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Dallas, Texas, USA



# INSTALLATION/ OPERATION INSTRUCTIONS

## HHE Relay Kit V0CTRL92P-1

VRf SYSTEMS -- HHE Relay Kit  
507568-02  
05/2016

**THIS MANUAL MUST BE LEFT  
WITH THE OWNER FOR  
FUTURE REFERENCE**

### ⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a licensed professional HVAC installer (or equivalent) or service agency. Be sure that power supply has been turned off before beginning installation. Do not operate equipment with wet hands.

### ⚠ WARNING

Do not install equipment in areas where heavy oil, vapor, or gases containing sulfur may exist or it may be damaged.

### IMPORTANT!

These instructions are intended as a general guide and do not supersede local codes in any way. Consult authorities having jurisdiction before installation. Read all of the information in this manual before operating this equipment.

### Shipping and Packing List

#### Package 1 of 1 contains:

- 1 - Four-Dry Contact board
- 1 - Plastic mounting base (VWMA installation)
- 1 - Double-sided tape
- 1 - Mounting bracket (VMDA007-012 installation)
- 4 - Plastic feet
- 1 - 14-1/2 inches (370 mm) cable
- 1 - Installation manual

### General

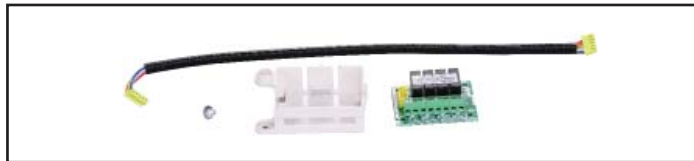
The installation location of the HHE relay kit varies between indoor units.

Installation steps are similar for each indoor unit. See indoor unit sections of this guide for specific indoor unit installation information.

See HHE Relay Kit Submittal for equipment compatibility.



VMDA007-012 Use Provided Mounting Bracket



VWMA Use Provided Plastic Mounting Box

## Installation

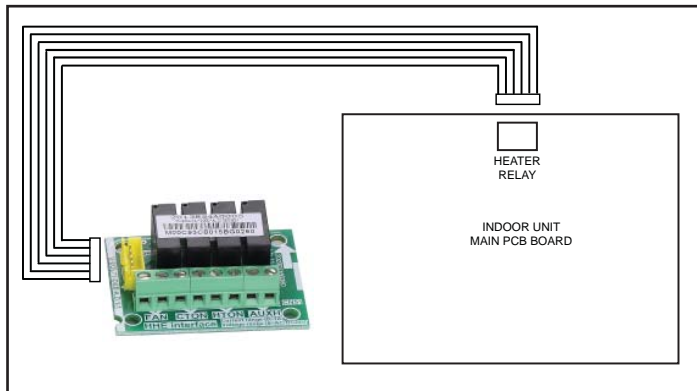


Figure 1. Principle Electrical Diagram of HHE Relay

1. Turn off power to the unit.
2. Access the indoor unit electrical control box and remove the phillips-head screws securing the cover.
3. Attach the four plastic mounting feet to the bottom of the four-dry contact control board (except for VWMA and V22A units) by pressing the pointed end of the plastic foot through the provided hole in the board and securing the clip to the edge of the board. See figure 2.
4. Connect one end of the provided wiring harness to the four-dry contact control board.
5. Secure the four-dry contact control board inside the indoor unit control box by pressing the four plastic feet attached to the bottom of the control board through four holes provided in the unit control box (except for VWMA and VMDA007-012 units). See figure 2 and individual indoor unit sections.
6. Locate the indoor unit main board, Yellow CN labeled "HEATER RELAY" and connect the other end of the provided wiring harness. See figure 3.
7. Use the phillips-head screws previously removed to secure indoor unit electrical control box cover and close any indoor unit panels.
8. Restore power to the unit.



**Figure 2. Mounting Feet Installed**



**HEATER RELAY CN**  
Location varies on each  
indoor unit.

**HHE Relay Installed**

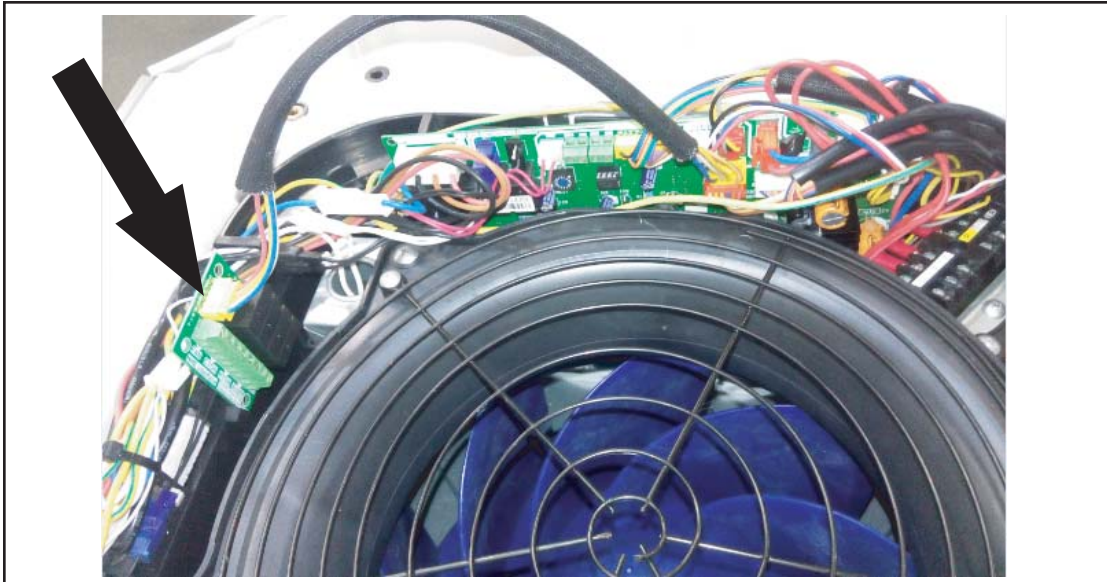
**Figure 3. Completed Installation (VCFA Shown)**



The four-dry contact board mounting location is located in the control box on the opposite side from the transformer.

**NOTE-** Removal of indoor unit main board is required for connection.

Figure 4. V33 Cassette Installation



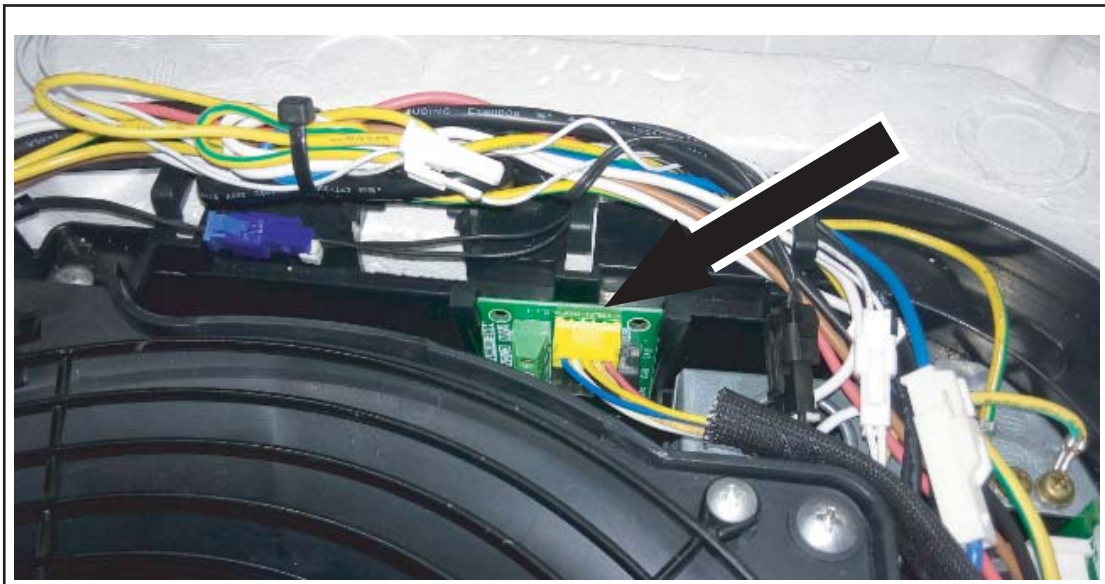
The four-dry contact board mounting location is located between the blower fan housing and the control box edge.

NOTE- Removal of indoor unit main board is required for connection.

Partial installation shown.

1. Open clip.
2. Slide four-dry contact board into slot.
3. Close clip.

Figure 5. V22 Compact Cassette Installation Location



Complete installation shown.

Figure 6. V22 Compact Cassette Installation Complete





The four-dry contact board mounting location is located below and to the right side of the LED display in the control box.

Figure 7. VHIA024-054 Ducted Installation Complete



The four-dry contact board mounting location is located next to the transformer in the control box.

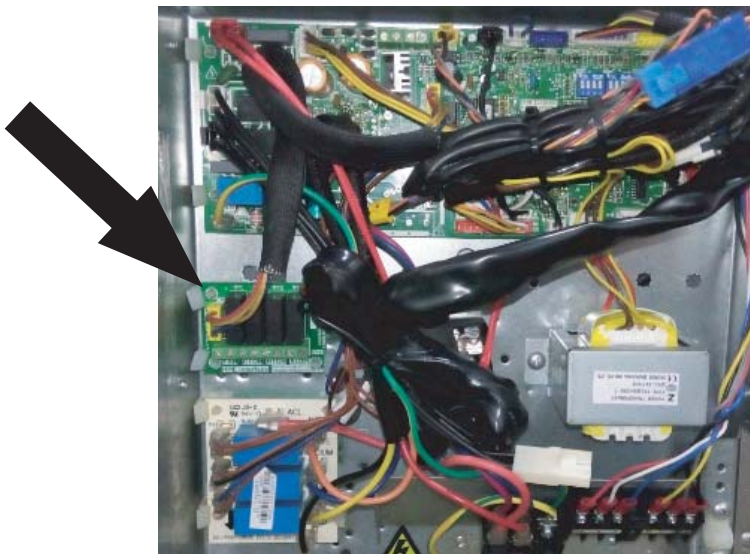
Figure 8. VHIA072-096 Ducted Installation Complete





The four-dry contact board mounting location is located next to the transformer in the control box.

Figure 9. VCFA012-048 Ceiling/Floor Mount Installation Complete



The four-dry contact board mounting location is located near the fan relay board in the control box.

Figure 10. VCFA054 Ceiling/Floor Mount Installation Complete

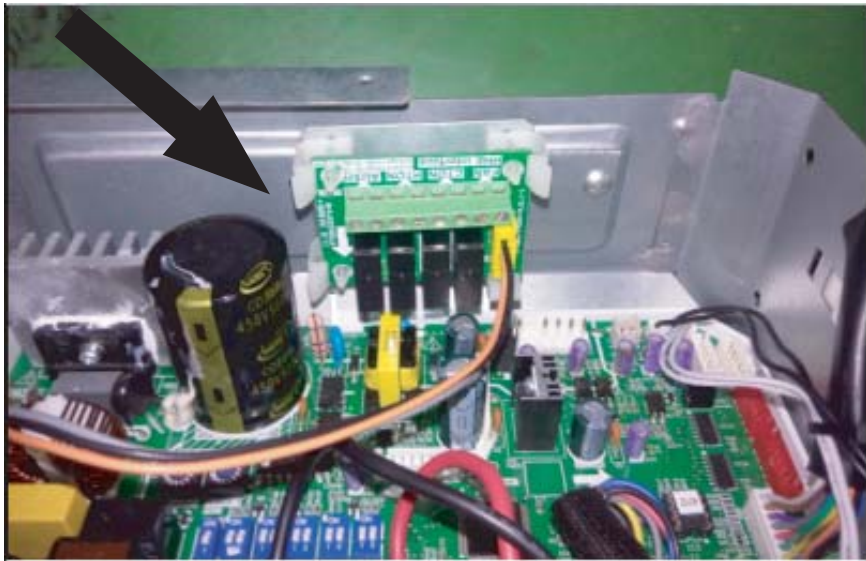


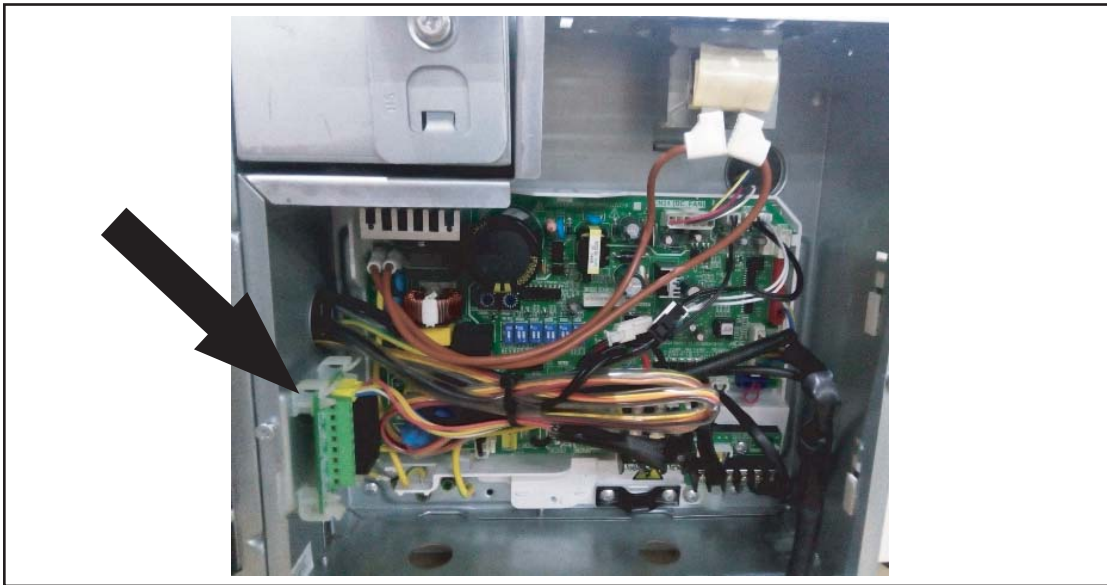
Figure 11. VMDA007-012 Medium Static Ducted Installation Complete

Medium Static Ducted VMDA007-012 units installation requires the use of a factory-supplied mounting bracket.

The four-dry contact board mounting location is located on the top of the electrical box above the main board.

Follow these steps for installation.

1. Secure mounting bracket using two screws (field-supplied).
2. Mount the four-dry contact board directly to the mounting bracket following the instructions on page 2.

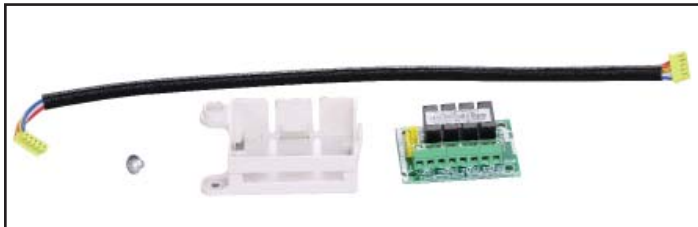


The four-dry contact board mounting location is located on the side of the electrical box opposite the power wiring terminal block.

Figure 12. VMDA Ducted VMDA015-048

## VWMA Wall-Mounted

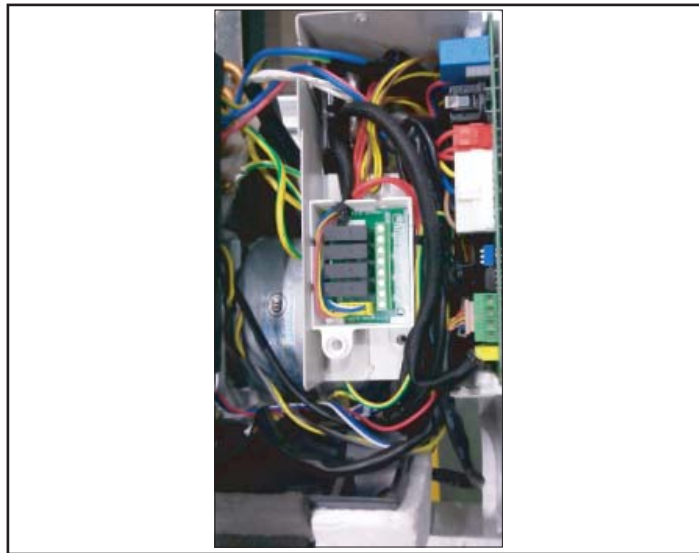
**NOTE-** Removal of indoor unit main board is required for connection.



**Figure 13. VWMA Required Kit Contents**

Wall-mounted indoor unit models 3. Locate the indoor unit main board, CN labeled "HEATER RELAY" and connect one end of the provided wiring harness. See figure 3.

1. Turn off power to the indoor unit.
2. Raise the indoor unit front panel and remove the phillips-head screws securing the indoor unit control box cover.
4. Secure four-dry contact board into plastic box using double sided tape. See figures 14 and 15.



**Figure 14. VWMA007-018 Install Inside of Control Box**

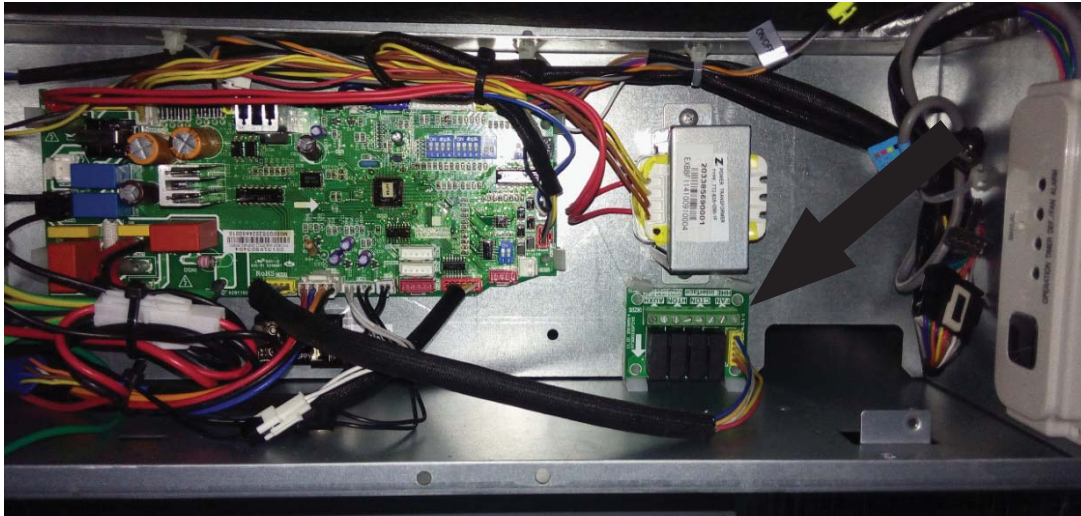


Figure 15. VWMA024-030 Install Outside of Control Box

5. Connect other end of provided wiring harness to the yellow connection on the four-dry contact control board. See figure 3.
6. **VWMA07-018 units** - Use a field-provided screw to secure the plastic box inside the indoor unit control box. See figure 14.  
**VWMA024-030 units** - Use a field-provided screw to secure the plastic box to the outside of the indoor unit control box cover. See figure 15.
7. Use phillips-head screws to secure indoor unit electrical control box cover.
8. Restore power to the unit.



## VVCA Vertical Air Handler



The four-dry contact board mounting location is located near the transformer in the control box.

**Figure 16. VVCA Vertical Air Handler Installation Complete**

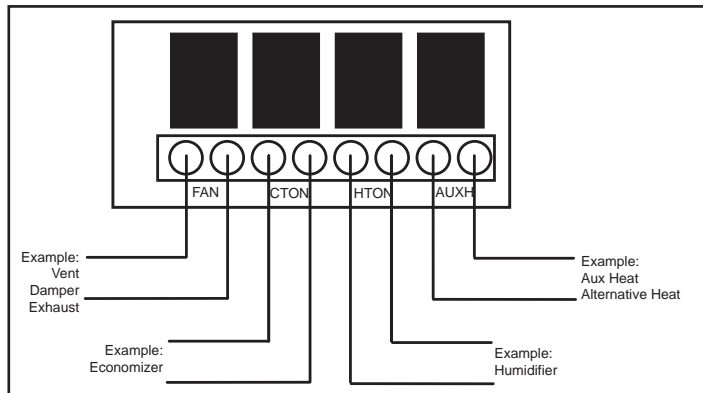
## Dry Contact Connections

The dry contact connections are used to provide a signal to up to four devices. Use these instructions for connecting a device to the four-dry contact board.

1. Turn off power to the unit.
2. Access the indoor unit electrical control box and remove the phillips-head screws securing the cover.
3. Make connections. See figure 16.
4. Use phillips-head screws to secure indoor unit electrical control box cover and close any indoor unit panels.
5. Restore power to the unit.

**Table 1. Dry Contact Specifications**

Max Amps	1A
Max Voltage	24V



**Figure 17. Dry Contact Connection**