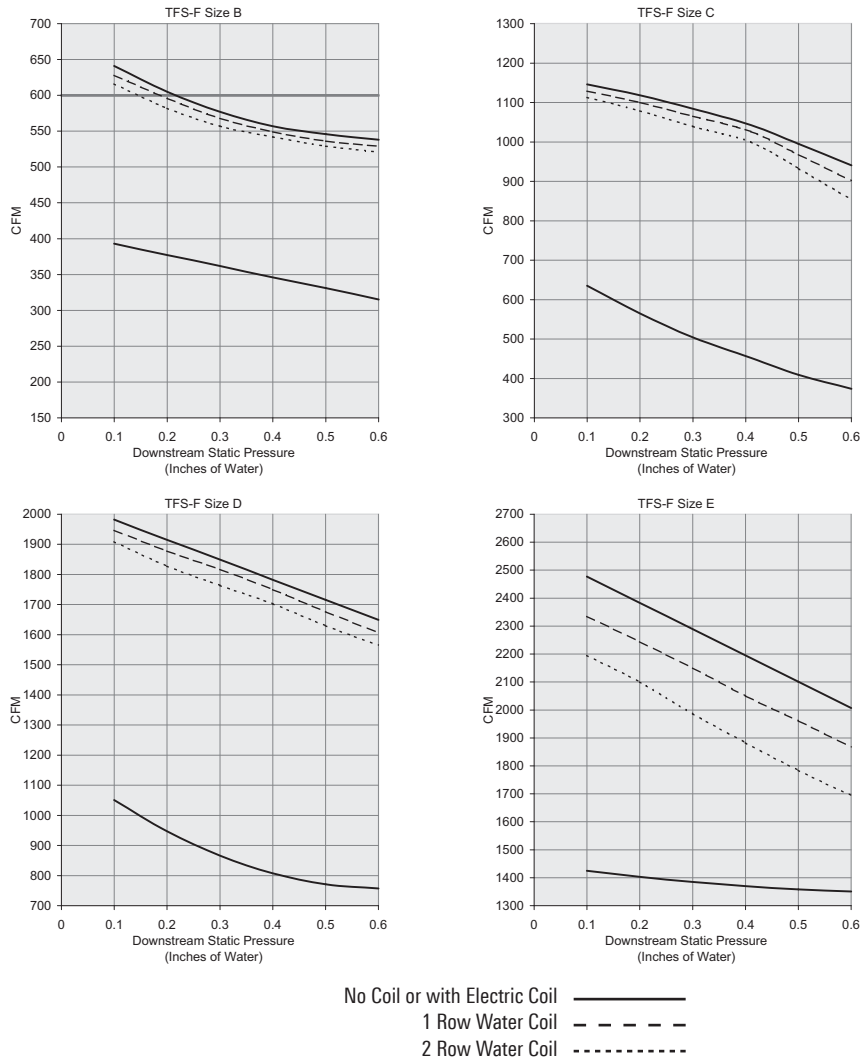
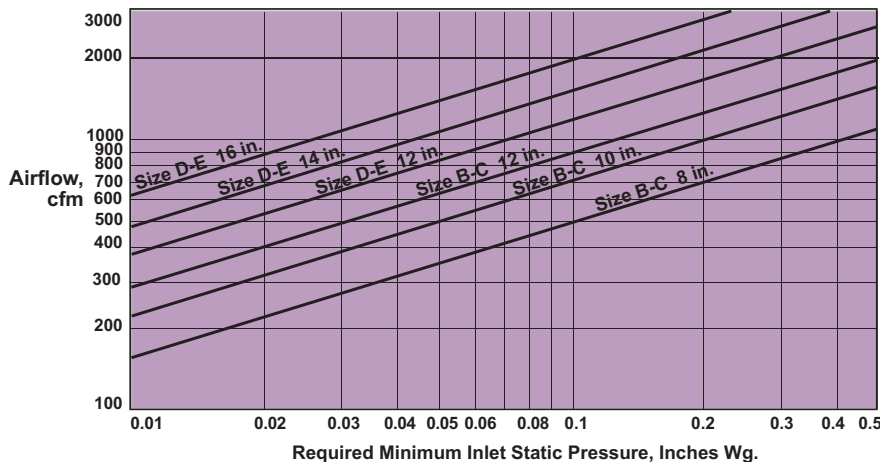


PTFS-F, ATFS-F, DTFS-F / AIRFLOW VS. DOWNSTREAM STATIC PRESSURE



PRIMARY AIR INLET PRESSURE / PTFS-F, ATFS-F, DTFS-F



Note: For selection procedure, see the Engineering Guidelines and the topic, 'Sizing Basic Terminals from Capacity Tables'.

PTFS-F, ATFS-F, DTFS-F / WATER COIL HEATING CAPACITY (MBH)

Unit Size	Rows	gpm	Head Loss	Airflow, cfm								
				200	250	300	350	400	450	500	550	600
B	One Row	1.0	0.16	14.3	14.8	15.4	15.9	16.3	16.7	17.1	17.5	17.8
		2.0	0.50	16.4	17.2	18.0	18.6	19.3	19.9	20.5	21.0	21.6
		4.0	1.83	17.7	18.6	19.6	20.4	21.2	21.9	22.6	23.3	23.9
		6.0	3.95	18.2	19.2	20.2	21.0	21.9	22.7	23.5	24.1	24.9
		Airside ΔPs		0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03
	Two Row	1.0	0.14	20.4	21.3	22.1	22.8	23.5	24.1	24.7	25.1	25.6
		2.0	0.33	25.0	26.4	27.9	29.1	30.4	31.5	32.6	33.5	34.5
		4.0	1.19	27.4	29.1	31.0	32.6	34.2	35.6	37.1	38.4	39.7
		6.0	2.56	28.2	30.1	32.1	33.8	35.6	37.2	38.8	40.2	41.7
		Airside ΔPs		0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.07	0.07

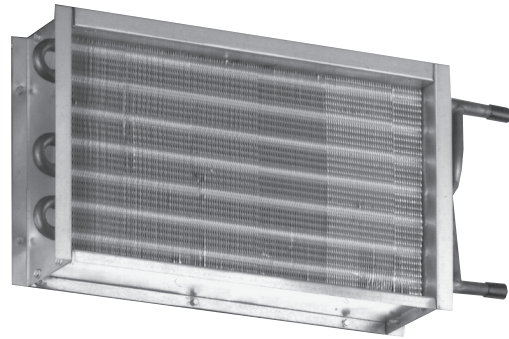
Unit Size	Rows	gpm	Head Loss	Airflow, cfm								
				400	490	580	670	760	850	940	1030	1100
C	One Row	1.0	0.16	14.5	15.7	16.7	17.5	18.3	18.9	19.5	20.0	20.4
		2.0	0.50	16.4	18.1	19.5	20.7	21.8	22.8	23.6	24.4	25
		4.0	1.87	17.6	19.5	21.2	22.6	24.0	25.1	26.2	27.2	28
		6.0	4.05	18	20	21.8	23.4	24.8	26.1	27.2	28.2	29.1
		Airside ΔPs		0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09
	Two Row	1.0	0.13	21.5	23.4	24.90	26.20	27.30	28.20	29.00	29.6	30.1
		2.0	0.33	26.4	29.5	32.20	34.50	36.60	38.40	40.00	41.4	42.4
		4.0	1.21	28.9	32.8	36.20	39.30	42.00	44.50	46.80	48.8	50.3
		6.0	2.61	29.8	34	37.80	41.10	44.20	46.90	49.50	51.8	53.5
		Airside ΔPs		0.04	0.05	0.07	0.08	0.10	0.12	0.14	0.16	0.18

Unit Size	Rows	gpm	Head Loss	Airflow, cfm								
				800	925	1050	1175	1300	1425	1550	1675	1800
D	One Row	1.0	0.26	23.7	24.9	25.9	26.8	27.5	28.2	28.8	29.4	29.9
		2.0	0.78	28.7	30.5	32.1	33.5	34.8	36.0	37.0	38.0	38.9
		4.0	2.86	31.7	33.9	36.0	37.8	39.5	41.0	42.5	43.8	45.0
		6.0	6.19	32.8	35.3	37.5	39.5	41.3	43.0	44.6	46.1	47.5
		Airside ΔPs		0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09
	Two Row	1.0	0.53	35.9	37.6	39.1	40.2	41.2	42.1	42.9	43.5	44.1
		2.0	1.49	46.5	49.8	52.7	55.3	57.5	59.6	61.4	63.0	64.5
		4.0	5.46	53.0	57.7	61.8	65.6	69.0	72.2	75.0	77.7	80.2
		6.0	5.48	53.0	57.7	61.8	65.6	69.0	72.2	75.0	77.7	80.2
		Airside ΔPs		0.05	0.06	0.07	0.09	0.10	0.12	0.13	0.15	0.17

Unit Size	Rows	gpm	Head Loss	Airflow, cfm								
				1400	1525	1650	1775	1900	2025	2150	2275	2320
E	One Row	1.0	0.26	28.1	28.7	29.3	29.8	30.2	30.7	31.1	31.4	31.5
		2.0	0.77	35.7	36.8	37.8	38.7	39.6	40.4	41.1	41.8	42.0
		4.0	2.86	40.8	42.2	43.5	44.8	46.0	47.0	48.1	49.1	49.4
		6.0	6.19	42.7	44.3	45.8	47.2	48.5	49.7	50.9	52.0	52.4
		Airside ΔPs		0.06	0.07	0.07	0.08	0.09	0.10	0.11	0.12	0.13
	Two Row	1.0	0.53	41.9	42.7	43.4	44.0	44.5	45.0	45.4	45.8	46.0
		2.0	1.49	59.2	61.0	62.7	64.2	65.6	66.9	68.1	69.1	69.5
		4.0	5.46	71.5	74.5	77.2	79.7	82.0	84.2	86.3	88.2	88.8
		6.0	5.46	71.5	74.5	77.2	79.7	82.0	84.2	86.3	88.2	88.8
		Airside ΔPs		0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.26

PTFS-F, ATFS-F, DTFS-F / WATER COIL HEATING CAPACITY (MBH)

- All coil performance in accordance with AHRI 410-2001
- Heating capacities are in MBH
- Data based on 180°F entering water and 65°F entering air
- For temperature differentials other than 115°, multiply MBH by correction factors below
- Head loss is in feet of water
- Always supply water to lowest connection pipe to prevent air entrapment
- Air temperature rise = 927 x MBH/cfm
- Water temperature drop = 2.04 x MBH/gpm
- Connection size is 5/8" OD male solder
- Coils are not intended for steam applications and are labeled for a maximum water temperature of 200°F
- Coils are tested for leakage at test pressure of 500 psi
- Water volumes less than those shown may result in laminar flow and reduced heating capacity. If possible reduce the number of coil rows to increase water velocity into turbulent range.



Correction factors for other entering conditions:

ΔT	50	60	70	80	90	100	115	125	140	150
Factor	0.44	0.52	0.61	0.70	0.79	0.88	1.00	1.07	1.20	1.30



PTFS-F, ATFS-F, DTFS-F / RADIATED SOUND PERFORMANCE

Size	CFM	Discharge Ps	Min ΔPs	Octave Band Sound Power, Lw																											
				Fan Only							0.5" ΔPs							1.0" ΔPs							1.5" ΔPs						
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
B08	375	0.25	0.03	56	43	42	35	35	32	17	54	44	42	40	40	37	15	56	46	44	41	42	40	17	57	48	44	42	43	42	18
	400		0.04	57	44	43	36	35	32	18	55	45	43	41	40	37	16	57	48	44	42	42	40	18	58	49	45	43	43	42	19
	450		0.05	59	47	45	38	36	33	21	57	47	45	42	41	38	18	59	50	46	43	43	41	20	59	51	46	44	44	43	20
	500		0.06	61	49	47	40	36	33	23	59	49	46	43	42	39	20	60	51	47	44	44	42	22	61	53	48	45	45	44	23
	550		0.07	63	51	48	41	37	34	26	60	50	47	44	42	40	22	62	53	48	45	44	43	24	62	55	49	46	45	45	24
C10	600	0.25	0.05	62	49	46	39	35	33	24	63	52	46	42	37	33	25	64	54	47	42	40	39	27	64	55	48	43	42	42	27
	700		0.07	63	51	48	42	37	34	26	63	53	48	43	38	34	25	64	55	49	44	41	40	27	64	56	49	45	43	43	27
	800		0.09	63	53	49	44	38	36	26	64	53	49	44	39	35	27	64	55	50	45	42	41	27	65	56	50	46	44	44	28
	900		0.11	64	54	51	46	40	37	27	64	54	50	46	40	36	27	64	56	51	46	43	41	27	65	57	52	47	45	45	28
	1050		0.15	65	56	53	49	42	38	28	64	55	51	47	41	37	27	65	56	52	48	44	42	28	65	57	53	49	46	46	28
D12	1000	0.25	0.03	62	52	47	42	37	31	24	61	52	48	43	39	35	23	63	55	49	44	42	40	25	65	56	50	44	43	43	28
	1150		0.05	64	54	49	44	40	35	27	62	53	50	44	41	37	24	65	56	51	45	44	42	28	66	58	52	46	45	45	29
	1300		0.06	66	55	51	46	42	38	29	63	55	51	46	43	39	25	66	58	52	47	45	43	29	68	59	53	48	47	46	32
	1450		0.07	68	57	52	48	43	40	32	64	56	53	48	44	40	27	67	59	54	49	47	45	31	69	60	55	49	48	48	33
	1600		0.09	69	58	53	49	45	43	33	65	57	54	49	45	41	28	68	60	55	50	48	46	32	70	61	56	51	49	49	34
E14	1500	0.25	0.04	70	63	56	51	46	42	35	69	61	54	50	45	41	33	70	62	55	50	47	45	34	70	63	56	51	48	47	34
	1650		0.05	71	65	58	52	48	44	36	70	62	56	51	46	43	34	71	63	57	52	49	46	36	71	64	58	53	50	49	36
	1800		0.06	73	67	59	54	50	46	38	71	63	57	53	48	44	36	71	65	59	54	50	48	36	72	66	59	54	51	50	37
	1950		0.08	74	68	61	55	51	48	40	71	64	59	54	49	45	36	72	66	60	55	51	49	37	73	67	61	55	53	51	38
	2100		0.09	75	70	62	57	53	50	42	72	65	60	55	50	46	37	73	67	61	56	52	50	38	74	68	62	57	54	53	40

- Radiated sound is the noise transmitted through the unit casing and emitted from the induction port
- Min ΔPs is the difference between atmospheric pressure and the inlet static pressure with the primary damper full open and the unit fan set to match the primary flow
- Sound power levels are in dB, ref 10⁻¹² watts
- Sound performance based on units lined with standard dual density fiberglass lining

- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI Certified. See page N41 for AHRI Certified Performance Listings.

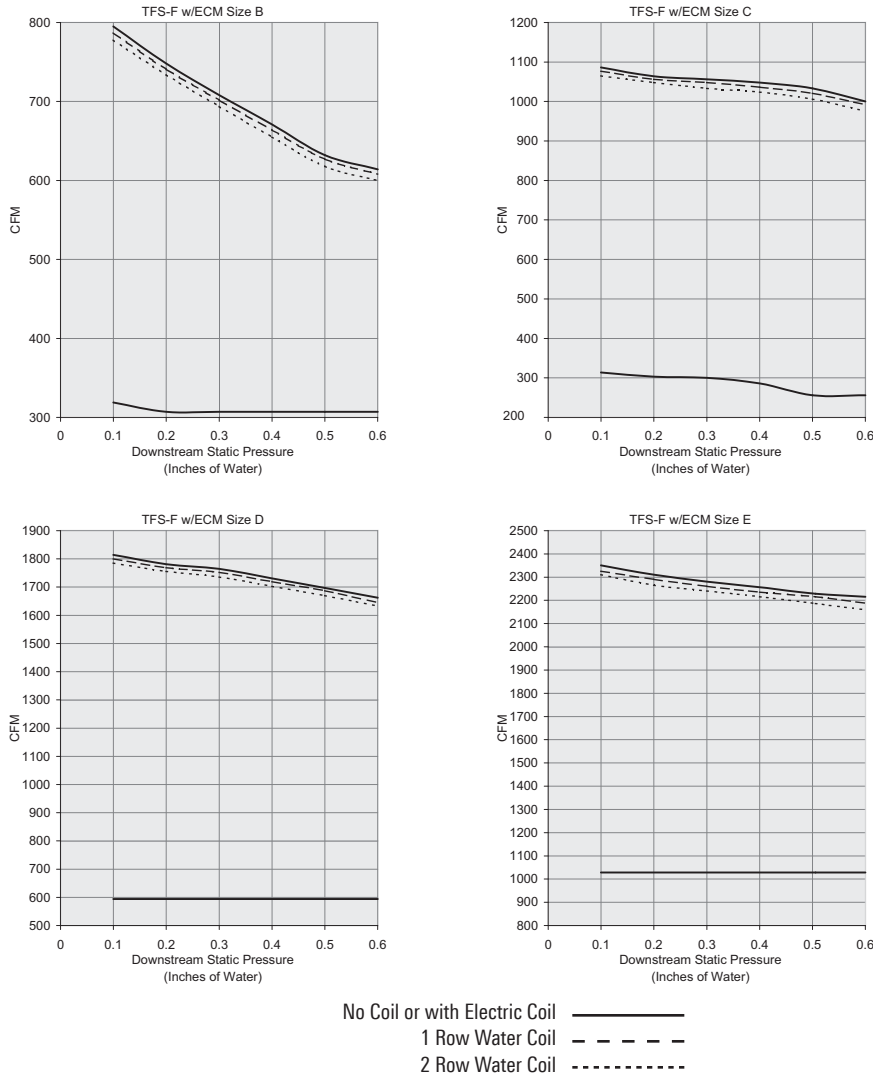
PTFS-F, ATFS-F, DTFS-F / DISCHARGE SOUND PERFORMANCE

Size	CFM	Discharge Ps	Min ΔPs	Octave Band Sound Power, Lw																											
				Fan Only							0.5" ΔPs							1.0" ΔPs							1.5" ΔPs						
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
B08	375	0.25	0.03	65	51	52	50	50	48	17	64	54	52	53	51	49	16	65	54	51	52	51	49	17	65	54	51	52	51	49	17
	400		0.04	66	52	53	51	51	49	19	65	56	53	54	52	50	17	66	56	52	53	52	50	19	66	56	52	53	52	50	19
	450		0.05	68	55	54	53	53	51	21	68	58	54	55	54	53	21	68	58	54	55	54	53	21	68	58	54	55	54	53	21
	500		0.06	70	58	55	55	55	53	24	70	60	56	57	56	55	24	70	60	56	57	56	55	24	70	60	56	57	56	55	24
	550		0.07	71	60	56	57	56	55	25	72	62	58	59	58	57	26	72	62	57	59	58	57	26	72	62	57	59	58	57	26
C10	600	0.25	0.05	69	62	55	54	54	52	22	67	60	54	53	52	50	20	68	61	54	53	52	51	21	69	61	54	53	52	51	22
	700		0.07	71	64	57	57	57	56	25	68	62	56	56	55	54	21	69	63	56	56	55	54	22	70	63	56	56	55	55	24
	800		0.09	73	66	59	59	59	59	25	69	63	57	58	57	57	21	70	64	57	58	58	57	21	70	64	57	58	58	58	22
	900		0.11	74	68	60	61	61	61	26	70	65	59	60	60	59	23	71	65	59	60	60	60	24	71	65	58	60	60	60	24
	1050		0.15	76	70	62	64	64	65	29	71	66	60	62	62	63	27	71	67	60	62	63	63	27	72	67	60	62	63	64	28
D12	1000	0.25	0.03	66	61	57	58	58	56	20	67	62	56	57	56	55	19	69	62	56	56	56	55	20	70	62	56	56	56	55	21
	1150		0.05	69	64	59	61	61	60	24	68	63	58	60	59	58	22	70	64	58	59	59	58	22	72	64	58	59	59	58	24
	1300		0.06	72	67	61	63	63	63	27	70	65	60	62	61	61	25	72	65	60	62	61	61	25	73	66	60	61	61	61	25
	1450		0.07	74	69	63	66	66	65	29	71	66	62	65	63	63	27	73	67	62	64	63	63	27	74	67	62	64	63	63	27
	1600		0.09	76	71	65	68	68	68	31	72	68	63	67	66	66	30	74	68	63	66	65	65	29	75	68	63	66	65	65	29
E14	1500	0.25	0.04	78	73	65	67	68	66	32	77	72	64	65	64	62	31	78	73	64	66	65	63	32	79	73	64	66	65	63	33
	1650		0.05	79	75	66	69	70	68	34	79	74	65	67	66	65	33	80	75	66	68	67	65	34	81	75	66	68	67	66	35
	1800		0.06	81	76	68	71	71	70	36	80	76	67	69	68	67	36	82	76	67	69	69	67	36	82	77	67	70	69	68	37
	1950		0.08	82	78	69	72	73	72	38	82	77	69	70	70	69	37	83	78	69	71	71	69	38	84	78	69	71	71	70	39
	2100		0.09	84	79	70	74	75	74	39	83	78	70	72	72	71	38	84	79	70	73	72	71	39	85	80	70	73	73	72	40

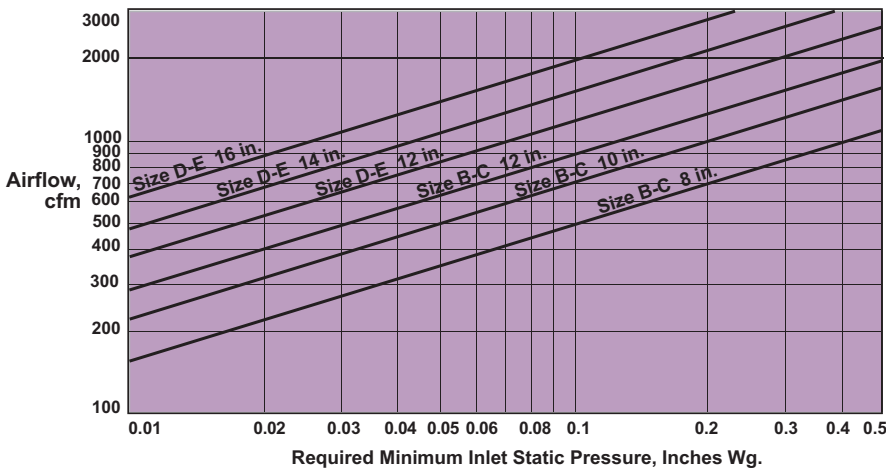
- Discharge sound is the noise emitted from the unit discharge into the downstream ductwork
- Min ΔPs is the difference between atmospheric pressure and the inlet static pressure with the primary damper full open and the unit fan set to match the primary flow
- Sound power levels are in dB, ref 10⁻¹² watts
- Sound performance based on units lined with standard dual density fiberglass lining

- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI Certified. See page N41 for AHRI Certified Performance Listings.

PTFS-F, ATFS-F, DTFS-F WITH ECM MOTOR / AIRFLOW VS. DOWNSTREAM STATIC PRESSURE



PRIMARY AIR INLET PRESSURE / PTFS-F, ATFS-F, DTFS-F



ECM ELECTRICAL DATA

Unit Size	Motor HP	120V	208V	240V	277V
B	1/3	5.0	3.3	2.8	2.6
C	1/3	5.0	3.3	2.8	2.6
D	1/2	7.7	5.0	4.3	4.1
E	3/4	9.6	7.9	6.8	5.5

Note: For selection procedure, See the section Engineering Guidelines and the topic 'ECM Motors - Fan Powered Terminals' for additional information

PTFS-F, ATFS-F, DTFS-F WITH ECM / RADIATED SOUND PERFORMANCE

Size	CFM	Discharge Ps	Min ΔPs	Octave Band Sound Power, Lw																											
				Fan Only							0.5" ΔPs							1.0" ΔPs							1.5" ΔPs						
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
B08	400	0.25	0.04	59	49	46	40	36	31	21	57	47	44	40	37	32	18	58	50	45	42	40	39	19	59	52	46	43	42	43	20
	475		0.05	61	51	47	42	40	36	23	59	50	46	42	38	33	20	61	53	48	44	42	40	23	62	55	48	45	44	44	24
	550		0.07	63	52	49	44	44	41	26	61	52	48	44	40	35	23	63	55	49	45	44	42	25	64	57	50	46	46	46	27
	625		0.09	64	53	50	45	48	44	27	63	54	50	45	41	36	25	65	57	51	47	45	43	28	66	59	52	48	47	47	29
	700		0.11	65	54	51	46	51	48	28	65	56	51	46	43	37	28	67	59	53	48	46	44	31	68	61	53	49	48	48	32
C10	450	0.25	0.03	50	41	41	33	27	21	14	51	44	41	37	33	28	14	54	48	43	39	37	36	16	55	50	44	40	40	40	17
	600		0.05	55	47	46	39	34	28	20	54	46	44	40	35	30	17	57	50	46	42	40	38	19	59	53	47	43	42	42	20
	750		0.07	59	51	49	44	38	33	23	57	48	47	42	37	32	20	60	52	49	44	41	40	23	62	55	50	45	44	44	24
	900		0.11	62	54	52	48	42	37	27	59	50	49	44	39	33	23	62	54	51	46	43	41	25	64	56	52	47	45	45	27
	1050		0.15	65	57	55	51	45	40	30	61	51	50	45	40	35	24	64	55	52	48	44	42	27	66	58	53	49	46	47	29
D12	800	0.25	0.02	55	46	42	38	33	28	16	56	46	43	41	37	32	17	60	50	45	42	40	38	22	62	52	46	43	42	41	24
	1000		0.03	59	50	45	42	37	33	21	59	49	46	43	39	35	20	62	53	48	45	42	40	24	64	54	49	46	44	43	27
	1200		0.05	62	53	48	44	40	37	24	61	52	49	45	41	37	23	64	55	51	47	44	42	27	66	57	52	48	46	46	29
	1400		0.07	65	56	51	47	43	40	28	62	54	51	47	43	39	25	66	57	53	48	46	44	29	68	59	54	49	48	47	32
	1600		0.09	67	58	53	49	45	43	31	64	56	53	48	44	40	27	67	59	54	50	47	46	31	69	61	55	51	49	49	33
E14	1300	0.25	0.03	65	56	52	47	42	37	28	62	55	51	46	43	39	25	64	57	53	48	45	43	27	65	58	54	48	47	46	28
	1500		0.04	68	59	55	50	45	41	32	65	57	54	49	45	41	28	67	59	55	50	47	45	31	68	61	56	51	49	48	32
	1700		0.06	70	62	57	53	48	44	35	67	59	56	51	46	42	31	69	61	57	52	49	47	33	70	63	58	53	50	49	34
	1900		0.07	72	65	60	55	51	47	37	69	61	57	52	48	44	33	71	63	59	54	50	48	36	72	64	60	54	52	51	37
	2100		0.09	74	67	62	57	53	50	40	71	63	59	54	49	45	36	73	65	60	55	52	50	38	74	66	61	56	53	52	40

- Radiated sound is the noise transmitted through the unit casing and emitted from the induction port
- Min ΔPs is the difference between atmospheric pressure and the inlet static pressure with the primary damper full open and the unit fan set to match the primary flow
- Sound power levels are in dB, ref 10⁻¹² watts
- Sound performance based on units lined with standard dual density fiberglass lining

- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI Certified. See page N41 for AHRI Certified Performance Listings

PTFS-F, ATFS-F, DTFS-F WITH ECM / DISCHARGE SOUND PERFORMANCE

Size	CFM	Discharge Ps	Min ΔPs	Octave Band Sound Power, Lw																											
				Fan Only							0.5" ΔPs							1.0" ΔPs							1.5" ΔPs						
				2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC	2	3	4	5	6	7	NC
B08	400	0.25	0.04	70	60	55	56	56	54	24	65	56	53	53	53	51	17	66	57	53	54	53	52	19	66	57	53	54	53	52	19
	475		0.05	73	63	58	59	59	58	28	68	60	56	56	56	55	21	69	60	56	57	56	55	22	70	61	56	57	57	56	24
	550		0.07	75	66	60	61	61	60	30	71	63	58	59	59	58	25	72	63	58	59	59	58	26	73	64	58	59	59	59	28
	625		0.09	77	68	62	63	64	63	33	74	66	60	61	61	61	29	75	66	60	61	62	61	30	76	66	60	61	62	61	31
	700		0.11	79	70	63	65	66	65	35	76	68	62	63	64	63	31	77	69	62	63	64	63	33	78	69	62	63	64	64	34
C10	450	0.25	0.03	67	58	52	53	52	49	20	63	54	49	48	47	45	15	64	55	49	48	47	45	16	65	55	49	48	48	46	17
	600		0.05	70	62	56	57	56	55	24	65	57	53	53	52	51	17	67	58	53	53	53	52	20	68	59	53	53	53	52	21
	750		0.07	73	65	58	60	60	59	25	67	60	56	57	56	56	20	69	61	56	57	57	56	20	70	61	56	57	57	57	21
	900		0.11	75	67	60	62	62	62	28	69	62	59	60	60	60	24	71	63	59	60	60	60	24	71	63	59	60	60	61	25
	1050		0.15	77	69	62	64	65	65	30	70	64	61	63	63	63	27	72	65	61	63	63	64	28	73	65	61	63	63	64	28
D12	800	0.25	0.02	62	51	50	53	52	49	13	61	53	53	53	52	50	14	63	54	53	53	52	51	15	64	55	53	53	53	51	15
	1000		0.03	66	57	54	58	57	55	19	65	56	56	58	56	55	19	66	58	57	58	57	55	19	68	58	57	58	57	56	20
	1200		0.05	70	62	58	62	61	60	24	67	59	59	61	60	59	23	69	61	59	61	60	60	24	70	61	60	61	61	60	24
	1400		0.07	73	66	62	65	64	64	28	70	62	62	64	63	63	27	71	63	62	64	63	63	27	72	64	62	64	64	63	27
	1600		0.09	76	69	64	67	67	67	30	72	64	64	67	66	66	30	73	66	64	67	66	66	30	74	66	64	67	66	66	30
E14	1300	0.25	0.03	74	68	60	64	64	62	26	69	64	58	60	61	58	22	70	65	58	61	61	59	23	71	66	59	61	62	59	24
	1500		0.04	77	71	63	67	67	65	30	71	67	61	64	64	62	26	73	68	61	64	65	62	26	74	69	62	64	65	63	27
	1700		0.06	79	74	66	69	70	68	33	74	70	63	66	67	65	29	75	71	64	67	67	66	30	76	72	64	67	68	66	31
	1900		0.07	81	77	68	72	73	71	37	76	73	66	69	69	68	32	77	73	66	69	70	69	32	78	74	66	70	70	69	33
	2100		0.09	83	79	70	74	75	74	39	77	75	68	71	72	71	34	79	76	68	71	72	71	36	80	76	68	72	73	72	36

- Discharge sound is the noise emitted from the unit discharge into the downstream ductwork
- Min ΔPs is the difference between atmospheric pressure and the inlet static pressure with the primary damper full open and the unit fan set to match the primary flow
- Sound power levels are in dB, ref 10⁻¹² watts
- Sound performance based on units lined with standard dual density fiberglass lining

- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011 for Appendix E. See Terminal Unit Engineering Guidelines
- All NC levels determined using AHRI 885-2008
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI Certified. See page N41 for AHRI Certified Performance Listings.