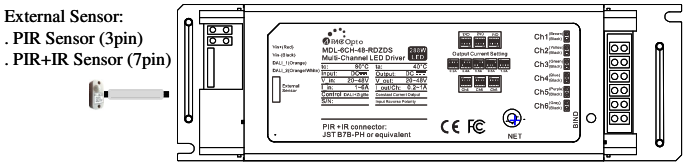


Attentions: 1. ZigBee dimming interface is compatible with ZigBee 2007 Pro and DALI dimming command. The maximum has 9330 devices and 16 scenes in the same PAN network.

2. The LED driver can rebind with Coordinator via BIND button.

6. Connection of PIR or PIR+IR Sensing Interface (OPTION)

a. LED driver uses a PIR sensor to implement auto-dimming without the central control host.
b. LED driver uses IR to achieve ZigBee addressing.
c. Suggestion of PIR sensor connected terminal: JST B3B-PH or with the standard terminal connector.
d. Suggestion of PIR+IR connected terminal: JST B7B-PH or with the standard terminal connector.



Warning: Shorting the PIR or PIR + IR sensor terminals can cause the LED driver to be damaged.

Notices:

1. The subject models are SELV and for LED general luminaire used.
2. The equipment output is available in constant current mode.
3. The equipment is in compliance with IEC/EN 61347-1and IEC/EN 61347-2-13.
4. The driver input has ground pin. It belongs Class I product.
5. Temperature ambient : ta=40°C; tc=80°C;
   tc= Highest permissible temperature which may occur on the outer surface
   ta= Rated maximum ambient temperature
6. Safety isolating/short-circuit proof control gear
7. Independent lamp control gear