

# INSTALLATION MANUAL

## AIR-TO-WATER HEAT PUMP

Please read this installation manual completely before installing the product. Installation work must be performed in accordance with the national wiring standards by authorized personnel only. Please retain this installation manual for future reference after reading it thoroughly.

**THERMAV**™ DHW Tank Kit  
PHLTA, PHLTC



MFL62047301  
Rev.07\_040521

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### Safety Precautions

- If the product was submerged under water, ask the service center for instruction. It may cause fire or an electric shock unless you do that.
- For electrical work, contact the dealer, seller, a qualified electrician, or Authorized Service Center.

### CAUTION

- Make sure children or senior citizens use the product under proper observation in order to prevent safety accident.
- Do not subject the product to shock. It will cause product breakdown.
- Do not pick the product with a sharp tool. It may cause product breakdown with the damage to its parts.
- Do not clean the product with strong cleanser such as solvent. Use soft clothes in order to prevent fire or product deformation.
- Do not touch the product with a wet hand. Do not pull the lead cable. It may cause product breakdown or an electric shock.
- Do not install the unit in potentially explosive atmospheres.



#### Disposal of your old appliance

1. This crossed-out wheeled bin symbol indicates that waste electrical and electronic products (WEEE) should be disposed of separately from the municipal waste stream.
2. Old electrical products can contain hazardous substances so correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health. Your old appliance may contain reusable parts that could be used to repair other products, and other valuable materials that can be recycled to conserve limited resources.
3. You can take your appliance either to the shop where you purchased the product, or contact your local government waste office for details of your nearest authorised WEEE collection point. For the most up to date information for your country please see [www.lg.com/global/recycling](http://www.lg.com/global/recycling)

## Safety Precautions

To prevent injury to the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

### WARNING

This symbol indicates the possibility of death or serious injury.

### CAUTION

This symbol indicates the possibility of injury or damage.

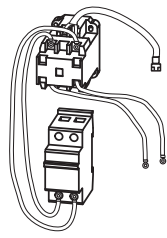




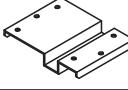
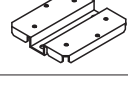

### WARNING

#### Installation

- ELCB(Electric Leakage Circuit Breaker) should be installed for safety.
- Entrust installation of the product to the service center because improper installation may cause fire, an electric shock, explosion, and physical injury.
- Use the original parts in order to prevent fire, an electric shock, explosion, and product breakdown.
- Keep combustible and/or inflammable materials away from the product in order to prevent fire or product breakdown.
- Do not disassemble, repair, or modify the product at your discretion in order to prevent fire or an electric shock.
- Do not install the product in wet and humid areas in order to prevent product breakdown.
- Do not drop water on to the product. It may cause an electric shock or product breakdown.

### Part Description

#### Part Description

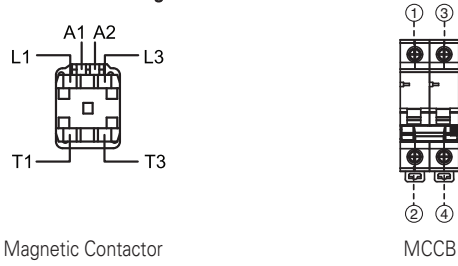
Item	Image	Quantity (EA)
MCCB(Molded Case Circuit Breaker) & Magnetic Contactor		1
Thermistor Sensor		1
Cable (For connecting MCCB with terminal block)		2
Fixing Screw for Magnetic Contactor		2
Installation Manual		1
Bracket (For PHLTA)		1
Bracket (For PHLTC)		1
Fixing Screw for Bracket		2

# Installation Method

## Before Installing the DHW Tank Kit

- Check the port number of the magnetic contactor and MCCB before installing the DHW Tank Kit. (Figure 1)

Figure 1. Port Number Assignment



- DHW tank booster heater can be used up to 3kW.
- Select a circuit breaker and power cable appropriate for the current.

## How to Install the DHW Tank Kit

Follow the procedures in Step 1 ~ Step 6 below.

**Step 1.** Find the magnetic contactor and MCCB in the kit. Assemble them into the indoor unit control box by using the enclosed components.

**Step 2.** Connect the indoor unit PCB harness connector with the magnetic contactor using the enclosed cable. (Figure 3)

Harness Connector	Magnetic Contactor
CN_B_HEAT_A	A1, A2
CN_TANK_HEATER	A1, A2

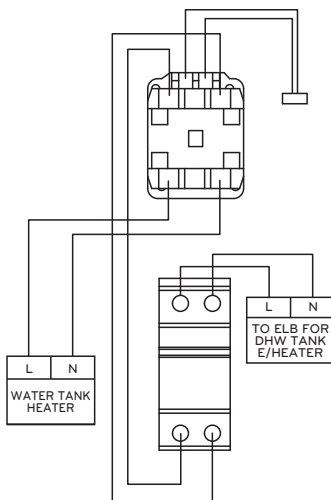
**Step 3.** Connect the magnetic contactor with MCCB. (Figure 2)

Magnetic Contactor	MCCB
L1	②
L3	④

**Step 3.** Connect the MCCB with the terminal block "TO ELB FOR DHW TANK E/HEATER".

MCCB	TO ELB FOR DHW TANK E/HEATER
①	L
③	N

Figure 2. Wiring example



**Step 4.** Connect the magnetic contactor with the terminal block "WATER TANK HEATER". (Figure 2)

Magnetic Contactor	WATER TANK HEATER
T1	L
T3	N

**Step 5.** Connect MCCB to the terminal block "TO ELB FOR DHW TANK E/HEATER". (Figure 2)

MCCB	TO ELB FOR DHW TANK E/HEATER
①	L
③	N

**Step 6.** Insert the DHW tank sensor into "CN\_TH4" of the Main PCB. The sensor should be mounted correctly into the sensor hole of the DHW tank. (Figure 3)

## How to Check Polarity

Follow the procedures in Step 1 ~ Step 3 below.

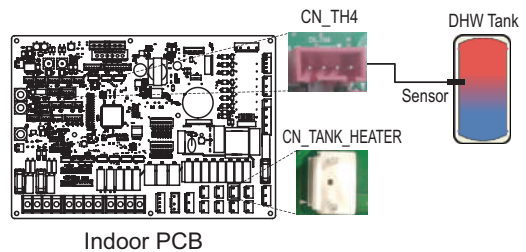
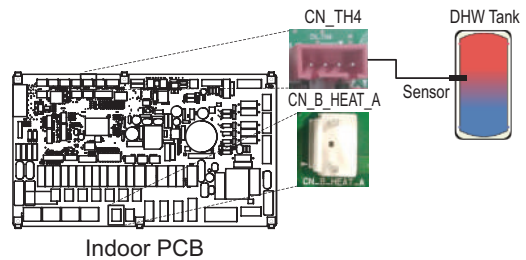
**Step 1.** Connect the magnetic contactor with MCCB.

Magnetic Contactor	MCCB
L1	②
L3	④

**Step 2.** Connect the magnetic contactor with the terminal block "WATER TANK HEATER".

Magnetic Contactor	WATER TANK HEATER
T1	L
T3	N

Figure 3. PCB Wiring



※ Details may vary depending on the model. For more information, refer to the **THERMAV** installation manual and wiring diagram.

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