

## TECHNICAL SPECIFICATIONS

# JT5BD Series

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

The JT5BD 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 JT5BD is rated at 13 SEER and 8.0 HSPF when matched with our air handlers. Units are ideally sized for slab or rooftop mounting.



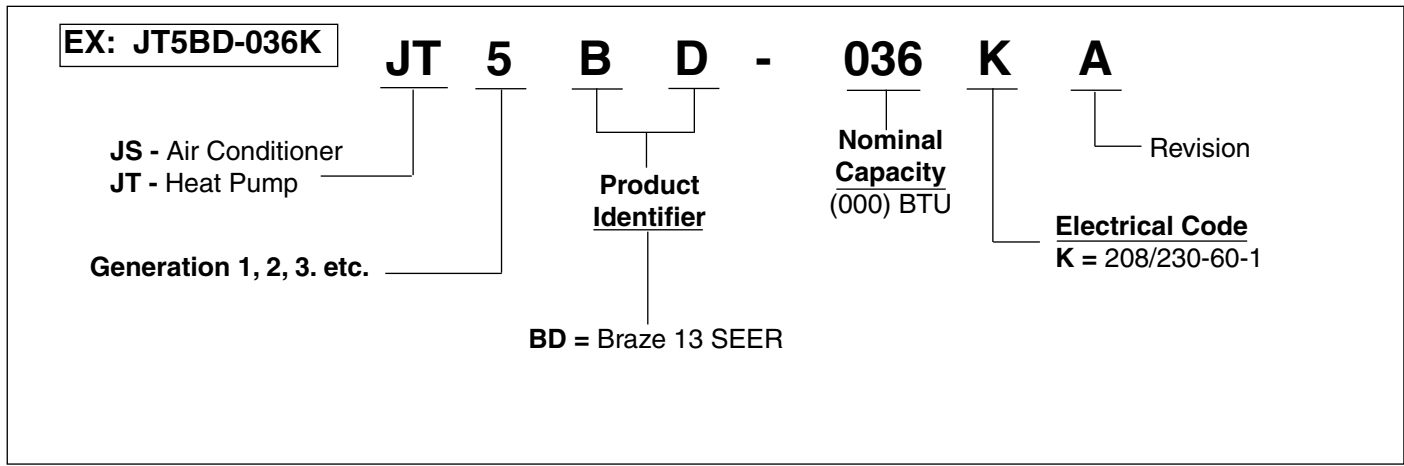
## WARRANTY

- This product offers a 5-year parts warranty.
- 5-year compressor warranty

## FEATURES and BENEFITS

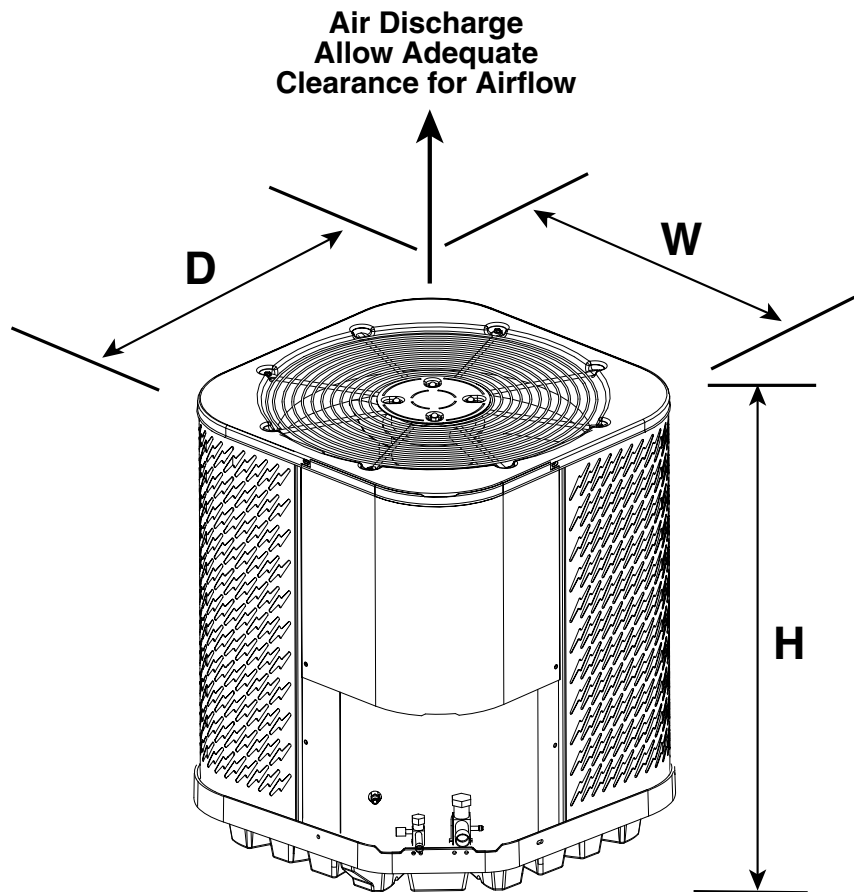
- **Composite Base Pan:** Absorbs sound and is corrosion resistant. Composite is also stronger and lighter than steel.
- **Durable, Attractive Cabinet:** Designed using galvanized steel with a polyester urethane finish. The 950 hour salt spray finish is 1.5 mil thick and resists corrosion 50% better 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.
- **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

| JT5BD | 018K   | 024K   | 030K   | 036K   | 042K   | 048K   | 060K   |
|-------|--------|--------|--------|--------|--------|--------|--------|
| H     | 27     | 27     | 39     | 43     | 39     | 43     | 43     |
| W     | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 |
| D     | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 | 30-3/4 |



# PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

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

| Model Number JT5BD-   |                        | 018K            | 024K         | 030K         | 036K         | 042K         | 048K         | 060K         |           |
|---|------------------------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| 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             | 9.9             | 11.8         | 14.6         | 15.7         | 17.5         | 19.7         | 26.4         |           |
|   | Delay Fuse Max. (2)    | 20              | 25           | 30           | 30           | 35           | 40           | 50           |           |
|   | Min. Circuit Ampacity  | 12.1            | 14.5         | 18.0         | 19.4         | 21.6         | 24.3         | 32.6         |           |
| Component Data  | Coil                   | Area            | 15.17        | 15.17        | 22.88        | 25.42        | 22.88        | 25.42        | 25.42     |
|   |                        | 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. |
|   | Fan Motor              | Type            | PSC          | PSC          | PSC          | PSC          | PSC          | PSC          | PSC       |
|   |                        | 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-#<br>Blades | 24" - 3      | 24" - 3      | 24" - 3      | 24" - 3      | 24" - 3      | 24" - 3      | 24" - 3   |
|   |                        | SCFM            | 2370         | 2370         | 3000         | 3000         | 3000         | 4000         | 4000      |
|   | Compressor Data        | RLA             | 8.3          | 10.8         | 13.4         | 15.3         | 19.2         | 19.8         | 25.3      |
|   |                        | LRA             | 40.3         | 56           | 68           | 87           | 112          | 105          | 146       |
| Refrigerant suction line-<br>Length/O.D. (Liq. Line All<br>Lengths - 3/8" O.D.) | 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" (3)     | 7/8"         | 7/8"         | 1-1/8" (4)   |           |
|   | 40-75 ft.              | 3/4"            | 3/4"         | 7/8" (3)     | 7/8" (3)     | 7/8"         | 1-1/8" (4)   | 1-1/8" (4)   |           |
| Refrigerant charge in ounces<br>(Outdoor unit, Indoor Unit 15' Line<br>Set)     |                        | 93              | 96           | 144          | 155          | 248          | 248          | 268          |           |
| Weight<br>Approximate (lbs.)  | Net                    | 166             | 171          | 190          | 204          | 252          | 276          | 285          |           |
|   | 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.

### 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<br>(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.

# 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 | 12.3 | 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 | 11.8 | 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   | 34200                       | 8    | 1150 |
| 036K         | C6B(A,H)-T36(C,U)-C + MB6BM | 35000                 | 13.0 | 11.7 | 34800                       | 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                       | 7.9  | 1840 |

| 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 + TDR | 18000                 | 13.0 | 12.5  | 16800                       | 7.9  | 585  |
| 024K         | C6B(A,H)-T24(C,U)-A + TDR | 24000                 | 13.0 | 11.6  | 22200                       | 7.8  | 750  |
| 030K         | C6B(A,H)-T30(C,U)-A + TDR | 28000                 | 13.0 | 11.6  | 27400                       | 7.8  | 1000 |
| 036K         | C6B(A,H)-T36(C,U)-B + TDR | 35000                 | 13.0 | 11.85 | 35600                       | 8    | 1150 |
| 042K         | C6B(A,H)-T42(C,U)-B + TDR | 40000                 | 13.0 | 11.95 | 40000                       | 8    | 1350 |
| 048K         | C6B(A,H)-T48(C,U)-C + TDR | 47000                 | 13.0 | 12.1  | 45500                       | 8    | 1625 |

| Outdoor Unit | Indoor TXV Air Handler GB5B(M,V)- | Cooling Capacity BTUH | SEER | EER  | Heating Capacity BTUH @47 F | HSPF | SCFM  |
|--------------|-----------------------------------|-----------------------|------|------|-----------------------------|------|-------|
| 018K         | T24K-A                            | 18,000                | 13.0 | 12.4 | 17,700                      | 7.8  | 600   |
| 018K         | T24K-B                            | 18,000                | 13.0 | 12.4 | 17,800                      | 8.0  | 600   |
| 024K         | T24K-A                            | 22,000                | 13.0 | 11.8 | 22,000                      | 7.7  | 750   |
| 024K         | T24K-B                            | 22,000                | 13.0 | 11.8 | 22,000                      | 8.0  | 750   |
| 030K         | T30K-A                            | 29,000                | 13.0 | 12.1 | 28,000                      | 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         | T48K-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 |

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



### 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 five 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.



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