

## B6VMAI Series

iQ Drive<sup>®</sup>

24.5 SEER Residential System

Indoor Sections

Variable Speed Air Handler

C6 Series

Residential Indoor Coils with EXV



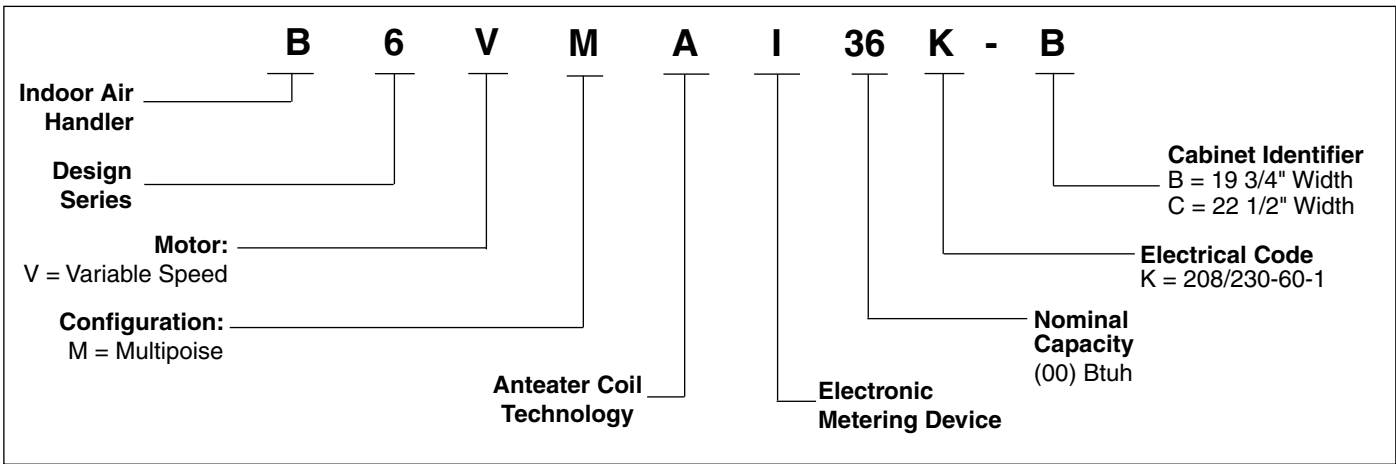
## WARRANTY

- 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.

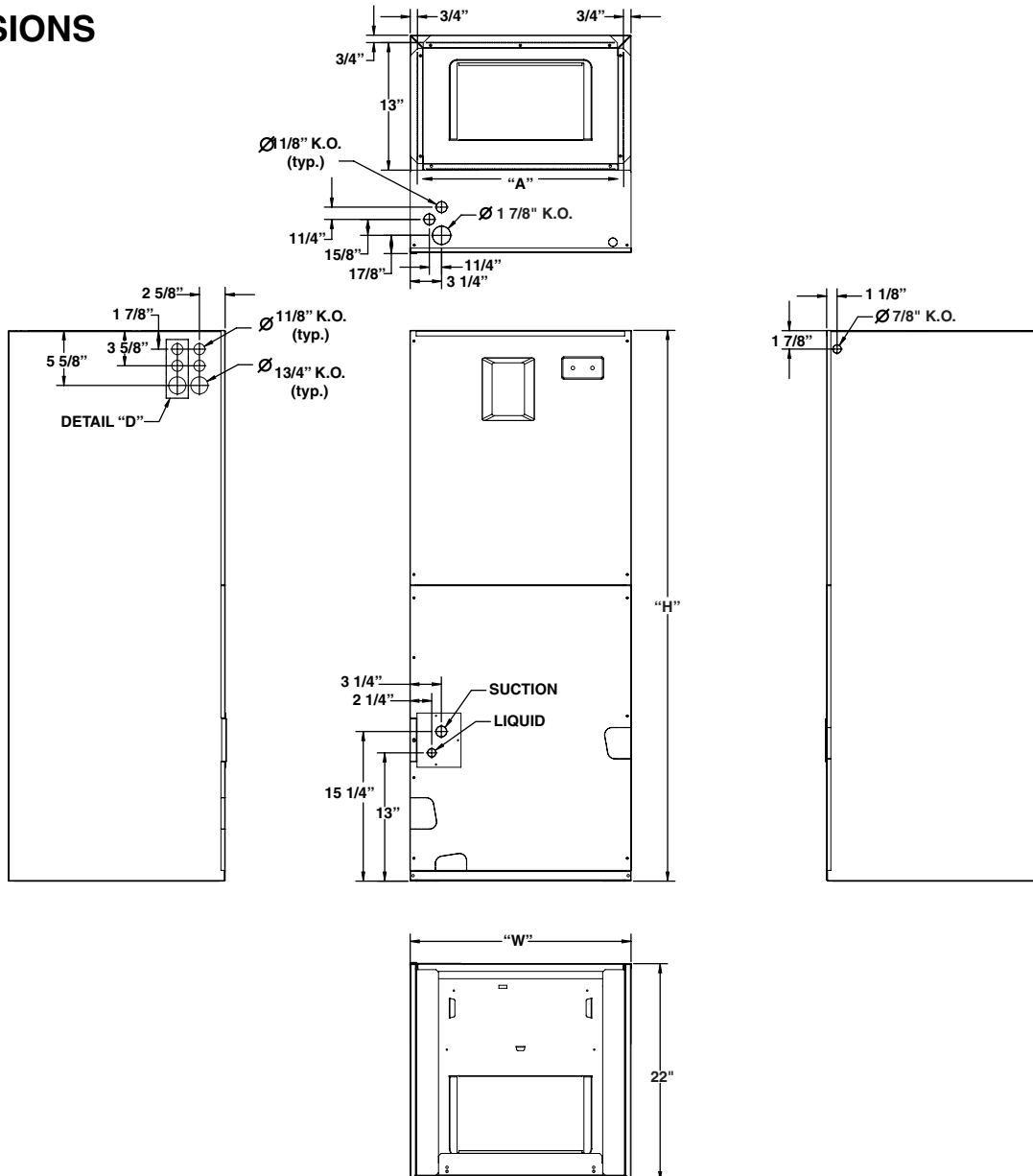
## FEATURES and BENEFITS

- **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

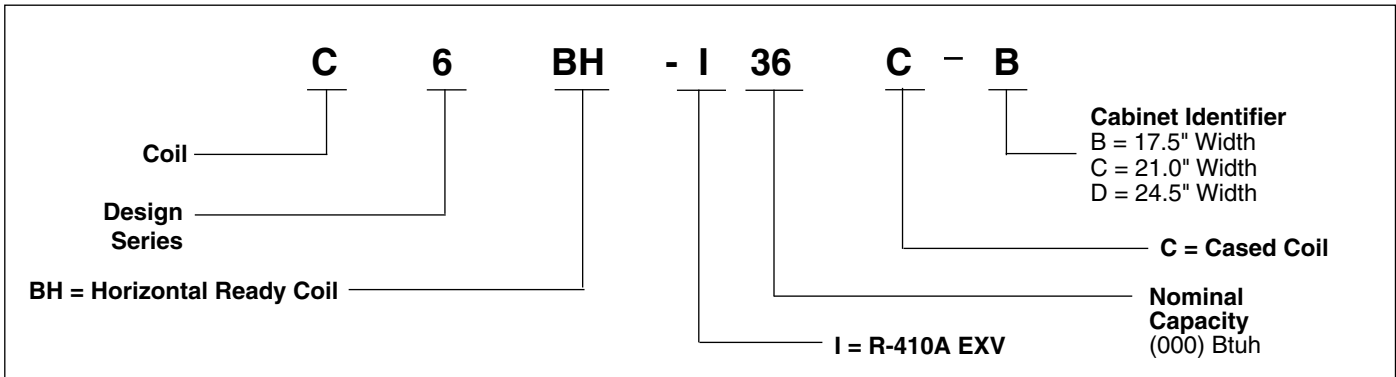
Accessory Kit Description	Cabinet Size		Order Number
	B	C	
Down-flow adaptor kit	X		919321
		X	919322
Single circuit adaptor for 2 circuit breakers	X	X	913874
Single circuit adaptor for 3 circuit breakers	n/a	X	913556

### 240V Single-Phase Heater Kit Application

Nominal KW	Matched Units		Order Number		
	24K-B	36K-B	48K-C	With Circuit Breakers	Without Circuit Breakers
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

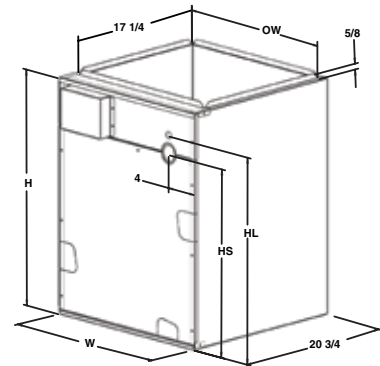


Figure 1. Cased Coil

## Cased Coil Dimensions

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

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

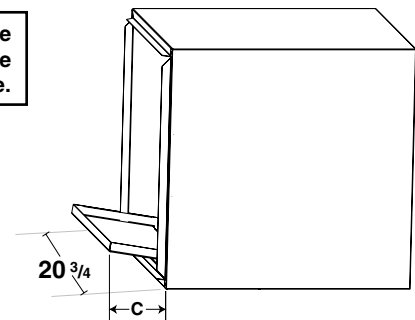


Figure 2. Horizontal Left Configuration with Drain Pan Extension



### 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)