TECHNICAL SPECIFICATIONS

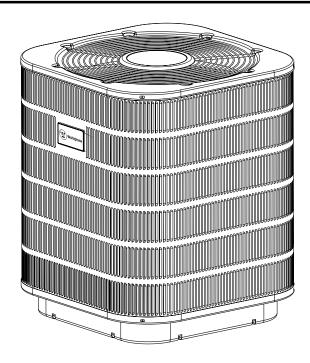


FT3BA-(-)KA Series High Efficiency Heat Pumps 10 SEER 1-1/2 – 5 Ton Capacity

The FT3BA Series of heat pumps offers exceptional performance from a small, compact package. The heat pump, when combined with our engineered coils or air handlers, offers a full line of quality, split system heating and cooling equipment. Units are ideally sized for slab or rooftop mounting in single, multifamily, and light commercial applications.

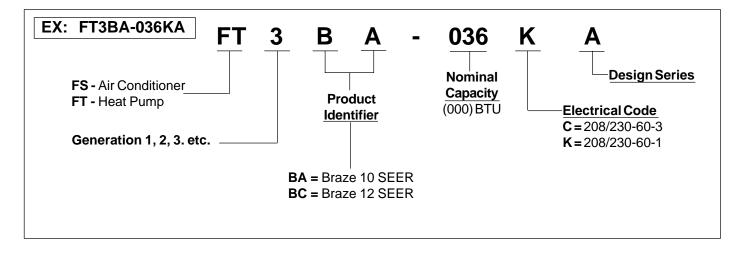
FEATURES and BENEFITS

- Durable, Attractive Cabinet Designed using galvanized steel with a polyester urethane finish. The 950 hour salt spray finish resists corrosion 50% better than comparable units.
- Copper Tube / Aluminum Fin Coils Both indoor and outdoor coils are designed to optimize heat transfer, minimize size and cost, and increase durability and reliability.
- Permanently Lubricated Motor A heavy duty PSC motor for long lasting reliability and quiet operation. Requires no maintenance and is completely protected from rain and snow.
- Full Service Valves These brass valves are easily accessible and simplify servicing of the refrigeration system.
- Louvered Condenser Guard Durable metal guard protects the coil from yard hazards and extreme weather.
- Time/Temperature Defrost—A reliable, industry standard control offers various time settings to meet any type climate.
- Removable Top Grille Assembly Allows ease of service from the top without disconnecting fan motor leads.



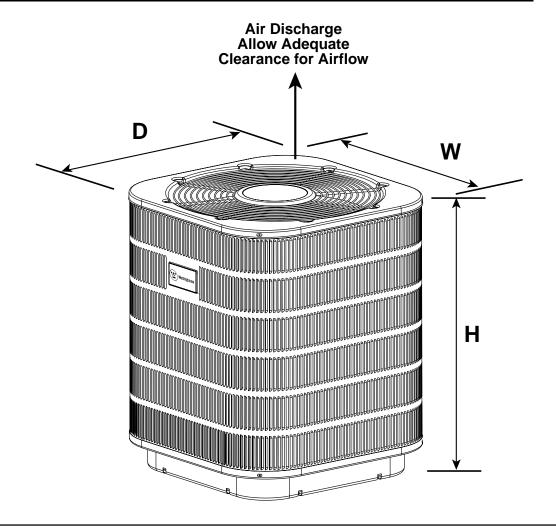
- One Piece Top/Orifice Designed for maximum airflow and quiet operation.
- Common Suction Service Port This port allows the contractor to read the suction pressure in all modes of operation without removing any panels, saving time and increasing serviceability.
- 2-1/2" Pedestal Base The sturdy base keeps the bottom
 of the coil out of harms way. Secondly, the base has weep
 holes along the edge to allow the water from the defrosting
 coil and rain to flow away from the unit.
- Five Minute Restart Time Delay When the unit shuts down, a five minute delay keeps the unit from restarting, eliminating the highest cause for compressor failure.
- Suction Accumulator and Crankcase Heat Protection from liquid flood back and future compressor failures.
- Hot Gas Muffler Reduces compressor noise and vibration.
- Easy Compressor and Control Access Designed to make servicing easier for the contractor, access panels are provided to all controls and the compressor from the side of the unit.
- 8 Year Limited All Parts Warranty and 5 Year QUality
 Pledge The best in the industry and has proven to be a major benefit to the consumer.

MODEL IDENTIFICATION CODES



DIMENSIONS HEAT PUMP OUTDOOR SECTION

| FT3BA- | 018K-A | 024K-A | 030K-A | 036K-A | 042K-A | 048K-A | 060K-A |
|--------|--------|--------|--------|--------|--------|--------|--------|
| Н | 22 1/2 | 22 1/2 | 26 1/2 | 34 1/2 | 34 1/2 | 30 1/2 | 42 1/2 |
| W | 22 1/2 | 22 1/2 | 22 1/2 | 22 1/2 | 22 1/2 | 30 1/2 | 30 1/2 |
| D | 22 1/2 | 22 1/2 | 22 1/2 | 22 1/2 | 22 1/2 | 30 1/2 | 30 1/2 |



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

10 SEER — High Efficiency — Single Phase

| Model No. FT3BA- | | 018KA | 024KA | 030KA | 036KA | 042KA | 048KA | 060KA | |
|---------------------|---|------------------------|------------------|--------------|--------------|-----------------|--------------|--------------|--------------------|
| Electrical | Volts-Cycles-Phase (1) | Volts-Cycles-Phase (1) | | 208/230-60-1 | 208/230-60-1 | 208/230-60-1 | 208/230-60-1 | 208/230-60-1 | 208/230-60-1 |
| Data Total Amps | | | 9.2 | 10.5 | 14.8 | 15.9 | 19.3 | 23.3 | 26.5 |
| | Min. Circuit Ampacity | | 11.4 | 12.9 | 18.2 | 19.7 | 23.7 | 28.7 | 32.7 |
| | Delay Fuse Max. (2) | | 15 | 20 | 30 | 30 | 40 | 50 | 50 |
| Component | Coil | Area | 8.2 | 8.2 | 9.9 | 13.2 | 13.2 | 17.7 | 25.3 |
| Data | | Rows-FPI | 1-14 | 1-16 | 1-18 | 1-18 | 1-18 | 1-18 | 1-18 |
| | | Tube Dia. | 3/8 O.D. | 3/8 O.D. | 3/8 O.D. | 3/8 O.D. | 3/8 O.D. | 3/8 O.D. | 3/8 O.D. |
| | Fan | Type | PSC | PSC | PSC | PSC | PSC | PSC | PSC |
| | Motor | Amps | 0.7 | 0.7 | 1.1 | 1.1 | 1.4 | 1.5 | 1.5 |
| | | Watts-HP | 145-1/10 | 145-1/10 | 210-1/8 | 210-1/8 | 245-1/4 | 300-1/4 | 300-1/4 |
| | Fan | Dia#Blades | 18 in3 | 18 in3 | 18 in3 | 18 in3 | 18 in3 | 24 in3 | 24 in3 |
| | Blade | SCFM | 2100 | 2100 | 2500 | 2500 | 2800 | 4000 | 4000 |
| | Compressor | RLA | 8.6 | 9.8 | 13.7 | 14.8 | 17.9 | 21.8 | 25.0 |
| | Data* | LRA | 49 | 56 | 75 | 96 | 103 | 131 | 150 |
| Refrigerant Suction | on Line-Length/O.D. | 0-24 ft. | 5/8" (3) | 5/8" (3) | 3/4" | 3/4" | 7/8" | 7/8" | 7/8" |
| (Liq. Line All Leng | gths - 3/8"O.D.) | 25-39 ft. | 5/8" <i>(</i> 3) | 3/4" | 3/4" | 3/4" | 7/8" | 7/8" | 1-1/8" <i>(5</i>) |
| | | 40-75 ft. | 3/4" | 3/4" | 3/4" | 7/8" <i>(4)</i> | 7/8" | 7/8" | 1-1/8" <i>(5</i>) |
| Refrigerant Charge | | | | | | | | | |
| (Outdoor unit, Inc | (Outdoor unit, Indoor Unit, 15' Line Set) R-22 Ounces | | 69 | 70 | 79 | 95 | 103 | 134 | 198 |
| Weight | Weight | | 118 | 120 | 130 | 145 | 148 | 174 | 231 |
| Approximate (lbs | .) | Ship | 130 | 132 | 142 | 157 | 150 | 186 | 243 |

10 SEER — High Efficiency — Three Phase

| Model No. FT | 3BA- | 036CA | 048CA | 060CA | |
|---------------------|--------------------------|-------------|-----------------|--------------|-------------------|
| Electrical | Volts-Cycles-Phase (1) | | 208/230-60-3 | 208/230-60-3 | 208/230-60-3 |
| Data | Total Amps | | 11.4 | 14.3 | 16.9 |
| | Delay Fuse Max. (2) | | 20 | 30 | 35 |
| | Min. Circuit Ampacity | | 13.9 | 17.5 | 20.8 |
| Component | Coil | Area | 13.2 | 17.7 | 25.3 |
| Data | | Rows-FPI | 1-18 | 1-18 | 1-18 |
| | | Tube Dia. | 3/8 O.D. | 3/8 O.D. | 3/8 O.D. |
| | Fan | Type | PSC | PSC | PSC |
| | Motor | Amps | 1.1 | 1.5 | 1.5 |
| | | Watts-HP | 210-1/8 | 300-1/4 | 300-1/4 |
| | Fan | Dia#Blades | 18 in3 | 24 in3 | 24 in3 |
| | Blade | SCFM | 2500 | 4000 | 4000 |
| | Compressor | RLA | 10.2 | 12.8 | 15.4 |
| | Data* | LRA | 75 | 91 | 124 |
| Refrigerant Suction | on Line-Length/O.D. | 0-24 ft. | 3/4" | 7/8" | 7/8" |
| (Liq. Line All Leng | gths - 3/8"O.D.) | 25-39 ft. | 3/4" | 7/8" | 1-1/8" <i>(5)</i> |
| | | 40-75 ft. | 7/8" <i>(4)</i> | 7/8" | 1-1/8" <i>(5)</i> |
| Refrigerant Char | ge | | | | |
| (Outdoor unit, Inc | door Unit, 15' Line Set) | R-22 Ounces | 95 | 134 | 198 |
| Weight | · | Net | 151 | 174 | 200 |
| Approximate (lbs | .) | Ship | 163 | 186 | 212 |

^{*} Values shown are most severe and may vary slightly depending on the make of the compressor supplied.

- (1) Operating Voltage Range: 198v min. 253v max.
- (2) HACR Type Circuit Breakers may be used.
- (3) Requires 3/4" to 5/8" reducer from unit to line.
- (4) Requires 7/8" to 3/4" reducer from line to unit.
- (5) Requires 7/8" to 1-1/8" reducer from line to unit.

| COPPER WIRE SIZE — AWG | | | | | | | | | | |
|--|-------------------|-----|----|----------|--|--|--|--|--|--|
| | (1% Voltage Drop) | | | | | | | | | |
| Supply Wire Length-Feet Supply Circu | | | | | | | | | | |
| 200 | 150 | 100 | 50 | Ampacity | | | | | | |
| 6 | 8 | 10 | 14 | 15 | | | | | | |
| 4 | 6 | 8 | 12 | 20 | | | | | | |
| 4 | 6 | 8 | 10 | 25 | | | | | | |
| 4 | 4 | 6 | 10 | 30 | | | | | | |
| 3 | 4 | 6 | 8 | 35 | | | | | | |
| 3 | 4 | 6 | 8 | 40 | | | | | | |
| 2 | 3 | 4 | 6 | 45 | | | | | | |
| 2 | 3 | 4 | 6 | 50 | | | | | | |

Wire Size based on N.E.C. for 60° type copper conductors.

SYSTEM HEATING & COOLING CAPACITIES

10 SEER — High Efficiency — Single Phase

| Outdoor Unit | With This Coil | | | | | | | |
|------------------------|----------------|-----------------|------|----------------------|----------------------|------|----------------|-----------------------------|
| Model Number FT3BA- | Coil C3BA- | Cooling Btuh | SEER | Heating Btuh @ 47 | Heating Btuh @ 17 | HSPF | Nominal CFM | Required Orifice Size |
| 018KA | 024C/U-A (1) | 18,000 | 10.0 | 17,400 | 9,000 | 6.8 | 675 | .053 (2) |
| 024KA | 024C/U-A (1) | 23,000 | 10.0 | 22,200 | 12,000 | 7.0 | 900 | .060 (3) |
| 030KA | 036C/U-A (1) | 30,000 | 10.0 | 29,600 | 16,000 | 7.2 | 1125 | .067 (3) |
| 030KA | 030C/U-B | 29,600 | 10.0 | 29,200 | 15,800 | 7.2 | 1125 | .067 (2) |
| 036C/KA | 036C/U-A (1) | 34,200 | 10.0 | 33,600 | 17,400 | 7.2 | 1200 | .071 <i>(</i> 2 <i>)</i> |
| 036C/KA | 036C/U-B (1) | 34,600 | 10.0 | 34,000 | 17,600 | 7.2 | 1350 | .071 <i>(</i> 2 <i>)</i> |
| 042KA | 042C/U-B | 40,000 | 10.0 | 39,000 | 22,800 | 7.2 | 1450 | .077 (2) |
| 048C/KA | 048C/U-B (1) | 46,000 | 10.0 | 46,500 | 26,000 | 7.2 | 1550 | .082 (2) |
| 048C/KA | 048C/U-C | 46,500 | 10.0 | 46,500 | 26,000 | 7.2 | 1600 | .082 (2) |
| 060C/KA | 060C/U-C (1) | 56,500 | 10.0 | 57,000 | 35,000 | 7.2 | 1850 | .093 (3) |

| Outdoor Unit | With This Air Handler | | | | | | | |
|------------------------|--------------------------|-----------------|------|----------------------|----------------------|------|----------------|-----------------------------|
| Model Number FT3BA- | Air Handler B3B(M/V)- | Cooling Btuh | SEER | Heating Btuh @ 47 | Heating Btuh @ 17 | HSPF | Nominal CFM | Required Orifice Size |
| 018KA | 024A/KA | 18,000 | 10.0 | 17,400 | 9,000 | 6.8 | 675 | .053 (2) |
| 024KA | 024A/KA | 23,000 | 10.0 | 22,200 | 12,000 | 7.0 | 900 | .060 (3) |
| 030KA | 030A/KA | 30,000 | 10.0 | 29,600 | 16,000 | 7.2 | 1125 | .067 (2) |
| 030KA | 030K-B | 30,000 | 10.0 | 29,600 | 16,000 | 7.2 | 1125 | .067 (2) |
| 036KA | 030A/KA | 34,200 | 10.0 | 33,600 | 17,400 | 7.2 | 1200 | .071 (2) |
| 036C/KA | 036K-B | 34,600 | 10.0 | 34,000 | 17,600 | 7.2 | 1350 | .071 <i>(</i> 2 <i>)</i> |
| 042KA | 042K-B | 40,000 | 10.0 | 39,000 | 22,800 | 7.2 | 1450 | .077 (2) |
| 048C/KA | 048A/K-B | 46,000 | 10.0 | 46,500 | 26,000 | 7.2 | 1600 | .082 (2) |
| 060C/KA | 060K-C | 56,500 | 10.0 | 57,000 | 35,000 | 7.2 | 1850 | .093 (3) |

⁽¹⁾ Also available as C3BH Horizontal Case Coil

See the current ARI Directory for certified combinations and ratings.

ACCESSORIES - Condensing Unit

Start Assist Kit - 912933

Provides additional starting torque for the compressor motor when operating with low line voltage or high operating temperatures.

Thermostat

Two thermostats are available. Both are offered for twostage heat and one-stage cool application.

Low Pressure Control Kit - 913551





Low Ambient Control Kit - 913549

Snow Stand

Plastic-coated, molded wire stand which elevates units 7-1/4" above ground level.

913144 - (018 through 042) Shipped six (6) per box.

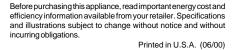
913145 - (048 through 060) Shipped six (6) per box.

Outdoor Thermostat - 913852

Two stage logic provides ability to lock out electric strips down to balance point and bring on in stages.

Westinghouse products are manufactured and distributed by NORDYNE.









⁽²⁾ Field supplied

⁽³⁾ Installed