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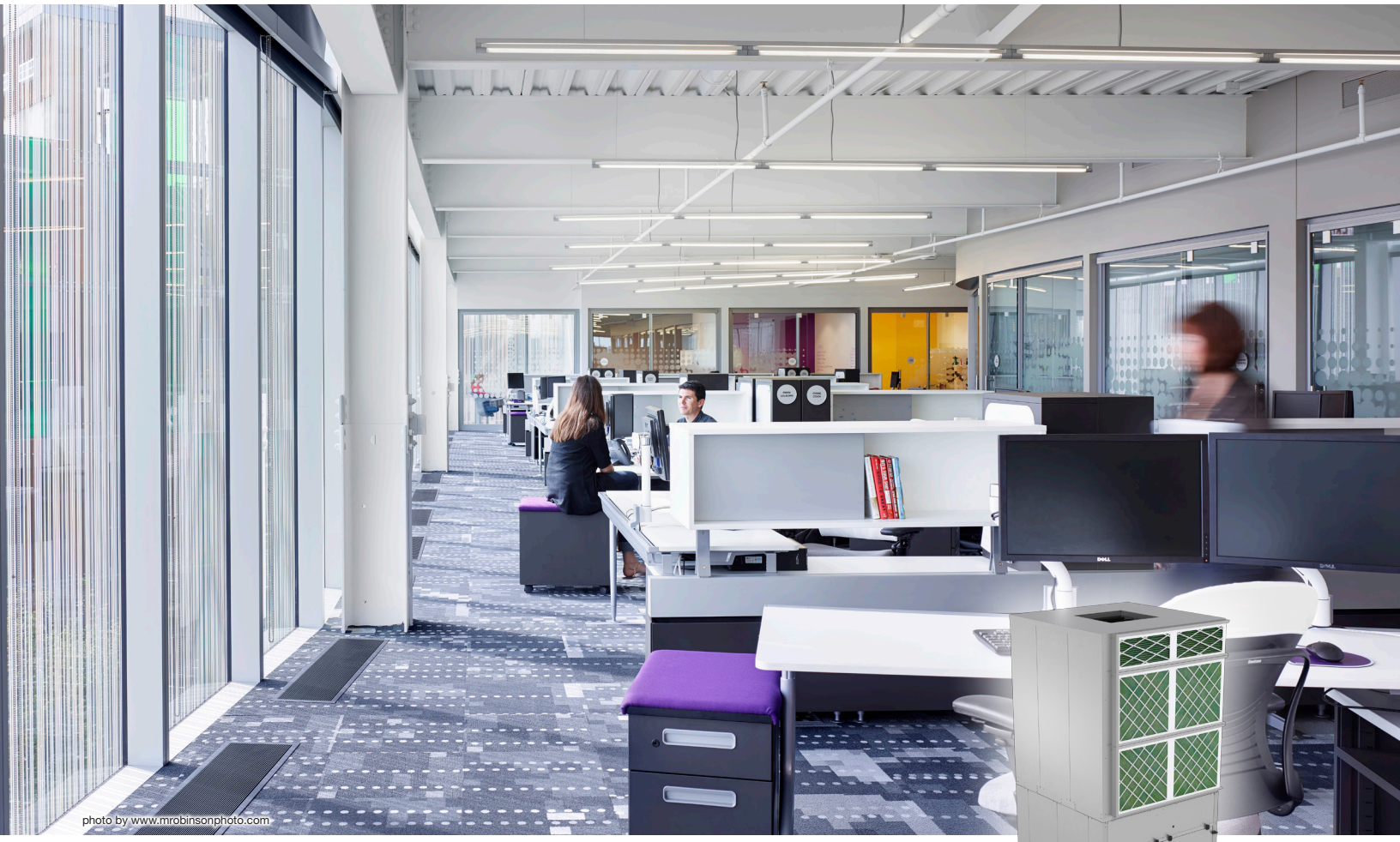


photo by www.mrobinsonphoto.com

PFC

Price Fan Column

Typical Applications

The Price Fan Column (PFC) is a vertical fan unit designed to discharge into a raised access floor plenum. The unit's compact design makes it suitable for any office space looking to minimize the mechanical room foot print and maximize usable floor space. It provides localized air handling and can also help reduce the air shaft size down to fresh air only. The PFC is an ideal solution for millennial spaces seeking flexibility and optimal space utilization.

Price Fan Column

Fan Column Housing

FEATURES

- **Compact design**
- **Capacities range from 1,000 to 17,500 cfm**
- **Convenient access**
- **Superior acoustical performance**
- **Variable frequency drive**
- **Demand control ventilation**
- **Discharge flow monitoring**

Product Highlights

The PFC is available in various sizes and configurations in order to meet any application need. The following features lend to the versatility the PFC can offer.

Compact Design

- Use of vertical space frees up mechanical room floor space.
- A design based around fan columns can reduce the size of the mechanical room by 30% or more compared to compartmental units.

Capacity Range

- 1,000 – 17,500 cfm air flow range to take care of small to large zones.
- Airfoil style blade fan wheel design with seven different unit sizes available to select from.

Convenient Access

- Exterior handles make it easy to access the fan column interior.
- The fan assembly is on rollers facilitating any maintenance or inspection and also designed without having to remove a flex connector.

Superior Acoustical Performance

- Quiet operation is achieved from the double wall insulated construction and acoustical pyramid discharge section.
- Heavy gauge steel frame provides a sturdy construction.

Variable Frequency Drive (VFD)

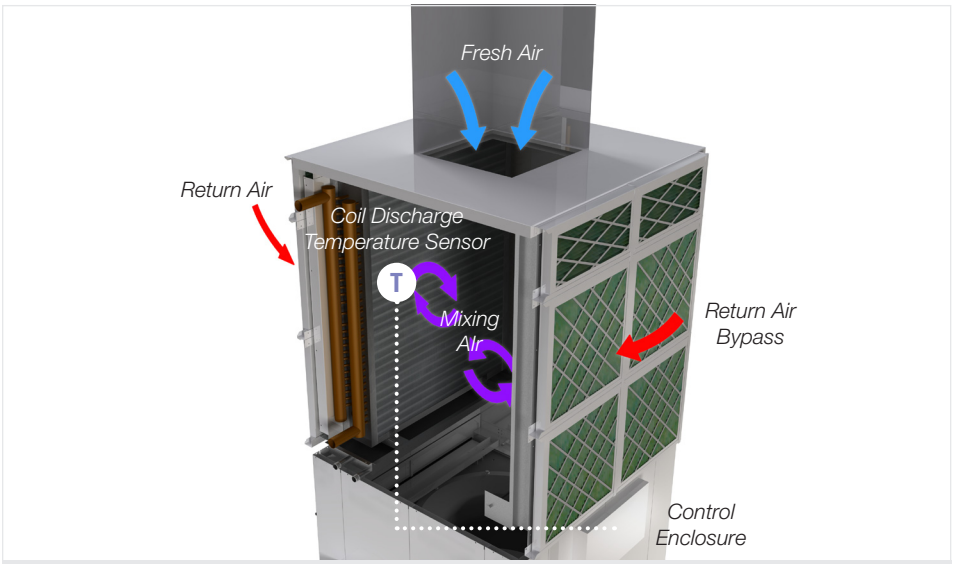
- Plenum pressure can be controlled through modulating the fan speed from the VFD.
- Factory installed variable frequency drive and controls enclosure for reduced field installation.

Demand Control Ventilation (DCV)

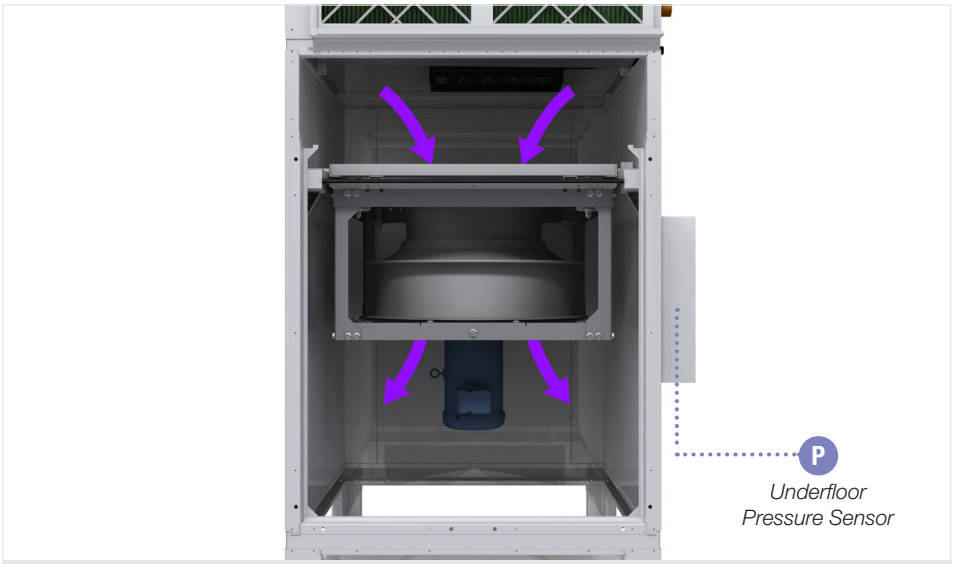
- CO_2 levels in the space can be monitored and used to control the isolated fresh air supply into each zone based on actual demand and occupancy.
- DCV can provide energy savings through demand based fresh air supply.

Discharge Flow Monitoring

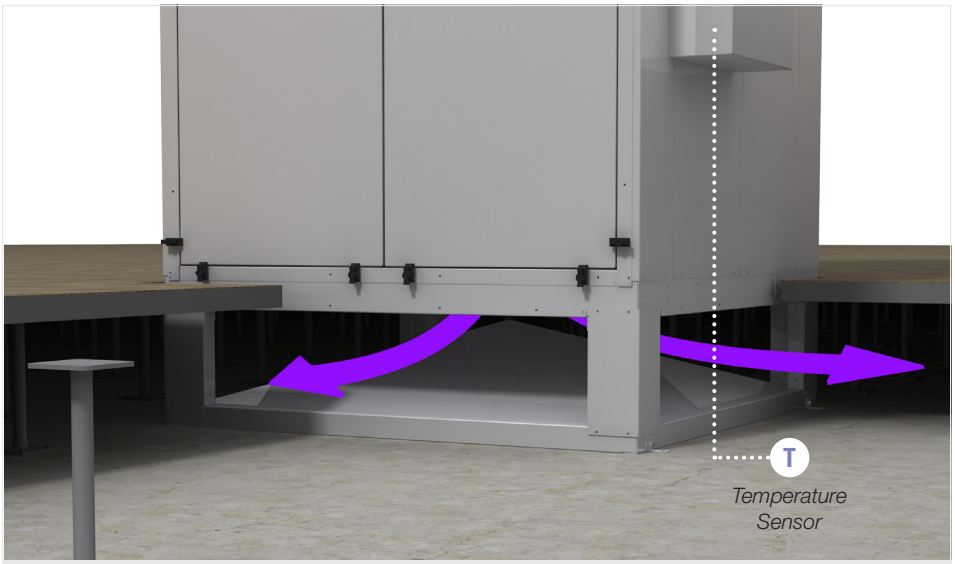
- A piezometer ring can be provided to measure the total air volume being supplied through the PFC.
- Zone based airflow monitoring allows tight and efficient control throughout the building.



Mixing Box Section



Fan Section



Discharge Section

Fan Column Sections

Mixing Box Section

The mixing box is the most versatile section of the PFC as it can be arranged and modified to fit any application.

- Cooling coil and bypass arrangement will use the discharge temperature sensor located in the underfloor plenum to achieve desired set point.
- Fresh air connection is ducted to the top of the mixing box.
- Other arrangements include:
  - When an open ended VAV box is being used no separate fresh air opening is needed on the fan column, fresh air is mixed with return air in the mechanical room.
  - No cooling coil or no bypass is required when using an air economizer.

Fan Section

The fan section includes a direct drive plenum fan inside the insulated double wall housing with a factory mounted VFD and control enclosure.

- Fan can be modulated based on the underfloor pressure sensor to maintain a predetermined static pressure.
- If required the fan can also be modulated to reset the static pressure under low load conditions to minimize fan energy.

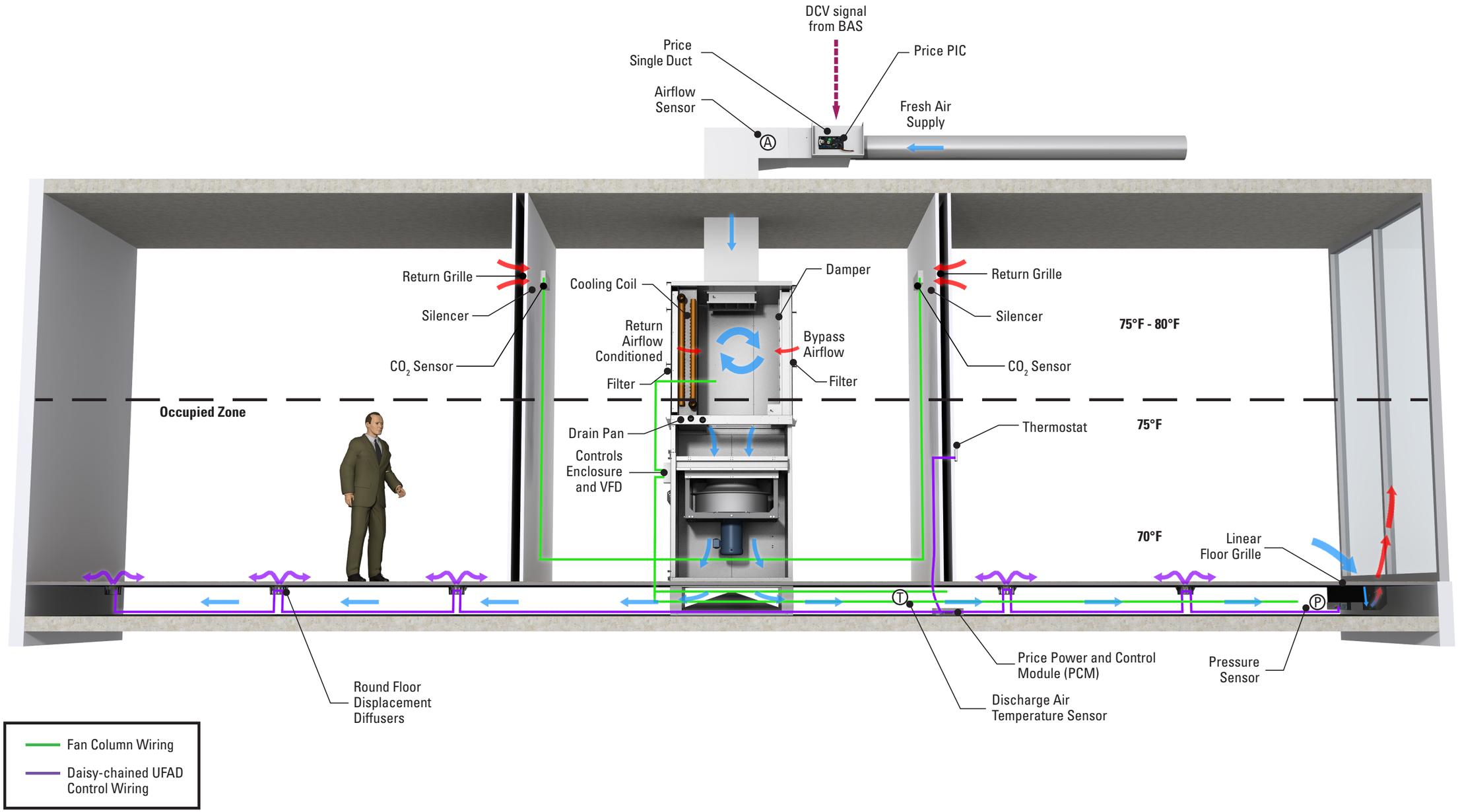
Discharge Section

The discharge section can be provided in 2, 3 and 4 way discharge opening orientations based on location and restrictions.

- The height dimensions of this section can be tailored to match the floor plenum height.
- Discharge section comes with integrated acoustical pyramid for superior sound performance.

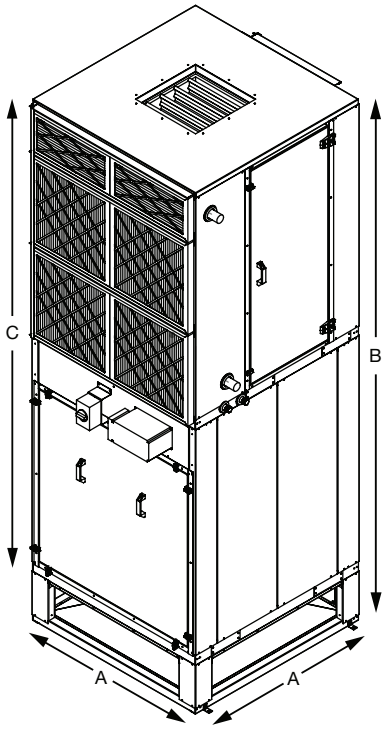
Typical System Layout

Other mixing box arrangements available, see page 3.



Dimensional Data

PFC - Fan Column



Size	Design Airflow (cfm)	Unit Width (A)[1]	Overall Height (B)[2]	Above Floor Height (C)
25	2,500	30	92.5	78.5
50	5,000	40	115	101
75	7,500	49	135	121
100	10,000	52	143	129
125	12,500	58	153	139
150	15,000	64	172	158
175	17,500	72	182	168

[1] All units have a square cross-section.
[2] All units come with a standard underfloor height of 14 in. Underfloor height may vary by job and needs to be verified prior to ordering.

NOTES:
1. Dimension UH varies per order
   - Minimum 10"
   - Maximum 24"
2. UL1995/CSA22.2 No. 236 Certified
3. Other mixing box arrangements available, see page 3.

Nominal Performance Data

Model	Rated Airflow (cfm)	Design OA (cfm)	Design Coil Airflow (cfm)	Maximum ESP with design coil (in.w.c.)[1]	Maximum BHP with design coil (BHP)	Cooling Coil		
						Fin Area (ft^2)	Total Coil Capacity[2] (MBH)	Coil PD at design (in.w.c.)
25	2,500	750	1,250	1.8	1.8	3.7	43.0	0.31
50	5,000	1,500	2,300	1.0	2.7	7.7	89.4	0.25
75	7,500	2,250	3,450	1.3	4.5	13.2	144.1	0.18
100	10,000	3,000	4,600	1.9	6.7	14.3	181.9	0.25
125	12,500	3,750	5,750	0.9	5.4	16.5	229.1	0.32
150	15,000	4,500	6,900	0.8	6.3	23.0	278.9	0.23
175	17,500	5,250	8,050	1.4	9.1	26.5	330.7	0.23

[1] Maximum ESP based on average filter pressure drop and design cooling coil pressure drop with 4 discharge openings.
[2] Total capacity based on design for 62°F supply air, 80/67°F db/wb return air, and 55/55°F db/wb outdoor air.

Note: Sound power level data is available upon request.

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