

# BRASCH

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## INSTRUCTIONS BH-931 Series



### WARNING



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

Read carefully these instructions before installation, operation of the heater. Failure to adhere to the instructions could result in fire, electric shock, serious personal injury, and death or property damage. Review frequently for continuing safe operation and instruction of future users, if necessary.

## IMPORTANT INSTRUCTIONS

- 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, like furniture, pillows, bedding, papers, clothes, and curtains at least 36 in. (915 mm) 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. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.
- 5- Do not use outdoors.
- 6- To disconnect heater, rotate thermostat knob full counter-clockwise 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 or fire, or damage the heater.
- 8- To prevent a possible fire, do not block air intakes or exhaust in any way whatsoever.
- 9- This heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or 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- **AMERICAN VERSION ONLY:** Some models (up to 6000W maximum and 240V maximum) include a visual alarm to warn that parts of the heater are getting excessively hot. If the light turns on, 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. If no obstruction is visible, the heater must be checked by a qualified person. **DO NOT OPERATE THE HEATER WHEN THE ALARM ILLUMINATING.**
- 12- The thermostat should not be considered an infallible device in cases where maintaining a temperature is considered critical. Examples: Hazardous material storage, computer server room, etc. In these particular cases, it is imperative to add a monitoring system to avoid the consequences of a thermostat failure.

## SAVE THESE INSTRUCTIONS

## OPERATING INSTRUCTIONS

- 1- The heater must be properly installed before it is used.
- 2- Turn the power on at the circuit breaker panel.
- 3- Electronic thermostat: be sure to set it on the fan mode.
- 4- Built-in thermostat: to set thermostat at the desired temperature, follow these steps:
  - Set thermostat at maximum temperature (turn clockwise).
  - When the desired temperature is reached, turn the thermostat counter-clockwise slowly until you hear a click.
  - The thermostat will keep this room temperature.
- 5- Built-in thermostat with control knob, the setting can be adjusted with the supplied knob, located on the front cover.
- 6- Built-in tamperproof thermostat: the setting can be done through the hole in the front cover with a small slotted screwdriver.
- 7- **AMERICAN VERSION ONLY:** Some models (up to 6000W maximum and 240V maximum) include a visual alarm to warn that parts of the heater are getting excessively hot. If the light turns on, 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 WHEN THE ALARM ILLUMINATING.**

### START UP

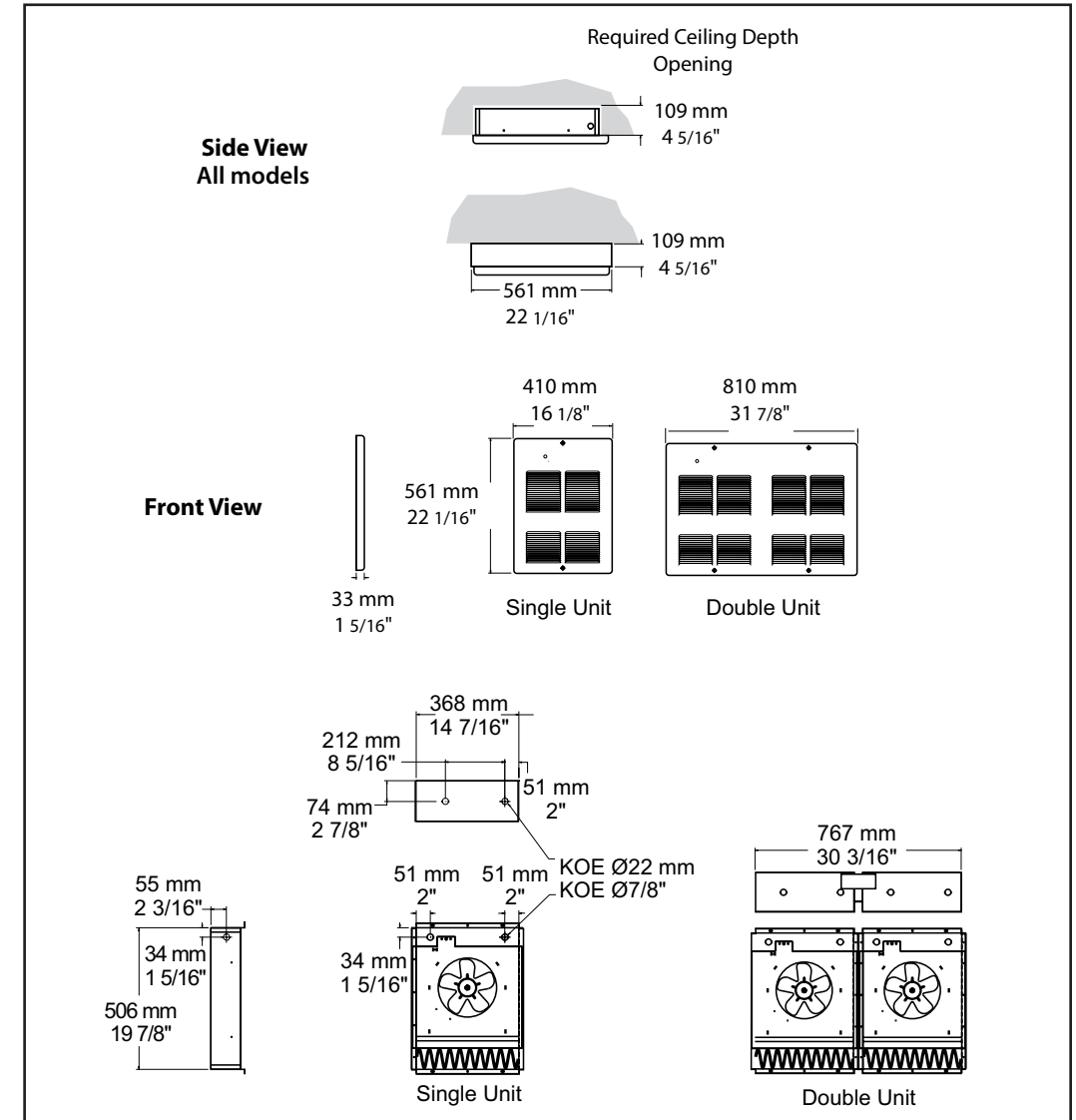
On a call for heat from either the remote thermostat or the unit mounted thermostat the elements and fan will be energized.

When the thermostat is satisfied the elements will be deenergized.

The fan will continue to run until the residual heat is removed from the heater. Then the fan will stop.

## MAINTENANCE INSTRUCTIONS

- 1- Once a year, remove the front panel and use a vacuum cleaner to remove the dust accumulation inside the heater and through openings of the front panel.
- 2- Cleaning should be done while the heater is disconnected from the main service panel. Wait until the housing and heating element cool before performing maintenance.
- 3- Replace the front panel before energizing.
- 4- Any other servicing should be performed by a qualified technician.
- 5- Factory-lubricated motor. No lubrication required.



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# INSTALLATION INSTRUCTIONS

## CAUTION:

- High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 36 in. (915 mm) from the front of the heater. To reduce the risk of fire, do not store or use gasoline or other flammable vapors and liquids in the vicinity of the heater.
- Ceiling installation only.
- Do not install heater less than 10 in. (250 mm) from walls.
- Do not obstruct front of heater for at least 72 in. (1829 mm).
- Disconnect all power supplies before working on any circuit.

## IMPORTANT:

- 1- Must be installed solidly. This heater could weight up to:  
Single unit: 26 lb (12 kg)  
Double unit: 52 lb (24 kg)
- 2- Connect the control according to the wiring diagram in the heater.
- 3- Do not interrupt power supply to control this heater.
- 4- Any remote thermostat or relay must be connected to the heater control terminal block.
- 5- If an electronic thermostat is used, it must be compatible with forced-air heaters.

## OPTIONS:

Refer to the instruction supplied with the option.

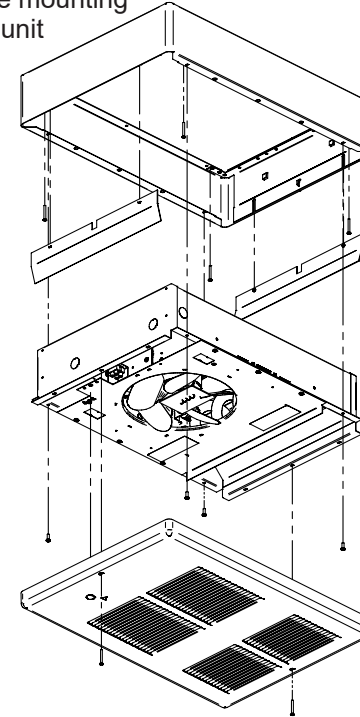
## RECESS MOUNTING:

- 1- Heater must be used with recess box.
- 2- Provide a ceiling opening as:  
Depth: 4 5/16 in. (109 mm)  
Height: 19 7/8 in. (506 mm)  
Length: - Single unit: 14 7/16 in. (368 mm)  
- Double unit: 30 3/16 in. (767 mm)
- 3- Remove the appropriate knock-out from the recess box for the electrical supply.
- 4- Attach firmly the recess box using provided screws. Make sure that the edge on each side of the recess box lean on the gypsum panel and not on the structural parts of the ceiling. See marking on the sides of the recess box.
- 5- Install the heater to the recess box and be sure that the heater is attach firmly with four (4) provided screws.
- 6- Connect the heater leads to the supply leads according to national and local codes. See wiring diagram in the front cover of the heater.
- 7- Make sure the fan rotates freely and that there is no foreign object in the heater.
- 8- Install the front cover using the provided screws. **IMPORTANT:** Make sure that the part of the front cover without louver is in front of the supply terminal box.
- 9- To test the heater temporarily, set thermostat at maximum temperature.

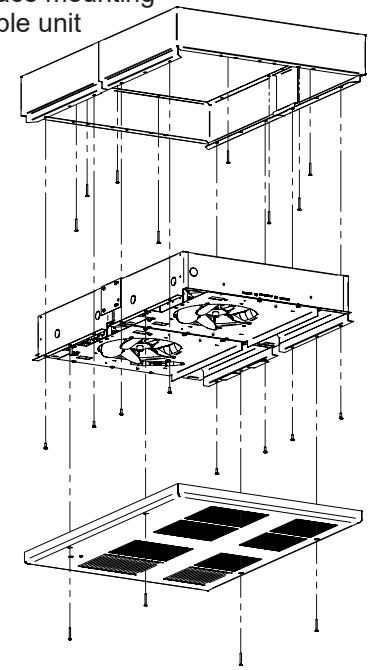
## SURFACE MOUNTING:

- 1- The surface box must be used with recess box.
- 2- Locate the power supply leads behind the planned location of the heater (surface box).
- 3- Mount the surface box securely to the ceiling with provided screws. **IMPORTANT:** For a single surface box, there are two brackets fixed at the top and bottom. Unfold the metal hooks to remove the brackets. Insert the front cover supports (top and bottom) in the surface box before continuing the installation. See illustration to install properly.
- 4- Follow instructions 3 to 9 as above for recess mounting.

Surface mounting  
Single unit



Surface mounting  
Double unit



## SUSPENDED CEILING MOUNTING:

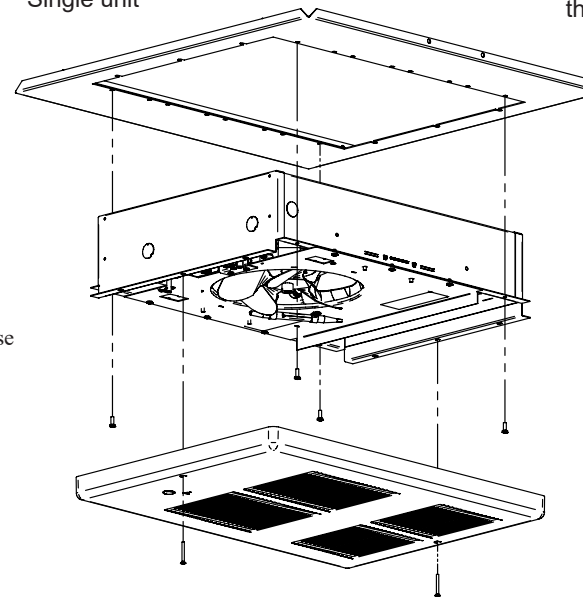
### SINGLE UNIT:

- 1- Remove one suspended ceiling tile.
- 2- Insert the adaptor for suspended ceiling in place of the removed tile.
- 3- Firmly secure the adaptor to the ceiling using the holes for this purpose (see illustration).
- 4- Refer to the installation instructions to the "Recessed Mounting" section to complete the installation of the unit.

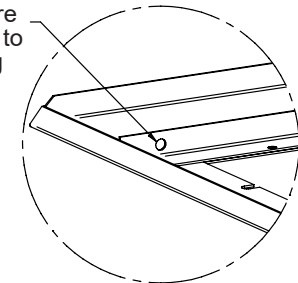
### DOUBLE UNIT:

- 1- Remove two suspended ceiling tiles, side by side.
- 2- Strengthen the structure of the suspended ceiling before cutting T-bar passes through the opening.
- 3- Insert the adaptor for suspended ceiling in place of the removed tiles.
- 4- Firmly secure the adaptor to the ceiling using the holes for this purpose (see illustration).
- 5- Refer to the installation instructions to the "Recessed Mounting" section to complete the installation of the unit.

Adaptor for suspended ceiling  
Single unit



Hole to use to firmly secure the adaptor to the ceiling



DETAIL A

Holes to use to firmly secure the adaptor to the ceiling

