

# **MODEL**

KBVD - Vertical direct drive blower coil unit

# **FEATURES**

- Galvanized steel cabinet construction, minimum 18 gauge
- 1" thick fiberglass, scrim foil face insulation and closed cell foam insulation, and 1" double wall construction
- 1" supply duct collars
- Gasketed, removable access panels on sides or hinged access panels with lift and turn fasteners
- IAQ galvanized steel drain pan
- · Left and right hand arrangement
- · Hanger rod holes in base rail for "thru bolt" installation
- External rubber-in-shear or spring type vibration isolators (optional)
- Base rails with rigging slots factory assembled and installed (optional)
- · Multiple fan arrangements
- Mixing box (optional) with low leakage dampers in multiple arrangements

## COILS

- Chilled water / Direct expansion (DX)- 3, 4, or 6 rows
- Hot water / Steam- 1 or 2 rows
- Electric heat discharge mounting
- 1/2" O.D. seamless copper tubes
- · Manual air vent plug on all water coils
- 0.016" tube wall on water and evaporator coils, optional 0.025 tube wall; 0.025" tube wall on steam coils
- 450 PSIG working pressure at 200°F, tested at 450 PSIG
- · High efficiency aluminum fin surface
- Steam coils rated at 15 PSIG maximum operating pressure at about 35°F
- · Coil connections opposite handing
- · Heat pump compatible cooling coils
- · Stainless Steel coil casings

### PIPING PACKAGES

- · Factory assembled, shipped loose
- 1/2", 3/4", 1", 1-1/4" & 1-1/2" piping size

#### FILTERS AND FILTER RACK

- · Hinged side access flat filter racks
- · 2" throwaway filter
- High efficiency filter rack with 2" and 4" filters (optional)

### FAN ASSEMBLY

- Forward curved (double width, double inlet) fans
- · Statically and dynamically balanced
- Solid steel shafting
- · Direct drive motor and blower assembly



## **FAN MOTOR AND DRIVE**

- Single speed motor controls accessible from exterior of control enclosure
- Electronically commutated single and three phase motors with electronic protection
- Three different control options to choose from:
  - Variable single speed with manual adjustment
  - Variable multi-speed with manual adjustment
  - Proportional speed (2-10VDC, 0-10VDC or 4-20mA remote signal) with external adjustment

## **INLET DAMPER SECTION**

- Factory assembled and installed
- Heavy gage galvanized steel formed blade dampers
- Low-leak dampers with extruded vinyl blade seals and flexible metal jamb seals
- Parallel blade operation
- · Interconnecting damper linkage

### **OPTIONAL ELECTRICAL FEATURES**

- Optional mounting locations for control enclosure
- Door interlocking disconnect switch (non-fused)
- Hand off auto switch (HOA)
- Main fusing
- Factory mounted electric heater with single point power connection, cETLus listed as an assembly
- Remote mounted digital display and programmable thermostats

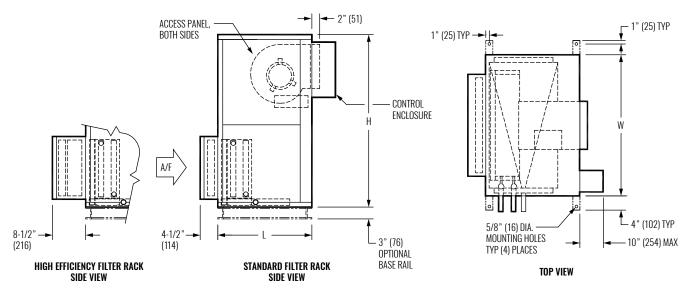
#### CERTIFICATIONS

- cETL Listed Adherence to UL/ANSI Standard 1995
- AHRI 410 certified performance data

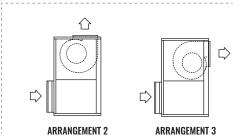
**WEB SEARCH: KBVD** 



# **DIMENSIONAL DATA**



NOTES: Dimensions in parentheses are in millimeters (mm). See table below for dimensional references. Provide sufficient clearance to permit access to controls and comply with applicable codes and ordinances. Base rail is optional on the base unit. Base rails must be used with mixing box. Electric heaters are only available in fan arrangement 3.



# PERFORMANCE AND DIMENSIONAL DATA

SIZE	PERFORMANCE										DIMENSIONS			
UNIT SIZE	Phase	1/2 hp	1 hp	1-1/2 hp	(2x) 3/4 hp	(2x) 1 hp	(2x) 1-1/2 hp	SINGLE BLOWER CFM	DUAL Blower CFM	TSP RANGE @ NOM CFM (in wg)	FAN SIZE	L	w	Н
8	1-Phase	Χ	Χ	-	-	-	-	800	N/A	0.4 - 1.6	9"x6" (229x152)	24" (610)	30" (762)	44" (1118)
	3-Phase	Χ	Χ	-	-	-	-			0.5 - 3.0				
12	1-Phase	Χ	Χ	-	-	-	-	1200	N/A	0.4 - 1.2	9"x6" (229x152)	24" (610)	36" (914)	44" (1118)
	3-Phase	Χ	Χ	-	-	-	-			0.5 - 2.8				
16	1-Phase	Χ	Χ	-	-	-	-	1600 N/A	NI /A	0.4 - 2.2	10"x8" (254x203)	24" (610)	44" (1118)	44" (1118)
	3-Phase	Χ	Χ	Χ	-	-	-		N/A	0.5 - 3.0				
20	1-Phase	Χ	Χ	-	-	-	-	2000 N/A	0.4 - 2.1	10"x8" (254x203)	30"	50" (1270)	50" (1270)	
	3-Phase	Χ	Χ	Χ	-	-	-		0.5 - 2.9		(762)			
30	1-Phase	Χ	Χ	-	Χ	Χ	-	2400	2400	0.5 - 2.1	10"x8"	30"	59"	56"
	3-Phase	Χ	Χ	Χ	-	Χ	Χ	2700	0.5 - 3.0	(254x203)	(762)	(1499)	(1422)	
40	1-Phase	Χ	Χ	-	Χ	Χ	-	2400	4000	0.7 - 1.8	10"x8" (254x203)	30"	68" (1727)	59" (1499)
	3-Phase	Χ	Χ	Χ	-	Χ	Χ	2700		0.5 - 2.8		(762)		

NOTES: Dimensions in parentheses are mm. All dimensions are ±1/4" (6mm). Metric values are soft conversion. Right hand unit shown, left hand unit opposite. Motor/drive location may be specified left hand or right hand. Standard control enclosure location matches motor/drive position. See coil connection sizes and locations. "X" denotes availability. Nominal CFM is highlighted in yellow. CFM values highlighted in blue have between 0.5" to 0.8" TSP. Horsepower availability depends on fan airflow and TSP.