

B5VM Series

Variable Speed Air Handler

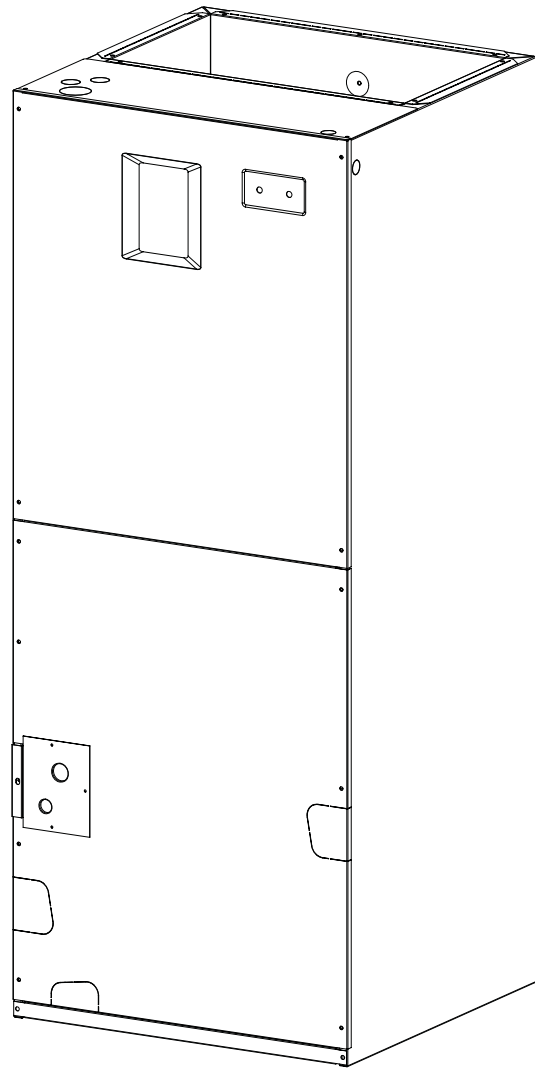
13/14 SEER Residential System

18,000 - 60,000 Btuh (Heat Pump & Air Conditioner)

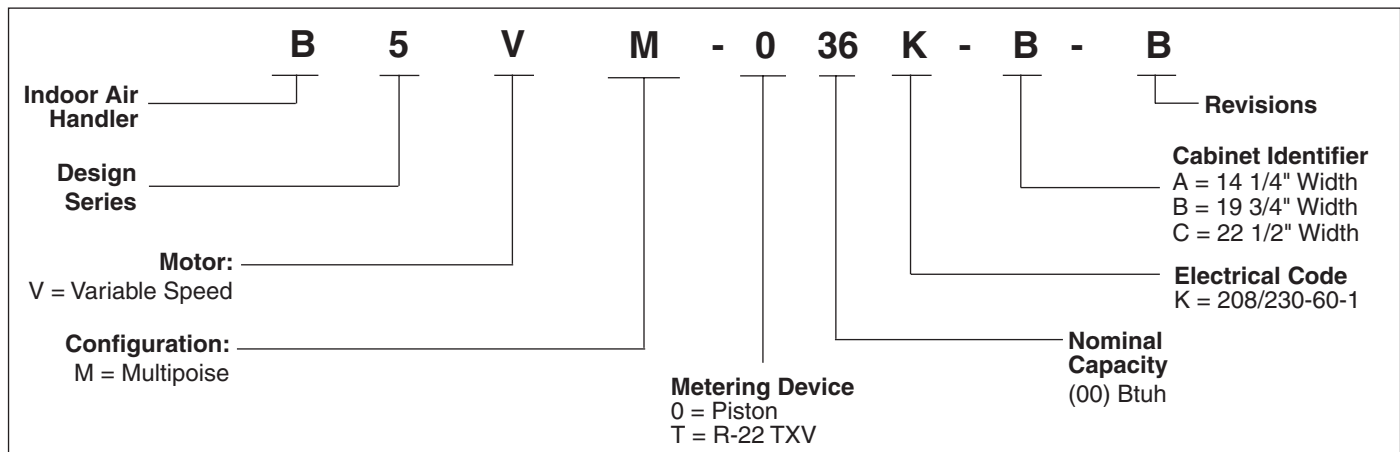
The B5VM Series of air handlers, when combined with our heat pump or air conditioner, offer a full line of quality, split system heating and cooling equipment.

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 and heat pump efficiencies up to 14 SEER and 8.5 HSPF.
- **ECM Variable Speed Motor** — Advanced technology allows for 12 selected cooling airflows and 4 heating airflows to match any application.
- **Quiet Blower Operation** — Extra quiet and smooth blower on and off cycles.
- **Constant Airflow** — Motor automatically adjusts to different static loads.
- **Field selectable delay profiles** — Increase efficiency and comfort.
- **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
- **Circuit Board** — Incorporating low voltage terminal strip, and heat-strip sequencing.
- **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.
- **Warranty** — Eight year limited all parts warranty, a major benefit to the consumer.



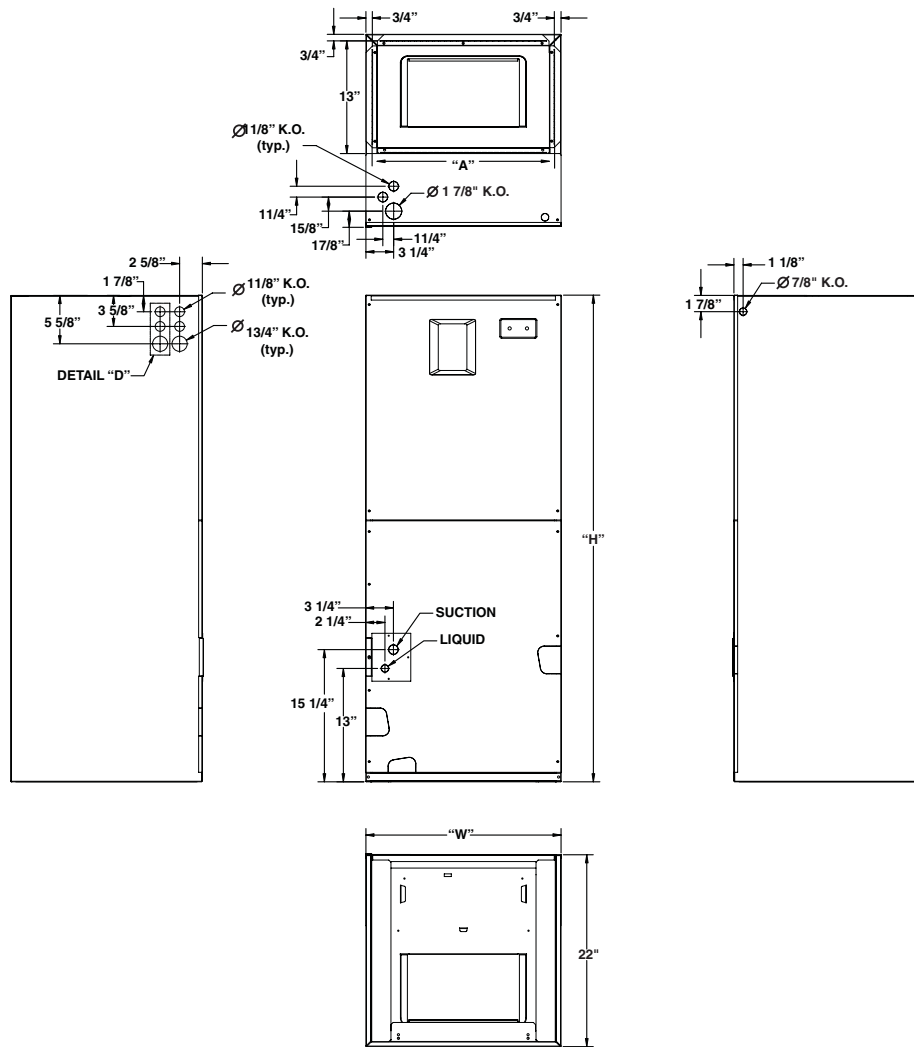
MODEL IDENTIFICATION CODE



ELECTRICAL DATA

Model Number H6HK- Voltage KW			Standard Air Handler (A & B size)								Variable Speed & Std Air Handler (C size)							
			Min. Circuit Ampacity				Max. Over-Current Protection				Min. Circuit Ampacity				Max. Over-Current Protection			
			Circuit A	Circuit B	Circuit C	Single Circuit	Circuit A	Circuit B	Circuit C	Single Circuit	Circuit A	Circuit B	Circuit C	Single Circuit	Circuit A	Circuit B	Circuit C	Single Circuit
005H-XX	240	4.8	-	-	-	30	-	-	-	30	-	-	-	34	-	-	-	40
008H-XX	240	7.5	-	-	-	45	-	-	-	50	-	-	-	48	-	-	-	50
010H-XX	240	9.6	-	-	-	55	-	-	-	60	-	-	-	59	-	-	-	60
015H-XX	240	14.4	55	25	-	80	60	30	-	90	59	25	-	83	60	30	-	90
020H-XX	240	19.2	55	50	-	105	60	60	-	125	59	50	-	109	60	60	-	125
025H-XX	240	24.0	-	-	-	-	-	-	-	-	59	50	25	134	60	60	30	150
030H-XX	240	28.8	-	-	-	-	-	-	-	-	59	50	50	159	60	60	60	175
005H-XX	208	3.6	-	-	-	27	-	-	-	30	-	-	-	30	-	-	-	40
008H-XX	208	5.6	-	-	-	39	-	-	-	40	-	-	-	42	-	-	-	50
010H-XX	208	7.2	-	-	-	48	-	-	-	50	-	-	-	52	-	-	-	60
015H-XX	208	10.8	48	21	-	70	50	25	-	80	52	22	-	73	60	25	-	80
020H-XX	208	14.4	48	43	-	92	50	50	-	100	52	43	-	95	60	50	-	100
025H-XX	208	18.0	-	-	-	-	-	-	-	-	52	43	22	117	60	50	25	125
030H-XX	208	21.6	-	-	-	-	-	-	-	-	52	43	43	138	60	50	50	150
009Q-XX	240	9.0	-	-	-	32	-	-	-	40	-	-	-	36	-	-	-	40
015Q-XX	240	14.4	-	-	-	48	-	-	-	50	-	-	-	52	-	-	-	60
009Q-XX	208	6.8	-	-	-	29	-	-	-	30	-	-	-	32	-	-	-	40
015Q-XX	208	10.8	-	-	-	43	-	-	-	50	-	-	-	46	-	-	-	50

DIMENSIONS



SPECIFICATIONS

Model Number B5VM	*24K-A	*25K-A	*30K-A	*24K-B	*25K-B	*30K-B	*36K-B	*42K-B	*48K-C	*49K-C	*60K-C
Nominal cooling capacity - BTUh ¹	24000	24000	30000	24000	24000	30000	36000	42000	48000	48000	60000
Orifice size (if supplied) ²	0.050	0.061	0.069	0.050	0.061	0.069	0.078	0.083	0.090	0.090	0.101
Maximum Available Auxiliary Heat	10	10	15	10	10	20	20	20	30	30	30
Nominal Blower Size (Dia. x Width)	10 x 6	10 x 6	10 x 6	11 x 8	11 x 8	11 x 8	11 x 8	11 x 8	11 x 10	11 x 10	11 x 10
Motor Hp-speeds-type	1/2-VS	1/2-VS	1/2-VS	1/2-VS	1/2-VS	1/2-VS	1/2-VS	1/2-VS	3/4-VS	3/4-VS	3/4-VS
Filter Size (supplied internal filter rack) ³	12x20x1	12x20x1	12x20x1	18x20x1	18x20x1	18x20x1	18x20x1	18x20x1	20x20x1	20x20x1	20x20x1
Approximate Shipping Weight, lbs	91	91	94	111	111	114	114	134	154	154	159
Height, "H", in.	43-5/16	43-5/16	43-5/16	43-5/16	43-5/16	43-5/16	43-5/16	49-5/16	55-15/16	55-15/16	55-15/16
Width, "W", in.	14-3/16	14-3/16	14-3/16	19-11/16	19-11/16	19-11/16	19-11/16	19-11/16	22-7/16	22-7/16	22-7/16
Supply Air Outlet Dimension, in.	12-7/8 x 12-3/4	12-7/8 x 12-3/4	12-7/8 x 12-3/4	12-7/8 x 18-1/4	12-7/8 x 18-1/4	12-7/8 x 18-1/4	12-7/8 x 18-1/4	12-7/8 x 18-1/4	12-7/8 x 21	12-7/8 x 21	12-7/8 x 21
Ref. Connection Sizes, in. (suc./liq.)	3/4 - 3/8	3/4 - 3/8	3/4 - 3/8	3/4 - 3/8	3/4 - 3/8	3/4 - 3/8	3/4 - 3/8	7/8 - 3/8	7/8 - 3/8	7/8 - 3/8	7/8 - 3/8

¹ See current ARI Directory for certified combinations and ratings.

² When supplied, orifice is sized for most common R-22 13 SEER HP match. See outdoor unit documentation for orifice size.

³ Filter is not supplied with unit.

AIRFLOW SELECTION FOR VARIABLE SPEED MODELS

Basic Airflow Setting

BASIC AIR-FLOW SETTINGS *24/*25/*30 A-CABINET					
Nominal Airflow	Switch Number				External Static Pressure Range*
	1	2	3	4	+/- 5% of nominal air-flow
540	0	0	0	1	0.2 - 0.8"
600	0	0	0	0	0.2 - 0.9"
660	0	0	1	0	0.2 - 1.0"
715	1	0	0	1	0.2 - 1.0"
790	1	0	0	0	0.2 - 1.1"
870	1	0	1	0	0.1 - 1.1"
915	0	1	0	1	0.1 - 1.1"
955	1	1	0	1	0.1 - 1.0"
1015	0	1	0	0	0.0 - 1.1"
1060	0	1	1	0	0.1 - 1.0"
1075	1	1	0	0	0.1 - 1.0"
1165	1	1	1	0	0.2 - 1.0"
1=ON 0=OFF					

BASIC AIR-FLOW SETTINGS *24/*25/*30/*36 B-CABINET					
Nominal Airflow	Switch Number				External Static Pressure Range*
	1	2	3	4	+/- 5% of nominal air-flow
720	0	0	0	1	0.1 - 1.0"
800	0	0	0	0	0.0 - 1.1"
880	0	0	1	0	0.0 - 1.1"
850	1	0	0	1	0.0 - 1.2"
945	1	0	0	0	0.0 - 1.2"
1040	1	0	1	0	0.0 - 1.2"
1085	0	1	0	1	0.0 - 1.2"
1140	1	1	0	1	0.0 - 1.2"
1205	0	1	0	0	0.1 - 1.2"
1325	0	1	1	0	0.2 - 0.9"
1265	1	1	0	0	0.1 - 1.0"
1390	1	1	1	0	0.2 - 0.8"
1=ON 0=OFF					

BASIC AIR-FLOW SETTINGS *42 TALL B-CABINET					
Nominal Airflow	Switch Number				External Static Pressure Range*
	1	2	3	4	+/- 5% of nominal air-flow
720	0	0	0	1	0.0 - 1.0"
800	0	0	0	0	0.0 - 1.2"
880	0	0	1	0	0.0 - 1.2"
850	1	0	0	1	0.0 - 1.2"
945	1	0	0	0	0.0 - 1.2"
1040	1	0	1	0	0.0 - 1.2"
1085	0	1	0	1	0.0 - 1.2"
1140	1	1	0	1	0.0 - 1.2"
1205	0	1	0	0	0.1 - 1.2"
1325	0	1	1	0	0.1 - 0.9"
1265	1	1	0	0	0.1 - 1.0"
1390	1	1	1	0	0.1 - 0.9"
1=ON 0=OFF					

BASIC AIR-FLOW SETTINGS *48/*49/*60 C-CABINET					
Nominal Airflow	Switch Number				External Static Pressure Range*
	1	2	3	4	+/- 5% of nominal air-flow
1075	0	0	0	1	0.0 - 1.0"
1225	0	0	0	0	0.0 - 1.0"
1380	0	0	1	0	0.0 - 1.0"
1135	1	0	0	1	0.0 - 1.0"
1295	1	0	0	0	0.0 - 1.2"
1460	1	0	1	0	0.0 - 1.2"
1525	0	1	0	1	0.0 - 1.2"
1625	1	1	0	1	0.0 - 1.2"
1740	0	1	0	0	0.1 - 1.2"
1960	0	1	1	0	0.1 - 0.9"
1860	1	1	0	0	0.1 - 1.0"
2090	1	1	1	0	0.1 - 0.9"
1=ON 0=OFF					

*NOTES:

- External static pressure is shown in inches of w.c.
- All airflows measured without filter. Subtract .08" external static pressure for filter.
- All airflows measured with dry coil. Subtract .10" external static pressure for wet coil.

ACCESSORIES

Accessory Kit Description	Cabinet Size			Order Number
	A	B	C	
Down-flow adaptor kit	X			917342
		X		919321
			X	919322
Single circuit adaptor for 2 circuit breakers	X	X	X	913874
Single circuit adaptor for 3 circuit breakers	n/a	n/a	X	913556
Horizontal conversion kit for vertical-only units	X	X		903749
		X ¹		919405
			X	914730

¹ Required for *42 models



CERTIFICATION APPLIES ONLY WHEN THE COMPLETE SYSTEM IS LISTED WITH ARI



240V Single-Phase Heater Kit Application

Nominal KW	Matched Units								Order Number	
	*24/*25K - A	*30K-A	*24/*25K - B	*30K-B	*36K-B	*42K-B	*48K-C	*60K-C	With Circuit Breakers	Without Circuit Breakers
5	X	X	X	X	X	X	X	X	904407	904406
8	X	X	X	X	X	X	X	X	904409	904408
10	X	X	X	X	X	X	X	X	904412	904411
15	n/a	X	X	X	X	X	X	X	904414	n/a
20	n/a	n/a	X	X	X	X	X	X	904416	n/a
25	n/a	n/a	n/a	n/a	n/a	n/a	X	X	904417	n/a
30	n/a	n/a	n/a	n/a	n/a	n/a	X	X	904418	n/a

240V Three-Phase Heater Kit Application

Nominal KW	Matched Units								Order Number	
	*24/*25K - A	*30K-A	*24/*25K - B	*30K-B	*36K-B	*42K-B	*48K-C	*60K-C	With Circuit Breakers	Without Circuit Breakers
9	X	X	X	X	X	X	X	X	904410	n/a
15	n/a	X	X	X	X	X	X	X	904415	n/a

198C-0906 (Replaces 198C-0606)