# TECHNICAL SPECIFICATIONS

# **NT5BD Series**

# High Efficiency Heat Pumps 13+ SEER Residential System 1.5 - 5 Ton Capacity

The NT5BD Series of heat pumps offers exceptional performance. The heat pump, when combined with our engineered coils or air handlers, offers a line of quality, split system heating and cooling equipment. The NT5BD is rated at 13 SEER and 8.0 HSPF when matched with our air handlers. When matched with our variable speed air handler, or our variable speed blower kits, the NT5BD is rated up to 14 SEER and 8.5 HSPF. Units are ideally sized for slab or rooftop mounting.



# **WARRANTY**

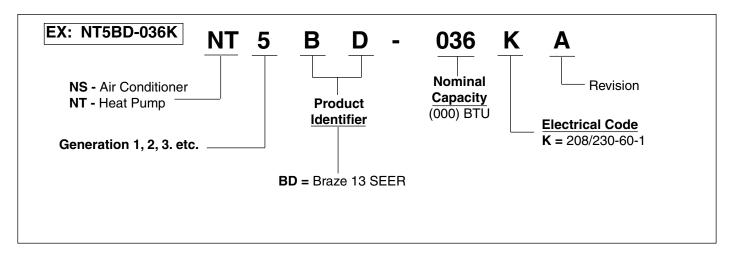
- This product offers a 10-year all-parts warranty.
- This product offers a 1 Year Quality Pledge to replace the unit if the compressor fails in the first year of operation, to the original owner. All split system products must be installed with a matched indoor air handler or indoor coil.
- Consumer product registration required for 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.

# FEATURES and BENEFITS

- **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 Service Valves: These brass valves are easily accessible and simplify servicing of the refrigeration system.
- **Complete Metal Wrapper:** Protects the units coil from being damaged.
- **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: 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.

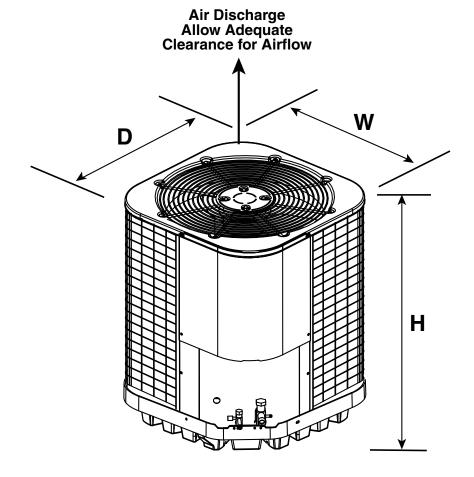
- 2 ------

# **MODEL IDENTIFICATION CODES**



# DIMENSIONS HEAT PUMP OUTDOOR SECTION

NT5BD	018K	024K	030K	036K	042K	048K	060K
Н	26-1/2	26-1/2	38-1/2	42-1/2	38-1/2	42-1/2	42-1/2
W	30-1/2	30-1/2	30-1/2	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	30-1/2	30-1/2	30-1/2



### PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS 13+ SEER — Ultra High Efficiency — Single Phase

Model I	Number N <sup>.</sup>	T5BD-	018K	024K	030K	036K	042K	048K	060K
	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		9.9	11.8	13.2	15.7	17.5	19.7	26.4
	Delay Fuse I	Max. <i>(2)</i>	20	25	25	30	35	40	50
	Min. Circuit A	Ampacity	12.1	14.5	16.2	19.4	21.6	24.3	32.6
		Area	15.17	15.17	22.88	25.42	22.88	25.42	25.42
	Coil	Rows-FPI	1 - 18	1 - 18	1 - 20	1 - 20	2 - 16	2 - 16	2 - 16
		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.
		Туре	PSC	PSC	PSC	PSC	PSC	PSC	PSC
	Fan Motor	Amps	0.91	0.91	1.00	1.00	1.00	1.4	1.4
		HP	1/8	1/8	1/4	1/4	1/4	1/4	1/4
	Fan Blade	Dia-# Blades	24" - 3	24" - 3	24" - 3	24" - 3	24" - 3	24" - 3	24" - 3
Component Data		SCFM	2370	2370	3000	3000	3000	4000	4000
	Compressor	RLA	10	12	14	16.4	18.4	20.4	28
	Data	LRA	41	54	67	83	95	109	148
Refrigerant s	suction line-	0-24 ft.	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
		25-39 ft.	3/4"	3/4"	3/4"	7/8" <i>(3)</i>	7/8"	7/8"	1-1/8" (4)
Lengths - 3/8	3″ O.D.)	40-75 ft.	3/4"	3/4"	7/8" <i>(3)</i>	7/8" <i>(3)</i>	7/8"	1-1/8" <i>(4)</i>	1-1/8" (4)
(Outdoor uni									
Set)			93	96	144	155	248	248	268
Weight		Net	166	171	190	204	252	276	285
Approximate	e (lbs.)	Ship	175	180	200	215	265	290	300

(1) Operating Voltage Range: 198v min. - 253v max.

(2) HACR type circuit breakers may be used.

(3) Requires 7/8" to 3/4" reducer from line to unit.

(4) Requires 1 1/8" to 7/8" reducer from line to unit.

# **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.

#### **Snow Stand**

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

913145 - (Large Base Pan) Shipped six (6) per box.

#### Outdoor Thermostat - 913235

Two-stage logic provides ability to lock out electric strips down to balance point.

Time Delay Relay Kit (TDR) - 911758

	COPPER WIRE SIZE — AWG (1% Voltage Drop)										
Supp	y Wire	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  $60^\circ$  type copper conductors.

### SYSTEM COOLING CAPACITIES 13 SEER — High Efficiency — Single Phase

Outdoor Unit	Indoor TXV Coil + TDR	Cooling Capacity BTUH	SEER	EER	Heating Capacity BTUH @47 F	HSPF	SCFM
018K	C6B(A,H)-T24(C,U)-A + MB6BM	18000	13.0	12.9	17500	8	600
018K	C6B(A,H)-T24(C,U)-B + MB6BM	18000	13.0	12.9	17500	8	600
024K	C6B(A,H)-T24(C,U)-A + MB6BM	24000	13.0	12.2	22400	8	770
024K	C6B(A,H)-T24(C,U)-B + MB6BM	24000	13.0	12.2	22400	8	770
030K	C6B(A,H)-T30(C,U)-A + MB6BM	28000	13.0	11.7	28000	8	800
030K	C6B(A,H)-T30(C,U)-B + MB6BM	28000	13.0	11.7	28000	8	800
036K	C6B(A,H)-T36(C,U)-B + MB6BM	35000	13.0	12	35600	8	1150
036K	C6B(A,H)-T36(C,U)-C + MB6BM	35000	13.0	12	35600	8	1150
042K	C6B(A,H)-T42(C,U)-B + MB6BM	40000	13.0	12	40000	8	1350
042K	C6B(A,H)-T42(C,U)-C + MB6BM	40000	13.0	12	40000	8	1350
048K	C6B(A,H)-T48(C,U)-C + MB6BM	47500	13.0	12	46000	8	1625
048K	C6B(A,H)-T48(C,U)-D + MB6BM	47500	13.0	12	46000	8	1625
060K	C6B(A,H)-T60(C,U)-C + MB6EM	57000	13.0	11.6	56500	8	1840
060K	C6B(A,H)-T60(C,U)-D + MB6EM	57000	13.0	11.6	56500	8	1840

Outdoor Unit	Indoor TXV Coil + TDR	Cooling Capacity BTUH	SEER	EER	Heating Capacity BTUH @47 F	HSPF	SCFM
018K	C5B(A,H)-T24(U,C)-A	18,000	13.0	12.4	17,800	8.0	600
018K	C5B(A,H)-T25(U,C)-A	18,000	13.0	12.4	17,800	8.0	600
024K	C5B(A,H)-T25(U,C)-A	24,000	13.0	12.4	22,400	8.0	750
024K	C5B(A,H)-T25(U,C)-B	24,000	13.0	12.4	22,400	8.0	750
030K	C5B(A,H)-T30(U,C)-A	29,000	13.0	12.1	28,600	8.0	870
030K	C5B(A,H)-T30(U,C)-B	29,000	13.0	12.1	28,600	8.0	870
036K	C5B(A,H)-T36(U,C)-B	35,400	13.0	11.7	36,000	8.0	1,140
042K	C5B(A,H)-T42(U,C)-B	40,000	13.0	11.8	40,000	8.0	1,350
048K	C5B(A,H)-T49(U,C)-C	45,500	13.0	11.3	47,500	8.0	1,500
060K	C5B(A,H)-T60(U,C)-C+TDR+VSB-C	57,000	13.0	11.6	60,000	8.0	1,600

Outdoor Unit	Indoor TXV Air Handler B5B(M,V)-	Cooling Capacity BTUH	SEER	EER	Heating Capacity BTUH @47 F	HSPF	SCFM
018K	T24K-A	18,000	13.0	12.4	17,800	8.0	600
018K	T25K-A	18,000	13.0	12.4	17,800	8.0	600
024K	T25K-A	24,000	13.0	12.4	22,400	8.0	750
024K	T25K-B	24,000	13.0	12.4	22,400	8.0	750
030K	T30K-A	29,000	13.0	12.1	28,600	8.0	870
030K	T30K-B	29,000	13.0	12.1	28,600	8.0	870
036K	T36K-B	35,400	13.0	11.7	36,000	8.0	1,140
042K	T42K-B	40,000	13.0	11.8	40,000	8.0	1,350
048K	T49K-C	45,500	13.0	11.3	47,500	8.0	1,500
060K	T60K-C	57,000	13.0	11.6	60,000	8.0	1,600

(1) Field Supplied Piston

The ratings shown above are for the highest sales volume combination. Additional ratings, including mix-matches may be found in the current edition of the ARI Directory of Certified Unitary Equipment. Verification of ratings not printed in the current edition of the Directory may be obtained online at the ARI website (www.ari.org).

### SYSTEM COOLING CAPACITIES 14 SEER — High Efficiency — Single Phase

Outdoor Unit	Indoor TXV Coil	Cooling Capacity BTUH	SEER	EER	Heating Capacity BTUH @47 F	HSPF	SCFM
018K	C5B(A,H)-T24(U,C)-B+TDR+VSB-B	18,100	14.0	12.2	16300	8.5	720
024K	C5B(A,H)-T25(U,C)-B+TDR+VSB-B	24,200	14.0	12.4	22000	8.5	800
030K	C5B(A,H)-T30(U,C)-B+TDR+VSB-B	29,400	14.0	12.5	25800	8.5	860
036K	C5B(A,H)-T36(U,C)-B+TDR+VSB-B	35,800	14.0	12.4	35800	8.5	1,125
042K	C5B(A,H)-T42(U,C)-B+TDR+VSB-B	40,500	14.0	12.3	41500	8.5	1,375
048K	C5B(A,H)-T49(U,C)-C+TDR+VSB-C	46,000	14.0	12.4	46500	8.5	1,555

Outdoor Unit	Indoor TXV Air Handler B5VM-	Cooling Capacity BTUH	SEER	EER	Heating Capacity BTUH @47 F	HSPF	SCFM
018K	T24K-B	18,100	14.0	12.2	16300	8.5	720
024K	T25K-B	24,200	14.0	12.4	22000	8.5	800
030K	Т30К-В	29,400	14.0	12.5	25800	8.5	860
036K	T36K-B	35,800	14.0	12.4	35800	8.5	1,125
042K	T42K-B	40,500	14.0	12.3	41500	8.5	1,375
048K	T49K-C	46,000	14.0	12.4	46500	8.5	1,555

Outdoor Unit	Indoor TXV Air Handler B5BM-	Cooling Capacity BTUH	SEER	EER	Heating Capacity BTUH @47 F	HSPF	SCFM
018K	T24K-B+VSB-B	18,100	14.0	12.2	16300	8.5	720
024K	T25K-B+VSB-B	24,200	14.0	12.4	22000	8.5	800
030K	T30K-B+VSB-B	29,400	14.0	12.5	25800	8.5	860
036K	T36K-B+VSB-B	35,800	14.0	12.4	35800	8.5	1,125
042K	T42K-B+VSB-B	40,500	14.0	12.3	41500	8.5	1,375
048K	T49K-C+VSB-C	46,000	14.0	12.4	46500	8.5	1,555

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#### **GENERAL TERMS OF LIMITED WARRANTY**

NORDYNE will furnish a replacement for any part of this product which fails in normal use and service within the first ten years of installation, in accordance with the terms of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the NORDYNE warranty department for a copy.

NORDYNE 8000 Phoenix Parkway | O'Fallon MO 63368-3827

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