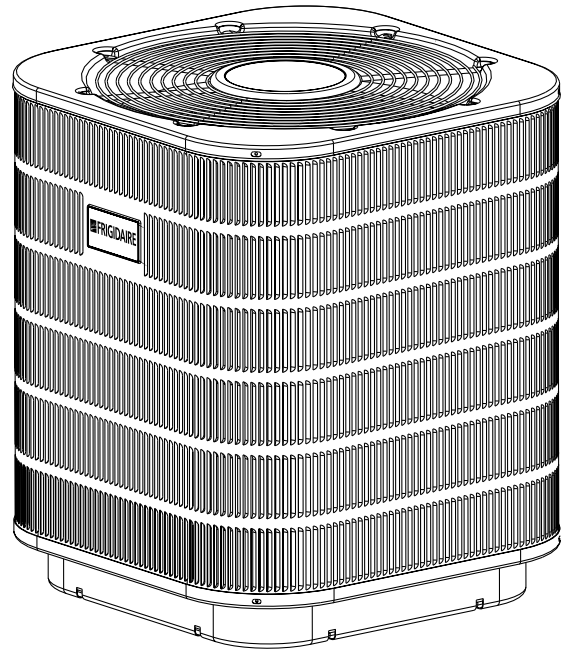


## FT3BA-(-)KA Series High Efficiency Heat Pumps 10 SEER 1-1/2 – 5 Ton Capacity

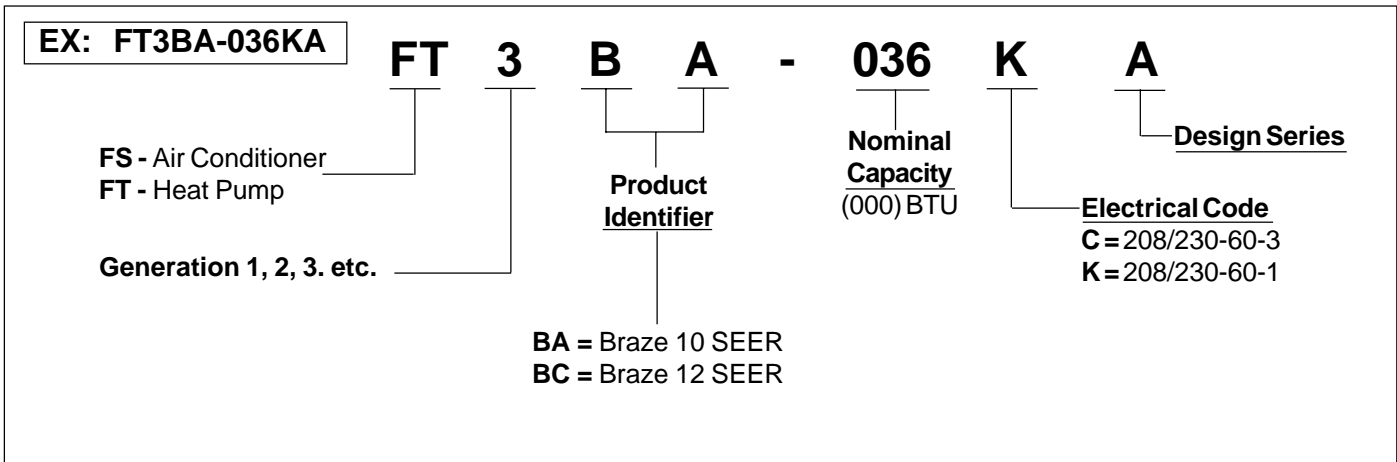
The FT3BA Series of heat pumps offers exceptional performance from a small, compact package. The heat pump, when combined with our engineered coils or air handlers, offers a full line of quality, split system heating and cooling equipment. Units are ideally sized for slab or rooftop mounting in single, 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** – The best in the industry and has proven to be a major benefit to the consumer.



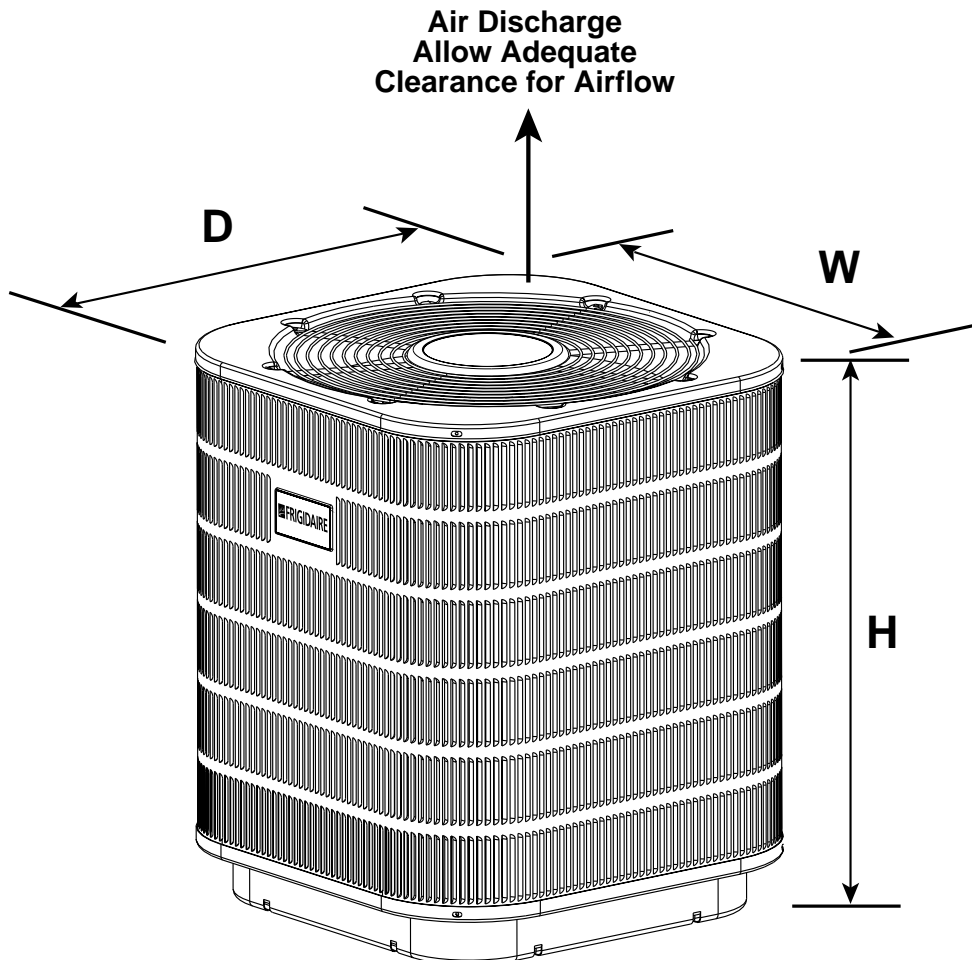
## MODEL IDENTIFICATION CODES



## DIMENSIONS

### HEAT PUMP OUTDOOR SECTION

FT3BA-	018K-A	024K-A	030K-A	036K-A	042K-A	048K-A	060K-A
H	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 Data	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	208/230-60-1	
	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 Data	Coil	Area	8.2	8.2	9.9	13.2	13.2	17.7	25.3
		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 Motor	Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
		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 Blade	Dia.-#Blades	18 in.-3	18 in.-3	18 in.-3	18 in.-3	18 in.-3	24 in.-3	24 in.-3
		SCFM	2100	2100	2500	2500	2800	4000	4000
	Compressor Data*	RLA	8.6	9.8	13.7	14.8	17.9	21.8	25.0
		LRA	49	56	75	96	103	131	150
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8"O.D.)	0-24 ft.	5/8" (3)	5/8" (3)	3/4"	3/4"	7/8"	7/8"	7/8"	
	25-39 ft.	5/8" (3)	3/4"	3/4"	3/4"	7/8"	7/8"	1-1/8"(5)	
	40-75 ft.	3/4"	3/4"	3/4"	7/8" (4)	7/8"	7/8"	1-1/8"(5)	
Refrigerant Charge (Outdoor unit, Indoor Unit, 15' Line Set)	R-22 Ounces	69	70	79	95	103	134	198	
Weight Approximate (lbs.)		118	120	130	145	148	174	231	
	Ship	130	132	142	157	150	186	243	

## 10 SEER — High Efficiency — Three Phase

Model No. FT3BA-		036CA	048CA	060CA	
Electrical Data	Volts-Cycles-Phase (1)	208/230-60-3	208/230-60-3	208/230-60-3	
	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 Data	Coil	Area	13.2	17.7	25.3
		Rows-FPI	1-18	1-18	1-18
		Tube Dia.	3/8 O.D.	3/8 O.D.	3/8 O.D.
	Fan Motor	Type	PSC	PSC	PSC
		Amps	1.1	1.5	1.5
		Watts-HP	210-1/8	300-1/4	300-1/4
	Fan Blade	Dia.-#Blades	18 in.-3	24 in.-3	24 in.-3
		SCFM	2500	4000	4000
	Compressor Data*	RLA	10.2	12.8	15.4
		LRA	75	91	124
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8"O.D.)	0-24 ft.	3/4"	7/8"	7/8"	
	25-39 ft.	3/4"	7/8"	1-1/8"(5)	
	40-75 ft.	7/8" (4)	7/8"	1-1/8"(5)	
Refrigerant Charge (Outdoor unit, Indoor Unit, 15' Line Set)	R-22 Ounces	95	134	198	
Weight Approximate (lbs.)	Net	151	174	200	
	Ship	163	186	212	

COPPER WIRE SIZE — AWG (1% Voltage Drop)				
Supply Wire Length-Feet				Supply Circuit Ampacity
200	150	100	50	
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.

\* 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.

# 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 (2)
036C/KA	036C/U-B (1)	34,600	10.0	34,000	17,600	7.2	1350	.071 (2)
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 (2)
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

(2) Field supplied

(3) Installed

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 two-stage 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.

