

BCHD

HORIZONTAL DIRECT-DRIVE BLOWER COIL

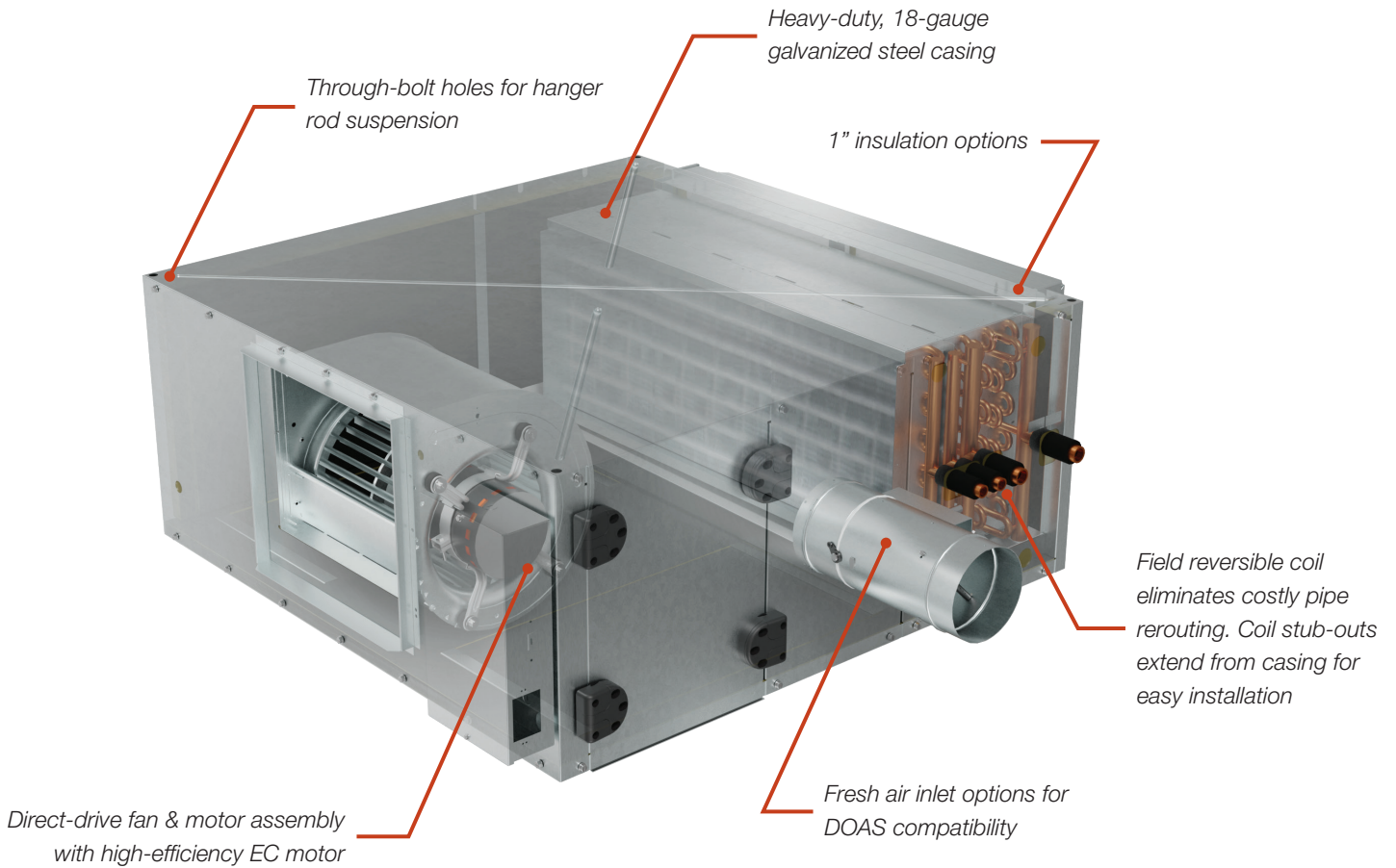


PRICE | FAN COILS

BCHD

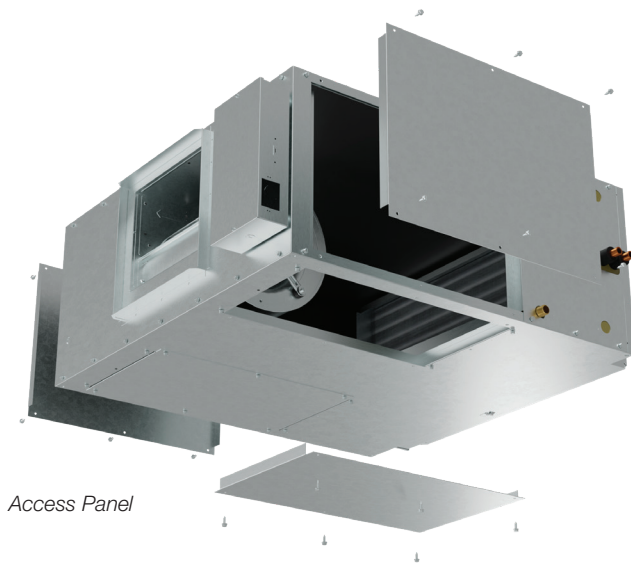
Horizontal Direct-Drive Blower Coil

The BCHD Horizontal Blower Coil is a low-profile solution for applications that require flexibility between a traditional fan coil unit and a central station air handling unit. This adaptable blower coil operates in a large airflow range from 200 to 4600 cfm by combining an optimized fan and motor assembly with a Price EC motor speed controller. The wide variety of coil and construction options offered with the BCHD ensures that it can meet the needs of many applications while providing conditioned air to one or more zones.



SIMPLIFIED INSTALLATION AND MAINTENANCE

- + Direct drive fan & motor assembly with EC motor speed controller to ensure jobsites are commissioned quickly and efficiently
- + Side and bottom access panels for easy maintenance
- + The BCHD features a 2 in. filter rack with side and bottom access
- + Field reversible coils provide on-site flexibility to eliminate the need for costly pipe rerouting
- + Price blower coils ship pre-assembled to reduce on-site installation time
- + Through-bolt holes allow for rapid hanger rod suspension



TYPICAL APPLICATIONS

Price blower coils are an excellent choice for applications where substantial heating/cooling capacities or high external static pressures are required. The ability to operate with high static pressure and integrate with outdoor air makes blower coils well-suited for hospital and laboratory applications as well.

FORWARD-THINKING CONSTRUCTION

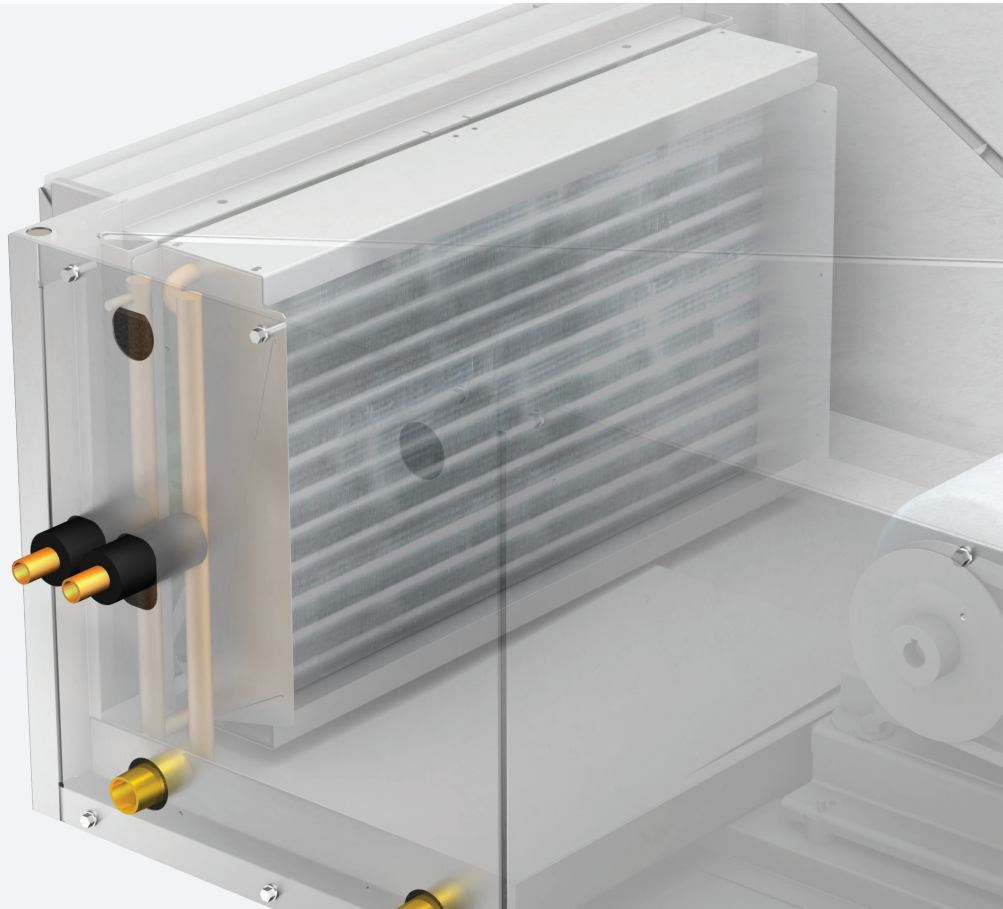
The BCHD is a blower coil built with the future in mind. Modular construction brings the latest in motor efficiency and air filtration to innovative DOAS markets, retrofit applications, and everything in between. Coupling this with a design aimed at ease of installation and maintenance results in a blower coil that excels in almost any application.

IDEAL FOR INSTALLATIONS WITH LIMITED SPACE

- + Low profile solution with unique bottom access is ideal for ducted applications with restricted height
- + The high static pressure of the blower coil allows for the use of multiple air outlets and long duct runs, helping to reduce the footprint of the HVAC system as ductwork from the primary air handler is not required

WATER COILS

- + Price water coils are AHRI 410 certified and feature high quality construction with copper tubes, aluminum fins, and 20 GA galvanized steel casing
- + For optimal performance and versatility, water coils are available in RH and LH configurations with up to 10 rows with the following configurations:
 - Heating: 1-2 Rows (Reheat/Preheat)
3, 4, 6, or 8 Rows (Heating Only)
 - Cooling: 3, 4, 6, or 8 rows



VALVE PACKAGES

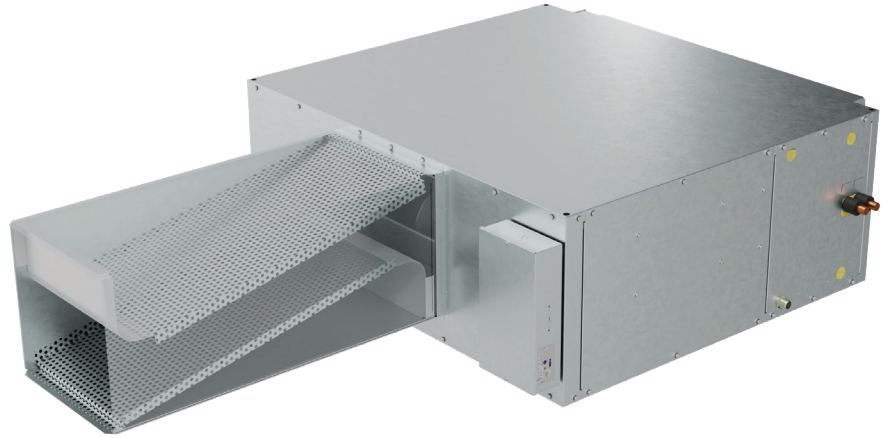
- + Hot water coils are available with a factory leak-tested valve package for simplicity and ease of installation.
- + 2-way valves
- + Automatic balancing valve
- + TCV supplied by Price or supplied by others and factory mounted
- + 3/4 in. or 1 in. piping package diameter

DIRECT-DRIVE

- + Reduced complexity & maintenance compared to belt-driven motors
- + Easy integration with BMS or thermostat control
- + High efficiency motors available in 115 - 277V

QUIET CONSTRUCTION

- + Removable discharge silencer now specifically for our BCHD unit
- + Available with all standard liner options for our silencer on FCU's
- + Reduces discharge and radiated noise levels for sound-sensitive situations.



INDOOR AIR QUALITY

- + Fresh Air Inlet - Factory installed fresh air inlet with damper and airflow measuring sensor allows for preconditioned outside air to be easily monitored and controlled
- + Mixing box - Manual or actuated mixing box allows outside air and return air to mix prior to entering the unit
- + Solid metal liner - Insulated liner isolates insulation from the air stream
- + Air filtration - Filtration starting with a standard MERV 8 filter and going up to an optional MERV 13 filter



SEISMIC CERTIFIED CONSTRUCTION

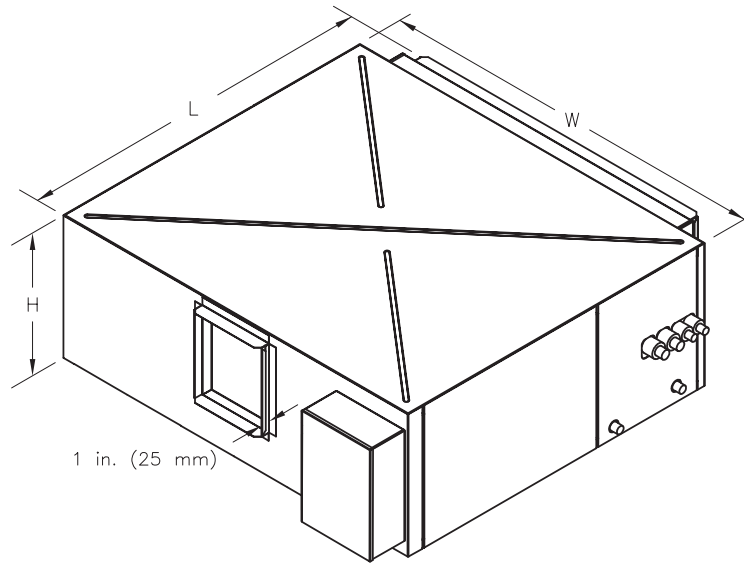
- + The following Fan Coil units and accessories are listed on OSP Special Seismic Certification Pre-Approval # OSP-0378
- + BCHD, all sizes, ceiling suspended BCHQ with quiet operation, all sizes
- + ALL standard coil configurations being 2-pipe or 4-pipe
- + ALL standard Price Liners for our BCHD unit

STANDARD & OPTIONAL FEATURES

	Standard Features	Optional Features
Unit Construction	<ul style="list-style-type: none"> + Heavy Duty, 18-gauge unit construction + 1" dual-density fiberglass insulation + Integrated through-bolt holes for unit installation + Removeable side access panels + Removeable bottom access panels (not available on size 08) 	<ul style="list-style-type: none"> + 1" foil-face fiberglass board or 1" fiber-free insulation + 1" fiberglass with solid metal liner + Spring hanger brackets + Hinged, tool-free side access panels + Hinged, tool-free bottom access panels + OSP Seismic certified construction
Performance	<ul style="list-style-type: none"> + AHRI 260 sound performance + AHRI 410 certified water coils 	<ul style="list-style-type: none"> + Discharge silencer
Electrical	<ul style="list-style-type: none"> + Left or right-hand electrical enclosure handing + Line voltage to 24V control transformer 	<ul style="list-style-type: none"> + Toggle disconnect switch + Drain pan overflow safety float switch + Motor fusing + Control fusing + 24V isolation transformer
Fan & Motor Assembly	<ul style="list-style-type: none"> + Optimized, large diameter, DWDI forward curve fans + 115, 208, 240, or 277V, high efficiency, direct-drive EC motors + Modulating EC motor speed control 	
Water Coils	<ul style="list-style-type: none"> + 1/2" heavy duty, copper tubes with 10 FPI aluminum fins + Left or right-hand coil handing + Up to 8 rows for single heating or cooling coil + 10 total, combined rows maximum <ul style="list-style-type: none"> - Cooling - 3, 4, 6, or 8 rows chilled water - Heating - 1 or 2 row hot water + Preheat or reheat configurations + Manual air vents 	
Drain Pans	<ul style="list-style-type: none"> + Dual-sloped galvanized steel drain pan with external insulation 	<ul style="list-style-type: none"> + Dual-sloped stainless steel drain pan with external insulation + Secondary overflow drain
Indoor Air Quality	<ul style="list-style-type: none"> + 2" MERV 8 filters + Tool-free, bottom & side filter access panels 	<ul style="list-style-type: none"> + 2" MERV 13 filters + Spare 2" filters + Left or right-hand round fresh air inlet with airflow measuring probe and damper + Ship-loose mixing box + Mixing box actuators, access panels, and low-leak dampers
Valve Packages		<ul style="list-style-type: none"> + Factory-mounted, 3/4" & 1" line size, 2-way + On/Off control valves and modulating control valves with electronic fail-safe + Floating point control valves + Factory-optimized and field-adjustable CV settings for control valves + Isolation valves with memory stop, unions, and PT ports + Serviceable automatic balancing valve + Y-strainer with blow-down

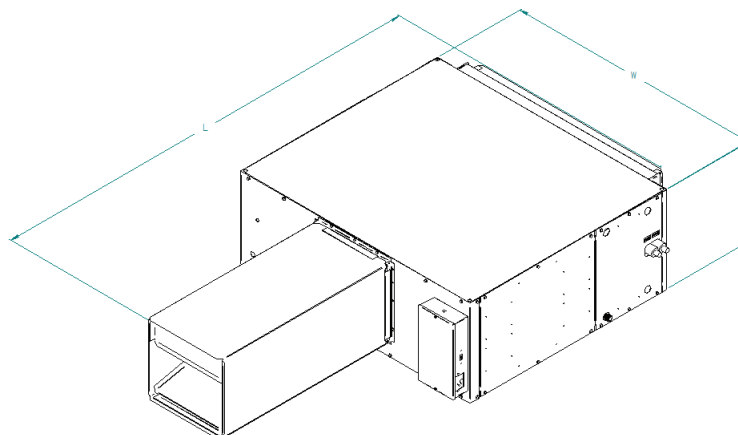
DIMENSIONAL DATA

BCHD



Size	Length (L)	Width (W)	Height (H)
08	46 7/8 in. (1191 mm)	30 in. (762 mm)	15 1/2 in. (394 mm)
12		38 in. (965 mm)	
16		44 in. (1118 mm)	19 in. (483 mm)
20	50 in. (1270 mm)		
30	53 7/8 in. (1368 mm)	52 in. (1321 mm)	25 in. (635 mm)
40		65 in. (1651 mm)	

BCHDQ

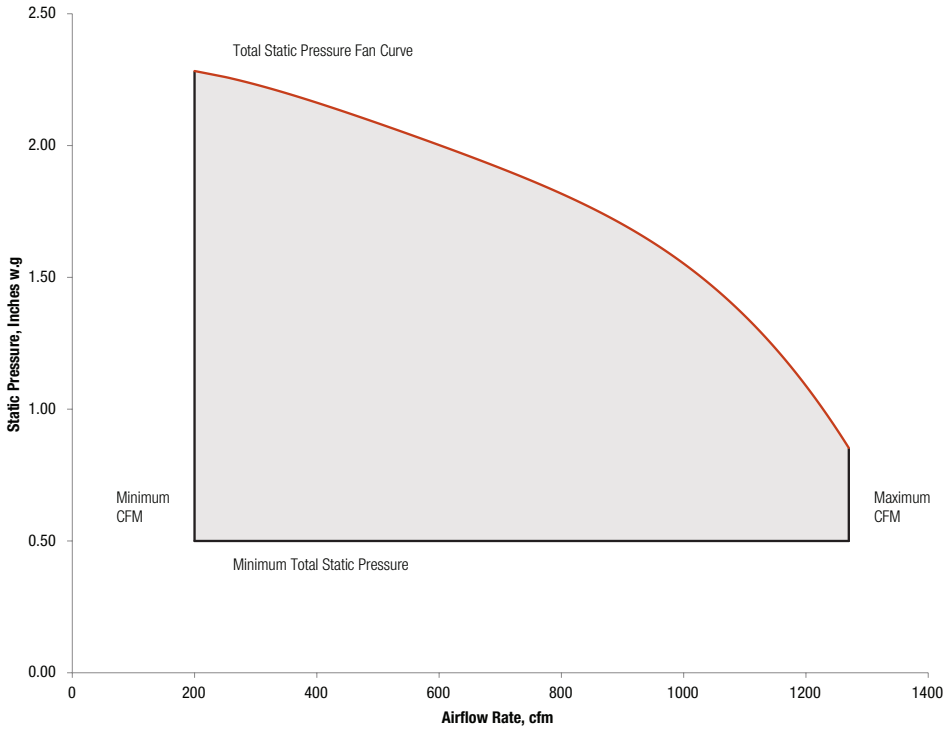


Size	Length (L)	Width (W)	Height (H)
08	82 7/8 in. (2105 mm)	30 in. (762 mm)	15 1/2 in. (394 mm)
12		38 in. (965 mm)	
16		44 in. (1118 mm)	19 in. (483 mm)
20	50 in. (1270 mm)		
30	92 7/8 in. (2359 mm)	52 in. (1321 mm)	25 in. (635 mm)
40		65 in. (1651 mm)	

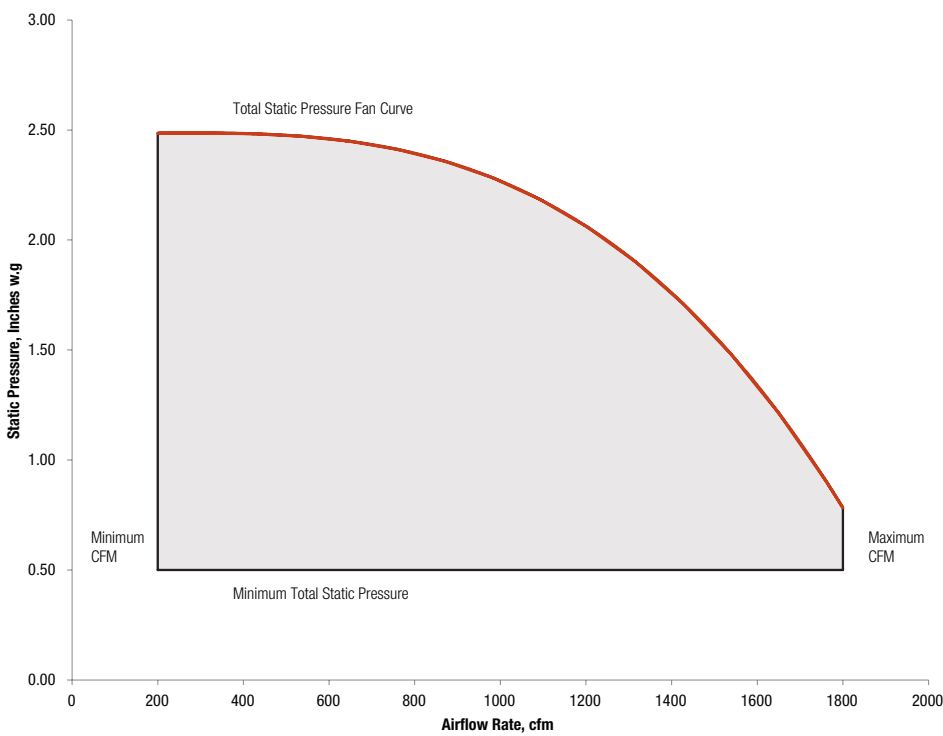
PERFORMANCE DATA

Fan Performance Curves

BCHD Size 08 ECM



BCHD Size 12 ECM



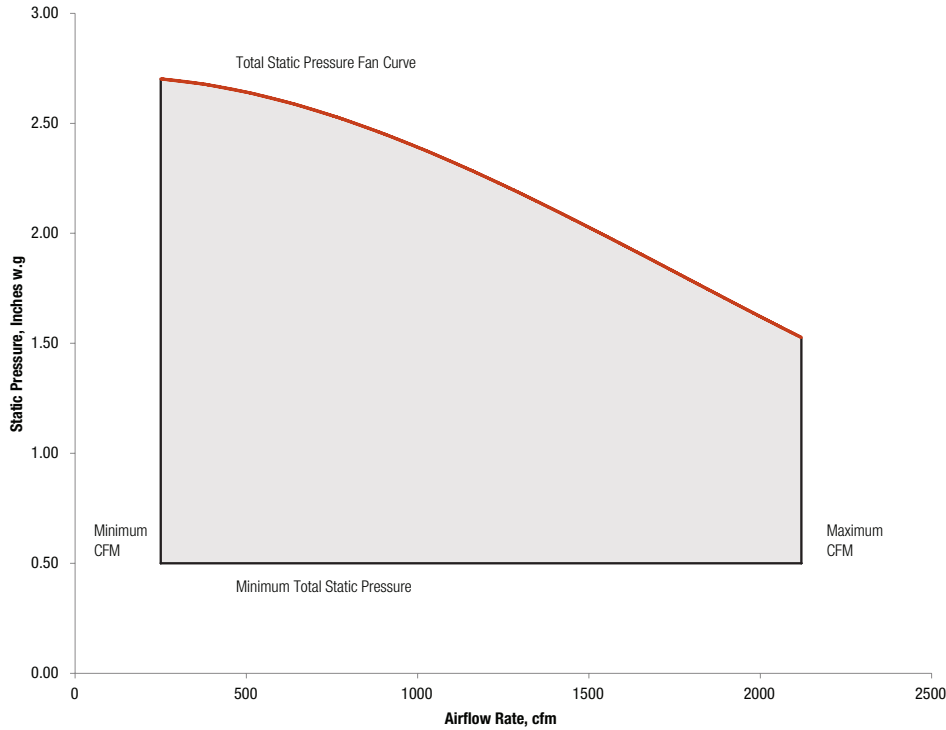
Notes:

1. Fan Performance data obtained in accordance with the latest editions of AHRI Standard 430-2014 and AMCA Standard 210-16.
2. Black solid lines represent maximum and minimum operating flows and static pressures.
3. All BCHD sizes require a minimum of 0.1" w.g. of downstream static pressure.

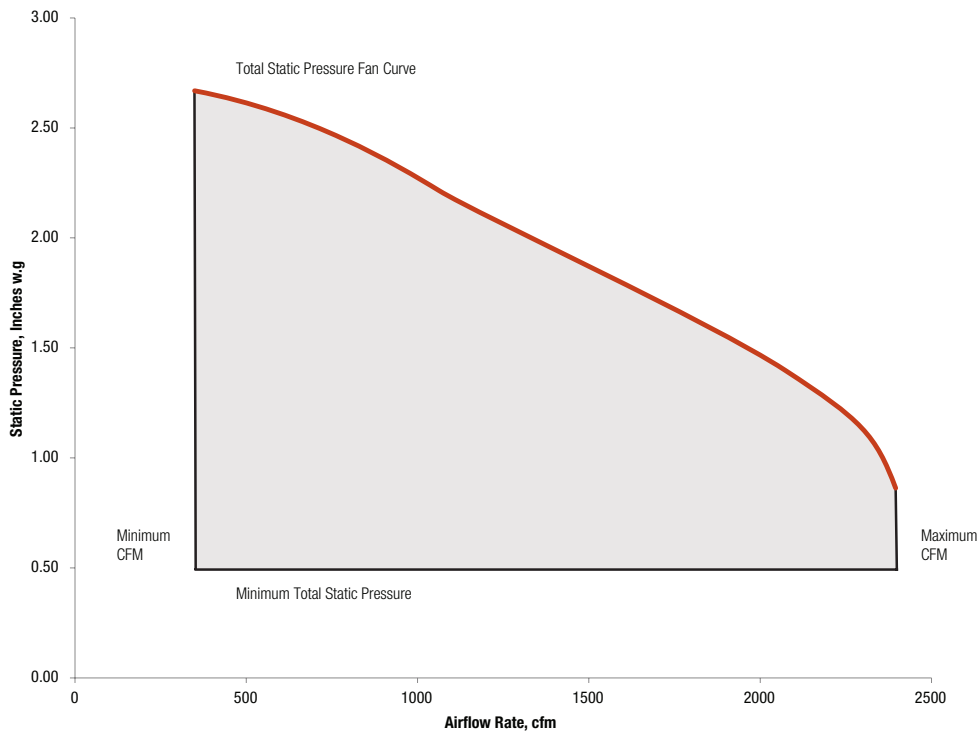
PERFORMANCE DATA

Fan Performance Curves

BCHD Size 16 ECM



BCHD Size 20 ECM



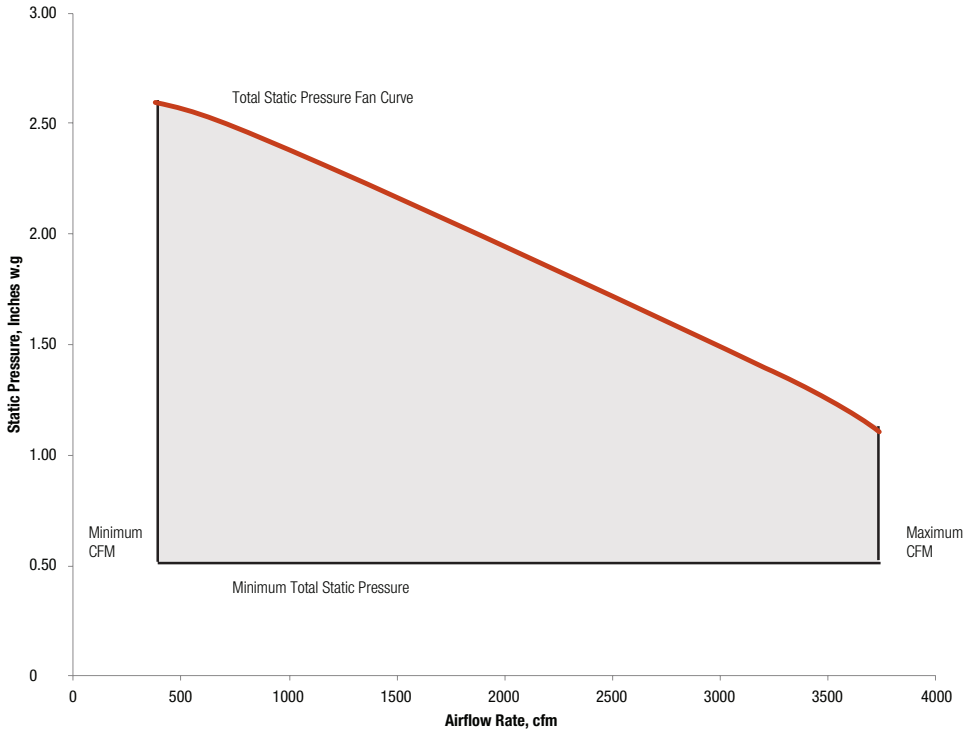
Notes:

1. Fan Performance data obtained in accordance with the latest editions of AHRI Standard 430-2014 and AMCA Standard 210-16.
2. Black solid lines represent maximum and minimum operating flows and static pressures.
3. All BCHD sizes require a minimum of 0.1" w.g. of downstream static pressure.

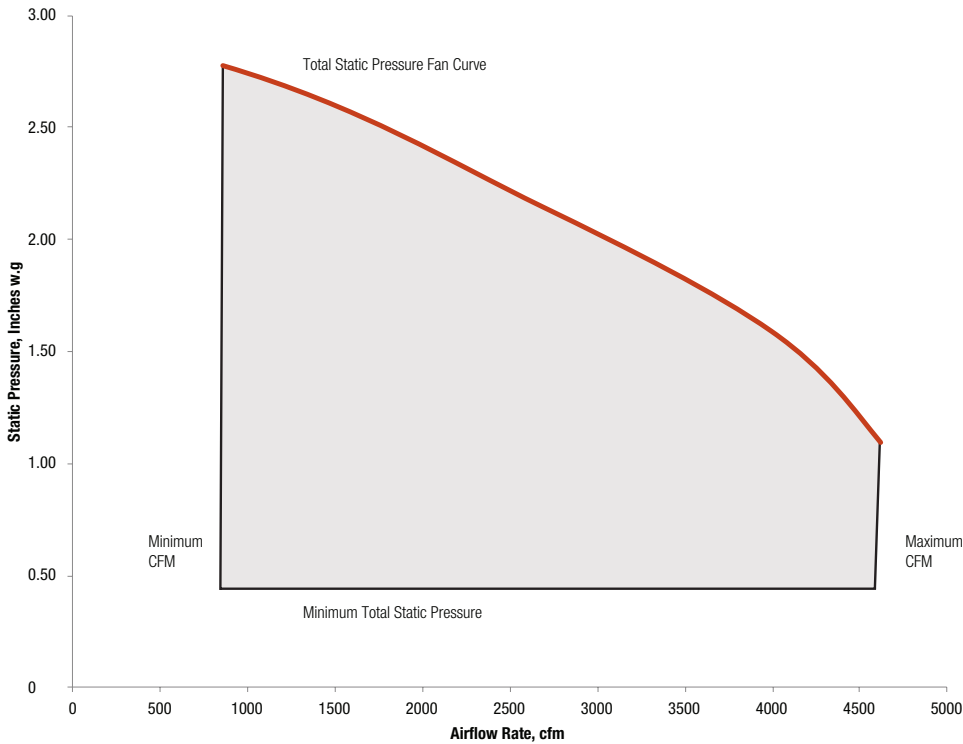
PERFORMANCE DATA

Fan Performance Curves

BCHD Size 30 ECM



BCHD Size 40 ECM



Notes:

- 1. Fan Performance data obtained in accordance with the latest editions of AHRI Standard 430-2014 and AMCA Standard 210-16.
- 2. Black solid lines represent maximum and minimum operating flows and static pressures.
- 3. All BCHD sizes require a minimum of 0.1" w.g. of downstream static pressure.

PERFORMANCE DATA

Component Static Pressure Losses

Unit	Flow (cfm)	Wet Coil				Dry Coil						2 in. MERV 8 Filters	2 in. MERV 13 Filters	Mixing Box
		3	4	6	8	1	2	3	4	6	8			
8	400	0.07	0.09	0.14	0.18	0.02	0.04	0.07	0.09	0.13	0.18	0.13	0.19	0.02
	600	0.14	0.18	0.27	0.36	0.04	0.09	0.13	0.17	0.26	0.34	0.25	0.32	0.03
	800	0.22	0.29	0.44	0.59	0.06	0.14	0.21	0.28	0.42	0.56	0.40	0.35	0.05
12	600	0.09	0.12	0.17	0.23	0.02	0.05	0.07	0.10	0.15	0.20	0.15	0.22	0.02
	900	0.17	0.23	0.34	0.45	0.04	0.10	0.15	0.20	0.29	0.39	0.29	0.34	0.03
	1200	0.27	0.37	0.55	0.73	0.07	0.16	0.24	0.32	0.47	0.63	0.47	0.32	0.06
16	800	0.08	0.11	0.16	0.21	0.02	0.04	0.07	0.09	0.14	0.18	0.12	0.18	0.02
	1200	0.16	0.21	0.31	0.42	0.04	0.09	0.13	0.18	0.27	0.36	0.23	0.31	0.03
	1600	0.25	0.34	0.51	0.68	0.06	0.14	0.21	0.29	0.43	0.57	0.38	0.35	0.06
20	1000	0.09	0.12	0.19	0.25	0.02	0.05	0.08	0.10	0.15	0.20	0.14	0.21	0.02
	1500	0.18	0.24	0.37	0.49	0.04	0.10	0.15	0.20	0.30	0.40	0.26	0.33	0.03
	2000	0.30	0.40	0.59	0.79	0.07	0.16	0.24	0.32	0.49	0.65	0.43	0.34	0.06
30	2000	0.16	0.21	0.32	0.43	0.04	0.09	0.13	0.18	0.27	0.36	0.25	0.32	0.02
	2500	0.23	0.31	0.47	0.62	0.06	0.13	0.19	0.26	0.39	0.52	0.37	0.35	0.04
	3000	0.31	0.42	0.63	0.84	0.08	0.17	0.26	0.35	0.53	0.70	0.51	0.29	0.06
40	2000	0.11	0.15	0.23	0.30	0.03	0.06	0.09	0.12	0.18	0.23	0.16	0.24	0.02
	3000	0.22	0.30	0.44	0.59	0.05	0.11	0.17	0.23	0.35	0.46	0.32	0.35	0.03
	4000	0.36	0.48	0.72	0.96	0.08	0.18	0.28	0.37	0.56	0.75	0.53	0.27	0.06

PERFORMANCE DATA

Nominal Cooling Capacities

Unit Size	Nominal CFM	Rows	Circuits	Connection Size (in.)	Total Capacity (MBH)	Sensible Capacity (MBH)	Fluid Flow (GPM)	Fluid PD (ft w.g.)
8	800	4	2	7/8	25.5	18.1	5.1	16.4
			4	7/8	21.6	16.4	4.4	2.3
		6	3	7/8	32.7	21.8	6.5	12.8
			6	7/8	29.5	20.4	5.9	2.7
		8	3	7/8	38.5	24.6	7.7	22.4
			6	7/8	34.4	22.8	6.9	4.2
12	1200	4	3	7/8	38.0	27.2	7.6	12.8
			5	7/8	33.0	25.0	6.6	3.4
		6	4	7/8	49.6	33.0	9.9	14.8
			6	7/8	45.6	31.3	9.1	6.2
		8	5	7/8	56.6	36.4	11.3	14.7
			8	7/8	52.0	34.4	10.4	7.3
16	1600	4	5	7/8	51.1	36.7	10.2	8.9
			8	7/8	44.2	34.1	8.8	4.8
		6	6	1 1/8	67.7	44.8	13.5	11.4
			9	1 1/8	62.2	42.4	12.4	5.3
		8	7	1 1/8	77.5	49.5	15.5	13.3
			10	1 1/8	73.3	47.6	14.6	7.6
20	2000	4	5	1 1/8	66.5	47.2	13.3	12.5
			8	1 1/8	58.6	43.8	11.7	4.5
		6	7	1 1/8	84.9	56.3	17.0	13.4
			10	1 1/8	78.8	53.6	15.7	7.8
		8	8	1 1/8	97.3	62.2	19.4	16.7
			12	1 1/8	91.2	59.4	18.2	10.8
30	3000	4	8	1 1/8	97.2	69.6	19.4	13.4
			12	1 1/8	86.4	65.0	17.3	8.9
		6	10	1 3/8	127.3	84.4	25.4	15.8
			14	1 3/8	118.8	80.6	23.7	10.2
		8	12	1 5/8	145.0	92.8	28.9	14.9
			17	1 5/8	137.1	89.2	27.4	9.2
40	4000	4	10	1 3/8	135.7	96.2	27.1	14.9
			14	1 3/8	123.7	91.1	24.7	10.0
		6	12	1 5/8	176.6	115.8	35.3	19.2
			17	1 5/8	165.1	110.7	33.0	12.0
		8	14	1 5/8	199.7	126.8	39.9	22.9
			17	1 5/8	194.6	124.4	38.9	18.1

Notes:

1. Nominal cooling capacities are based on 80°F DB, 67°F WB entering air temperature and 45°F entering water temperature, 10°F water temperature rise.
2. For all application ratings, please contact your local Price Representative.
3. Unit total static pressure includes External Static and Internal Pressure Drop such as cooling coils and filters.
4. Reference Price Selection software for discharge silencer sound performance.

PERFORMANCE DATA

Nominal Heating Capacities

Rows	Unit Size	Nominal CFM	Connection size (in.)	Circuits	10 °F Temperature Drop				20 °F Temperature Drop				30 °F Temperature Drop			
					Sensible Capacity (MBH)	LAT (°F)	Fluid Flow (GPM)	Fluid PD (ft w.g.)	Sensible Capacity (MBH)	LAT (°F)	Fluid Flow (GPM)	Fluid PD (ft w.g.)	Sensible Capacity (MBH)	LAT (°F)	Fluid Flow (GPM)	Fluid PD (ft w.g.)
1	8	800	5/8	1	31.1	90.8	4.8	21.8	28.4	87.6	2.9	9.0	24.0	82.7	1.6	3.2
				2	32.8	92.8	6.7	11.1	28.6	88.0	2.9	2.5	24.5	83.2	1.7	0.9
	12	1200	5/8	2	49.2	92.8	9.5	22.0	43.1	88.1	4.4	5.5	37.0	83.4	2.5	2.0
				3	50.1	93.5	10.3	26.7	43.7	88.6	4.5	6.0	37.4	83.7	2.6	2.2
	16	1600	7/8	3	71.2	96.0	14.3	10.7	62.1	90.8	6.4	2.5	53.2	85.7	3.6	0.9
				5	72.0	96.5	14.8	6.1	63.1	91.4	6.5	1.4	54.0	86.1	3.7	0.5
	20	2000	7/8	4	90.1	96.6	18.5	11.3	78.4	91.2	8.1	2.5	67.3	86.0	4.6	0.9
				6	90.8	96.9	18.7	9.5	79.4	91.7	8.2	2.1	68.1	86.4	4.7	0.8
	30	3000	1 1/8	5	131.2	95.4	23.8	11.6	115.8	90.6	11.9	3.3	99.5	85.6	6.8	1.2
				8	134.9	96.5	27.8	10.6	117.7	91.2	12.1	2.4	100.9	86.1	6.9	0.9
	40	4000	1 1/8	5	176.2	95.7	23.8	12.9	165.6	93.2	17.0	7.0	139.7	87.3	9.6	2.5
				8	189.1	98.7	38.1	19.7	165.2	93.2	17.0	4.6	142.1	87.8	9.7	1.7
2	8	800	7/8	3	60.1	124.3	12.3	10.2	55.6	119.1	5.7	2.5	51.3	114.1	3.5	1.1
				5	60.0	124.2	12.3	4.8	56.2	119.8	5.8	1.2	51.8	114.7	3.5	0.5
	12	1200	7/8	4	90.5	124.7	18.6	13.8	83.8	119.5	8.6	3.4	77.4	114.6	5.3	1.4
				8	90.6	124.7	18.6	11.4	85.3	120.6	8.8	3.0	78.7	115.6	5.4	1.3
	16	1600	7/8	6	127.9	128.8	26.3	20.7	118.5	123.4	12.2	5.2	109.6	118.2	7.5	2.2
				12	128.1	129.0	26.4	31.4	120.5	124.6	12.4	8.2	111.4	119.3	7.6	3.5
	20	2000	7/8	6	158.2	128.1	28.6	24.8	148.2	123.4	15.2	8.0	136.7	118.1	9.4	3.3
				12	160.8	129.3	33.1	47.4	150.5	124.5	15.5	12.2	139.2	119.3	9.5	5.2
	30	3000	1 1/8	10	237.5	128.2	47.6	34.2	219.7	122.7	22.6	8.9	204.2	117.9	14.0	3.8
				17	239.7	128.8	49.3	54.0	223.9	123.9	23.0	13.8	207.1	118.8	14.2	5.9
	40	4000	1 1/8	10	321.6	129.3	47.6	35.6	308.7	126.3	31.8	17.1	282.4	120.2	19.4	7.1
				17	333.5	132.0	68.7	98.8	309.4	126.5	31.8	24.8	286.9	121.3	19.7	10.5

Notes:

1. Nominal Heating Capacities are based on 180 °F EWT and 55 °F EAT.
2. Leaving air temperature is not to exceed 104 °F [40 °C] with the standard motor. Please contact Applications Engineering for higher temperature motor applications.
3. For all application ratings and for information on four and six row heating coil capacities, please contact your local Price representative



Product Improvement is a continuing endeavour at Price. Therefore, specifications are subject to change without notice. Consult your Price Sales Representative for current specifications or more detailed information. Not all products may be available in all geographic areas. All goods described in this document are warranted as described in the Limited Warranty shown at priceindustries.com. The complete Price product catalog can be viewed online at priceindustries.com.