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## TECHNICAL SPECIFICATIONS

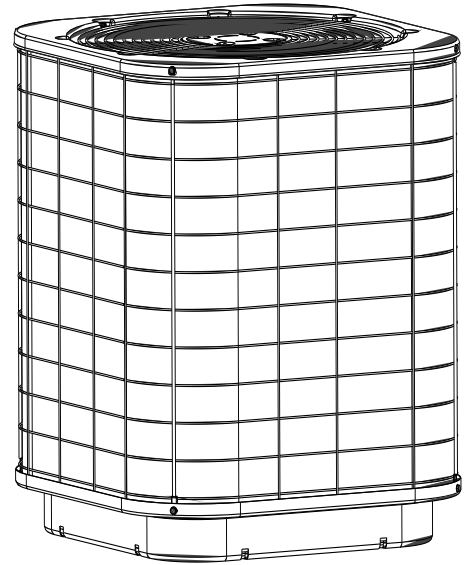
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### T3BA Series High Efficiency Heat Pumps 10 SEER 1-1/2 – 5 Ton Capacity

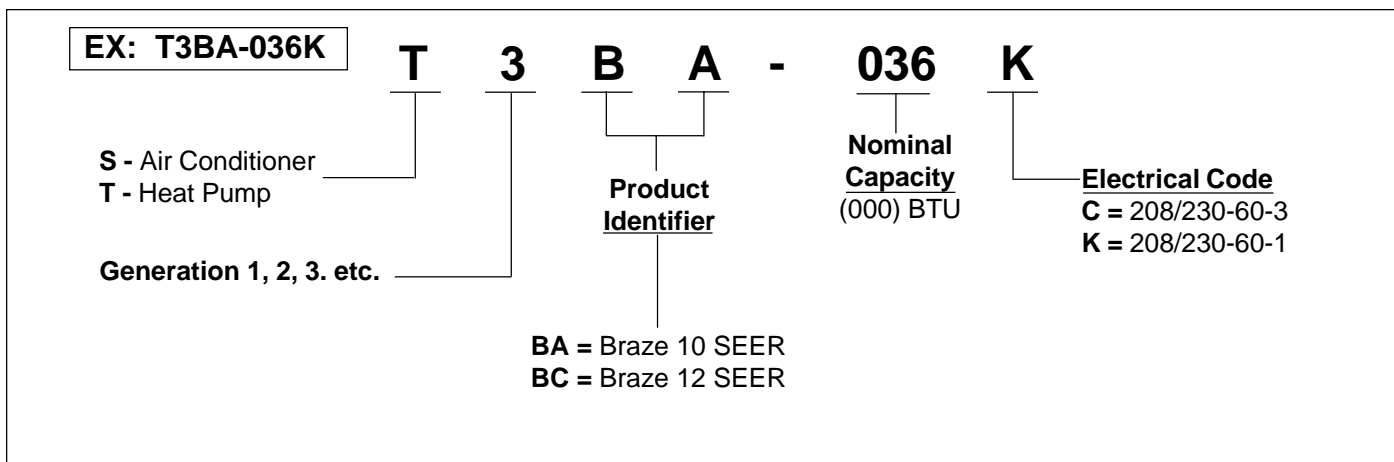
The T3BA Series of heat pumps offers exceptional performance from a small, compact package. The heat pump, when combined with our engineered coils or air handlers, offers a full line of quality, split system heating and cooling equipment. Units are ideally sized for slab or rooftop mounting in single, 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.
- **Plastic Coated Coil Guard and Mesh Hail Guard** – Guards that will never rust protect the unit coil from being damaged by balls, lawnmowers, hail, etc.
- **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.
- **6 Year Limited All Parts Warranty** – The best in the industry and has proven to be a major benefit to the consumer.

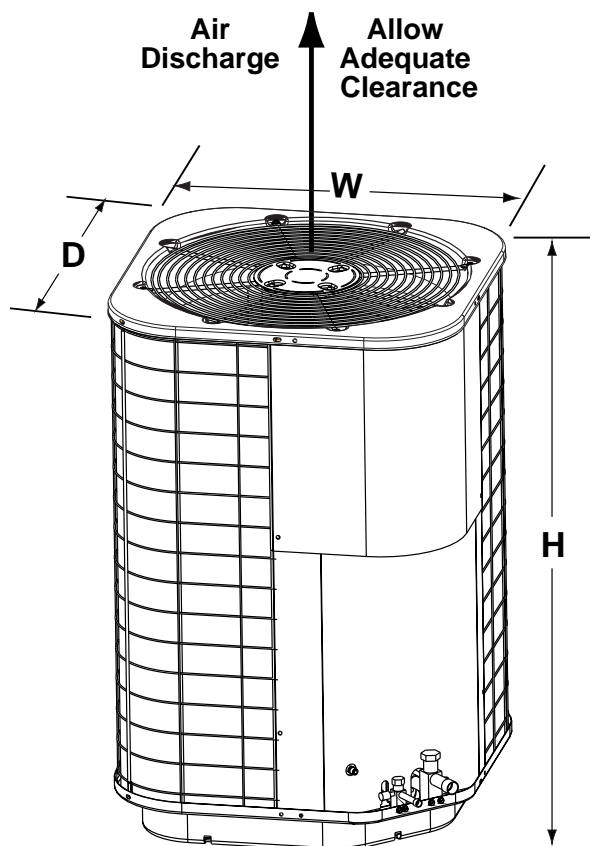


## MODEL IDENTIFICATION CODES



## DIMENSIONS HEAT PUMP OUTDOOR SECTION

T3BA-	018	024	030	036	042	048	060
H	22-1/2	26-1/2	34-1/2	26-1/2	26-1/2	30-1/2	42-1/2
W	22-1/2	22-1/2	22-1/2	30-1/2	30-1/2	30-1/2	30-1/2
D	22-1/2	22-1/2	22-1/2	30-1/2	30-1/2	30-1/2	30-1/2



# PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

## 10 SEER — High Efficiency — Single Phase

Model No. T3BA-		018	024	030	036	042	048	060	
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	14.9	15.8	18.4	19.7	26.5	
	Delay Fuse Max. (2)	20	20	30	30	40	40	50	
	Min. Circuit Ampacity	11.4	12.9	18.4	19.4	22.7	24.3	32.7	
Component Data	Coil	Area	8.3	10.0	13.3	15.3	15.3	17.9	25.5
		Rows-FPI	1-18	1-18	1-18	1-16	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	0.67	0.67	1.25	1.4	1.4	1.5	1.5
		Watts-HP	145-1/10	145-1/10	210-1/8	245-1/4	245-1/4	300-1/4	300-1/4
	Fan Blade	Dia.-#Blades	18 in.-3	18 in.-3	18 in.-3	24 in.-2	24 in.-2	24 in.-3	24 in.-3
		SCFM	2100	2100	2500	3300	3300	4000	4000
	Compressor Data*	RLA	8.6	9.8	13.7	14.4	17.0	18.2	25.0
		LRA	49	56	75	82	105	102	170
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"	3/4"	7/8"	7/8"	
	25-39 ft.	5/8" (3)	3/4"	3/4"	3/4"	7/8" (4)	7/8"	1-1/8" (5)	
	40-75 ft.	3/4"	3/4"	3/4"	7/8" (4)	7/8" (4)	7/8"	1-1/8" (5)	
Refrigerant Charge (Outdoor unit, Indoor Unit R-22 Ounces 15' Line Set)		68	88	106	118	120	140	185	
Weight Approximate (lbs.)	Net	150	152	158	164	166	176	200	
	Ship	162	164	170	176	178	188	212	

## 10 SEER — High Efficiency — Three Phase

Model No. T3BA-		036	048	060	
Electrical Data	Volts-Cycles-Phase (1)	208/230-60-3	208/230-60-3	208/230-60-3	
	Total Amps	10.4	14.1	16.9	
	Delay Fuse Max. (2)	20	30	35	
	Min. Circuit Ampacity	12.6	17.3	20.8	
Component Data	Coil	Area	11.7	15.3	20.4
		Rows-FPI	1-16	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	1.4	1.5	1.5
		Watts-HP	245-1/4	300-1/4	300-1/4
	Fan Blade	Dia.-#Blades	24 in.-2	24 in.-3	24 in.-3
		SCFM	3300	4000	4000
	Compressor Data*	RLA	9.0	12.6	15.4
		LRA	70	91	124
Refrigerant Suction Line-Length/O.D. (Liq. Line All Lengths - 3/8"O.D.)	0-24 ft.	3/4"	7/8" (4)	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 R-22 Ounces 15' Line Set)		118	140	185	
Weight Approximate (lbs.)	Net	164	176	200	
	Ship	176	188	212	

COPPER WIRE SIZE — AWG (1% Voltage Drop)				
Supply Wire Length-Feet				Supply Circuit
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.

\* 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	Coil	Cooling Btuh	SEER	Heating Btuh @ 47	Heating Btuh @ 17	HSPF	Nominal CFM	Required Orifice Size
T3BA-018K	C3BA-024C/U-A (3)	18,000	10	17,200	9,000	7.0	650	.051 (1)
T3BA-024K	C3BA-024C/U-A (3)	22,800	10	22,200	11,200	6.8	800	.060
T3BA-030K	C3BA-030C/U-B	30,000	10	29,000	15,200	7.0	900	.069 (2)
T3BA-030K	C3BA-036C/U-A (3)	30,000	10	29,000	15,200	7.0	900	.069 (2)
T3BA-036K	C3BA-036C/U-B (3)	34,600	10	34,200	18,600	7.2	1200	.071 (2)
T3BA-036K	C3BA-036C/U-A (3)	34,200	10	33,800	18,200	7.2	1200	.071 (2)
T3BA-042K	C3BA-042C/U-B	40,000	10	38,000	20,500	7.2	1350	.080 (2)
T3BA-048K	C3BA-048C/U-B (3)	45,000	10	45,000	25,000	7.2	1400	.082 (2)
T3BA-060K	C3BA-060C/U-C (3)	56,500	10	56,500	35,000	7.4	1600	.093

Outdoor Unit	With This Air Handler							
Model Number	Air Handler	Cooling Btuh	SEER	Heating Btuh @ 47	Heating Btuh @ 17	HSPF	Nominal CFM	Required Orifice Size
T3BA-018K	B3B(M,V)-024-A	18,000	10	17,200	9,000	7.0	650	.051 (1)
T3BA-024K	B3B(M,V)-024-A	22,800	10	22,200	11,200	6.8	800	.060
T3BA-030K	B3B(M,V)-030-A	30,000	10	28,600	15,000	7.0	900	.069 (2)
T3BA-030K	B3B(M,V)-036-B	30,000	10	28,600	15,000	7.0	900	.069 (2)
T3BA-036K	B3B(M,V)-036-A	34,200	10	33,800	18,600	7.2	1200	.071 (2)
T3BA-036K	B3B(M,V)-036-B	34,600	10	34,200	18,600	7.2	1200	.071 (2)
T3BA-042K	B3B(M,V)-042-B	40,000	10	38,000	20,500	7.2	1350	.080 (2)
T3BA-048K	B3B(M,V)-048-B	45,000	10	44,500	25,500	7.4	1500	.082 (2)
T3BA-060K	B3B(M,V)-060-C	56,500	10	56,500	34,500	7.4	1600	.093

- (1) Supplied with indoor section
- (2) Field supplied
- (3) Also available as C3BH Horizontal Case Coil

## 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.

### Snow Stand

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

**913144** - (018 through 030) Shipped six (6) per box.

**913145** - (036 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.

