

## ⚠ IMPORTANT INSTRUCTIONS

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

1. Read all instructions before using the heater.
2. The heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. The trim around the heater outlet becomes hot during heater operation. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 ft (0.9 m) from the front of the unit and keep them away from the sides and rear.
3. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the unit is left operating and unattended.
4. Do not operate any heater after it malfunctions. Disconnect power at the service panel and have the heater inspected by a reputable electrician before reusing.
5. Do not use outdoors.
6. To disconnect the unit, turn the controls off, and then switch off at main power supply panel.
7. Do not locate these heaters below any electrical convenience receptacles.
8. Do not install these heaters against combustible, low density cellulose fibre surfaces.
9. 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 to the heater.
10. To prevent a possible fire, do not block air intake or exhaust in any manner.
11. All electrical heaters have hot and arcing or sparking parts inside. Do not use in areas where gasoline, paint, or flammable liquids are used or stored.
12. Do not modify this heater. Use it only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock or injury to persons.

## SAVE THESE INSTRUCTIONS

### ⚡ Installation Instructions

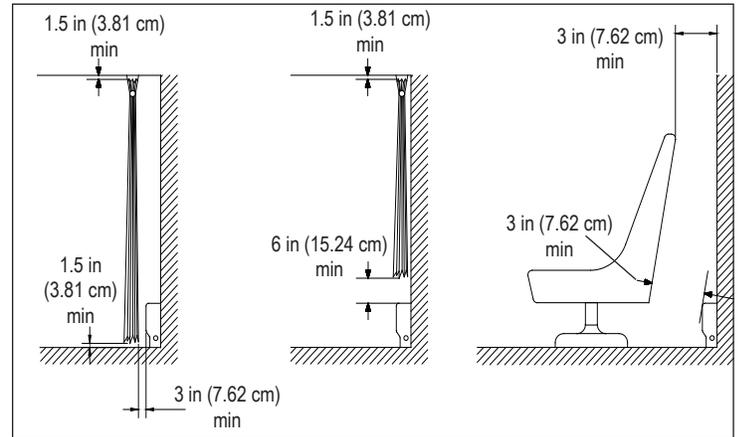
**⚠ WARNING:** Wiring procedures and connections should be in accordance with the National Electric Code (NEC & CEC) and local codes.

**⚠ WARNING:** To reduce the risk of fire, do not store or use gasoline or other flammable vapors or liquids in the vicinity of the heater.

**⚠ CAUTION:** High temperature, risk of fire, keep electrical cords, drapery, furnishings, and other combustibles at least 3 feet (0.9 m) from the front of the heater.

### Recommendations for Locating Drapes and Furniture near Heaters

For most satisfactory operation of the baseboard heaters and minimum effect on drapes and furniture, the following recommendations should be observed:



1. Hang drapes so that, in use, they extend below the center line of the heater, but with at least 1.5 inches clearance from the finished floor covering (such as carpet, if used).
2. Hang drapes so that there is at least 3 inches between the extreme front of the heater and the nearest fold of the drapes in the folded back (opened drape) position.
3. Hang drapes so there is at least 1.5 inches between the top of the drapes and the ceiling.
4. To be suitable for draperies located close to heaters, material should not discolour nor distort dimensionally (stretch or shrink) upon extended exposure (1000 hrs.) to a temperature of 200° F (93° C).

**! NOTE:** If drapes are to be cut off above a heater, they should be cut off at least 6 inches above the top of the heater and preferably more.

**! NOTE:** Place furniture no closer than 3 inches from the baseboard heater.

### Wall Installation

1. Unpack the heater from the carton and remove the front panel.  
**! NOTE:** The front panel screws are recessed at the bottom of the front panel at each end of the heater.
2. Remove the desired terminal box covers and wire supply knockouts from the terminal box area.
3. Determine the correct mounting height, and scribe or snap a level line on the wall to maintain each heater back plate in a horizontal alignment, when mounting.  
**! NOTE:** The front panel screws are recessed in the top louvres at each end of the heater.
4. Mount the back plate to the wall using suitable fasteners (provided by the customer) using the scribed line on the wall to keep the heater level.  
**! NOTE:** Should the wall surface be uneven, secure the heater back panel to the high spots. This will avoid a distorted appearance.
5. Proceed to the wiring instructions.

## Recessed Wall Installation

**! NOTE:** The use of a Signature Series Trim kit is strongly recommended when recessing the heater.

**! NOTE:** A recess opening dimension of 20-1/2" high and the length of the heater is required to install this heater.

**! NOTE:** The heater may be recessed up to a depth of 5-5/8".

1. Unpack the heater from the carton and remove the front panel.

**! NOTE:** The front panel screws are recessed at the bottom of the front panel at each end of the heater.

2. Remove the desired terminal box covers and wire supply knockouts from the terminal box area.

3. Use trim frame as a template to drill holes into the top, bottom and sides of the heater using a 1/8" diameter drill bit.

4. Secure the trim frame using the #8 screws provided with the trim kit.

**! NOTE:** The bottom trim may be omitted if the heater is to be installed at floor level.

5. Prepare the wall recess opening to accept the heater.

**! NOTE:** Leave approximately 1/2" clearance to insert the heater cabinet.

6. Secure the back plate into the recess opening using suitable fasteners (provided by customer).

7. Proceed to wiring instructions.

## Wiring Instructions

Recommended minimum supply wire sizes are listed in the table below:

MAXIMUM WATTS PER CIRCUIT USING 75 °C WIRE (COPPER WIRE)							
Rough in Wire Size	120V	208V	240V	277V	347V	480V	600V
14	1440	2496	2880	3324	4164	5760	7200
12	1920	3328	3840	4432	5552	7680	9600
10	2880	4992	5760	6648	8328	11520	14400

1. Run branch circuit wiring of proper voltage and wire size to the location of the terminal box of the heater. (See Chart)

**! NOTE:** Supply wire entry is commonly made into one heater. Through wiring (factory furnished) can be used for connection to adjacent heaters.

2. Wire all heaters and controls in accordance with the appropriate wiring diagram.

**! NOTE:** Sample wiring diagrams beside.

3. Wrap the supply ground wire around the green painted ground screw & tighten.

**! NOTE:** When heaters are mounted end to end, remove the finished end plate, install a chase nipple and locknut in the terminal box to ensure grounding continuity and to protect the wiring.

Where heaters are spaced apart, remove the finishing end plate, and use rigid conduit (provided by customer) for through wiring and ground continuity. Do not exceed the allowable number of conductors allowed by the National Electric Code.

4. Do a final and complete check of all wiring then replace the terminal box covers being careful not to pinch any wires.

5. The front panel may now be installed.

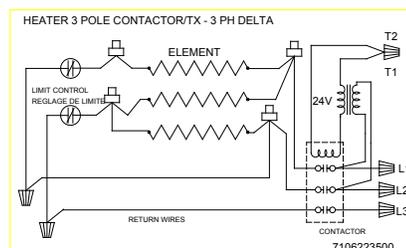
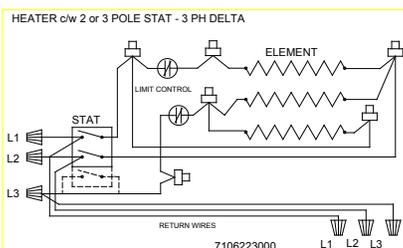
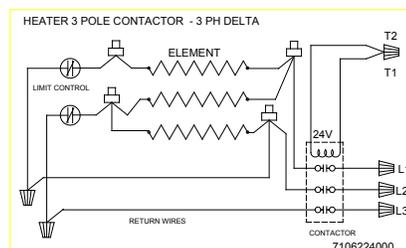
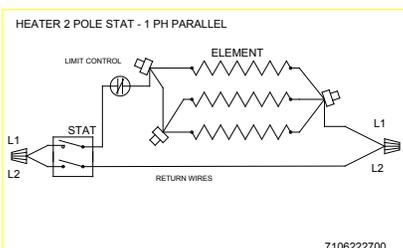
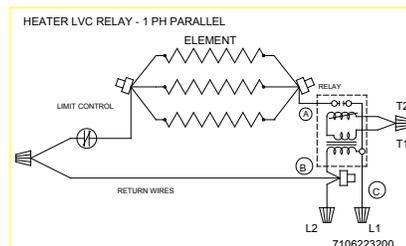
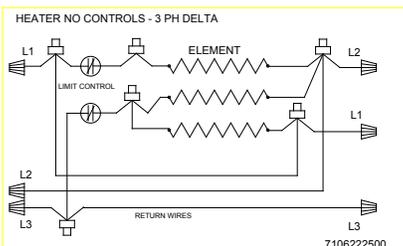
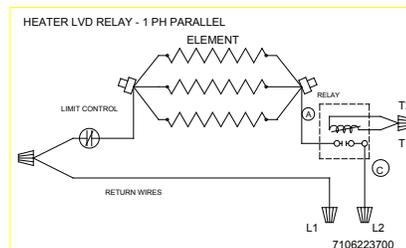
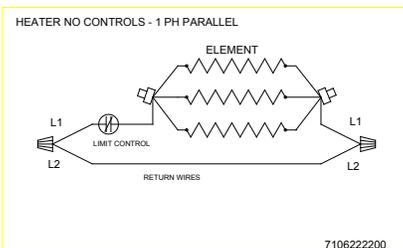
### Terminal Box Volumes in Cubic Inches

Heater Style	Left Hand Box 4" Wide	Right Hand Box 5" Wide
AF20	379.75	474.75

**⚠ WARNING:** TO PREVENT THE RISK OF FIRE, DO NOT OPERATE THE HEATER WITHOUT THE FRONT PANELS IN PLACE.

- Insert the top of the front panel into the top flange of the heater.
- Push the bottom flange of the front panel into place and secure with screws.

## Wiring Diagrams



## Operation

**⚠ WARNING:** This heater must be properly installed before it is used.

1. Prior to energizing remove all construction dirt (plaster, sawdust, etc.) from interior and exterior of heater.

Dimplex baseboard heaters are designed and tested for safe and trouble-free operation. All Dimplex baseboard heaters are protected against overheating by a built-in thermal cutout. Free airflow throughout the heater is extremely important for the most efficient operation of the heater. Restricted airflow may cause the thermal overload protector to cycle the heater "ON and OFF". A cycling heater will not supply sufficient heat to the room.

Avoid direct contact of paper, fabric, or furniture with heater.

## Maintenance

**⚠ CAUTION:** Before removing the front cover for cleaning, make certain the power has been turned off at the circuit breaker panel.

**⚠ CAUTION:** Allow adequate time for the element and body casing to cool before attempting to work on the heater.

The AF20 series contain no moving parts. Since the appliance contains no moving parts, little maintenance is required beyond vacuum cleaning. It is, however, essential that the heater is not operated with an accumulation of dust or dirt on the element, as this can cause a build up of heat and eventual damage. For this reason the heater must be inspected regularly, depending upon conditions and at least at yearly intervals. Once cleaning is complete replace the front cover and restore power.

**⚠ WARNING:** The user can perform cleaning ONLY, all other servicing should be performed by qualified service personnel.

## Warranty

The Manufacturer warrants the heating elements and components of the enclosed product against any defect in material or workmanship for a period of one year from the date of purchase. In full satisfaction of any claims under this Warranty the Manufacturer will repair or replace without charge, in its factory or in the field as it alone may decide, any parts which in its opinion are defective.

The Manufacturer shall not be responsible for any transportation or shipping costs in relation to such repair or replacement except as specifically assumed by it. Misuse of this product or repairs by persons other than the Manufacturer's authorized personnel without the Manufacturer's written approval, will void this Warranty.

This Warranty is in lieu of all other warranties or conditions whether expressed or implied including but not limited to those of merchantability or fitness for purpose and shall constitute the sole remedy of the Purchaser and the sole liability of the Manufacturer in respect of the sale of the product, whether in the nature of breach or breach of fundamental term, or of negligence or otherwise.

The Manufacturer shall not be liable for any special, indirect or consequential damages or for any damages resulting from removal or replacement of a heater subject to warranty claim without the Manufacturer's authorization.

This Warranty is transferable by the original consumer purchaser of the product. Any claims under this Warranty must be submitted in writing to the Service Manager, Dimplex North America Ltd., 1367 Industrial Rd., Cambridge, Ontario N1R 7G8, Canada.

** Dimplex®**

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1-888-346-7539 • [www.dimplex.com](http://www.dimplex.com)

In keeping with our policy of continuous product improvement, we reserve the right to make changes without notice.

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