INSTRUCTIONS FOR MOUNTING BP25/60 ELECTRIC HEATER KITS IN BARD UNITARY AIR CONDITIONERS AND HEAT PUMP MODELS P 24-60, P10 24-60, P11 24-48, P12 24-36 PH 24-60, PH10 24-60, PH11 24-42, & PH12 24-36

Refer to Air Conditioner manual for specifications on field wiring, duct work, control wiring, etc. All wiring must comply with the National Electric Code (NEC) and local ordinances that may apply. Duct materials **MUST** be 250 F.

Bard Models: P, P10, P11, P12, PH, PH10, PH11, PH12 Application Chart

Model:		24 25	30 31	36	42	48	60
KW:	5	X	X	X	X	X	X
	10	X	X	X	X	X	X
	15		X	X	X	X	X
	20				X	X	X

NOTE: Heaters in-between (or less than) those on the chart can be used in the same Bard Models as the higher **KW** shown.

- 1. **WARNING:** If the A/C unit is already installed and wired, disconnect power before starting the Heater installation.
- 2. Remove the electrical compartment exterior service panel. Remove the heater access cover near the unit discharge. Remove the electrical compartment cover.
- 3. Insert the heater carefully, making sure air flow arrow is pointing in the correct direction. The extended rod on the end should engage support hole and the heater terminal plate should be flush for fastening with sheet metal screws.
- 4. Insert the heater control wire plug into the matching unit receptacle located on the back of the electrical compartment. The indoor blower interlock on heat is included.
- 5. Separate or single point electrical connections can be utilized. A separate supply for the heater can be installed in the compartment marked "B" using the terminal block and ground lug supplied with the heater. Heaters 44 amps or less may be connected to vacant terminals on the air conditioner terminal block (lines 1,2, & 3 are color coded) by routing heater wires into compartment "A". Heaters over 48 amps include circuit fusing: a terminal

block and ground lug for compartment "B" with wires for optional air conditioner also included.

- 6. Attach heater diagram (provided) to the electrical compartment cover so it faces out. Attach heater rating label next to Bard unit rating label. Calculate minimum circuit Ampacity and maximum circuit protection sizes (see information below). Write those figures on the heater rating label (be sure to use waterproof ink), also check heater only or combined electrical supplies.
- 7. Re-install all covers and access panels.

CALCULATION INFORMATION

Separate heater electrical supply:

Heater amps times 1.25 is minimum circuit ampacity. Min. Circuit ampacity rounded up to nearest standard protective device rating is maximum circuit protection.

Combined electrical supply-cooling only units.

Heater amps times 1.25 plus 4 is minimum circuit ampacity.

Min. Circuit ampacity rounded up to nearest standard protective device rating is maximum circuit protection. **COMPARE** to Air Conditioner label. Write in **THE LARGER** of the two ratings.

Combined electrical supply-HEAT PUMPS

Add heater amps to Heat Pump Min. Circuit Ampacity for new total minimum circuit ampacity.

Min. Circuit ampacity rounded up to nearest standard protective device rating is maximum circuit protection.

Standard Protective device ratings are: 10,15,20,25,30,35,40,45,50,60,70,80,90, and 100 amps.

EXAMPLE:

Install a 41.7 amp heater in a PH421 heat pump and use the combined single electrical supply.

Per unit nameplate min. Circuit ampacity is 35. This makes the combined minimum ampacity (35 + 41.7) or 76.7 amps.

76.7 amps rounded up to nearest standard rating is 80 amps. The combined maximum Protective device is 80 A.