

# DESCRIPTION

The 3340 series is a heavy duty commercial wall/ceiling heater utilizing vane axial fan blades for quiet efficient operation. All units have an 18ga. powder coated grille and a decorative aluminum extrusion grille frame. The 3340 series is available in 6kW, 8kW and 9.6kW wattages in 208,240,277 and 480 volt applications. See catalog for specific models. The 3340 series can be surface or recessed mounted. All models come with manual reset limit controls and a lockable disconnect.

The dedicated T-bar mounted units are designed to be mounted in a standard 2 x 4 T-bar grid. These units have all of the electrical and control features of the standard 3340 series models. The T-bar models are supplied with a hinged grille for easy access to the heater for maintenance. Aluminum grille frame not available on T-bar models. **Note: These units are heavy and require additional support from the building structure.** 

- CAUTION High temperature, risk of fire, keep electrical cords, drapery, furnishings and other combustibles at least 3 feet (0.9m) from the front of the heater and away from the side and rear. Disconnect all power supplies before servicing.
- ATTENTION -Haute température, risque d'incendie, arder les cordons électriques, des rideaux, des meubles et d'autres combustibles au moins 3 pieds (0,9 m) du devant de l'appareil et loin de la côte et l'arrière. Débranchez toutes les alimentations avant l'entretien.

### **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 installing or using this heater.
- 2. This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes and curtains, etc. at least 3 feet from the front of the heater.
- 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 and/or 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 shock, 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. WARNING: 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

#### 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 wiring to make certain insulation is intact and all connections are tight.

#### Cleaning:

Clean the unit casing, fan and motor once a year. A dirty motor will tend to run hot and eventually will 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.

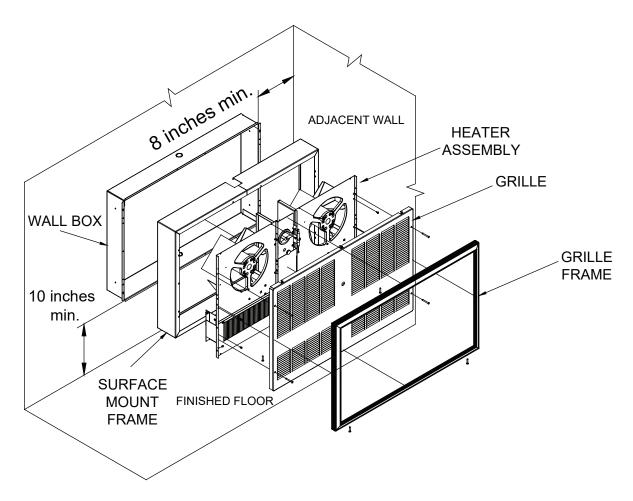
### INSTALLATION

The 3340 series shall be installed according to manufacturers installation instructions, the N.E.C. and authorities having jurisdiction. All 3340 series heaters must be grounded per the N.E.C.

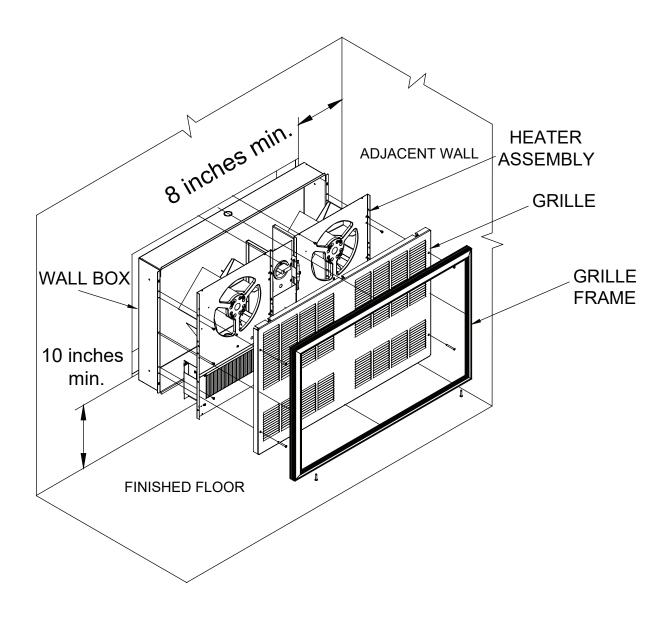
### MOUNTING CLEARANCES

The 3340 series requires clearances of 8 inches from adjacent walls and 10 inches from the finished floor. Heater may be installed for top inlet, bottom discharge only.

# SURFACE MOUNT APPLICATIONS



- 1. Determine location of heater. Note required clearances as stated above.
- 2. Mount the wall box with appropriate hardware for specific mounting surface. Holes are provided in the wall box. Knockouts are provided on the top and bottom of the wall box. Power may enter from either the top or bottom. If power wiring is entering on bottom, leads must be long enough to reach top of heater plus 6 inches.
- 3. Place the surface mount frame over the wall box.
- 4. Place heater assembly into wall box, align heater mounting holes with surface mounting frame and wall box. Re-install all screws.
- 5. Install power wiring. Refer to **WIRING SECTION** for details. **NOTE:** <u>REMEMBER TO TURN</u> <u>POWER SWITCH ON BEFORE INSTALLING GRILLE, MAKE SURE MAIN BREAKER IS OFF.</u>
- 6. Install grille and grille frame.
- 7. For operating instructions see **OPERATION SECTION**.



- 1. Determine location of heater. Note required clearances as stated above.
- 2. Mount the wall box with appropriate hardware for specific mounting surface. Holes are provided in the wall box. Knockouts are provided on the top and bottom of the wall box. Power may enter from either the top or bottom. Rough in hole dimensions are 30-1/2 inches wide x 19-1/2 inches high.
- 3. The 3340 series is designed for recessing in a 4 inch wall. For semi-recessed installations (2 inches max.) use surface mounting frame 3340EX16.
- 4. Mount the wall box. Route power wiring into box. If power wiring is entering on bottom, leads must be long enough to reach top of heater plus 6 inches.
- 5. Place heater assembly into wall box, align heater mounting holes with surface mounting frame (if required) and wall box. Re-install all screws.
- 6. Install power wiring. Refer to **WIRING SECTION** for details. **NOTE:** <u>REMEMBER TO TURN POWER</u> <u>SWITCH ON BEFORE INSTALLING GRILLE MAKE SURE MAIN BREAKER IS OFF.</u>
- 7. Install grille and grille frame.
- 8. For operating instructions see **OPERATION SECTION**.

# **T-BAR MOUNTING**

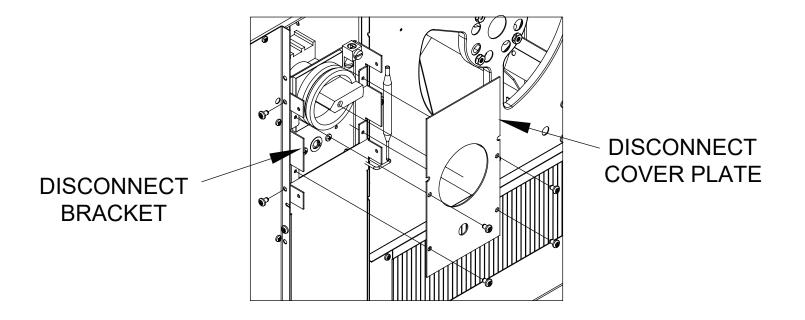
- 1. The 3340 series T-bar models are designed for standard 2 x 4 T-bar grids.
- 2. <u>These units must be supported by the building structure.</u> Hanger wire, jack chain ,wire cable, etc. can be used to support the unit from the building structure.
- 3. It is recommended that more than 1 person install these units.
- 4. Remove heater chassis before installation into the grid.
- 5. Place the T-bar assembly into the grid and secure to building structure.
- 6. Install the heater chassis.
- 7. For wiring and operation, see page 6.

**Top View** SUPPORT MEANS TO STRUCTURE **T-BAR GRID Bottom View** 

#### WIRING

# MAIN CIRCUIT BREAKER MUST BE OFF BEFORE WIRING THE HEATER

- 1. Remove the four srews securing the disconnect cover plate. See below.
- 2. Remove the four screws securing the disconnect bracket. See below.
- 3. Rotate the switch forward until the disconnect switch terminals are accessible.
- 4. Attach field wiring to disconnect. Make certain that all terminals are tight before re-mounting the disconnect.
- 5. Mount the disconnect and disconnect cover plate.
- 6. Turn the disconnect on before attaching grille.

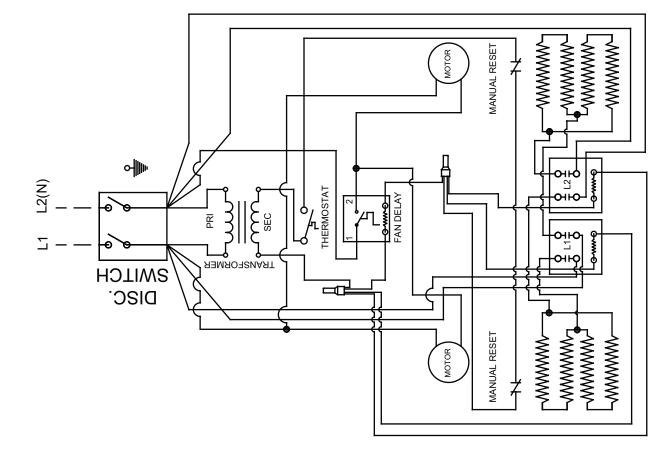


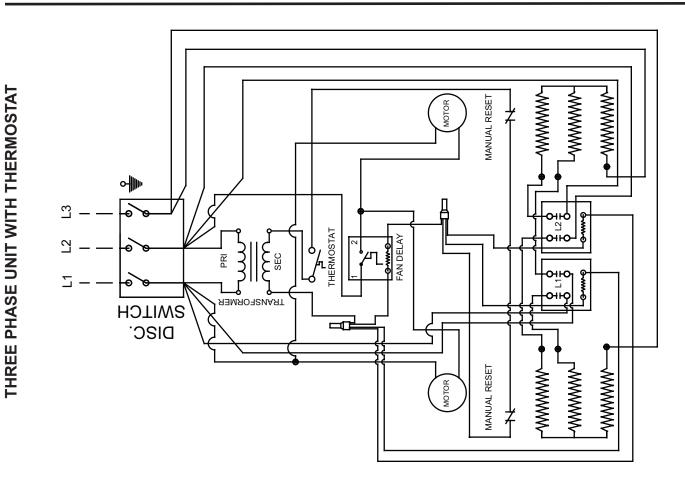
# OPERATION

- 1. Restore power from main breaker.
- 2. Remove the tamper-proof plug from the front of the grille.
- 3. Insert a small straight blade screwdriver through the hole and adjust the thermostat by rotating the screwdriver fully clockwise. The heat will be energized before the fans. There is an approximate delay of 30 seconds before the fans energize.
- 4. When the area reaches the desired temperature, turn the thermostat counter-clockwise until the heat de-energizes, The fans will continue to purge the residual heat for approximately 90 seconds.
- 5. Re-install the tamper-proof plug.
- 6. For units that utilize a low voltage wall thermostat, adjust thermostat to the desired level.

#### WIRING DIAGRAMS







ECO 1-7964 REV. A FORM: 8220