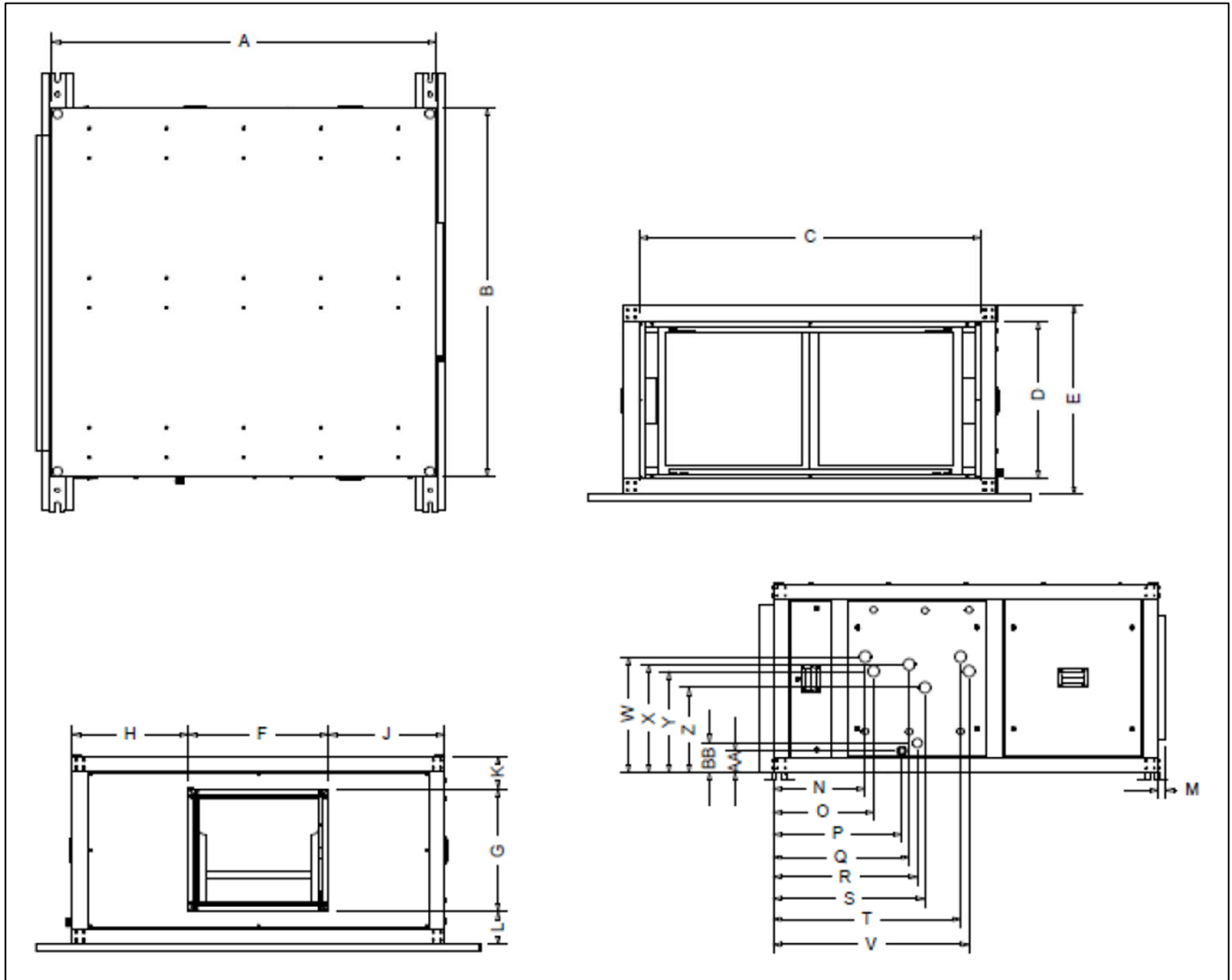


HAB

Horizontal Air Handler Belt Drive Air Handler Unit

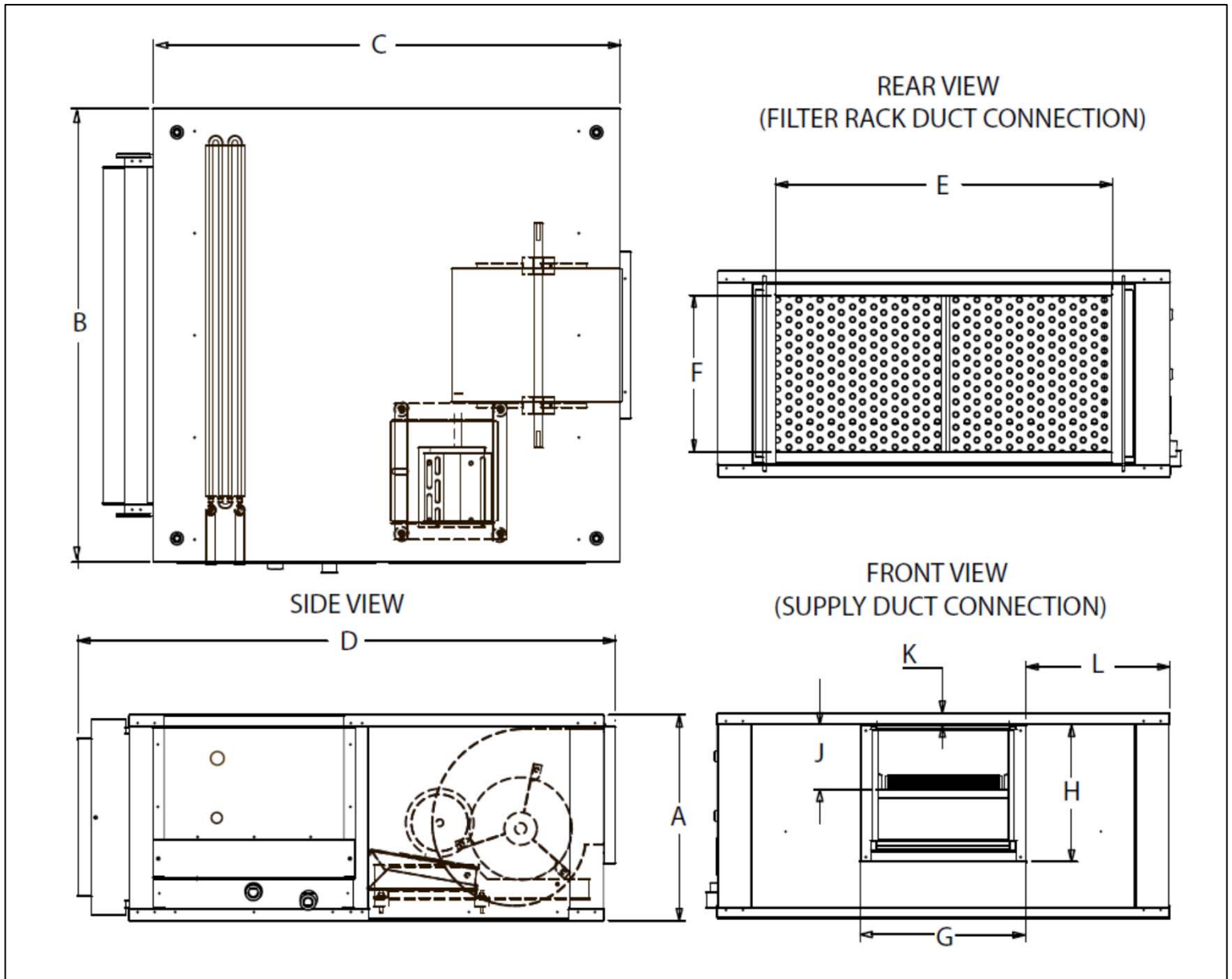


HORIZONTAL UNIT DIMENSIONS

UNIT	A	B	C	D	E	F	G	H	J	K	L	M	N
08	49.50	39.00	34.93	16.06	20.06	14.00	12.50	12.50	12.50	2.01	5.55	1.00	11.42
12	49.50	39.00	34.93	16.06	20.06	14.00	12.50	12.50	12.50	2.01	5.55	1.00	11.42
16	49.50	48.00	43.93	20.56	24.56	18.00	16.00	14.98	14.98	4.28	4.28	1.00	11.78
20	49.50	48.00	43.93	20.56	24.56	18.00	16.00	14.98	14.98	4.28	4.28	1.00	11.78
30	63.00	57.09	53.00	32.41	36.69	19.97	17.53	18.52	18.52	9.53	9.53	1.00	12.75
40	63.00	57.09	53.00	32.41	36.69	19.97	17.53	18.52	18.52	9.53	9.53	1.00	12.75
UNIT	O	P	Q	R	S	T	V	W	X	Y	Z	AA	BB
08	13.79	16.80	20.05	34.93	16.06	23.72	26.10	11.43	11.55	9.18	9.05	2.79	3.89
12	13.79	16.80	20.05	34.93	16.06	23.72	26.10	11.43	11.55	9.18	9.05	2.79	3.89
16	12.86	16.48	48.00	43.93	19.45	24.03	25.12	13.19	11.07	15.07	14.07	2.82	3.85
20	12.86	16.48	48.00	43.93	19.45	24.03	25.12	13.19	11.07	15.07	14.07	2.82	3.85
30	13.93	18.98	57.09	53.00	22.72	27.62	28.92	18.87	18.41	17.35	17.44	3.27	4.38
40	13.93	18.98	57.09	53.00	22.72	27.62	28.92	18.87	18.41	17.35	17.44	3.27	4.38

HAB

Horizontal Air Handler Belt Drive Air Handler Unit



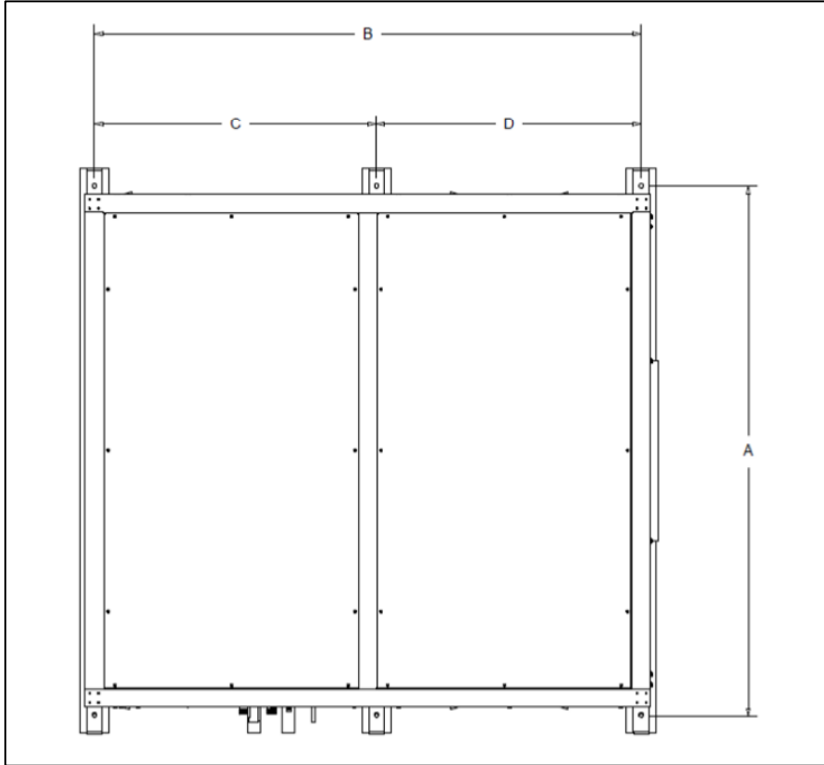
HORIZONTAL UNIT DIMENSIONS

UNIT	A	B	C	D	E	F	G	H	J	K	L
60	47.15	72.00	57.50	76.75	65.92	44.99	24.93	20.65	12.2	4.33	23.49
80	47.15	72.00	57.50	76.75	65.92	44.99	24.93	20.65	12.2	4.33	23.49

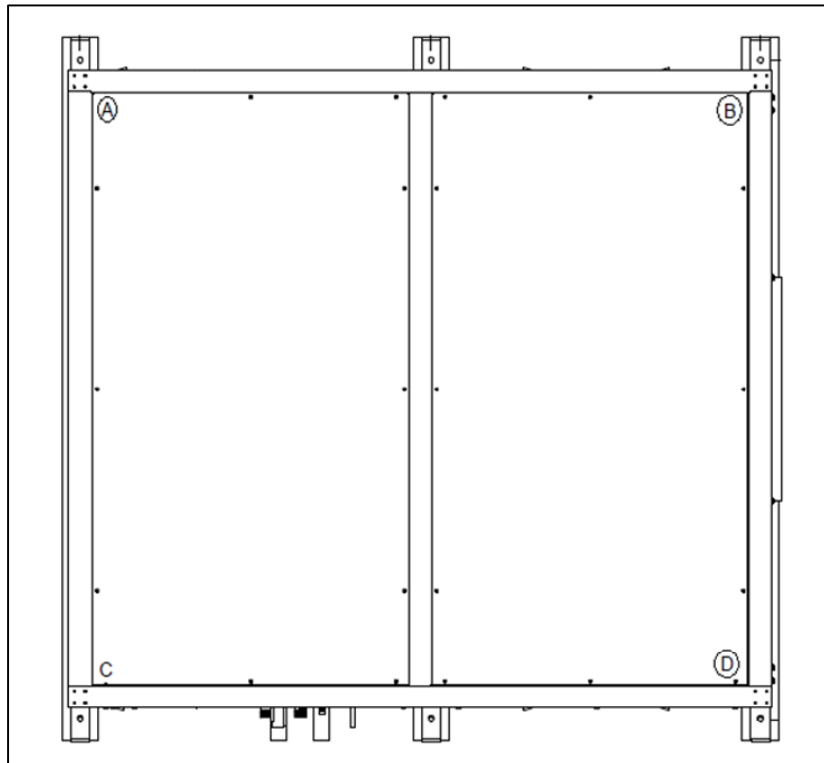
HAB

Horizontal Air Handler Belt Drive Air Handler Unit

Mounting Holes Distance



MOUNTING HOLE DISTANCE				
Unit Size	A	B	C	D
08	37.50	48.00	n/a	n/a
12	37.50	48.00	n/a	n/a
16	46.50	48.00	n/a	n/a
20	46.50	48.00	n/a	n/a
30	59.00	60.91	31.41	29.50
40	59.00	60.91	31.41	29.50
60	75.31	53.13	19.45	33.67



Unit Weight Corner Distribution					
Unit Size	Corner Weight 8 Row Coil				Total Weight
	A	B	C	D	
08	93	94	83	85	355
12	91	104	105	106	406
16	92	122	95	123	432
20	110	125	98	113	446
30	137	153	139	137	566
40	145	156	140	132	574
60	214	223	202	236	875
80	280	293	262	270	1105

Unit Weight Corner Distribution				
Unit Size	Correction Factor for Rows & Single Wall			
	6R	4R	2R	Single Wall
08	-9	-17	-25	-35
12	-11	-21	-33	-35
16	-20	-39	-59	-40
20	-22	-45	-65	-40
30	-36	-72	-103	-65
40	-47	-95	-140	-65
60	-54	-108	-160	-85
80	-55	-110	-162	-85

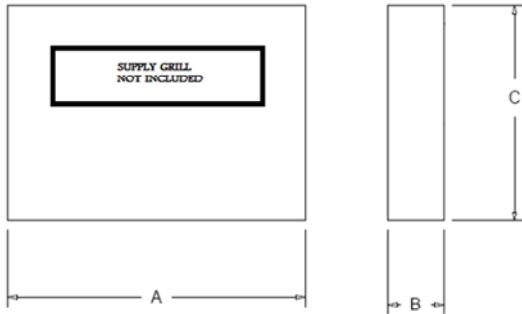
HAB

Horizontal Air Handler Belt Drive Air Handler Unit

FILTER SIZE												
FILTER SIZE	UNIT				FILTER QUANTITY							
	MODEL				08	12	16	20	30	40	60	80
	14"	X	20"	X	2/4"							
	14"	X	25"	X	2/4"				4	4		
16"	X	16"	X	2/4"	2	2						
16"	X	20"	X	2/4"						4	4	
16"	X	25"	X	2/4"						4	4	
20"	X	20"	X	2/4"			2	2				
FILTER TOTAL					2	2	2	2	4	4	8	8

2" & 4" filter racks for units size 08-80 are side loading only

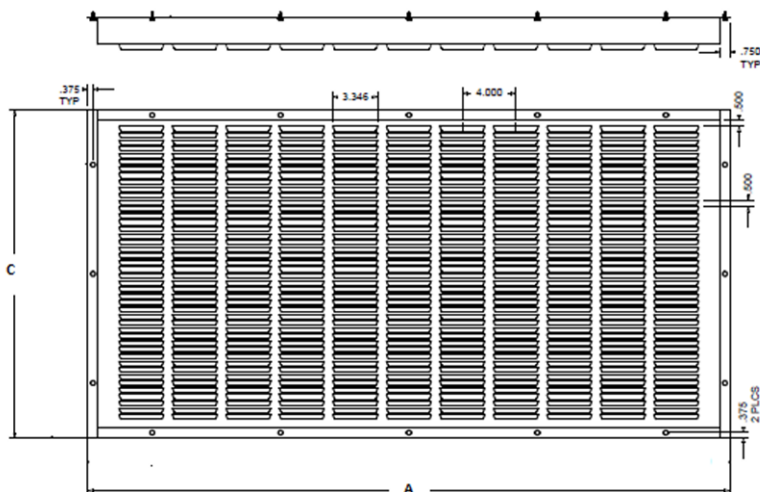
SUPPLY AIR PLENUM



SUPPLY AIR PLENUM					
MODEL	SIZE	A	B	C	GRILL
HAB	08-12	39.00	6.00	20.00	12 X 20 4-W
HAB	16-20	48.00	6.00	24.50	16 X 24 4-W
HAB	30-40	57.00	6.00	36.60	18 X 48 4-W
HAB	60-80	72.00	6.00	47.00	16 X 24 4-W

- Units with supply air plenum cannot have electric heat.
- Units with return air plenum cannot have mixing box, no face & bypass dampers

RETURN AIR PLENUM GRILL



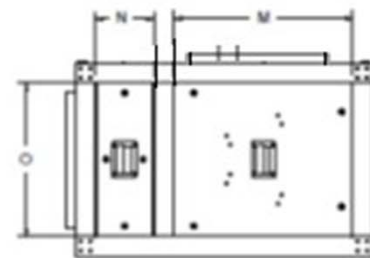
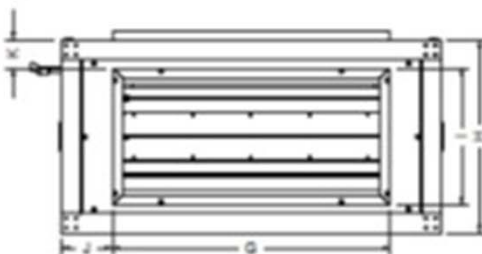
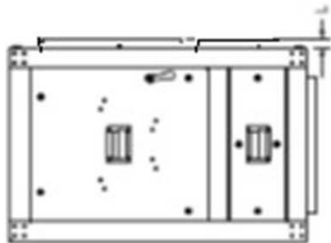
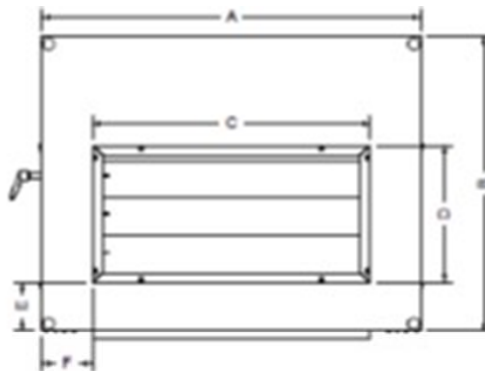
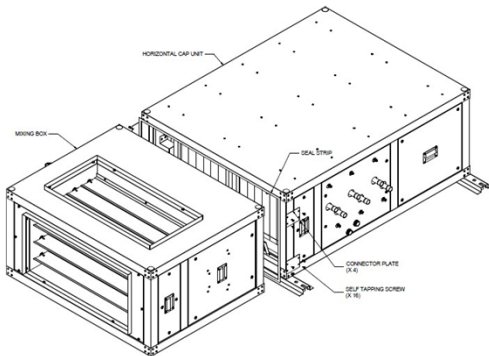
COIL DATA					
MODEL SIZE	FIN BLOCK H X W	FACE AREA	ROWS	FPI	WATER CONN.
					HEADER OD
08	10 X 31	2.15	1	10	5/8
			2		
			4		7/8
			6		
12	13 X 31	2.80	8		5/8
			1		
			2		7/8
			4		
16	15 X 40	4.17	6	5/8	
			8		
			1	1-1/8	
			2		
20	17.5 X 40	4.86	4	5/8	
			6		
			8	1-1/8	
			1		
30	22.5 X 47	7.34	2	10	7/8
			4		1-1/8
			6		1-5/8
			8		1-5/8
40	28 X 47	9.14	2		7/8
			4		1-1/8
			6		1-5/8
			8		1-5/8
60	30 X 60	12.5	8	1-5/8	
			2	1-3/8	
			4	1-5/8	
			6	1-5/8	
80	42.5 X 60	17.70	8	2-1/8	
			2	1-3/8	
			4	1-5/8	
			6	2-1/8	
			8	2-1/8	

RETURN AIR PLENUM W/ FIXED GRILL				
MODEL	SIZE	A	B	C
HAB	08-12	39.00	2.00	20.00
HAB	16-20	48.00	2.00	24.40
HAB	30-40	57.00	2.00	36.60
HAB	60-80	72.00	2.00	47.00

- Units with supply air plenum cannot have electric heat.
- Units with return air plenum cannot have mixing box, no face & bypass dampers

HAB

Horizontal Air Handler Belt Drive Air Handler Unit



MIXING BOX																
UNIT	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
HAB	08	39.00	30.50	28.50	14.25	5.00	5.25	28.50	20.00	14.25	5.25	2.90	1.00	18.40	6.00	16.00
HAB	12	39.00	30.50	28.50	14.25	5.00	5.25	28.50	20.00	14.25	5.25	2.90	1.00	18.40	6.00	16.00
HAB	16	48.00	30.00	36.50	17.25	4.20	5.75	36.50	24.50	17.25	5.75	3.70	1.00	16.75	7.70	20.50
HAB	20	48.00	30.00	36.50	17.25	4.20	5.75	36.50	24.50	17.25	5.75	3.70	1.00	16.75	7.70	20.50
HAB	30	63.00	41.50	36.50	22.25	4.50	10.25	57.00	36.70	22.25	10.25	7.20	1.00	23.60	11.80	32.70
HAB	40	63.00	41.50	36.50	22.25	4.50	10.25	57.00	36.70	22.25	10.25	7.20	1.00	23.60	11.80	32.70
HAB	60	72.00	41.50	51.50	24.50	4.50	10.25	51.50	47.00	32.60	10.25	7.20	1.00	23.60	11.80	42.00
HAB	80	72.00	41.50	51.50	24.50	4.50	10.25	51.50	47.00	32.60	10.25	7.20	1.00	23.60	11.80	42.00

Accessories (Optional)

Check if provided.

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> Pleated Filter | <input type="checkbox"/> Return Air Grille | <input type="checkbox"/> Closed Cell Liner | <input type="checkbox"/> Double Wall Cabinet |
| <input type="checkbox"/> Discharge Grille Plenum | <input type="checkbox"/> Spring Isolators | | |

Outside Air Options

- | | |
|---|--|
| <input type="checkbox"/> Mixing Box | <input type="checkbox"/> Face & Bypass Damper* |
| <input type="checkbox"/> Mixing Box w/ 3-Position Control Package | <input type="checkbox"/> Face & Bypass Damper* w/ Filter Section |
| <input type="checkbox"/> Mixing Box w/ Modulating Control Package | |

* Cabinet Dimensions change with face and bypass damper, Consult Titus or website.

HAB

Horizontal Air Handler Belt Drive Air Handler Unit

Coil - 3/8" O.D. Copper Tube; 10 Fins/Inch Aluminum, Corrugated (Sizes HAB08 & HAB12)

Coil - 1/2" O.D. Copper Tube; 10 Fins/Inch Aluminum, Corrugated (Sizes HAB16 to HAB20)

Coil - 5/8" O.D. Copper Tube; 10 Fins/Inch Aluminum, Corrugated (Sizes HAB30 to HAB80)

2-Pipe Coils

4-Row (STD.) 6-Row

4-Pipe (Cooling / Heating)

4/1-Row Preheat 4/2-Row Preheat 6/1-Row Preheat 6/2-Row Preheat

4/1-Row Reheat 4/2-Row Reheat 6/1-Row Reheat 6/2-Row Reheat

Chilled Water Cooling

Hot Water Heating

Glycol Chilled Water Cooling

Glycol Hot Water Heating

Pipe Entry (as you are looking at the filter)

Right Hand (STD.)

Left Hand

Electric Heat

Heater Voltage

(Single Phase)

(Three Phase)

115V 208V

208V 230V

230V 460V

277V

Size	Range
08	5.0-10.0 kW
12	5.0-10.0 kW
16	5.0-10.0 kW
	11.0-16.0 kW
	17.0 kW
20	10.0-16.0 kW
	17.0-19.0 kW
30/40	10.0-14.0 kW
	15.0-16.0 kW
	17.0-19.0 kW
	20.0-21.0 kW

Electric Heat is shipped separately and installed externally to unit discharge.

Electric Heater Options

- Single Point Line Connect, Heater & Motor Same Voltage, Single Phase
- Single Point Line Connect, Heater & Motor Same Voltage, Single Phase w/ Door Disconnect
- Single Point Line Connect, Heater & Motor Same Voltage, Three Phase
- Single Point Line Connect, Heater & Motor Same Voltage, Three Phase w/ Door Disconnect

HAB

Horizontal Air Handler Belt Drive Air Handler Unit

Motors

Available Motors (60 Hz)																	
Phase	Voltage	Type	Horsepower														
			1/4	1/3	1/2	3/4	1	1.5	2	3	5	7.5	10				
Single-phase	115	ODP, Shaded-Pole	S	S	S	S	S	S	S								
	115/208-230	ODP	S	S	S	S	S	S	S								
	115/230	ODP, High Efficiency	S	S	S	S	S	S	S								
	115/230	Totally Enclosed, Fan-Cooled	S	S	S	S	S	S	S								
	115	ODP, 2-speed	S	S	S	S	S	S	S								
	230	ODP, 2-speed	S	S	S	S	S	S	S								
	277	ODP	S	S	S	S	S	S	S								
3-phase	208-230/460	ODP	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
		ODP, High Efficiency	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
		ODP, 2-speed	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
		Totally Enclosed, Fan-Cooled	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
	575	ODP, HE, TEFC	S	S	S	S	S	S	S	S	S	S	S	S	S	S	

ODP = Open, Drip-Proof casing

Notes:

1. ETL-listed.
2. Models HAB08, 12, 16, and 20 -- two-speed motors installed only (must be field wired).
3. Models HAB08, 12, 16, and 20 -- single- and three-phase motors installed and wired to unit junction box.
4. Motor sizes 1/4 to 1.5 hp single-phase include auto reset overload. All others require field supplied overload protection.
5. A triangle (s) indicates availability.

Maximum Motor HP								
Series	Model							
	08	12	16	20	30	40	60	80
HAB	0.5	0.5	1.5	1.5	3.0	5.0	7.5	10.0

*Values presented are from the NEC Handbook, 1999 Edition. Actual motor nameplate amps may vary.

Motor Current Rating (AMPs)*

Single-Phase Motors				
Horsepower	Voltage			
	115	208	230	
1/4	2.9	1.5	1.3	
1/3	5.1	2.6	2.4	
1/2	6.3	3.2	2.9	
3/4	9.7	4.9	4.7	
1	10.2	5.1	4.9	
1 1/2	20.0	11.0	10.0	
2	24.0	13.2	12.0	
Three-Phase Motors				
Horsepower	Voltage			
	208	230	460	575
1/2	2.2	2.0	1.0	.08
3/4	3.1	2.8	1.4	1.1
1	4.0	3.6	1.8	1.4
1 1/2	5.7	5.2	2.7	2.1
2	7.5	6.8	3.4	2.7
3	10.7	9.6	4.8	3.9
5	16.7	15.2	7.6	6.1
7 1/2	24	22	11	9
10	31	28	14	11

General Description

- Each horizontal blower unit provides flexibility of design due to belt-driven fans, multi-row coil capability and available factory options. These products are designed for the common areas and large meeting rooms in hotels, motels, apartment complexes, condominiums, schools, universities, hospitals, and nursing homes.
- Cabinet fabricated of heavy gauge pre painted galvanized steel, lined with 1-inch, 1.5 pound fiberglass insulation with antimicrobial coating.
- 2-inch fiberglass disposable filter with a horizontal filter slide.
- Manual Air Vent.