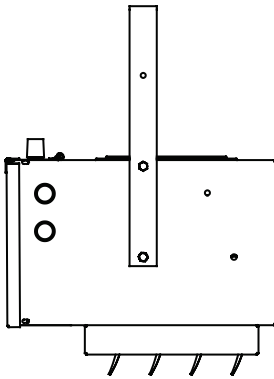


# UHMT & 5600 SERIES UNIT HEATER

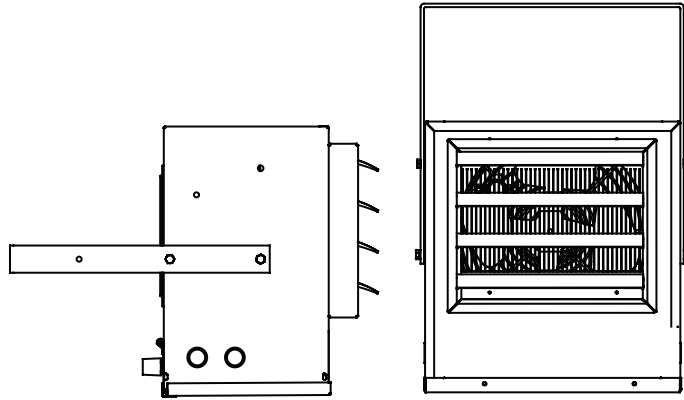
Horizontal or Vertical  
Mounting

**MAINTENANCE  
MANUAL &  
INSTALLATION  
INSTRUCTIONS**

**ATTENTION:** Read carefully before attempting to install, or operate Unit Heater. Retain these installation instructions for future use.



**Vertical Air Flow**



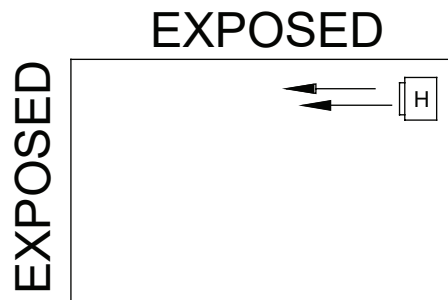
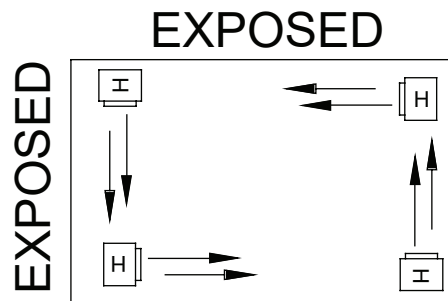
**Horizontal Air Flow**

**FEATURES:**

- Forced air electric unit heater available in 240/208 volt single phase, 5 kw and 240 three phase, 480 three phase 5 kw.
- 240/208 single phase unit is factory wired for 5 kw. The wattage may be reduced by moving jumpers as indicated in table 1.
- 24 volt control standard on three phase unit.
- Field installed disconnect switch kit available.
- All units with "T" suffix provided with unit mounted hydraulic bulb thermostat.
- Mounting bracket included with all units.

**PROPER MOUNTING:**

The heater(s) should be located along outside walls or other areas of greatest heat loss. Multiple heaters should be spaced to set up a generally circular air movement, each heater supporting the air stream of the other.



**IMPORTANT: OWNER SHOULD RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE**

## IMPORTANT INSTRUCTIONS

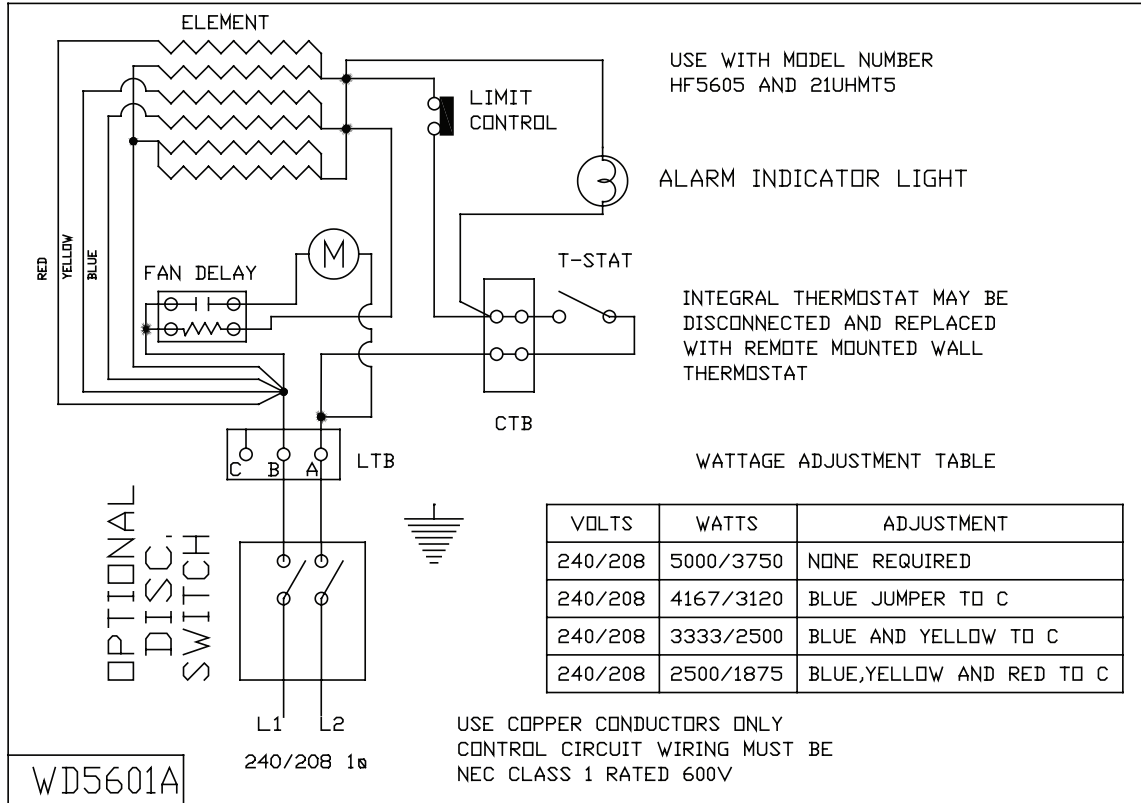
When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons, including the following:

1. Read all instructions before using this heater.
2. **CAUTION:** High temperatures. Keep cords and all other combustible material, such as furniture, papers, clothes and curtains away from the heater. For safe and efficient operation, keep an open space around heater of three feet in front and 6 inches at ends and rear.
3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
4. Do not operate any heater after it malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
5. Do not use outdoors.
6. To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel (or operate internal disconnect switch if provided).
7. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric chock or fire, or damage the heater.
8. To prevent a possible fire, do not block air intakes or exhaust in any manner.
9. A heater has hot and arcing or sparking parts inside. Do not use it in area where gasoline, paint, or flammable liquids are used or stored.
10. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
11. This heater may include an audible or visual alarm to warn that parts of the heater are getting excessively, hot. If the alarm sounds (or illuminates), immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred.  
**DO NOT OPERATE THE HEATER WITH THE ALARM SOUNDING (OR ILLUMINATING).**
12. **SAVE THESE INSTRUCTIONS**

## OPERATING INSTRUCTIONS

When the thermostat calls for heat, the elements are immediately energized, a fan delay brings on the fan after the elements are heated. When the thermostat is satisfied, the elements are de-energized and the fan purges the heater of residual heat.

The heater wattage may be field adjusted on models HF5605T and 21UHMT5. Select the desired wattage from Table 1 and move color coded jumpers as indicated.



## INSTALLATION INSTRUCTIONS

All electric unit heaters are shipped fully assembled. Installation includes hanging the unit, mounting the built-in and remote accessories, wiring of optional control devices, and electrical wiring to the unit.

The wall and/or ceiling structure must be sufficient to support the combined weight of the heater and any mounting bracket and accessories.

Be sure power source is de-energized before installing heater. Check heater voltage and phase listed on heater data label on back of unit to make sure they are the same as the electrical service supplied.

**CAUTION:** Follow all local electrical and safety codes, as well as the National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).

Open the access panel.

Remove desired knock-out(s) on side or back of the heater.

Install any optional accessories following their installation instructions before mounting unit. Following the correct unit/ accessory wiring diagram, connect the power supply, electrical ground and accessories to the correct terminals or termination points using acceptable wiring practices. Modification of the heater or any component is prohibited.

After the installation is complete, replace the access panel.

Set the controls (thermostat, switch) located on the rear of the heater, at their desired control point and apply power to the unit.

Check for correct operation.

## Maintenance:

Caution: Make certain that the power source is disconnected before attempting to service or disassemble any component. If the power disconnect is out of the line of sight, lock it in the OPEN position and tag to prevent the application of power. Make sure the heater has cooled enough to safely handle.

## Electrical:

Once a year inspect the control panel wiring to make certain insulation is intact and all connections are tight. Inspect all heater and relay contacts. If the contacts appear badly pitted or burned, replace the contactor/relay.

## Cleaning:

Clean the unit casing, fan and motor once a year. A dirty motor will tend to run hot and eventually will be damage internally. Use the crevice tool on a vacuum cleaner or a clean cloth to clear dust and dirt. Any rust spots on the casing should be cleaned and repainted.

## Lubrication:

All units have fan motors that are permanently lubricated so that only occasional cleaning is required.

## General Safety Information:

### CAUTION:

Follow all local electrical and safety codes, as well as the National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).

To avoid possible electrical shock, be sure the electrical current is turned off at the main switch prior to wiring or servicing of unit.

If the power disconnect is not integral and is out-of-sight, lock it in the open position and tag to prevent unexpected application of power prior to performing any service of maintenance on the unit.

The unit when installed must be electrically grounded in accordance with the National Electrical Code and standard industry practice.

Make certain that the power source conforms to the requirements of your equipment. See Table 2 below for information as to wire and circuit size.

Check heater voltage and phase on rating label to confirm it is the same as the electric service supply.

Wiring diagrams of the heaters and supply connections are permanently attached to the heater access door. All terminals are coded in accordance with the wiring diagram. Accessory wiring are shown on the unit wiring diagram and supporting literature.

The heater must be mounted at least 6' above the floor to prevent accidental contact with the fan blade which could cause injury. Install unit so there are no obstructions to be intake or discharge. Maintain clearances as shown in Fig. 1.

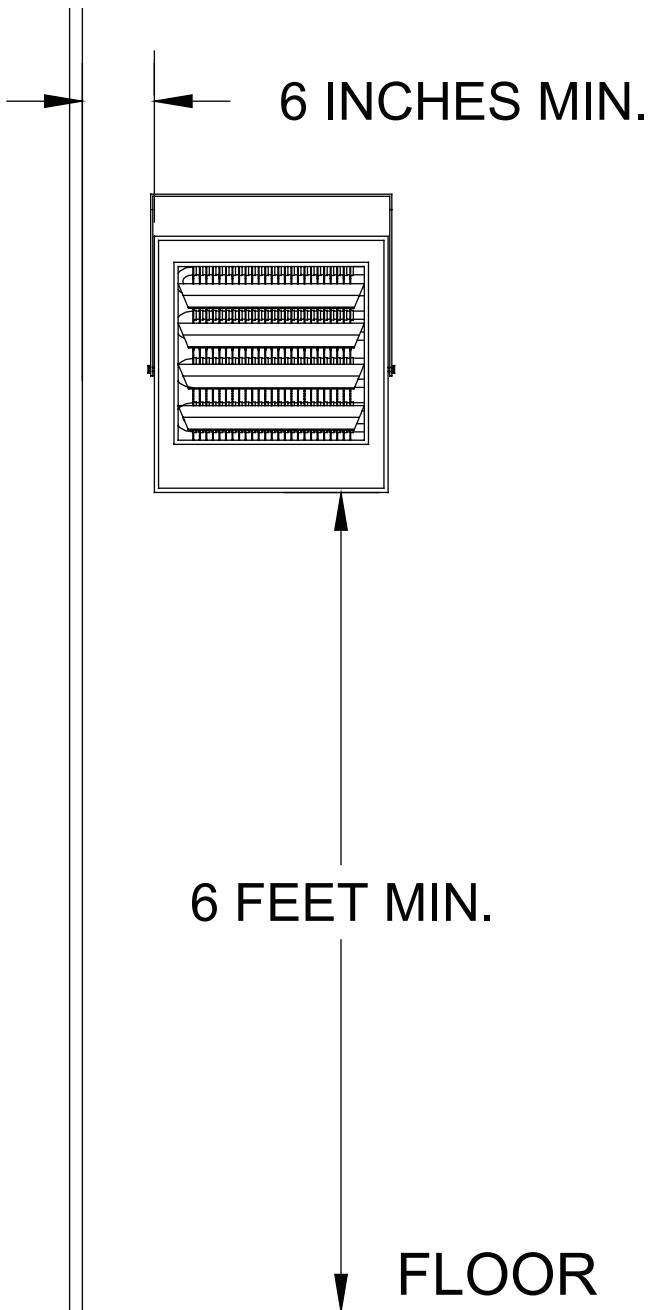
The wall/ceiling mounting structure and anchoring provisions must be of sufficient strength to support the combined weight of the heater and mounting bracket.

Heater must be mounted at least 6 feet above floor and a minimum of 6 inches from adjacent wall. See Fig. 1.

TECHNICAL DATA TABLE 2					
MODEL	VOLTS	WATTS	PHASE	AMPS	SUPPLY WIRE
HF5605/21UHMT5	240/208	5000/3750	1	20.83/18	10
H3H5605/23UHMT	240/208	5000/3750	3	12.04/10.4	12
P3P5605/43UHMT5	480	5000	3	6.1	14

Note: Supply wire must be 60° AWG minimum.

**INSTALLATION INSTRUCTIONS  
FOR  
FIELD INSTALLED DISCONNECT  
SWITCH MODEL DCS-MT303  
RATED 25 AMP @ 600 V.A.C.**



Read these instructions thoroughly before installing switch. Be sure to de-energize power source to unit before installing switch. Check heater data label to insure that heater electrical rating does not exceed the disconnect switch's electrical rating.

Supply wire must be copper conductors only.

All wiring must be in accordance with N.E.C. and local codes.

1. Remove 7/8" knockout for switch mounting located at right rear of unit.
2. Detach switch handle by moving the red lever on switch.
3. Remove retaining nut and mount knob. Secure knob assembly with retaining nut to enclosure, be sure to align anti-rotation pin with groove located on side of knockout.
4. Wire switch and heater according to diagram located in heater. Connect the leadwires on the switch marked T1-T2-T3 to the heater power terminal block marked L1-L2 connections. Connect ground lead to ground screw or lug.
5. Connect incoming power supply wires to terminals L1-L2-L3. Single phase units only require L1-L2 connections. Connect ground lead to ground screw of lug.
6. Install switch on knob assembly, and lock into place by moving red lever to original position.
7. Check all connections, close cover and restore power.

**Dimension Data**

DIMENSIONS						
A	B	C	D	E	F	G
14"	20.25"	14"	8.5"	6.5"	9"	2.75"

