

## TECHNICAL SPECIFICATIONS

### B6VMAI Series

iQ Drive®

24.5 SEER Residential System

Indoor Sections

Variable Speed Air Handler

C6 Series

Residential Indoor Coils with EXV



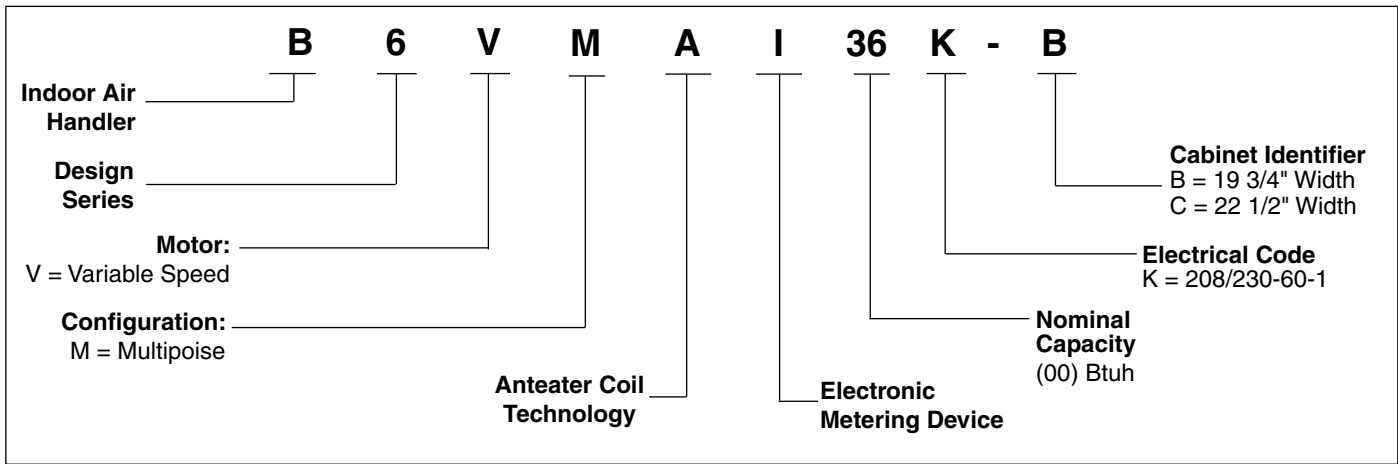
### WARRANTY

- This product carries a 5-year all parts warranty. When installed with a matched outdoor unit, the air handler will carry the outdoor system warranty. See current warranty document or visit our consumer web site for warranty details.

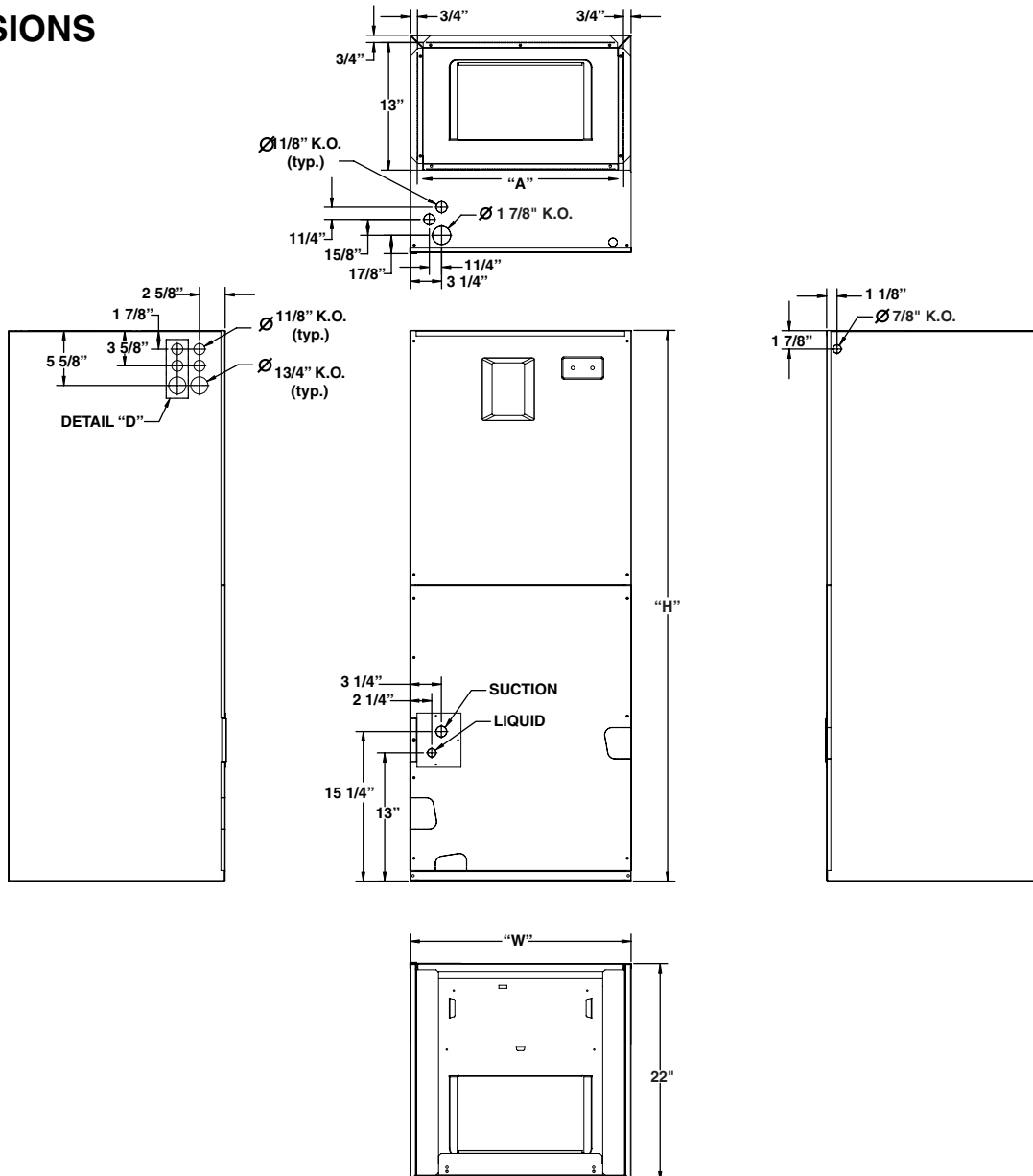
### FEATURES and BENEFITS

- **Durable, Attractive Cabinet:** Designed using galvanized steel. The door is also galvanized steel, with a polyester urethane finish. The 950 hour salt spray finish resists corrosion 50% better than comparable units. The plastic drain pan is corrosion-resistant.
- **Multi-poised:** Can be used in horizontal, upflow, downflow and vertical applications.
- **Increased Efficiencies:** Air conditioning efficiencies up to 24.5 SEER. Heat pump efficiencies up to 22 SEER.
- **ECM Variable Speed Motor:** Advanced technology allows for automatic selection of cooling airflows and heating airflows to match any application.
- **Quiet Blower Operation:** Extra quiet and smooth blower on and off cycles.
- **Reduced air stratification:** This results in improved air quality by optimizing humidity removal and filtration capabilities.
- **Ease-of-Service:** Plug-in wire connections and built-in filter rack makes the air handler easy to service.
- **Plug-in Heater Kits:** Available in 5 kw - 30 kw
- **Air Handler Control Board:** Controls time-sequencing of heat stages with field-selectable sequence timing.
- **Breaker Accessibility:** Breaker accessible from front of unit when heater is applied.
- **No Fasteners on Sides or Back:** Smooth surfaces for ease of installation.
- **Cabinet Insulation:** 1" insulation with an R-value of 4.2 contributes to quiet operation and prevents cabinet sweating in difficult applications.
- **Designed to meet the requirements 610.2.A.2:** Meets Florida building code requirements for air leakage.
- **Anteater Coil Technology:** Copper alloy with zinc additives to stop formicary corrosion.

# MODEL IDENTIFICATION CODE



# DIMENSIONS



# ELECTRICAL DATA

|                  |                             | 240 VAC, 50 & 60Hz Single Phase |      |      |      |      |       |       |       | 208 VAC, 60Hz Single Phase |      |      |      |      |      |       |       |      |
|------------------|-----------------------------|---------------------------------|------|------|------|------|-------|-------|-------|----------------------------|------|------|------|------|------|-------|-------|------|
|                  |                             | Aux. Heat Installed (Nom. KW)   | NONE | 005H | 008H | 010H | 015H  | 020H  | 025H  | 030H                       | NONE | 005H | 008H | 010H | 015H | 020H  | 025H  | 030H |
| Single Circuit   | Min. Circuit Amp.           | 5.8                             | 30.8 | 44.8 | 55.8 | 80.8 | 105.8 | 130.8 | 155.8 | 5.8                        | 27.4 | 39.4 | 49.0 | 70.7 | 92.3 | 113.9 | 135.6 |      |
|                  | Maximum Over-current Rating | 15                              | 40   | 50   | 60   | 90   | 125   | 150   | 175   | 15                         | 30   | 40   | 50   | 80   | 100  | 125   | 150   |      |
| Multiple Circuit | Circuit A                   | Min. Circuit Amp.               | 5.8  | 30.8 | 44.8 | 55.8 | 55.8  | 55.8  | 55.8  | 55.8                       | 5.8  | 27.4 | 39.4 | 49.0 | 49.0 | 49.0  | 49.0  | 49.0 |
|                  |                             | Maximum Over-current Rating     | 15   | 40   | 50   | 60   | 60    | 60    | 60    | 60                         | 15   | 30   | 40   | 50   | 50   | 50    | 50    | 50   |
|                  | Circuit B                   | Min. Circuit Amp.               | -    | -    | -    | -    | 25.0  | 50.0  | 50.0  | 50.0                       | -    | -    | -    | -    | 21.6 | 43.3  | 43.3  | 43.3 |
|                  |                             | Maximum Over-current Rating     | -    | -    | -    | -    | 30    | 60    | 60    | 60                         | -    | -    | -    | -    | 25   | 50    | 50    | 50   |
|                  | Circuit C                   | Min. Circuit Amp.               | -    | -    | -    | -    | -     | -     | 25.0  | 50.0                       | -    | -    | -    | -    | -    | -     | 21.6  | 43.3 |
|                  |                             | Maximum Over-current Rating     | -    | -    | -    | -    | -     | -     | 30    | 60                         | -    | -    | -    | -    | -    | -     | 25    | 50   |

## SPECIFICATIONS

| Model Number   | *I24K-B         | *I36K-B         | *I48K-C     |
|--|-----------------|-----------------|-------------|
| Nominal cooling capacity - BTUh <sup>1</sup>             | 24,000          | 36,000          | 48,000      |
| Metering Device  | EXV             | EXV             | EXV         |
| Maximum Available Auxiliary Heat                         | 20              | 20              | 30          |
| Nominal Blower Size (Dia. x Width)                       | 11 x 8          | 11 x 8          | 11 x 10     |
| Motor Hp-speeds-type                                     | 1/2-VS          | 1/2-VS          | 3/4-VS      |
| Filter Size (supplied internal filter rack) <sup>2</sup> | 18x20x1         | 18x20x1         | 20x20x1     |
| Approximate Shipping Weight, lbs                         | 111             | 114             | 154         |
| Height, "H", in.   | 43-5/16         | 49-5/16         | 55-15/16    |
| Width, "W", in.  | 19-11/16        | 19-11/16        | 22-7/16     |
| Supply Air Outlet Dimension, in.                         | 12-7/8 x 18-1/4 | 12-7/8 x 18-1/4 | 12-7/8 x 21 |
| Ref. Connection Sizes, in. (suc./liq.)                   | 3/4 - 3/8       | 7/8 - 3/8       | 7/8 - 3/8   |
| Range SCFM   | 500-1110        | 500-1110        | 680-1800    |

<sup>1</sup> See current AHRI Directory for certified combinations and ratings. [www.ahridirectory.org](http://www.ahridirectory.org)

<sup>2</sup> Filter is not supplied with unit.

## ACCESSORIES

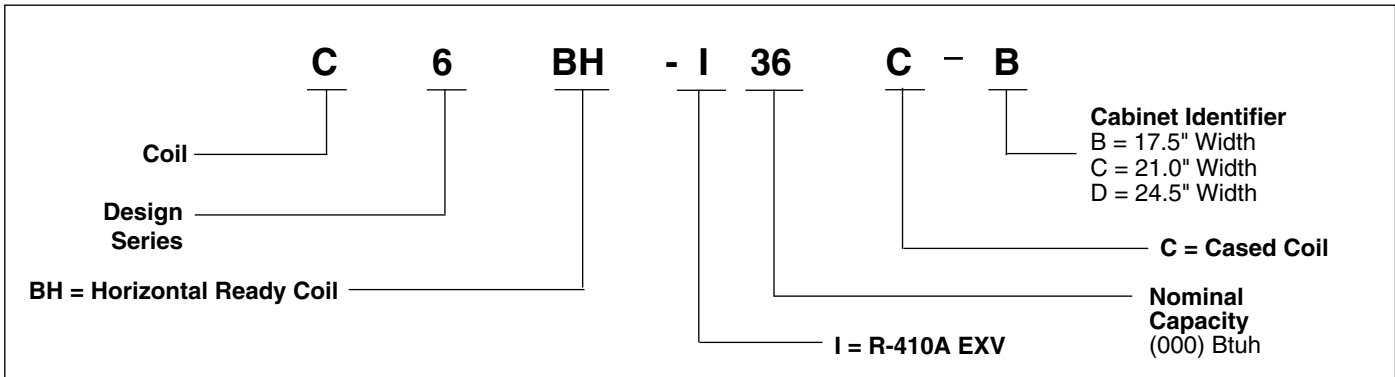
| Accessory Kit Description                     | Cabinet Size |   | Order Number |
|---|--------------|---|--------------|
|   | B            | C |              |
| Down-flow adaptor kit                         | X            |   | 919321       |
|   |              | X | 919322       |
| Single circuit adaptor for 2 circuit breakers | X            | X | 913874       |
| Single circuit adaptor for 3 circuit breakers | n/a          | X | 913556       |

### 240V Single-Phase Heater Kit Application

| Nominal KW | Matched Units |       | Order Number |        |
|------------|---------------|-------|--------------|--------|
|            | 24K-B         | 36K-B | 48K-C        |        |
| 5          | X             | X     | 904407       | 904406 |
| 8          | X             | X     | 904409       | 904408 |
| 10         | X             | X     | 904412       | 904411 |
| 15         | X             | X     | 904414       | n/a    |
| 20         | X             | X     | 904416       | n/a    |
| 25         | n/a           | X     | 921609       | n/a    |
| 30         | n/a           | X     | 921610       | n/a    |

# C6 COIL

## MODEL IDENTIFICATION CODE



## COIL DATA TABLES

| Model C6BH                                 | I24-B | I36-B | I36-C | I48-C | I48-D |
|--|-------|-------|-------|-------|-------|
| Face Area (ft ^2)                          | 4.18  | 5.58  | 5.58  | 6.42  | 6.42  |
| Rows                                       | 3     | 3     | 3     | 3     | 3     |
| Fins per inch                              | 14    | 14    | 14    | 14    | 14    |
| Refrigerant Flow Control                   | EXV   | EXV   | EXV   | EXV   | EXV   |
| Nominal Airflow (cfm)                      | 800   | 1,200 | 1,200 | 1,500 | 1,600 |
| Pressure drop at nominal airflow (in w.c.) | 0.12  | 0.21  | 0.21  | 0.30  | 0.30  |
| Connections:                               |       |       |       |       |       |
| Liquid Line                                | 3/8   | 3/8   | 3/8   | 3/8   | 3/8   |
| Suction Line                               | 3/4   | 3/4   | 7/8   | 7/8   | 7/8   |

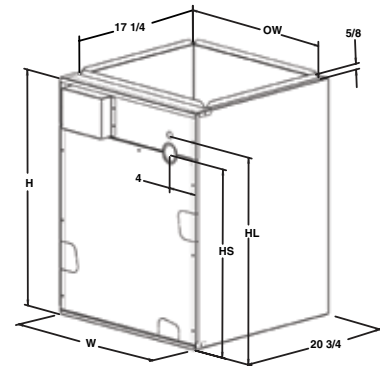


Figure 1. Cased Coil

## Cased Coil Dimensions

| Cabinet Identifier  | Overall |    | Top Opening | Bottom Opening | Horizontal Drain Pan Extension |
|---------------------|---------|----|-------------|----------------|--------------------------------|
|                     | W       | H  | A           | B              | C                              |
| <b>B</b> <b>I24</b> | 17 1/2  | 26 | 16 1/8      | 8 3/8          | 2 3/4                          |
| <b>B</b> <b>I36</b> | 17 1/2  | 26 | 16 1/8      | 8 3/8          | 2 3/4                          |
| <b>C</b> <b>I36</b> | 21      | 26 | 19 5/8      | 11 7/8         | 3 1/4                          |
| <b>C</b> <b>I48</b> | 21      | 30 | 19 5/8      | 11 7/8         | 2 3/4                          |
| <b>D</b> <b>I48</b> | 24 1/2  | 30 | 23 1/8      | 15 3/8         | 3 1/4                          |

**NOTE: Requires use of a 2-stage variable speed FG7 Furnace.**

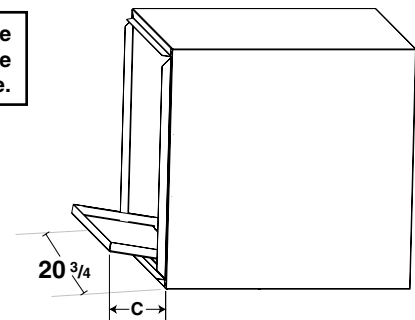


Figure 2. Horizontal Left Configuration with Drain Pan Extension



### GENERAL TERMS OF LIMITED WARRANTY

Nortek Global HVAC, LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

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

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (11/2015)