

**FT4BF-KA Series
R-410A Extra High
Efficiency Heat Pump
16 SEER Residential System
2 - 5 Ton Capacity**

Frigidaire now offers the choice of a heat pump that uses a more efficient and environmentally friendly refrigerant designated R-410A. The FT4BF-KA Series of Frigidaire heat pumps offers exceptional performance as well as environmental protection. These models, when matched with our variable speed air handlers or variable speed equipped gas furnaces, offer a line of high quality heat pump systems rated up to 16 SEER and 9.0 HSPF.

FEATURES and BENEFITS

• **Warranty**

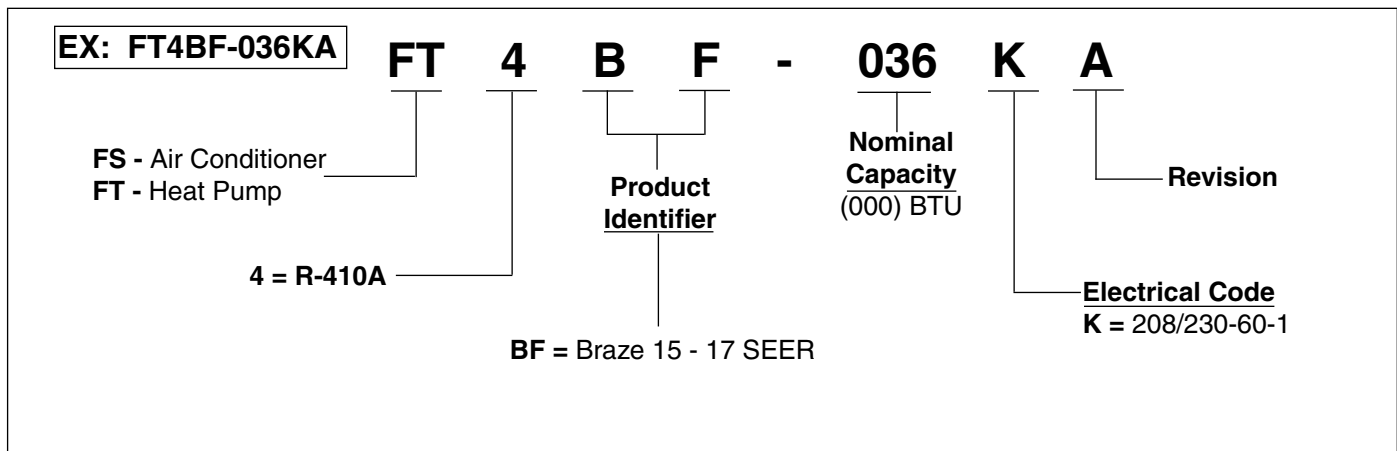
- This product offers a 10-year all-parts warranty.
- This product offers a 10 year Quality Pledge to replace the entire unit, if the unit's major component (heat exchanger or compressor) fails within the first 10 years of operation, to the original owner. All split system products must be installed with a matched indoor air handler or indoor coil to qualify.
- Consumer product registration required for both 10 year All Parts Warranty and Quality Pledge within a limited period of time after the installation. See current warranty document or visit our consumer web site listed on the back of this document for warranty details.

- **R-410A Refrigerant** – Earth friendly non-ozone depleting refrigerant.
- **Comfort Alert™ Module** – Detects system and electrical problem conditions. A diagnostics key directs the service technician to the root cause of a problem.
- **Copeland Scroll UltraTech™ Compressor** – The Ultra Tech Compressor operates with 2 stages of heating and cooling capacities to provide superior comfort and efficiency. Copeland's proven and simple design equates to years of comfort and reliability for the homeowner with virtually silent operation.
- **Durable, Attractive Cabinet** – Designed using galvanized steel with a polyester urethane finish. The 950 hour salt spray finish is 1.5 mil thick and resists corrosion 50% better than comparable units.
- **Composite Base Pan** – Absorbs sound and is corrosion resistant. Composite is also stronger and lighter than steel.
- **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.



- **Demand Defrost** – Provides additional energy savings in heating by defrosting only when necessary
- **Full Port Service Valves** – Full port brass ball valves provide low pressure drop and ease of service. The valves are actuated by 1/4 turn full open to full close.
- **Louvered Condenser Guard** – Durable metal guard protects the coil from yard hazards and extreme weather.
- **Removable Top Grille Assembly** – Allows ease of service from the top without disconnecting fan motor leads.
- **Compressor Sound Blanket** – Engineered to significantly reduce unwanted compressor noise.
- **Swept-Wing Fan Blade** – Designed to significantly reduce unwanted noise.
- **Low Pressure Switch** – Loss of charge protection ensures long compressor life. Auto-reset feature prevents nuisance service visits.
- **High Pressure Switch** – Protects against abnormally high system pressures. Auto-reset feature prevents nuisance service visits.
- **Liquid Line Filter Drier** – Included with unit, field installed.
- **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.
- **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** – 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.

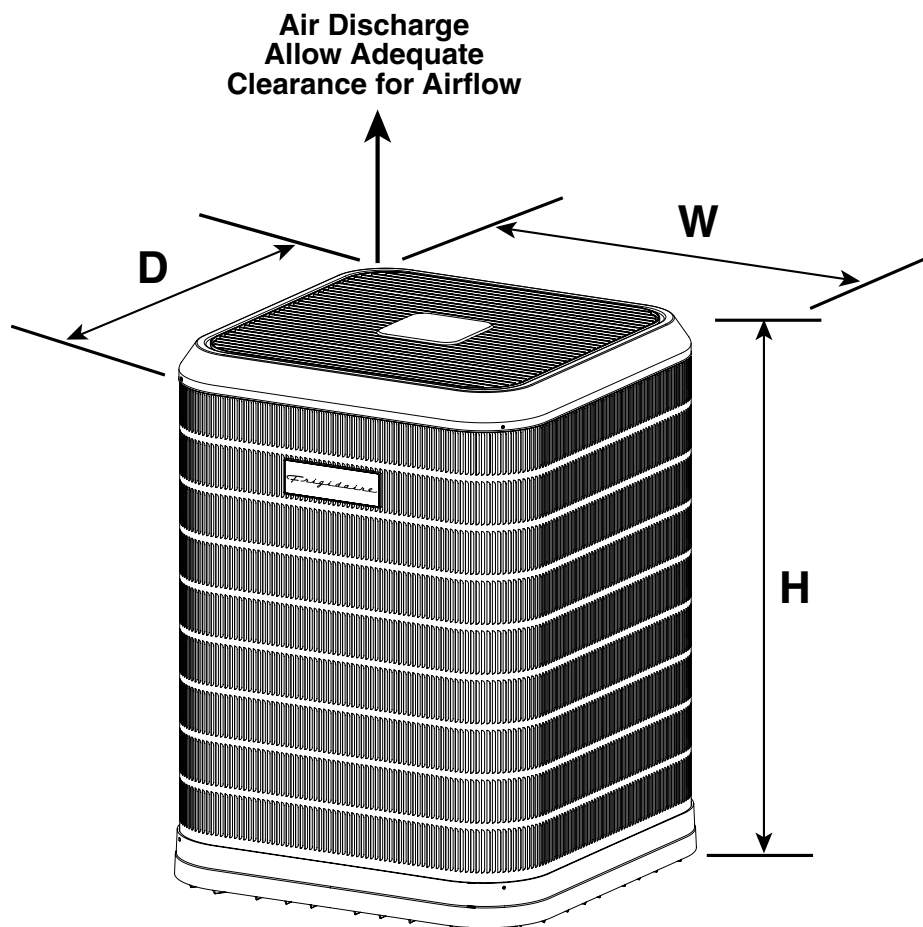
MODEL IDENTIFICATION CODES



DIMENSIONS

HEAT PUMP OUTDOOR SECTION

FT4BF	024KA	036KA	048KA	060KA
H	45	45	45	45
W	31 1/4	31 1/4	31 1/4	31 1/4
D	31 1/4	31 1/4	31 1/4	31 1/4



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

16 SEER — R-410A Extra High Efficiency — Single Phase

Model Number FT4BF		024KA	036KA	048KA	060KA	
Electrical Data	Volts-Cycles-Phase (1)		208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
	Total Amps		13.2	17.9	24.0	25.9
	Delay Fuse Max. (2)		25	35	50	50
	Min. Circuit Ampacity		15.8	22.1	29.3	31.7
Condenser Data	Coil	Area	25.4	25.4	25.4	25.4
		Rows-FPI	1-20	2-18	2-18	2-18
		Tube Dia	3/8" O.D.	3/8" O.D.	3/8" O.D.	3/8" O.D.
	Fan Motor	Type	BLDC	PSC	BLDC	BLDC
		Speeds	1	2	2	2
		Amps	2.9	1.3	2.9	2.9
		Lo/Hi Spd Watts	110	187/250	150/200	150/200
		HP	1/2	1/4	1/3	1/3
	Fan Blade	Dia-# Blades	24"- 2	24"- 2	24"- 2	24"- 2
		SCFM	3600	4000	4000	4000
	Compressor Data	RLA	10.3	16.6	21.1	23.0
		LRA	52	82	96	118
Refrigerant suction line O.D.(all length of liquid line are 3/8" O.D.)		0-24 ft.	3/4"	7/8" (4)	7/8"	7/8"
		25-39 ft.	7/8"	1-1/8" (3)	1-1/8" (3)	1-1/8" (3)
		40-75 ft.	7/8"	1-1/8" (3)	1-1/8" (3)	1-1/8" (3)
Refrigerant charge (R-410A) in ounces for outdoor unit, indoor unit and 15' lineset.		185	272	272	272	
Weight		Net	253	277	277	301
Approximate (lbs.)		Ship	265	289	289	313

- (1) Operating voltage range: 187V minimum - 253 V maximum
- (2) HACR type circuit breakers may be used
- (3) Requires 1-1/8 to 7/8" reducer from unit to lineset.
- (4) Use of a 3/4" lineset will result in approximately 2% loss in capacity.

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.

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.

SYSTEM HEATING AND COOLING CAPACITIES

16 SEER — Extra High Efficiency — Single Phase

With this Coil										
Outdoor Unit Number FT4BF	Indoor Unit Number C6BA/H-	Cooling				Indoor CFM		Heating		
		Low Speed Capacity (Btu/h)	High Speed Capacity (Btu/h)	SEER	EER	Low Speed SCFM	High Speed SCFM	Low Speed Capacity (Btu/h)	High Speed Capacity (Btu/h)	HSPF
024KA	X26(C,U)-B+MB6VM	18000	24000	16	13.0	640	850	18000	24000	9.0
036KA	X36(C,U)-B+MB6VM	25000	36000	16	12.5	900	1250	24000	36000	9.0
036KA	X36(C,U)-C+MB6VM	25000	36000	16	12.5	900	1250	24000	36000	9.0
048KA	X48(C,U)-C+MB6VM	34000	48000	16	12.5	1140	1700	31000	46000	9.0
048KA	X48(C,U)-D+MB6VM	34000	48000	16	12.5	1140	1700	31000	46000	9.0
060KA	X60(C,U)-C+MB6VM	41000	57000	16	12.5	1200	1800	37000	52500	8.5
060KA	X60(C,U)-D+MB6VM	41000	57000	16	12.5	1200	1800	37000	52500	8.5

With this Air Handler										
Outdoor Unit Number FT4BF	Indoor Unit Number B4VM-	Cooling				Indoor CFM		Heating		
		Low Speed Capacity (Btu/h)	High Speed Capacity (Btu/h)	SEER	EER	Low Speed SCFM	High Speed SCFM	Low Speed Capacity (Btu/h)	High Speed Capacity (Btu/h)	HSPF
024KA	X24KB	18000	24000	16	13.0	640	850	18000	24000	9.0
036KA	X36KB	25000	36000	16	12.5	900	1250	24000	36000	9.0
048KA	X48KC	34000	48000	16	12.5	1140	1700	31000	46000	9.0
060KA	X60KC	41000	57000	16	12.5	1200	1800	37000	52500	8.5

Air handlers and coils used in tables are designed and manufactured by NORDYNE.

See current AHRI Directory for certified combinations and ratings.
www.ahridirectory.org

COMFORT ALERT™ DIAGNOSTIC MODULE

Green POWER LED Indicates Voltage Is Present At The Power Connection Of The Module

Yellow ALERT LED Flashes To Indicate Fault Code

Red TRIP LED Indicates If Compressor Is Tripped Or Has No Power

Pass Through Ports Detect Run/Start Current; Spade Connectors Detect Tstat Demand and Pilot Voltage; Microprocessor Monitors Behavior To Determine Faults

Diagnostics Key Directs Service Tech To The Root Cause Of A Problem

