

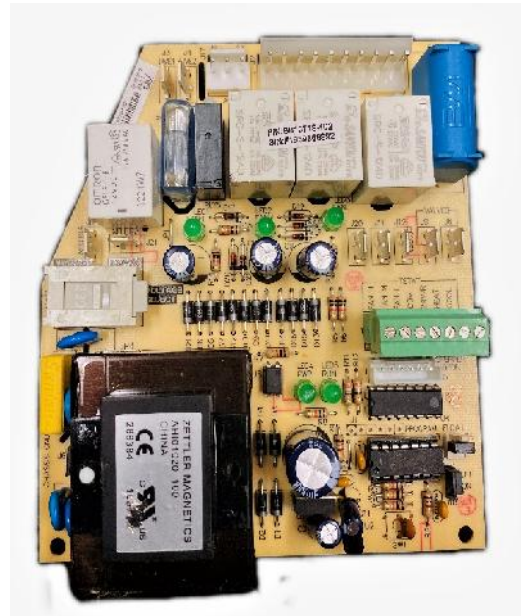
# PCB-U-HW-B 24vac Thermostat Adapter Board

## MULTIAQUA

The PCB-U-HW-B Thermostat Adapter Board is a field installed accessory **designed to be used with Multiaqua fan coil model MHWW**. This adapter board allows the fan coil to be connected to and controlled by a common 24vac thermostat. This board is **3 speed fan** capable.

The use of this adapter board will also allow the application of a **24vac Building Automation System (BAS) compatible** thermostat. Only the thermostat will communicate to the BAS. The unit is controlled from the 24vac of the thermostat.

Wiring diagram and functions on are on pages 2 and 3.



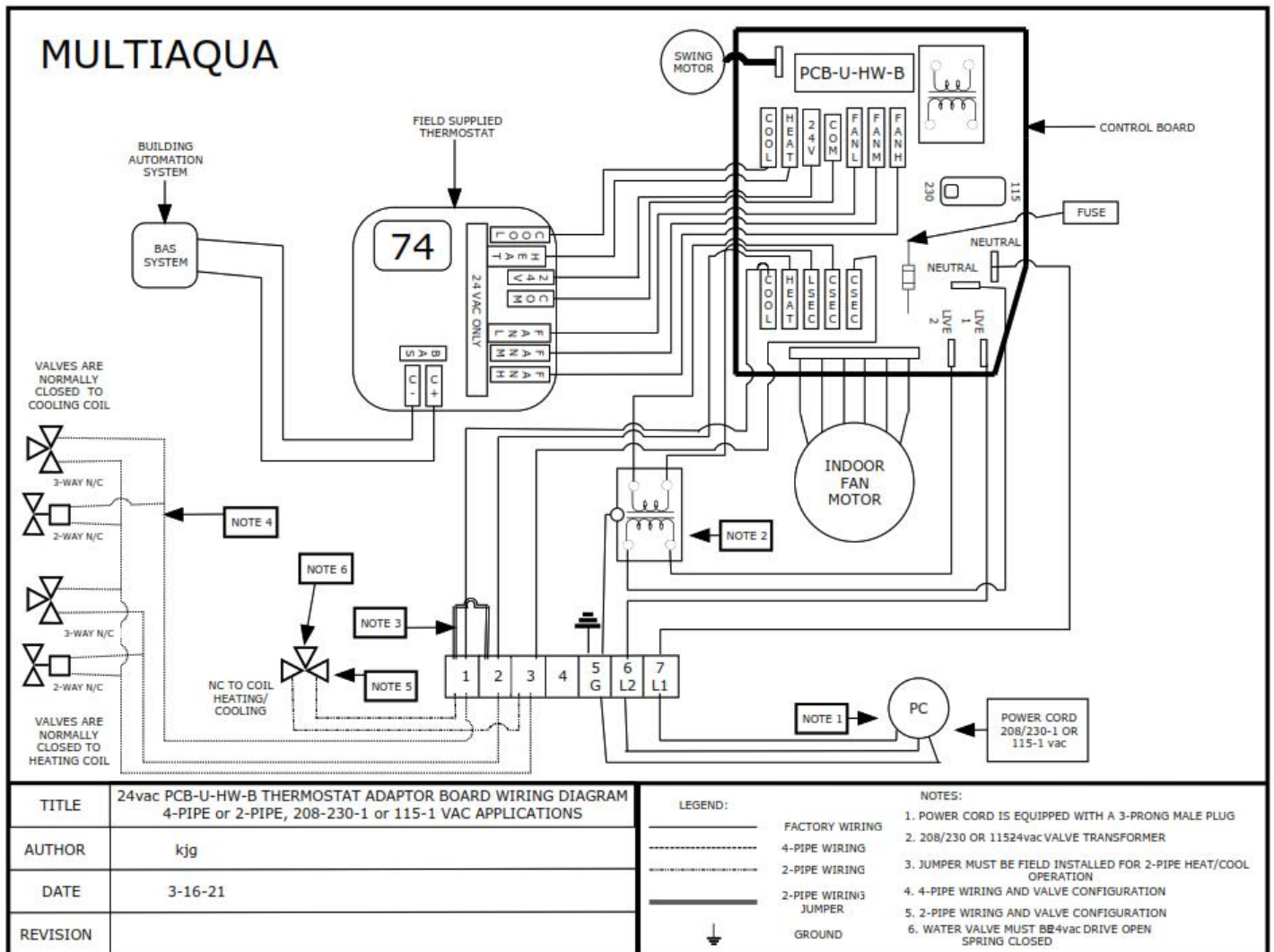
TITLE	PCB-U-HW-B Submittal & Wiring Diagram	<b>Model Number</b>	<b>Main Voltage</b>
AUTHOR	JDT	PCB-U-HW-B	115V or 230V
DATE	9/9/22	<b>Thermostat Voltage</b>	<b>Width/Height</b>
REVISION	1.5	24V	116.5 (mm) x 127.5 (mm)

## 1. APPLICATION

This adaptor board is designed to replace the proprietary control board on the MHW fan coils. This device will allow the fan coil to be controlled with a standard 24vac thermostat and an external 24vac transformer for valve control. The 24vac transformer is supplied with the unit. The water control valves must be a 24vac drive open and spring return closed type.

### 1.1 Features.

- 24vac Thermostat input.
- Power LED for operational status.
- 3 fan motor relays for 3-Speed fan operation.
- 3 fan speed LEDs (High/Medium/Low)
- Swing motor driver to open and close the discharge air louver.
- Run LED for operation status of Swing motor.
- Adapter board available in 208/230 or 115vac.
- 2 or 4-pipe operation



## 2. LOCAL CONTROL

### 2.1 Supply voltage selections.

115VAC: for 115vac  
230VAC: for 208/230vac

### 2.2 Fan motor relays

Controlled by fan speed outputs from the thermostat (High, Medium, Low)

### 2.3 Swing motor driver

Swing motor will operate the discharge air louver together with the Hi-wall operation.

- When the fan motor starts operation, the swing motor will drive the louver to fully open and hold that position.
- When fan motor stops operation, the swing motor will drive the louver to fully closed position.

### 2.4 LED display lights

Fan high, medium and low LEDs: Displays fan motor speed operational status.  
Power LED.

- OFF: Fan motor relays are turned off. No fan operation.
- ON: One of the fan motor relays is turned on.

### 2.5 Run LEDs

- Flashing 1Hz: Swing motor is running.
- OFF: Swing motor stopped.
- ON: Swing motor at maximum position.

### 2.6 Valve control

Dedicated 24vac terminations for the operation of a hot and or cold-water control valve(s).

## 3. TECHNICAL DATA

### **Fan relay board**

---

#### **Board primary operating voltage**

115 or 208/230vac - 50/60hz (Select by voltage switch)

#### **Board secondary voltage**

24vac 20va

#### **Fuse type and rating**

Cylinder (20mm.) 3.15A 250vac (Fast-blow)

#### **Board dimensions**

116.5mm x 127.5mm (Tolerance +/- 1.0mm)

### **Thermostat**

---

#### **Operating voltage**

24vac 50/60hz

### **Swing motor**

---

#### **Operating voltage**

12vdc Unipolar drive