

# **B6VMAX Series**

Air Handler with TXV 13-19 SEER Residential System 18,000 - 60,000 Btuh (Heat Pump & Air Conditioner) R-410A Refrigerant

The B6VMAX Series of air handlers, when combined with our heat pump or air conditioner, offers a full line of quality, split system heating and cooling equipment.



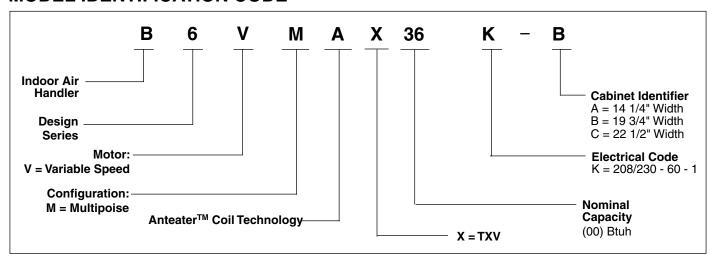
## **WARRANTY**

 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**

- Energy Efficient Variable Speed ECM Motor: Advanced technology provides 16 field-selectable cooling airflows and automatically sets heating airflows based on the amount of installed heat.
- Quiet Blower Operation: Extra quiet and smooth blower on and off cycles.
- Constant airflow: Motor automatically adjusts to different static loads.
- Reduced air stratification: This results in improved air quality by optimizing humidity removal and filtration capabilities.
- Multi-poised: Can be used in horizontal, upflow, downflow and vertical applications.
- Built in Filter Rack: makes the air handler easy to service.
- Plug-in Heater Kit: Available in 5 kw through 30 kw (Not for use in 115 Volt units)
- Circuit Board: Incorporating blower time delay relay, low voltage terminal strip, and heat-strip sequencing.
- Breaker Accessibility: Breaker accessible from the front of the unit when heater is applied.
- Plastic Drain Pan: Provides corrosion resistance.
- **Durable Cabinet:** Galvanized steel with a polyurethane finish. The finish will endure 950 hours of salt spray and resist corrosion 50% better than comparable units.
- **Designed to meet the requirements 610.2.A.2:** Meets Florida building code requirements for air leakage.
- Thermal Expansion Valve: Factory installed externally equalized thermal expansion valve provides precise refrigerant control under varying load conditions.
- Cabinet Insulation: 1" insulation with an R-value of 4.2 contributes to quiet operation and prevents cabinet sweating in difficult applications.
- Anteater<sup>™</sup> Coil Technology: Copper alloy with zinc additives to stop formicary corrosion.

### **MODEL IDENTIFICATION CODE**



#### **ACCESSORIES**

Accessory Kit Description		binet S	Part Number	
Accessory Kit Description	Α	В	С	rait Number
	Х			917342
Downflow Adaptor Kit		Х		919321
			Х	919322
Single Circuit Adaptor for 2 Circuit Breakers	Х	Х	Х	913874
Single Circuit Adaptor for 3 Circuit Breakers	n/a	n/a	Х	913556

#### 240v Single-Phase Electric Heater Kits

				Matche	d Units				Part I	Number
Nominal KW	24K-A	24K-B	30K-A	30K-B	36K-B	42K-B	48K-C	60K-C	With Circuit Breakers	Without Circuit Breakers
5	Х	Х	Х	Х	Х	Х	Х	Х	904407	904406
8	Х	Х	Х	Х	Х	Х	Х	Х	904409	904408
10	Х	Х	Х	Х	Х	Х	Х	Х	904412	904411
15	Х	Х	Х	Х	Х	Х	Х	Х	904414	n/a
20	n/a	Х	n/a	Х	Х	Х	Х	Х	904416	n/a
25	n/a	n/a	n/a	n/a	n/a	n/a	Х	Х	921609	n/a
30	n/a	n/a	n/a	n/a	n/a	n/a	Х	Х	921610	n/a

#### 240v Three-Phase Electric Heater Kits

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

## **SPECIFICATIONS**

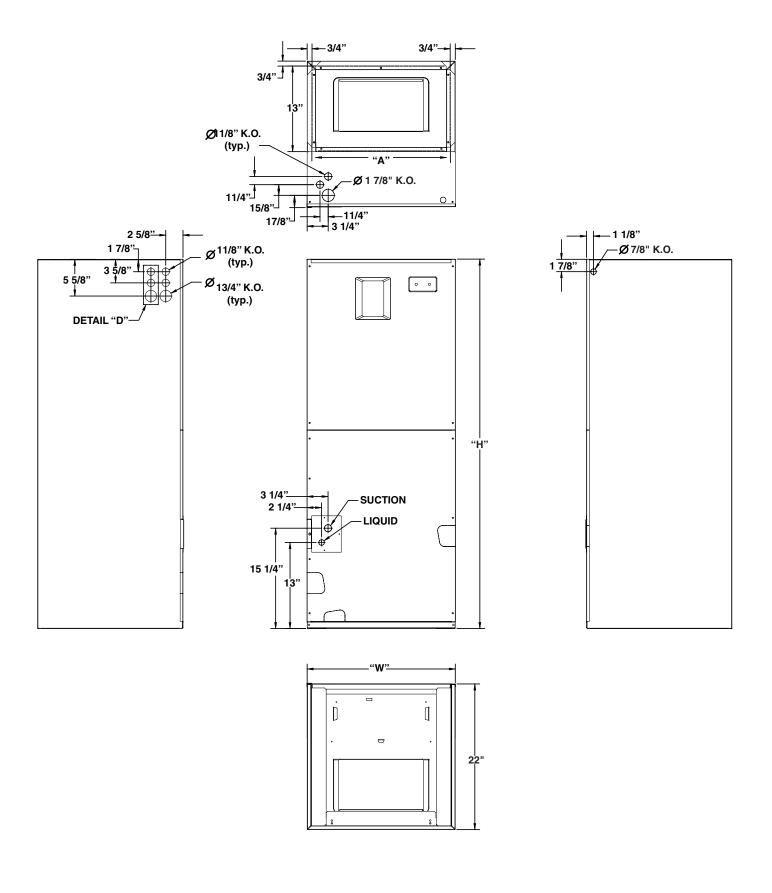
Model B6VMAX	24K-A	24K-B	30K-A	30K-B	36K-B	42K-B	48K-C	60K-C
Refrigerant Flow Control	TXV	TXV	TXV	TXV	TXV	TXV	TXV	TXV
Maximum Available Auxiliary Heat (kw)	15	20	15	20	20	20	30	30
Nominal Blower Size (D X W)	10 x 6	11 x 8	10 x 6	11 x 8	11 x 8	11 x 8	11 x 10	11 x 10
Variable Speed Motor HP	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
Filter Size	12 x 20 x 1	18 x 20 x 1	12 x 20 x 1	18 x 20 x 1	18 x 20 x 1	18 x 20 x 1	20 x 20 x 1	20 x 20 x 1
Approximate Shipping Weight (lbs.)	91	120	91	111	140	140	170	170

NOTES: See current AHRI Directory for certified combinations and ratings. www.ahridirectory.org

## **DIMENSIONS**

Models	Height	Width	Refrigerant (	Connections	Filter Size	Supply Air Duct
B6VMAX	пеідііі	Width	Suction Dia.	Liquid Dia.	Filler Size	Dimensions
24K-A	43 1/2	14 1/4	3/4	3/8	12 x 20 x 1	12 7/8 x 12 3/4
24K-B	49 1/2	19 3/4	7/8	3/8	18 x 20 x 1	12 7/8 x 18 1/4
30K-A	43 1/2	14 1/4	3/4	3/8	12 x 20 x 1	12 7/8 x 12 3/4
30K-B	43 1/2	19 3/4	3/4	3/8	18 x 20 x 1	12 7/8 x 18 1/4
36K-B	49 1/2	19 3/4	7/8	3/8	18 x 20 x 1	12 7/8 x 18 1/4
42K-B	49 1/2	19 3/4	7/8	3/8	18 x 20 x 1	12 7/8 x 18 1/4
48K-C	56	22 1/2	7/8	3/8	20 x 20 x 1	12 7/8 x 21
60K-C	56	22 1/2	7/8	3/8	20 x 20 x 1	12 7/8 x 21

## **DIMENSIONS**



# **ELECTRICAL DATA**

						Voltaç	je 240							Volta	ge 208			
			1	Vin. Circ	uit Am	).	Maxim	um Ove	r-current	Rating	ľ	Min. Circ	cuit Am	p.	Maxim	um Ovei	r-current	Rating
Cabinet		Model Number H6HK-	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 B	Circuit C	Single Circuit
		None	4.5	-	-	4.5	15.0	-	-	15.0	4.8	-	-	4.8	15.0	-	-	15.0
		005H-XX	29.5	-	-	29.5	30.0	-	-	30.0	26.4	-	-	26.4	30.0	-	-	30.0
		008H-XX	44.1	-	-	44.1	45.0	-	-	45.0	39.1	-	-	39.1	40.0	-	-	40.0
A	24/30	010H-XX	54.5	-	-	54.5	60.0	-	-	60.0	48.1	-	-	48.1	50.0	-	-	50.0
		015H-XX	54.5	25.0	-	68.1	60.0	30.0	-	80.0	48.1	21.7	-	69.8	50.0	25.0	-	70.0
		009Q-XX	-	-	-	31.6	-	-	-	35.0	-	-	-	28.2	-	-	-	30.0
		015Q-XX	-	-	-	47.8	-	-	-	50.0	-	-	-	42.3	-	-	-	45.0
		None	4.5	-	-	4.5	15.0	-	-	15.0	4.8	-	-	4.8	15.0	-	-	15.0
		005H-XX	29.5	-	-	29.5	30.0	-	-	30.0	26.4	-	-	26.4	30.0	-	-	30.0
		008H-XX	44.1	-	-	44.1	45.0	-	-	45.0	39.1	-	-	39.1	40.0	-	-	40.0
	24/30/	010H-XX	54.5	-	-	54.5	60.0	-	-	60.0	48.1	-	-	48.1	50.0	-	-	50.0
В		015H-XX	54.5	25.0	-	68.1	60.0	30.0	-	80.0	48.1	21.7	-	69.8	50.0	25.0	-	70.0
		020H-XX	54.5	50.0	-	104.5	60.0	60.0	-	110.0	48.1	43.3	-	91.4	50.0	45.0	-	100.0
		009Q-XX	-	-	-	31.6		-	-	35.0	-	-	-	28.2	-	-	-	30.0
		015Q-XX	-	-	-	47.8	-	-	-	50.0	-	-	-	42.3	-	-	-	45.0
		None	6.3	-	-	6.3	15.0	-	-	15.0	6.8	-	-	6.8	15.0	-	-	15.0
		005H-XX	31.3	-	-	31.3	35.0	-	-	35.0	28.4	-	-	28.4	30.0	-	-	30.0
		008H-XX	45.8	-	-	45.8	50.0	-	-	50.0	41.1	-	-	41.1	45.0	-	-	45.0
		010H-XX	56.3	-	-	56.3	60.0	-	-	60.0	50.1	-	-	50.1	60.0	-	-	60.0
		015H-XX	56.3	25.0	-	81.3	60.0	30.0	-	90.0	50.1	21.7	-	71.8	60.0	25.0	-	80.0
С	48/60	020H-XX	56.3	50.0	-	106.3	60.0	60.0	-	110.0	50.1	43.3	-	93.4	60.0	45.0	-	100.0
		025H-XX	56.3	50.0	25.0	131.3	60.0	60.0	60.0	150.0	50.1	43.3	21.7	115.1	60.0	45.0	45.0	125.0
		030H-XX	56.3	50.0	50.0	156.3	60.0	60.0	60.0	175.0	50.1	43.3	43.3	136.8	60.0	45.0	45.0	150.0
		009Q-XX	-	-	-	33.3	-	-	-	35.0	-	-	-	30.2	-	-	-	35.0
		015Q-XX	-	-	-	49.6	-	-	-	50.0	-	-	-	44.3	-	-	-	45.0

## **AIRFLOW SELECTION FOR VARIABLE SPEED MODELS**

		Coolin	g Airfl	ow		
	A/B Switch Setting 0 = OFF, 1 = ON		OL Swi = OFF			Airflow (CFM)
	0 = 011, 1 = 011	5	6	7	8	(CI W)
	0	0	0	0	0	525
	0	0	0	0	1	560
	0	0	0	1	0	600
	0	0	0	1	1	625
50/44	0	0	1	0	0	700
B6VM A-cabinet	0	0	1	0	1	750
A-cabinet	0	0	1	1	0	800
	0	0	1	1	1	850
	0	1	0	0	0	875
	0	1	0	0	1	890
	0	1	0	1	0	930
	0	1	0	1	1	950
	0	1	1	0	0	1000
	0	1	1	0	1	1050
	0	1	1	1	0	1125
	0	1	1	1	1	1200

Heating Airflow								
A/B Switch Setting 0 = OFF, 1 = ON	Heater Kit Installed (KW)	Airflow (CFM)						
0	0	600						
0	5	800						
0	8	1000						
0	10	1000						
0	15	1300						
0	20	n/a						
0	25	n/a						
0	30	n/a						

		Coolin	g Airfl	ow		
	A/B Switch Setting 0 = OFF, 1 = ON		DL Swi = OFF	Airflow (CFM)		
	0 = 011, 1 = 011	5	6	7	8	(01 111)
	1	0	0	0	0	525
	1	0	0	0	1	560
	1	0	0	1	0	600
	1	0	0	1	1	650
DOVIM	1	0	1	0	0	700
B6VM B-cabinet	1	0	1	0	1	750
b-cabinet	1	0	1	1	0	800
	1	0	1	1	1	850
	1	1	0	0	0	875
	1	1	0	0	1	950
	1	1	0	1	0	1050
	1	1	0	1	1	1150
	1	1	1	0	0	1250
	1	1	1	0	1	1350
	1	1	1	1	0	1400
	1	1	1	1	1	1600

Heating Airflow								
A/B Switch Setting 0 = OFF, 1 = ON	Heater Kit Installed (KW)	Airflow (CFM)						
1	0	700						
1	5	900						
1	8	1100						
1	10	1100						
1	15	1300						
1	20	1500						
1	25	n/a						
1	30	n/a						

	A/B Switch Setting (* = either 0 or 1)		DL Swi = OFF	Airflow (CFM)		
	( = 611161 0 01 1)	5	6	7	8	(01 111)
	*	0	0	0	0	1100
	*	0	0	0	1	1200
	*	0	0	1	0	1250
	*	0	0	1	1	1300
50/44	*	0	1	0	0	1350
B6VM C-cabinet	*	0	1	0	1	1400
C-cabinet	*	0	1	1	0	1450
	*	0	1	1	1	1500
	*	1	0	0	0	1550
	*	1	0	0	1	1600
	*	1	0	1	0	1650
	*	1	0	1	1	1700
	*	1	1	0	0	1750
	*	1	1	0	1	1800
	*	1	1	1	0	1900
	*	1	1	1	1	2000

Heating Airflow									
A/B Switch Setting (* = either 0 or 1)	Heater Kit Installed (KW)	Airflow (CFM)							
*	0	800							
*	5	1000							
*	8	1200							
*	10	1200							
*	15	1400							
*	20	1600							
*	25	1800							
*	30	2000							

- NOTES:

   Airflow values listed are for 240V operation. For 208V operation, multiply A & B cabinet values by .95; for C-cabinet values mulitply by .90

   When matched with two-stage outdoor units the airflow on low (Y1 or W1) input only will be 70% of the values shown in this table.

# **COOLING AIRFLOW SETTINGS**

A-CABINET									
CFM	_	-	SETTII 0 = O		NOMINAL CAPACITY				
	5	6	7	8					
525	0	0	0	0					
560	0	0	0	1	Z				
600	0	0	1	0	1.5 TON				
625	0	0	1	1	=:				
700	0	1	0	0		z			
750	0	1	0	1		2 TON			
800	0	1	1	0		7			
850	0	1	1	1					
875	1	0	0	0			Z		
890	1	0	0	1			2.5 TON		
930	1	0	1	0			2.5		
950	1	0	1	1					
1000	1	1	0	0					
1050	1	1	0	1				3 TON	
1125	1	1	1	0				3T	
1200	1	1	1	1					

B-CABINET											
CFM	_	TCH S = ON,			NOMINAL CAPACITY						
	5	6	7	8		0711710111					
525	0	0	0	0							
560	0	0	0	1	z						
600	0	0	1	0	1.5 TON		_				
650	0	0	1	1	<del>-</del>						
700	0	1	0	0		2 TON					
750	0	1	0	1		2 T					
800	0	1	1	0							
850	0	1	1	1			z				
875	1	0	0	0	]		2.5 TON				
950	1	0	0	1			25				
1050	1	0	1	0				z			
1150	1	0	1	1				3TON			
1250	1	1	0	0				3	0		
1350	1	1	0	1					3.5 TON	z	
1400	1	1	1	0					"	4 TON	
1600	1	1	1	1						4	

C-CABINET										
CFM	_	-	SETTII 0 = O		NOMICAL CAPACITY					
	5	6	7	8						
1100	0	0	0	0	3 TON		_			
1200	0	0	0	1	3 T					
1250	0	0	1	0		Z		_		
1300	0	0	1	1		3.5 TON				
1350	0	1	0	0		ြိ				
1400	0	1	0	1			z			
1450	0	1	1	0			4 TON			
1500	0	1	1	1			4			
1550	1	0	0	0						
1600	1	0	0	1						
1650	1	0	1	0						
1700	1	0	1	1				<sub>z</sub>		
1750	1	1	0	0				5 TON		
1800	1	1	0	1				2		
1900	1	1	1	0						
2000	1	1	1	1						













#### **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.