

#### FT4BF Series

# R-410A Ultra High Efficiency Heat Pump

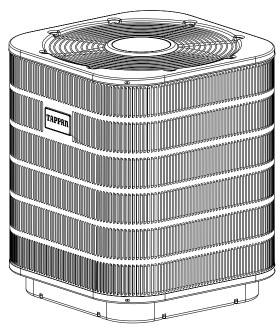
# 15+ SEER Residential System

## 2 - 5 Ton Capacity

Tappan now offers the choice of an air conditioner that uses a more efficient and environmentally friendly refrigerant designated PrimeGuard 410™ (R-410A). The FT4BF Series of Tappan 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 15+ SEER and 8.5 HSPF.

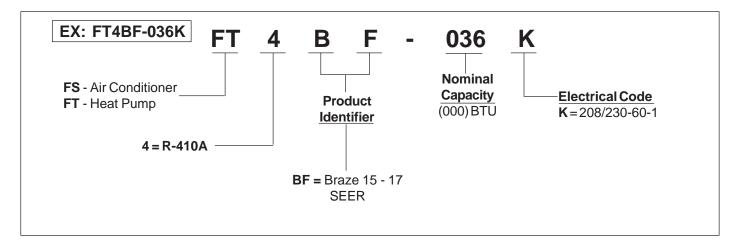
#### FEATURES and BENEFITS

- PrimeGuard 410<sup>™</sup> Refrigerant (R-410A) Earth friendly non-ozone depleting refrigerant.
- PrimeTell<sup>™</sup> Module Detects system and electrical problem conditions. A diagnostics key directs the service technician to the root cause of a problem.
- "Ultra Tech" Copeland Scroll™ 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.
- 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 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.
- 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.
- Discharge Temperature Limit Protects the compressor from abnormally high discharge temperatures. 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.
- 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 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** 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, 5 Year Quality Pledge and 10 Year Parts Coverage on Compressor— The best in the industry and has proven to be a major benefit to the consumer.

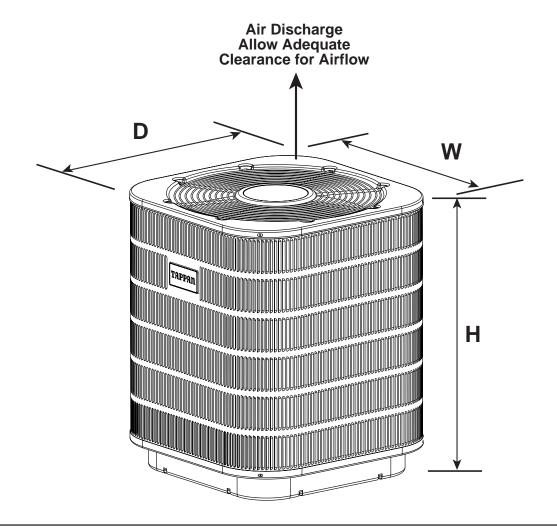
## **MODEL IDENTIFICATION CODES**



### **DIMENSIONS**

## **HEAT PUMP OUTDOOR SECTION**

FT4BF	024	036	048	060
Н	38 1/2	42 1/2	42 1/2	42 1/2
W	30 1/2	30 1/2	30 1/2	30 1/2
D	30 1/2	30 1/2	30 1/2	30 1/2



#### PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

### 15+ SEER — R-410A Ultra High Efficiency — Single Phase

Model Number FT4BF			024	036	048	060
	Volts-Cycles-Phase (1)		208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
Electrical Data	Total Amps	11.3	17.9	22.4	26.9	
Liectifical Data	Delay Fuse Max. (2)		20	35	45	50
	Min. Circuit Ampacity		13.9	22.1	27.7	33.3
		Area	22.8	25.4	25.4	25.4
	Coil	Rows-FPI	2-16	2-18	2-18	2-18
		Tube Dia	3/8" O.D.	3/8" O.D.	3/8" O.D.	3/8" O.D.
		Туре	PSC	PSC	PSC	PSC
	Fan Motor	Speeds	1	2	2	2
Condenser Data		Amps	1.0	1.3	1.3	1.3
Condenser Data		Lo/Hi Spd Watts	200	187/250	187/250	187/250
		HP	1/4	1/4	1/4	1/4
	Fan Blade	Dia-# Blades	24"- 2	24"- 2	24"- 2	24"- 2
	Fall blade	SCFM	3800 4000		4000	4000
	Compressor Data	RLA	10.3	16.6	21.1	25.6
	Compresser Data	LRA	52	82	96	99
Defrigerent quetien li	Refrigerant suction line O.D.(all length of		3/4"	7/8" <i>(4)</i>	7/8"	7/8"
liquid line are 3/8" O		25-39 ft.	7/8"	1-1/8" <i>(3)</i>	1-1/8" <i>(3)</i>	1-1/8" <i>(3)</i>
40.		40-75 ft.	7/8"	1-1/8" <i>(3)</i>	1-1/8" <i>(3)</i>	1-1/8" <i>(3)</i>
Refrigerant charge (R-410A) in ounces for outdoor unit, indoor unit and 15' lineset.		208	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.

# Variable Speed Blower Kit (VSB)

904075 - Furnace "B" cab. & "C" cab.

#### Transformer Upgrade Kit - 904077

Required for 2-stage heat pumps/gas furnace and fossil fuel kit.

#### **Snow Stand**

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

913145 - Shipped six (6) per box.

COPPER WIRE SIZE — AWG									
(1% Voltage Drop)									
Supply Wire Length-Feet Supply Circuit									
200	150	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  $60^{\circ}$  type copper conductors.

#### SYSTEM HEATING AND COOLING CAPACITIES

#### 15+ SEER — Ultra High Efficiency — Single Phase

With this Coil									
		Cooling		Indoor CFM		Heating			
		Low Speed High Speed		Low	High	Low Speed	High Speed		
Outdoor Unit	Indoor Unit	Capacity	Capacity		Speed	Speed	Capacity	Capacity	
Number FT4BF	Number C4BA-	(Btu/h)	(Btu/h)	SEER	SCFM	SCFM	(Btu/h)	(Btu/h)	HSPF
024K	X24(C,U)-B+VSB	18000	24000	15.2	640	840	18000	25000	8.2
036K	X36(C,U)-B+VSB	24000	35000	15.0	800	1155	25000	37000	8.0
048K	X48(C,U)-C+VSB	33000	46000	15.0	1100	1595	32000	47000	8.5
060K	X60(C,U)-C+VSB	39000	56000	14.0	1170	1700	38000	56000	8.4

With this Air Handler									
		Cooling			Indoor CFM		Heating		
		Low Speed High Speed			Low	High	Low Speed	High Speed	
Outdoor Unit	Indoor Unit	Capacity	Capacity		Speed	Speed	Capacity	Capacity	
Number FT4BF	Number B4VM	(Btu/h)	(Btu/h)	SEER	SCFM	SCFM	(Btu/h)	(Btu/h)	HSPF
024K	X24KB	18000	24000	15.2	640	840	18000	25000	8.2
036K	X36KC	24000	35000	15.0	790	1140	25000	37000	8.0
048K	X48KC	33000	46000	15.0	1070	1555	32000	47000	8.5
060K	X60KC	39000	56000	14.0	1150	1665	38000	56000	8.4

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

## COMFORT ALERT™ DIAGNOSTIC MODULE



512B-0904 (Replaces 512B-0803)