

# FDC-DOAS

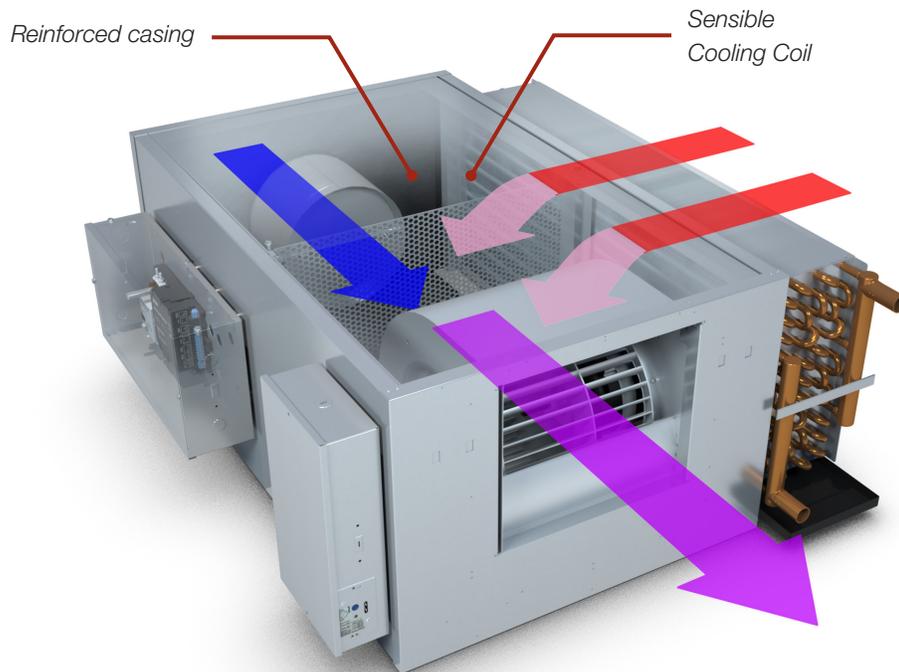
SERIES FLOW FAN POWERED TERMINAL UNIT FOR DEDICATED OUTDOOR AIR SYSTEMS



# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

The Price FDC-DOAS series fan powered terminal unit with a sensible cooling coil is an excellent solution for imparting large sensible loads on the zone when a Dedicated Outdoor Air System is utilized. With unit heights between 15 1/4" and 20 1/8", and airflow ranges between 100 and 2400 CFM, the FDC-DOAS proves to be an excellent solution for air volume control in restricted ceiling spaces and rooms of any size with variable occupancy. The FDC-DOAS provides ventilation air, and total air volume independently of one another in response to different control signals. A variety of options and accessories, including electric reheat, hot water reheat, and factory mounted valve packages, are available to meet specific job requirements.



*FDC with Sensible Cooling Coil (DOAS)*

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

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### SENSIBLE COOLING COIL (DOAS)

This option is intended for use within a Dedicated Outdoor Air System, wherein a DOAS air handler is typically designed to handle the space latent load by dehumidifying and conditioning the outdoor air. By managing the space sensible load with the sensible cooling coil option, the DOAS air handler can be sized to deliver only the airflow required for ventilation and latent loads, resulting in:

- + A smaller HVAC system with enhanced energy savings and simpler room-load calculations.
- + Superior humidity control and thermal comfort.
- + Eliminating over-ventilation.

DOAS offers energy saving benefits which complement the design goals of Green/LEED buildings. Benefits include energy efficient hydronic cooling combined with reduced air volumes and air handler size. The FDC with sensible cooling coil option comes with a standard EC motor which provides significant energy savings compared to PSC motors.

### VALVE PACKAGES

Hot water coils and sensible cooling coils are available with a factory leak-tested valve package for simplicity and ease of installation. Each valve package can save 1.5 hours or more of field labor. Valve Packages are available with the following options:

- + Controls Contractor or Price provided Temperature Control Valves
- + 2-way or 3-way Temperature Control Valve Configurations
- + Automatic or Manual Flow Balancing
- + Optional Valve Package Enclosures

### TYPICAL APPLICATIONS

The FDC-DOAS is an ideal solution for areas that require constant volume air delivery when ceiling space is limited or restricted. Low sound levels throughout the entire operating range further simplify the task of positioning these terminal units within the ceiling plenum. The highly configurable FDC-DOAS includes an efficient EC motor as well as a variety of hot water and electric reheat options.

The sensible cooling coil is used with the FDC as part of a dedicated outdoor air system (DOAS). With optimized coil circuitry and 2 through 8-row coil configurations (6 or 8 row being most typical), the FDC-DOAS can be selected to reduce primary air supply to minimum ventilation requirements while ensuring ASHRAE 62.1 compliance.

#### STANDARD DESIGN

- + High efficiency EC motor
- + 20 gauge casing for added durability
- + Reinforced casing for reduced sound levels

#### OPTIONAL FEATURES

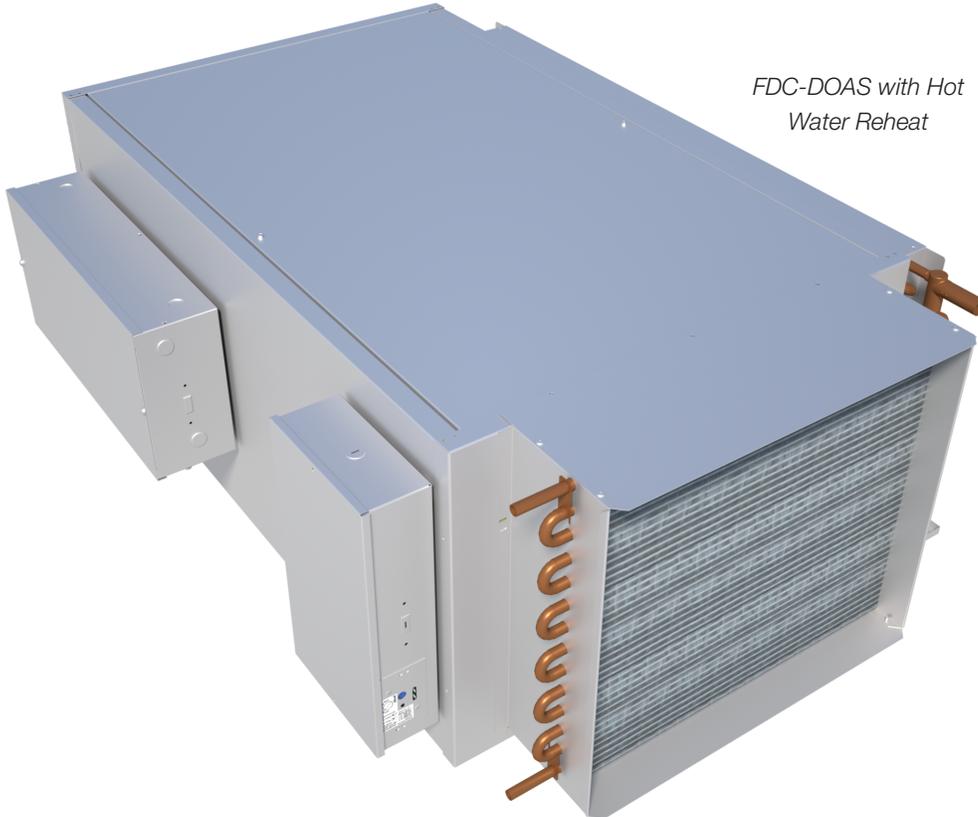
- + Sensible cooling coils up to 8 rows
- + Hot water or electric reheat
- + Fiber free and foil faced liners

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### HOT WATER REHEAT

Price water coils are constructed from high quality materials and are AHRI 410 certified. Designed to optimize heat transfer, water coils are available in standard and high capacity configurations to meet the requirements of every project. For ease of maintenance, optional access doors are available for upstream or downstream installation with a variety of fastening choices.



*FDC-DOAS with Hot Water Reheat*



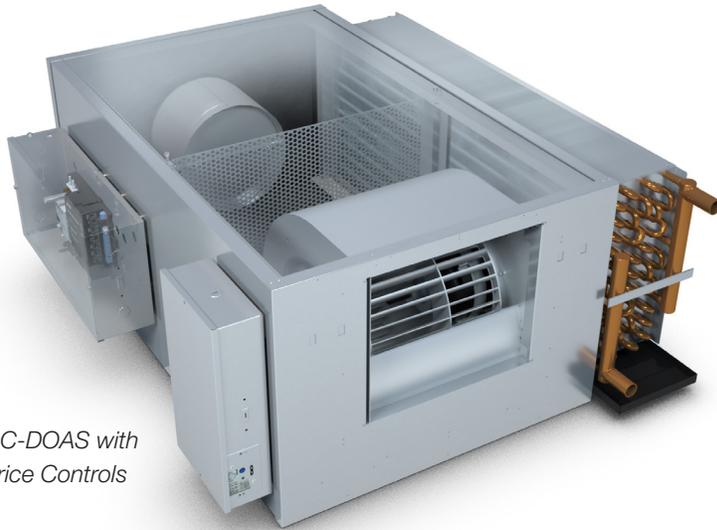
*FDC-DOAS with Electric Reheat*

### ELECTRIC REHEAT

Price electric coils are factory mounted, ETL listed to meet electrical safety standards, and comply with CSA 236/UL 1995. Fan powered electric heaters are a side-mounted, slide-in style, specifically designed to mount on the terminal discharge, allowing for easy field maintenance. Thermal safety switches and fan interlocked heating elements are supplied to ensure safe operation.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems



*FDC-DOAS with  
Price Controls*

## CONTROLS

Price offers a complete line of controls to best suit any application. For exceptional user comfort, the Price Intelligent Controller (PIC) universal DDC control package is available factory installed and configured on all FDC-DOAS units. The PIC can be used in conjunction with any Price thermostat to match the specific needs of the customer providing many options for user interface.

## DISCHARGE ATTENUATOR

A 3ft. or 5ft. attenuator section is available to reduce discharge noise in sound sensitive applications. The attenuator is conveniently provided with insulation to match the terminal unit.

## RECIRCULATED AIR FILTRATION

Enhanced filtration of recirculated air is delivered with a range of filter options for the FDC-DOAS. The filters are available in MERV 3, MERV 8 and MERV 13 to meet a variety of project specifications for particle arrestance.

## OPTIONS AND ACCESSORIES

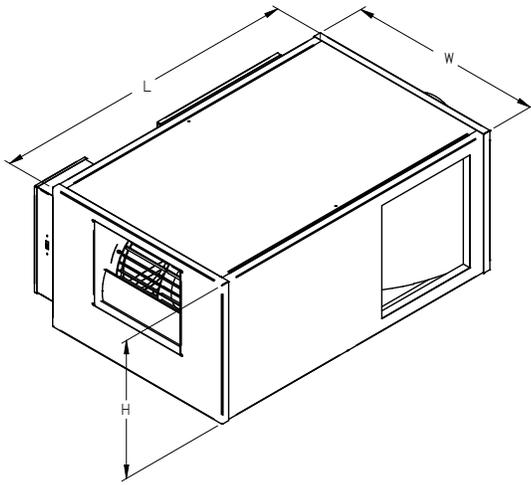
A complete line of additional accessories are offered to meet specific job requirements. Details on these accessories are available in the Terminal Units Accessories catalog.

# FDC-DOAS

Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

## DIMENSIONAL DATA

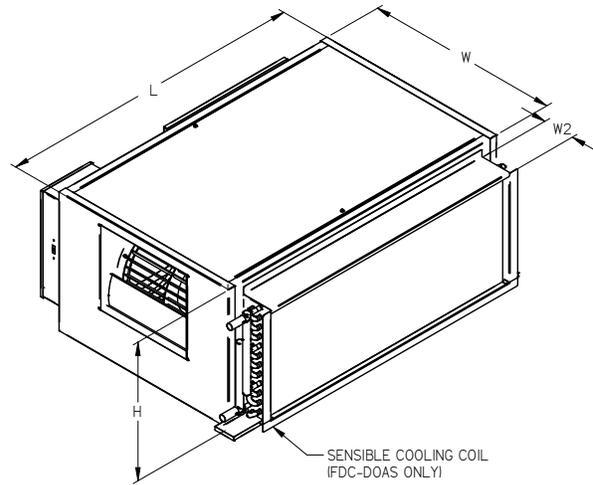
### FDC



Nominal Sizes			
UNIT SIZE	L	W	H
Imperial Units (inch)			
10	36	20	15 1/4
20	41	26	18 1/2
30	41	26	18 1/2
40	41	26	18 1/2
50	44	30	20 1/8

\*Available for FDCLP2-DOAS units only

### FDC-DOAS



Sensible Cooling Coil				
ROWS	2	4	6	8
Imperial Units (inch)				
W2	4 1/4	6 3/8	8 5/8	10 3/4

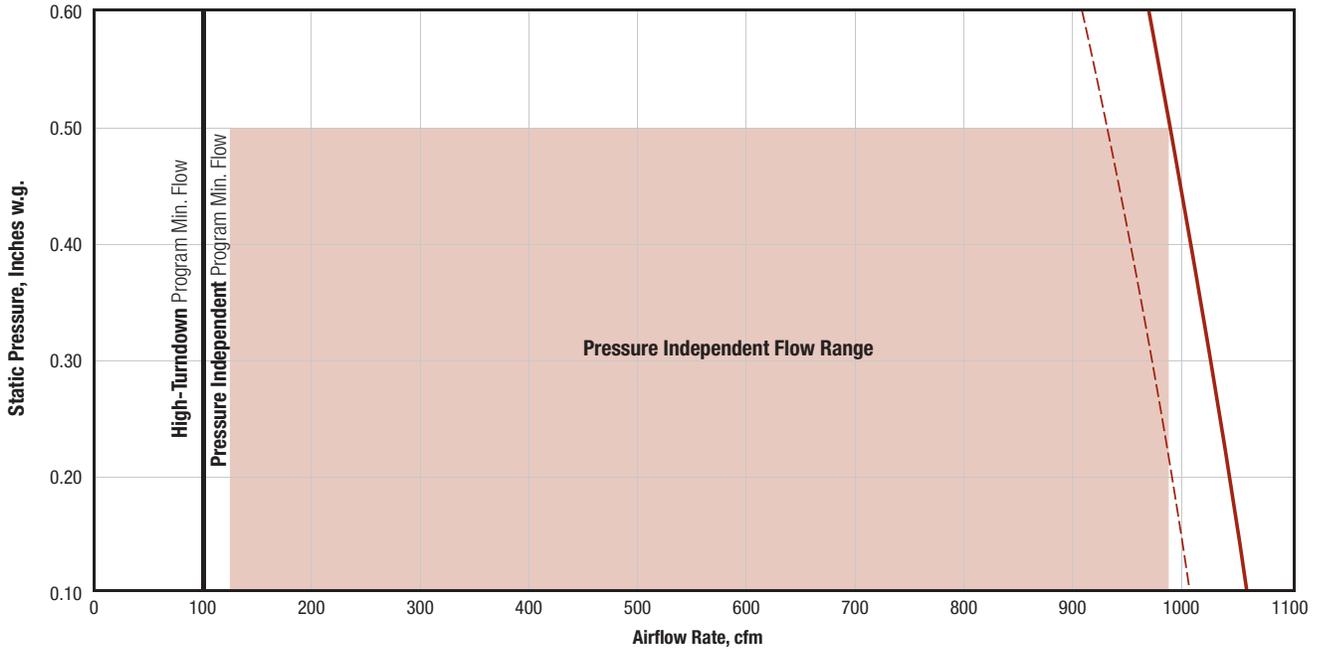
# FDC-DOAS

Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

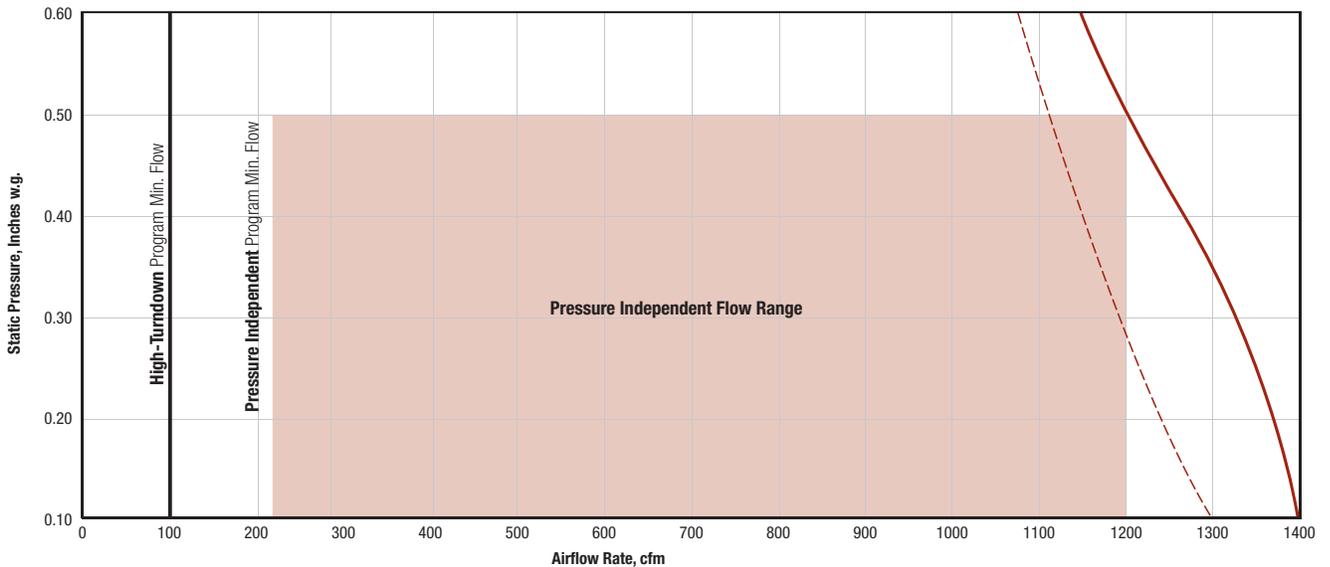
## PERFORMANCE DATA

FDC & Sensible Cooling Coil (DOAS) with ECM – Fan Performance Curves

### Unit Size 10



### Unit Size 20



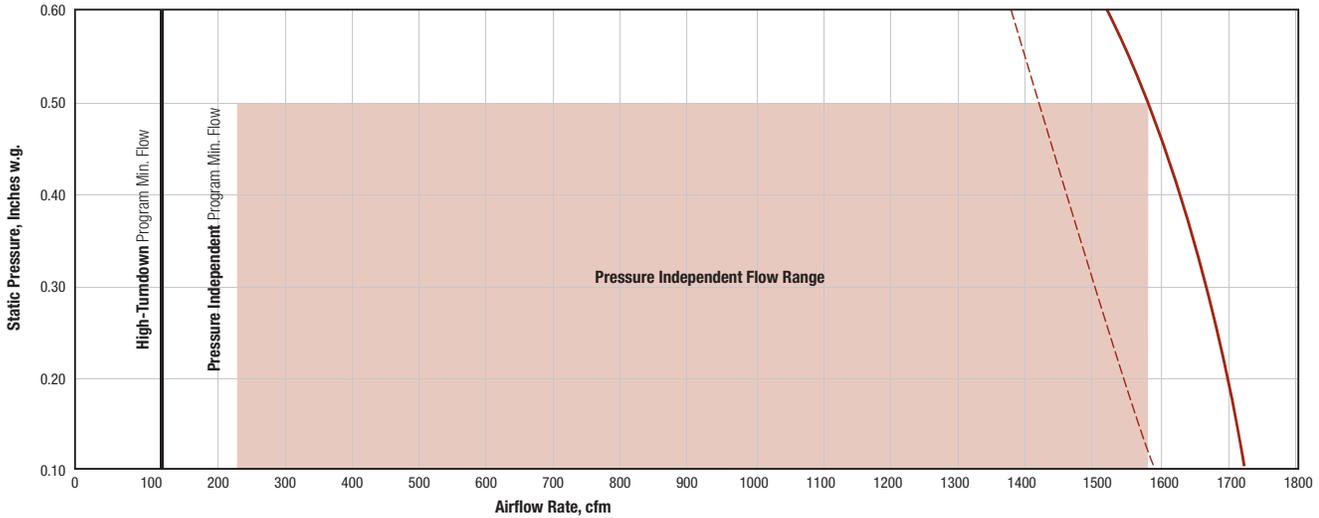
# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

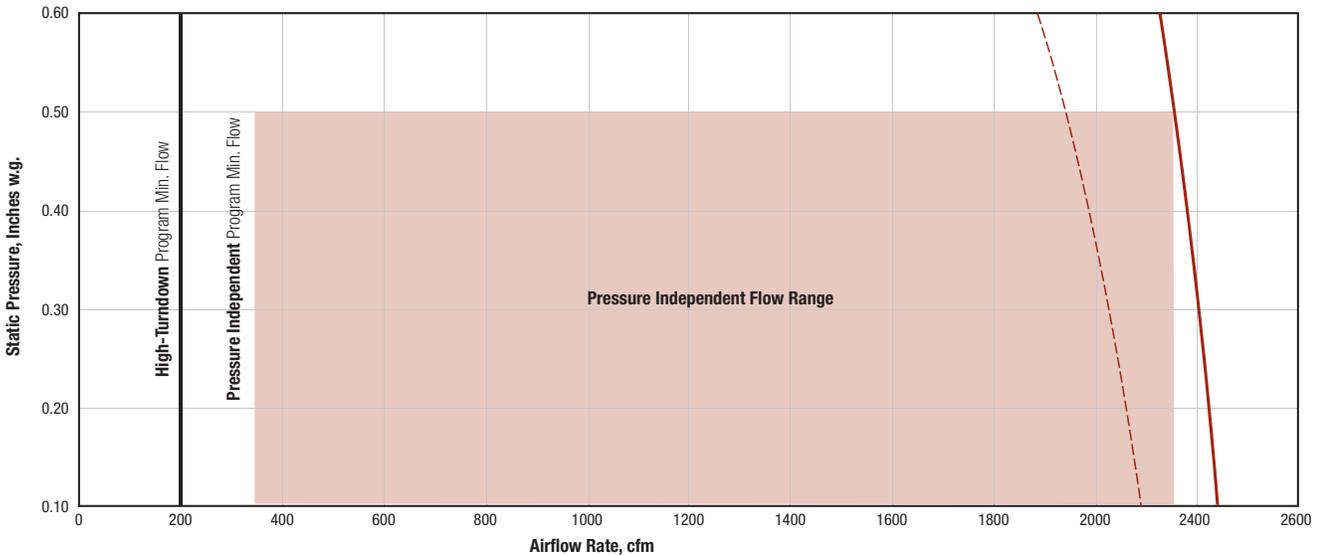
### PERFORMANCE DATA

#### FDC & Sensible Cooling Coil (DOAS) with ECM – Fan Performance Curves

##### Unit Size 30



##### Unit Size 40



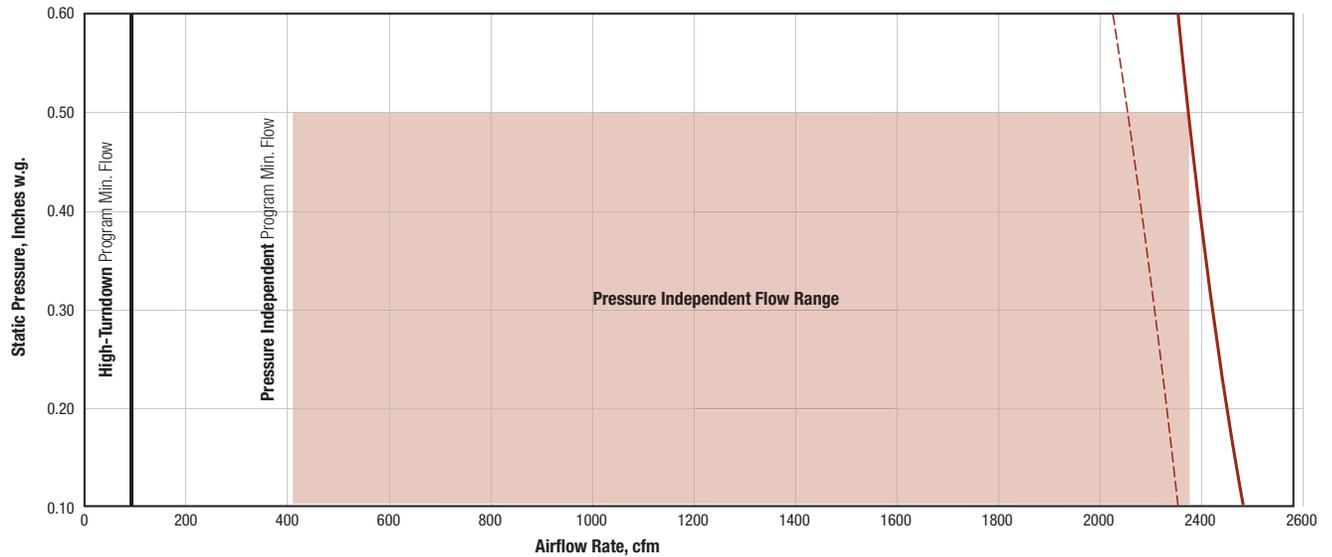
# FDC-DOAS

Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

## PERFORMANCE DATA

FDC & Sensible Cooling Coil (DOAS) with ECM – Fan Performance Curves

### Unit Size 50



# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC with Sensible Cooling Coil (DOAS) – ECM Capacities

Unit Size	Inlet Size	Primary Airflow		Fan Airflow		Motor HP	Full Load Amps			
		Minimum	Maximum	Minimum*	Maximum		115V	208V	240V	277V
10	4	45	400	100	1060	1/4	4.2	2.7	2.4	2.2
	5	60	500							
	6	65	550							
	8	125	1060							
20	4	45	400	100	1400	1/3	4.2	2.7	2.4	2.3
	5	60	500							
	6	65	550							
	8	125	1100							
	10	210	1400							
30	4	45	400	100	1725	1/2	6.4	4.0	3.5	3.2
	5	60	500							
	6	65	550							
	8	125	1100							
	10	210	1725							
40	4	45	400	100	2235	3/4	10.2	6.9	6.1	5.5
	5	60	500							
	6	65	550							
	8	125	1100							
	10	210	1800							
50	4	45	400	100	2430	1	10.2	6.5	5.7	5.2
	5	60	500							
	6	65	550							
	8	125	1100							
	10	210	1800							
	12	300	2430							

\*Minimum flow with High-Turndown Flow motor program

**Notes:**

1. Minimum primary airflow limit based on digital controls and a min 0.02 in. w.g. [5Pa] differential pressure signal from airflow sensor.
2. Maximum primary airflow limit based on max 1.5 in. w.g. [375 Pa] differential pressure signal from airflow sensor.
3. Minimum fan flow with High-turndown Flow motor program (ECM only).

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC Electric Coil Max kW - Single Point Connection

Size	1 Phase Voltage					3 Phase Voltage	
	120	208	240	277	480	208	480
10	5.4	9.3	10.8	12.0	12.4	12.8	12.4
20	5.2	9.4	10.9	12.6	17.8	16.3	17.8
30	4.9	9.2	10.7	12.4	20.9	16.0	25.0
40	4.6	8.9	10.3	12.1	20.9	15.4	28.8
50	4.3	8.6	10.1	11.8	20.5	14.9	35.2
60	3.5	7.8	9.2	10.7	18.6	13.6	32.3

\*Available up to 2 stage only

\*\*EC Motor Only

#### FDC Electric Coil Max kW - Dual Point Connection

Size	1 Phase Voltage					3 Phase Voltage		
	120	208	240	277	480	208	480	600
10	5.7	9.9	11.5	12.0	12.4	12.8	12.4	13.0
20	5.7	9.9	11.5	13.2	17.8	17.2	17.8	17.8
30	5.7	9.9	11.5	13.2	23.0	17.2	25.0	25.5
40	5.7	9.9	11.5	13.2	23.0	17.2	28.8	26.1
50	5.7	9.9	11.5	13.2	23.0	17.2	35.2	37.1
60	5.7	9.9	11.5	13.2	23.0	17.2	39.9	49.8

\*Available up to 2 stage only

\*\*EC Motor Only

#### FDC-DOAS Electric Coil Max kW - Single Point Connection

Size	1 Phase Voltage					3 Phase Voltage	
	120	208	240	277	480	208	480
10	5.2	9.4	10.9	12.0	12.4	12.8	12.4
20	5.2	9.4	10.9	12.6	20.0	16.3	20.0
30	4.9	9.1	10.6	12.4	20.9	15.8	24.6
40	4.5	8.5	10.0	11.7	20.4	14.8	28.8
50	4.5	8.6	10.1	11.8	20.5	14.9	34.7

\*Available up to 2 stage only

#### FDC-DOAS Electric Coil Max kW - Dual Point Connection

Size	1 Phase Voltage					3 Phase Voltage		
	120	208	240	277	480	208	480	600
10	5.7	9.9	11.5	12.0	12.4	12.8	12.4	13.0
20	5.7	9.9	11.5	13.2	20.0	17.2	20.0	20.0
30	5.7	9.9	11.5	13.2	23.0	17.2	24.6	24.6
40	5.7	9.9	11.5	13.2	23.0	17.2	28.8	26.1
50	5.7	9.9	11.5	13.2	23.0	17.2	34.7	31.2

\*Available up to 2 stage only

#### Notes:

- ETL certified assemblies.
- Minimum kW:  
Single Phase = 0.5 kW per stage.  
Three Phase = 1.5 kW.
- The recommended limit of 48 Amps may be exceeded. This requires supplemental fusing to meet NEC code requirements. Contact your local Price representative for further details
- Maximum kW limitations is the lesser of  
a) coil selection chart, or  
b) minimum air flow requirements of 70 cfm/kW.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC with Sensible Cooling Coil (DOAS) – Discharge Sound Power Levels

Unit Size	Inlet Size Inch	Primary Airflow		Fan Airflow		Sound Power Levels, Lw, dB re 10 <sup>-12</sup> Watts																				
						Fan Only							Primary Air													
						125 Pa. (0.75" w.g.)							375 Pa. (1.5" w.g.)													
						Octave Band							Octave Band							Octave Band						
L/s	CFM	L/s	CFM	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7					
10	6	85	180	189	400	64	60	60	56	54	48	64	60	60	56	54	48	64	60	60	56	54	48			
		142	300	189	400	64	60	60	56	54	48	63	59	56	52	48	43	65	62	56	52	49	44			
		127	270	283	600	70	66	65	63	60	56	70	66	65	63	60	56	70	66	65	63	60	56			
		212	450	283	600	70	66	65	63	60	56	67	63	60	56	54	51	69	66	60	57	54	52			
		170	360	378	800	76	72	70	69	66	63	76	72	70	69	66	63	76	72	70	69	66	63			
		283	600	378	800	76	72	70	69	66	63	70	66	62	59	58	56	72	69	62	60	58	57			
20	8	106	225	236	500	62	59	55	53	49	44	62	59	55	53	49	44	62	59	55	53	49	44			
		177	375	236	500	62	59	55	53	49	44	61	55	53	49	44	38	63	57	53	49	45	38			
		170	360	378	800	66	63	60	58	55	52	66	63	60	58	55	52	66	63	60	58	55	52			
		283	600	378	800	66	63	60	58	55	52	66	61	58	54	50	46	68	62	58	54	51	46			
		234	495	519	1100	70	67	64	63	60	58	70	67	64	63	60	58	70	67	64	63	60	58			
		389	825	519	1100	70	67	64	63	60	58	70	64	61	58	54	51	72	66	61	58	55	52			
30	8	127	270	283	600	64	61	57	55	51	47	64	61	57	55	51	47	64	61	57	55	51	47			
		212	450	283	600	64	61	57	55	51	47	63	57	55	51	47	41	65	59	55	51	47	41			
		212	450	472	1000	69	66	63	61	58	56	69	66	63	61	58	56	69	66	63	61	58	56			
		354	750	472	1000	69	66	63	61	58	56	69	63	60	57	53	50	71	65	60	57	53	50			
		297	630	661	1400	73	70	68	67	64	63	73	70	68	67	64	63	73	70	68	67	64	63			
40	10	496	1050	661	1400	73	70	68	67	64	63	73	67	63	61	57	55	75	69	63	61	58	56			
		170	360	378	800	66	63	60	58	55	52	66	63	60	58	55	52	66	63	60	58	55	52			
		283	600	378	800	66	63	60	58	55	52	66	62	58	55	51	47	67	63	58	55	51	47			
		255	540	566	1200	71	68	66	64	61	60	71	68	66	64	61	60	71	68	66	64	61	60			
		425	900	566	1200	71	68	66	64	61	60	70	65	61	59	55	52	71	67	61	59	55	53			
		340	720	755	1600	75	72	71	69	67	66	75	72	71	69	67	66	75	72	71	69	67	66			
50	10	566	1200	755	1600	75	72	71	69	67	66	73	68	63	62	58	57	74	69	64	62	59	57			
		212	450	472	1000	67	62	59	55	54	50	67	62	59	55	54	50	67	62	59	55	54	50			
		354	750	472	1000	67	62	59	55	54	50	66	58	53	51	46	40	58	49	45	41	36	27			
		330	700	732	1550	71	66	63	60	59	56	71	66	63	60	59	56	71	66	63	60	59	56			
		547	1160	732	1550	71	66	63	60	59	56	71	63	58	57	53	49	63	55	50	47	43	35			
		446	945	991	2100	74	70	66	64	63	61	74	70	66	64	63	61	74	70	66	64	63	61			
743	1575	991	2100	74	70	66	64	63	61	75	67	62	61	57	54	66	58	54	51	47	41					

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC with Sensible Cooling Coil (DOAS) – Radiated Sound Power Levels

Unit Size	Inlet Size Inch	Primary Airflow		Fan Airflow		Sound Power Levels, Lw, dB re 10 <sup>-12</sup> Watts																				
						Fan Only							Primary Air													
													125 Pa. (0.75" w.g.)							375 Pa. (1.5" w.g.)						
						Octave Band							Octave Band							Octave Band						
L/s	CFM	L/s	CFM	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7					
10	6	85	180	189	400	57	52	51	45	41	36	58	52	51	45	44	42	60	55	52	47	48	48			
		142	300	189	400	57	52	51	45	41	36	62	57	53	49	48	46	65	61	56	52	52	53			
		127	270	283	600	61	57	56	50	48	43	61	57	56	50	48	45	64	60	56	51	52	52			
		212	450	283	600	61	57	56	50	48	43	66	61	57	53	51	50	69	65	60	56	56	56			
		170	360	378	800	65	62	60	56	54	51	65	62	60	56	54	51	67	63	60	56	54	54			
		283	600	378	800	65	62	60	56	54	51	69	65	60	56	54	52	71	69	63	58	58	59			
20	8	106	225	236	500	56	52	48	43	40	33	56	52	49	45	42	37	57	54	51	48	46	43			
		177	375	236	500	56	52	48	43	40	33	59	56	52	49	46	43	61	59	55	52	50	48			
		170	360	378	800	59	56	52	48	46	40	59	56	52	49	46	42	61	58	55	51	50	48			
		283	600	378	800	59	56	52	48	46	40	63	60	56	53	50	48	65	63	58	55	54	53			
		234	495	519	1100	63	60	57	53	51	47	63	60	57	53	51	47	64	61	57	54	52	51			
		389	825	519	1100	63	60	57	53	51	47	63	63	58	55	53	51	68	65	61	57	57	57			
30	8	127	270	283	600	58	53	50	45	42	36	58	54	50	47	44	39	58	56	53	49	47	45			
		212	450	283	600	58	53	50	45	42	36	61	58	54	50	48	45	63	60	56	53	52	50			
		212	450	472	1000	62	58	56	51	49	46	62	58	56	51	49	46	63	60	56	53	52	50			
		354	750	472	1000	62	58	56	51	49	46	65	62	57	54	52	50	67	64	60	57	56	56			
		297	630	661	1400	67	64	61	58	56	54	67	64	61	58	56	54	67	64	61	58	56	54			
		496	1050	661	1400	67	64	61	58	56	54	68	65	61	58	56	54	70	67	62	59	59	59			
40	10	170	360	378	800	63	56	53	49	45	39	63	56	53	49	45	39	63	56	53	49	45	41			
		283	600	378	800	63	56	53	49	45	39	63	58	54	51	48	44	64	60	57	53	50	48			
		255	540	566	1200	66	61	58	54	52	47	66	61	58	54	52	47	66	61	58	54	52	47			
		425	900	566	1200	66	61	58	54	52	47	68	63	58	55	53	50	69	65	61	57	55	54			
		340	720	755	1600	70	66	63	59	57	54	70	66	63	59	57	54	70	66	63	59	57	54			
		566	1200	755	1600	70	66	63	59	57	54	71	66	63	59	57	54	73	68	64	60	59	58			
50	10	212	450	472	1000	63	57	54	50	48	41	63	57	54	50	48	41	63	57	54	50	48	44			
		354	750	472	1000	63	57	54	50	48	41	63	59	54	50	49	48	63	62	57	52	52	52			
		330	700	732	1550	67	62	59	56	55	50	67	62	59	56	55	50	67	62	59	56	55	51			
		547	1160	732	1550	67	62	59	56	55	50	68	65	60	57	56	55	69	68	62	58	59	59			
		446	945	991	2100	72	67	64	62	61	58	72	67	64	62	61	58	72	67	64	62	61	58			
		743	1575	991	2100	72	67	64	62	61	58	73	70	64	62	61	60	74	72	66	63	63	64			

**Performance Notes:**

1. Test data obtained in accordance with AHRI Standard 880-2017 and ASHRAE Standard 130-2016.
2. Data does not include corrections for Room Absorption, duct attenuation, or ceiling transmission loss.
3. Sound power levels include duct end corrections per AHRI Standard 880-2017. Please refer to the Engineering Guide for more details.
4. Fan external static pressure is 0.25 in. w.g. in all cases.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC with Sensible Cooling Coil (DOAS) – Cooling Coil Data (IP Units)

##### Unit Size 10

Rows	Coil GPM	HD Loss	Sensible Cooling Capacity (MBH)			
			275 CFM	500 CFM	725 CFM	950 CFM
2	1	0.45	2.9	3.8	4.3	4.7
	2	1.53	3.4	4.9	5.8	6.5
	4	5.19	3.8	5.9	7.4	8.6
	6	10.70	4.0	6.3	8.1	9.5
	Airsides Δ Ps			0.01	0.04	0.07
4	3	0.95	4.7	7.5	9.5	11.0
	5	2.34	4.9	8.0	10.6	12.6
	7	4.24	5.0	8.3	11.2	13.6
	9	6.63	5.0	8.5	11.5	14.2
	Airsides Δ Ps			0.03	0.08	0.14
6	1	0.36	4.5	6.2	7.0	7.5
	2	1.43	5.0	8.0	10.0	11.3
	4	4.81	5.2	8.8	11.9	14.3
	6	9.85	5.2	9.1	12.6	15.6
	Airsides Δ Ps			0.04	0.12	0.22
8	2	0.88	5.2	8.5	10.8	12.4
	3	2.93	5.3	9.2	12.6	15.4
	5	5.98	5.3	9.4	13.2	16.6
	7	9.95	5.3	9.5	13.5	17.1
	Airsides Δ Ps			0.06	0.15	0.29

##### Unit Size 20

Rows	Coil GPM	HD Loss	Sensible Cooling Capacity (MBH)			
			450 CFM	700 CFM	950 CFM	1200 CFM
2	2	0.69	5.0	6.2	7.1	7.7
	4	2.34	5.8	7.7	9.1	10.2
	6	4.79	6.2	8.4	10.2	11.7
	8	8.00	6.4	8.8	10.9	12.6
	Airsides Δ Ps			0.02	0.04	0.07
4	3	1.20	7.3	9.9	11.8	13.3
	5	2.94	7.7	11.0	13.6	15.7
	7	5.33	7.9	11.5	14.5	17.1
	9	8.33	8.1	11.8	15.1	18.0
	Airsides Δ Ps			0.04	0.08	0.13
6	2	0.86	7.6	10.2	11.8	13.0
	4	2.87	8.2	11.9	14.9	17.2
	6	5.85	8.4	12.5	16.1	19.2
	8	9.74	8.5	12.8	16.7	20.2
	Airsides Δ Ps			0.06	0.12	0.20
8	2	1.12	8.1	11.1	13.0	14.2
	4	3.73	8.5	12.7	16.1	18.9
	6	7.61	8.6	13.1	17.1	20.7
	8	12.67	8.6	13.2	17.6	21.5
	Airsides Δ Ps			0.08	0.16	0.27

For performance notes, see end of section.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC with Sensible Cooling Coil (DOAS) – Cooling Coil Data (IP Units)

##### Unit Size 30

Rows	Coil GPM	HD Loss	Sensible Cooling Capacity (MBH)			
			550 CFM	850 CFM	1150 CFM	1450 CFM
2	2	0.69	5.5	6.8	7.6	8.2
	4	2.34	6.6	8.6	10.0	11.2
	6	4.79	7.1	9.5	11.4	12.9
	8	8.00	7.4	10.1	12.3	14.1
	Airsides $\Delta$ Ps			0.03	0.06	0.09
4	3	1.20	8.4	11.1	13.0	14.4
	5	2.94	9.1	12.6	15.3	17.5
	7	5.33	9.4	13.4	16.6	19.3
	9	8.33	9.6	13.8	17.4	20.5
	Airsides $\Delta$ Ps			0.05	0.11	0.19
6	2	0.86	8.8	11.3	12.8	13.7
	4	2.87	9.8	13.8	16.8	19.1
	6	5.85	10.1	14.7	18.6	21.8
	8	9.74	10.3	15.2	19.5	23.3
	Airsides $\Delta$ Ps			0.08	0.17	0.28
8	2	1.12	9.4	12.3	14.0	15.0
	4	3.73	10.3	14.8	18.4	21.2
	6	7.61	10.4	15.6	20.1	23.9
	8	12.67	10.5	15.9	20.8	25.2
	Airsides $\Delta$ Ps			0.11	0.22	0.37

##### Unit Size 40

Rows	Coil GPM	HD Loss	Sensible Cooling Capacity (MBH)			
			750 CFM	1100 CFM	1450 CFM	1800 CFM
2	2	0.69	6.4	7.5	8.2	8.7
	4	2.34	8.0	9.8	11.2	12.2
	6	4.79	8.8	11.1	12.9	14.4
	8	8.00	9.3	11.9	14.1	15.8
	Airsides $\Delta$ Ps			0.05	0.09	0.14
4	3	1.20	10.3	12.8	14.4	15.6
	5	2.94	11.5	14.9	17.5	19.5
	7	5.33	12.1	16.1	19.3	21.9
	9	8.33	12.5	16.8	20.5	23.5
	Airsides $\Delta$ Ps			0.09	0.17	0.27
6	2	0.86	10.6	12.6	13.7	14.5
	4	2.87	12.6	16.4	19.1	21.2
	6	5.85	13.3	18.0	21.8	24.9
	8	9.74	13.6	18.8	23.3	27.0
	Airsides $\Delta$ Ps			0.14	0.26	0.41
8	2	1.12	11.5	13.8	15.0	15.7
	4	3.73	13.4	17.9	21.2	23.6
	6	7.61	13.9	19.4	23.9	27.5
	8	12.67	14.1	20.0	25.2	29.6
	Airsides $\Delta$ Ps			0.18	0.34	0.54

For performance notes, see end of section.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA

#### FDC with Sensible Cooling Coil (DOAS) – Cooling Coil Data (IP Units)

Unit Size 50

Rows	Coil GPM	HD Loss	Sensible Cooling Capacity (MBH)			
			850 CFM	1300 CFM	1750 CFM	2200 CFM
2	1	0.70	5.0	5.6	5.9	6.1
	2	2.33	7.2	8.4	9.2	9.8
	4	7.94	9.3	11.7	13.4	14.6
	6	16.34	10.3	13.4	15.7	17.5
	Airsides Δ Ps			0.04	0.08	0.13
4	3	1.44	11.6	14.4	16.3	17.5
	5	3.52	13.1	17.3	20.3	22.5
	7	6.38	13.9	18.9	22.8	25.8
	9	9.97	14.3	19.8	24.3	28.0
	Airsides Δ Ps			0.08	0.16	0.26
6	1	0.59	7.7	8.2	8.5	8.6
	2	2.21	11.7	13.8	14.9	15.6
	4	7.43	14.3	19.0	22.3	24.5
	6	15.22	15.2	21.2	25.9	29.5
	Airsides Δ Ps			0.12	0.24	0.39
8	3	2.72	14.4	18.6	21.0	22.5
	5	6.66	15.6	21.8	26.4	29.7
	7	12.05	16.0	23.1	29.1	33.8
	9	18.82	16.1	23.8	30.5	36.2
	Airsides Δ Ps			0.16	0.31	0.52

**Performance Notes:**

1. Tabulated values are in MBH (thousands of Btu per hour).
2. Tables are based on (57°F entering water temperature and 75°F entering air temperature). Entering water temperature must be above plenum dew point to prevent condensation on the coil (typically 55-57°F).
3. Minimum air and water flow values are based on ASHRAE recommendations for coil selections. For selections below these tabulated air or water values, please consult your local Price representative.
4. HD (Head) loss is in ft. of water.
5. Through the Coil ΔPs, is the pressure drop in in. of water across the coil.
6. Air temperature rise = ATR  
ATR (°F) = 927 x MBH/cfm
7. Water temperature drop = WTD  
WTD (°F) = 2.04 x MBH/gpm
8. Values in tables are listed for 0 ft. of altitude and no glycol in the system.
9. For information outside the ranges used in the table, consult the current Price software or your Price representative for accurate coil information.
10. Cooling coils used in this unit have performance rated and certified in accordance with the current edition of AHRI Standard 410.
11. Connections: 2 rows with 7/8 OD and 4, 6, 8 rows with 1 1/8 OD.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA



### FDC with Sensible Cooling Coil (DOAS) – Heating Coil Data

#### Size 10 Standard Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)						
			250	350	450	550	650	750	850
1 Row Multi Circuit	0.5	0.21	7.30	8.20	8.70	9.20	9.60	9.80	10.10
	1	0.73	9.20	10.70	11.60	12.50	13.10	13.70	14.20
	2	2.53	10.70	12.60	14.10	15.30	16.30	17.10	17.90
	3	5.25	11.20	13.30	15.00	16.40	17.50	18.50	19.60
Through the Coil, ΔPs			0.04	0.07	0.10	0.14	0.18	0.23	0.28
2 Row Multi Circuit	0.5	0.05	11.90	13.30	14.10	14.80	15.30	15.70	
	1	0.17	15.40	17.70	19.50	20.80	21.90	22.80	
	2	0.60	18.10	21.70	24.40	26.60	28.40	30.00	
	3	1.25	19.20	23.30	26.60	29.30	31.60	33.50	
Through the Coil, ΔPs			0.08	0.15	0.22	0.31	0.41	0.51	

#### Size 10 High Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)						
			250	350	450	550	650	750	850
1 Row Multi Circuit	0.5	0.29	8.90	9.90	10.50	11.00	11.50	11.70	12.10
	1	0.99	11.80	13.50	14.80	15.90	16.80	17.30	17.90
	2	3.43	14.10	16.60	18.70	20.30	21.70	22.90	24.00
	3	7.12	15.00	17.90	20.30	22.30	24.00	25.40	26.60
Through the Coil, ΔPs			0.03	0.05	0.07	0.10	0.13	0.16	0.20
2 Row Multi Circuit	0.5	0.07	13.90	15.40	16.40	17.10	17.70	18.10	
	1	0.22	18.50	21.50	23.70	25.40	26.70	27.70	
	2	0.76	22.20	27.00	30.70	33.70	36.10	38.30	
	3	1.58	23.70	29.30	33.90	37.70	40.80	43.50	
Through the Coil, ΔPs			0.06	0.11	0.16	0.22	0.29	0.36	

#### Size 20 Standard Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)						
			450	550	650	750	850	950	1050
1 Row Multi Circuit	0.5	0.04	10.30	10.80	11.30	11.60	11.80	12.00	12.30
	1	0.15	14.30	15.30	16.30	16.90	17.40	17.90	18.50
	2	0.50	18.10	19.80	21.20	22.50	23.40	24.50	25.20
	3	1.05	19.80	21.90	23.60	25.20	26.60	27.70	28.70
Through the Coil, ΔPs			0.03	0.05	0.06	0.08	0.09	0.11	0.13
2 Row Multi Circuit	0.5	0.08	16.60	17.50	18.00	18.50	19.00	19.20	19.50
	1	0.27	23.90	25.70	27.10	28.30	29.30	30.10	30.90
	2	0.94	30.60	33.80	36.50	38.70	40.70	42.30	43.80
	3	1.95	33.70	37.60	41.10	44.00	46.50	48.70	50.80
Through the Coil, ΔPs			0.07	0.10	0.13	0.17	0.21	0.25	0.29

#### Size 20 High Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)						
			450	550	650	750	850	950	1050
1 Row Multi Circuit	0.5	0.46	12.20	12.80	13.20	13.60	14.00	14.10	14.30
	1	1.59	18.00	19.30	20.30	21.20	21.90	22.50	23.00
	2	5.50	23.60	25.80	27.60	29.20	30.60	31.90	33.00
	3	11.42	26.20	29.00	31.30	33.40	35.20	36.90	38.40
Through the Coil, ΔPs			0.02	0.03	0.04	0.05	0.07	0.08	0.09
2 Row Multi Circuit	0.5	0.10	18.60	19.40	20.00	20.50	20.80	21.10	21.40
	1	0.34	27.90	29.90	31.50	32.70	33.80	34.70	35.50
	2	1.17	36.80	40.80	44.10	46.80	49.20	51.20	53.10
	3	2.42	41.00	46.00	50.40	54.20	57.50	60.50	63.10
Through the Coil, ΔPs			0.05	0.07	0.10	0.12	0.15	0.18	0.21

For performance notes, see end of section.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA



### FDC with Sensible Cooling Coil (DOAS) – Heating Coil Data

#### Size 30 Standard Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)						
			850	950	1050	1150	1250	1350	1450
1 Row Multi Circuit	1	0.15	17.40	17.90	18.50	18.80	19.10	19.60	19.80
	2	0.50	23.40	24.50	25.20	25.90	26.60	27.20	27.80
	4	1.76	28.30	29.60	30.90	32.00	33.00	34.00	34.90
	6	3.69	30.20	31.70	33.10	34.50	35.70	36.80	38.00
	Through the Coil, ΔPs			0.09	0.11	0.13	0.15	0.18	0.20
2 Row Multi Circuit	1	0.27	29.30	30.10	30.90	31.40	32.00	32.50	
	2	0.94	40.70	42.30	43.80	45.20	46.40	47.50	
	4	3.27	49.90	52.70	55.00	57.20	59.20	61.10	
	6	6.82	53.70	56.80	59.60	62.30	64.70	67.00	
	Through the Coil, ΔPs			0.21	0.25	0.30	0.35	0.40	0.45

#### Size 30 High Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)						
			850	950	1050	1150	1250	1350	1450
1 Row Multi Circuit	0.5	0.46	14.00	14.10	14.30	14.50	14.70	14.90	14.90
	1	1.59	21.90	22.50	23.00	23.60	23.90	24.40	24.70
	2	5.50	30.60	31.90	33.00	34.00	34.90	35.80	36.40
	3	11.42	35.20	36.90	38.40	39.70	40.90	42.00	43.00
	Through the Coil, ΔPs			0.07	0.08	0.09	0.11	0.13	0.14
2 Row Multi Circuit	1	0.34	33.80	34.70	35.50	36.20	36.70	37.20	
	2	1.17	49.20	51.20	53.10	54.70	56.10	57.50	
	4	4.07	62.60	66.20	69.50	72.50	75.10	77.60	
	6	8.48	68.40	72.70	76.70	80.50	83.80	87.00	
	Through the Coil, ΔPs			0.15	0.18	0.22	0.25	0.29	0.32

#### Size 40 Standard Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)							
			1150	1250	1350	1450	1550	1650	1750	1850
1 Row Multi Circuit	1	0.15	18.80	19.10	19.60	19.80	20.00	20.30	20.60	20.80
	2	0.50	25.90	26.60	27.20	27.80	28.40	28.90	29.30	29.80
	4	1.76	32.00	33.00	34.00	34.90	35.80	36.60	37.30	38.10
	6	3.69	34.50	35.70	36.80	38.00	38.90	39.80	40.70	41.70
	Through the Coil, ΔPs			0.15	0.18	0.20	0.23	0.25	0.28	0.31
2 Row Multi Circuit	1	0.27	31.40	32.00	32.50	33.00	33.40	33.80		
	2	0.94	45.20	46.40	47.50	48.50	49.50	50.30		
	4	3.27	57.20	59.20	61.10	62.90	64.50	66.00		
	6	6.82	62.30	64.70	67.00	69.10	71.10	73.00		
	Through the Coil, ΔPs			0.35	0.40	0.45	0.51	0.56	0.63	

#### Size 40 High Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)							
			1150	1250	1350	1450	1550	1650	1750	1850
1 Row Multi Circuit	0.5	0.46	14.50	14.70	14.90	14.90	15.10	15.30	15.30	15.30
	1	1.59	23.60	23.90	24.40	24.70	24.90	25.30	25.60	25.70
	2	5.50	34.00	34.90	35.80	36.40	37.00	37.80	38.30	38.80
	3	11.42	39.70	40.90	42.00	43.00	44.00	44.80	45.70	46.40
	Through the Coil, ΔPs			0.11	0.13	0.14	0.16	0.18	0.20	0.22
2 Row Multi Circuit	1	0.34	36.20	36.70	37.20	37.60	38.10	38.50		
	2	1.17	54.70	56.10	57.50	58.50	59.60	60.50		
	4	4.07	72.50	75.10	77.60	79.80	81.90	83.80		
	6	8.48	80.50	83.80	87.00	89.80	92.50	95.10		
	Through the Coil, ΔPs			0.25	0.29	0.32	0.36	0.41	0.45	

For performance notes, see end of section.

# FDC-DOAS

## Series Flow Fan Powered Terminal Unit for Dedicated Outdoor Air Systems

### PERFORMANCE DATA



### FDC with Sensible Cooling Coil (DOAS) – Heating Coil Data

#### Size 50 Standard Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)							
			1550	1650	1750	1850	1950	2050	2150	2250
1 Row Multi Circuit	1	0.18	22.70	22.80	23.20	23.30	23.50	23.80	23.90	24.20
	2	0.62	32.90	33.50	34.20	34.60	35.00	35.50	35.90	36.30
	4	2.16	42.70	43.70	44.60	45.50	46.30	47.10	47.90	48.70
	6	4.52	47.10	48.30	49.50	50.60	51.60	52.50	53.60	54.40
	Through the Coil, ΔPs			0.14	0.15	0.17	0.19	0.20	0.22	0.24
2 Row Multi Circuit	1.5	0.25	46.30	46.90	47.50	48.20	48.60	49.00	49.50	
	3	0.87	66.00	67.40	68.70	69.90	71.00	72.10	73.20	
	6	3.03	82.90	85.30	87.40	89.50	91.40	93.30	95.10	
	9	6.33	90.00	92.70	95.30	97.80	100.20	102.40	104.60	
	Through the Coil, ΔPs			0.31	0.35	0.38	0.42	0.46	0.50	0.54

#### Size 50 High Capacity

Rows	Coil gpm	HD Loss	Airflow Rate (cfm)							
			1550	1650	1750	1850	1950	2050	2150	2250
1 Row Multi Circuit	1	0.20	26.20	26.50	26.80	27.00	27.20	27.40	27.60	27.80
	2	0.70	40.60	41.40	41.90	42.50	43.00	43.50	43.90	44.40
	4	2.46	55.90	57.20	58.30	59.40	60.50	61.40	62.40	63.20
	6	5.13	63.50	65.20	66.70	68.10	69.50	70.80	72.10	73.20
	Through the Coil, ΔPs			0.11	0.12	0.14	0.15	0.16	0.18	0.19
2 Row Multi Circuit	1.5	0.29	53.20	53.90	54.50	55.20	55.60	56.00	56.50	
	3	0.98	79.90	81.60	83.20	84.50	85.80	87.00	88.20	
	6	3.43	104.90	108.00	110.90	113.50	116.10	118.40	120.80	
	9	7.14	115.90	119.80	123.50	126.80	130.00	133.20	136.00	
	Through the Coil, ΔPs			0.25	0.28	0.31	0.34	0.37	0.40	0.43

#### Performance Notes:

1. Tabulated values are in MBH (thousands of Btu per hour).
2. Tables are based on a temperature difference of 110°F (180°F entering water temperature and 70°F entering air temperature). For other temperature differences, multiply MBH values by factors as listed above.
3. Tables are based on (57°F entering water temperature and 75°F entering air temperature). Entering water temperature must be above plenum dew point to prevent condensation on the coil (typically 55-57°F).
4. Minimum air and water flow values are based on ASHRAE recommendations for coil selections. For selections below these tabulated air or water values, please consult your local Price representative.
5. HD (Head) loss is in ft. of water.
6. Through the Coil ΔPs, is the pressure drop in in. of water across the coil.
7. Air temperature rise = ATR  
ATR (°F) = 927 x MBH/cfm
8. Water temperature drop = WTD  
WTD (°F) = 2.04 x MBH/gpm
9. Values in tables are listed for 0 ft. of altitude and no glycol in the system.
10. For information outside the ranges used in the table, consult the current Price software or your Price representative for accurate coil information.
11. Cooling coils used in this unit have performance rated and certified in accordance with the current edition of AHRI Standard 410.
12. Connections: Single Circuit – 1/2 in. OD male solder Multi Circuit – 7/8 in. OD male solder.

# **PRICE** | **TERMINALS**

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](http://priceindustries.com). The complete Price product catalog can be viewed online at [priceindustries.com](http://priceindustries.com).