XG-FCQ-700 AHRI CERTIFIED RATING POINTS

AHRI CERTIFIED™ www.ahridirectory.org
VAV Terminals
AHRI Standard 880

RADIATED SOUND FAN ONLY

Case-Inlet Size	CFM	Min ΔPs	Octave Band					
			2	3	4	5	6	7
2-08	400	0.10	51	46	42	37	31	27
3-10	900	0.11	58	55	49	46	40	34
4-12	1400	0.12	62	55	48	46	42	40
5-12	1600	0.13	63	58	50	48	44	43
6-16	2500	0.14	67	60	54	53	50	48
7-18x16	2800	0.15	69	63	57	53	49	47

RADIATED SOUND

Power Levels @ 1.5" w.g. ΔPs

Case-Inlet Size	CFM	Min ΔPs	Octave Band					
			2	3	4	5	6	7
2-08	400	0.10	57	51	47	42	39	39
3-10	900	0.11	64	60	54	50	50	52
4-12	1400	0.12	68	60	51	50	46	46
5-12	1600	0.13	69	62	53	52	48	48
6-16	2500	0.14	73	65	59	57	55	54
7-18x16	2800	0.15	72	66	58	53	51	51

DISCHARGE SOUND FAN ONLY

Case-Inlet Size	CFM	Min ΔPs	Octave Band					
			2	3	4	5	6	7
2-08	400	0.10	51	45	41	37	32	28
3-10	900	0.11	56	54	48	43	40	47
4-12	1400	0.12	61	58	53	49	47	54
5-12	1600	0.13	61	59	53	49	48	54
6-16	2500	0.14	64	61	49	48	45	51
7-18x16	2800	0.15	62	62	53	48	47	55

PERFORMANCE NOTES

1) *Radiated sound is the noise transmitted through the unit casing*
2) *Discharge sound is noise emitted from unit discharge into downstream ductwork*
3) *Sound power levels expressed in decibels, (dB) re 10^{-12} Watts*
4) *Min ΔPs is the min. operating pressure requirement of the unit with the damper full open and is the static pressure drop from the unit inlet to the unit discharge*
5) *Performance data based on laboratory tests conducted in accordance with ASHRAE 130-2016 and AHRI 880-2017*
6) *Discharge sound power levels include duct end reflection corrections per AHRI Standard 880-2017*
7) *Sound performance based on units lined with standard dual density fiberglass insulation*
8) *Discharge (external) static pressure is 0.25" w.g. for all cases*

RADIATED SOUND MODEL XG-FCQ - PSC MOTOR

OCTAVE BAND SOUND POWER, Lw, dB																													
Case-Inlet Size	CFM	Min ΔPs	FAN ONLY							ΔPs = 0.50 in. wg.							ΔPs = 1.0 in. wg.							ΔPs = 1.5 in. wg.						
			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
2-08	200	0.10	46	42	38	29	27	24	<15	50	46	42	34	33	32	15	50	47	42	34	34	34	15	52	49	44	36	36	36	18
	300	0.10	49	44	40	33	29	26	<15	51	47	43	35	33	32	16	51	47	43	35	34	34	16	53	49	45	37	36	36	19
	400	**0.10**	**51**	**46**	**42**	**37**	**31**	**27**	15	54	49	45	40	36	35	19	55	49	45	40	37	37	19	**57**	**51**	**47**	**42**	**39**	**39**	21
	500	0.10	52	47	43	37	32	28	17	55	50	46	39	35	34	20	56	51	46	39	36	35	20	58	53	48	41	38	37	22
	600	0.10	53	49	44	37	33	30	18	56	51	47	38	36	35	21	57	51	47	38	36	36	21	59	53	49	40	38	38	23
3-10	500	0.11	52	53	46	43	34	27	21	56	55	49	45	44	45	24	58	55	49	45	46	50	24	59	57	51	47	48	51	26
	700	0.11	55	54	48	44	37	31	22	58	56	50	46	45	46	25	59	56	50	46	47	50	25	61	58	52	48	49	52	27
	900	**0.11**	**58**	**55**	**49**	**46**	**40**	**34**	24	61	58	52	48	46	46	28	62	58	52	48	48	50	28	**64**	**60**	**54**	**50**	**50**	**52**	30
	1100	0.11	60	56	51	47	42	37	25	64	59	53	50	48	48	29	65	60	53	50	49	51	30	67	62	55	52	51	53	32
	1300	0.11	63	58	52	49	45	41	27	66	61	55	52	49	49	31	67	62	55	52	50	51	32	69	64	57	54	52	53	35
4-12	1000	0.12	60	51	44	43	39	37	22	61	55	48	46	42	41	24	61	56	49	47	43	42	25	61	56	49	47	45	43	25
	1200	0.12	61	53	46	44	40	38	23	64	56	49	47	43	42	28	64	57	50	47	44	43	28	64	58	50	48	46	45	28
	1400	**0.12**	**62**	**55**	**48**	**46**	**42**	**40**	25	65	58	51	48	45	43	29	66	58	51	48	45	44	30	**68**	**60**	**51**	**50**	**46**	**46**	32
	1600	0.12	63	58	50	48	44	43	27	67	60	53	50	47	46	31	68	60	53	50	47	47	32	69	62	53	52	48	48	34
	1800	0.12	65	60	52	50	46	45	29	68	62	55	53	49	49	32	69	62	55	53	49	50	34	70	64	55	54	50	51	35
5-12	1200	0.13	61	53	46	44	40	38	23	64	56	49	47	43	42	28	64	57	50	47	44	43	28	64	58	50	48	46	45	28
	1400	0.13	62	55	48	46	42	40	25	65	58	51	48	45	43	29	66	58	51	48	45	44	30	68	60	51	50	46	46	32
	1600	**0.13**	**63**	**58**	**50**	**48**	**44**	**43**	27	67	60	53	50	47	46	31	68	60	53	50	47	47	32	**69**	**62**	**53**	**52**	**48**	**48**	34
	1800	0.13	65	60	52	50	46	45	29	68	62	55	53	49	49	32	69	62	55	53	49	50	34	70	64	55	54	50	51	35
	2000	0.13	67	62	54	52	48	47	31	68	62	55	53	49	49	32	69	52	55	53	49	50	34	70	64	55	54	50	51	35
6-16	1700	0.14	65	56	48	45	40	36	28	68	61	53	49	45	43	32	68	62	54	50	46	44	32	69	63	55	51	47	45	34
	2100	0.14	67	58	50	47	44	40	31	70	62	55	51	48	46	35	70	63	56	52	49	47	35	72	64	57	53	51	48	38
	2500	**0.14**	**67**	**60**	**54**	**53**	**50**	**48**	31	71	63	57	56	53	52	36	72	64	58	56	54	53	38	**73**	**65**	**59**	**57**	**55**	**54**	39
	2900	0.14	70	63	57	56	53	51	35	73	65	59	58	55	54	39	74	66	60	58	56	55	40	75	67	61	59	57	57	41
	3300	0.14	71	65	58	57	54	53	36	75	68	61	60	57	58	41	76	68	62	60	58	59	42	77	69	63	61	59	60	44
7-18x16	1800	0.15	69	58	52	47	42	38	34	69	61	54	49	46	47	34	70	61	54	49	47	49	35	70	62	55	50	49	50	35
	2300	0.15	68	60	55	50	46	43	32	69	62	55	50	47	48	34	69	62	55	50	48	49	34	70	63	56	51	49	50	35
	2800	**0.15**	**69**	**63**	**57**	**53**	**49**	**47**	34	71	64	57	52	50	49	36	71	64	57	52	50	50	36	**72**	**66**	**58**	**53**	**51**	**51**	38
	3300	0.15	70	66	62	57	56	47	37	73	67	63	56	54	51	39	74	67	63	56	54	52	40	75	69	64	57	55	53	41
	3800	0.15	72	68	65	59	57	48	41	75	70	66	59	57	53	41	76	70	66	59	57	54	42	77	71	68	61	58	55	44

1) *AHRI certified data is highlighted while all other data are application ratings*
2) *Radiated sound is the noise transmitted through the unit casing*
3) *Sound power levels expressed in decibels, (dB) re 10^{-12} Watts*
4) *Min ΔPs is the minimum operating pressure requirement of the unit with the damper full open and is the static pressure drop from the unit inlet to the unit discharge*
5) *Performance data based on laboratory tests conducted in accordance with ASHRAE 130-2016 and AHRI 880-2017*
6) *NC values are calculated using attenuation credits outlined in AHRI 885-2008 Appendix E*
7) *Blank spaces indicate Minimum Ps if unit exceeds the ΔPs across the unit*
8) *Sound performance based on units lined with standard dual density fiberglass insulation*
9) *Discharge (external) static pressure is 0.25" w.g. for all cases*

DISCHARGE SOUND MODEL XG-FCQ - PSC MOTOR

OCTAVE BAND SOUND POWER, Lw, dB																													
Case-Inlet Size	CFM	Min	FAN ONLY							ΔPs = 0.50 in. wg.							ΔPs = 1.0 in. wg.							ΔPs = 1.5 in. wg.						
		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
2-08	200	0.10	46	41	37	33	28	23	<15	59	48	41	36	32	27	<15	60	49	41	36	32	27	15	62	51	43	38	34	29	18
	300	0.10	49	43	39	35	30	25	<15	60	49	42	37	33	28	<15	61	50	42	37	33	28	<15	63	52	44	39	35	30	15
	400	**0.10**	**51**	**45**	**41**	**37**	**32**	**28**	<15	63	51	44	39	35	30	15	64	52	44	39	35	30	16	66	54	46	41	37	32	19
	500	0.10	52	46	42	38	34	28	<15	64	52	46	41	37	31	16	65	53	46	41	37	32	18	67	55	48	43	39	34	20
	600	0.10	54	48	43	40	35	30	<15	66	54	47	43	38	33	19	67	55	47	43	39	34	20	69	57	49	45	41	36	22
3-10	500	0.11	50	49	44	40	34	37	<15	62	56	49	44	38	42	<15	64	58	49	44	40	44	16	65	59	50	44	41	44	18
	700	0.11	53	52	46	41	37	42	<15	64	58	50	44	40	45	<15	65	59	50	44	41	46	15	67	60	51	45	42	47	18
	900	**0.11**	**56**	**54**	**48**	**43**	**40**	**47**	<15	67	60	52	46	43	50	18	68	61	52	46	44	51	19	70	62	53	47	45	52	21
	1100	0.11	58	56	51	44	42	51	15	69	62	55	47	45	54	20	70	63	55	47	46	55	21	72	65	56	48	48	56	24
	1300	0.11	61	58	53	45	45	55	19	72	64	57	48	48	58	24	73	65	57	48	49	59	25	75	67	58	49	50	60	28
4-12	1000	0.12	57	53	48	45	42	47	<15	62	55	48	45	42	47	<15	62	55	48	45	42	47	<15	62	55	48	45	43	47	<15
	1200	0.12	59	56	50	47	44	50	<15	64	58	50	47	44	50	<15	64	58	50	47	45	50	<15	65	58	50	47	45	50	15
	1400	**0.12**	**61**	**58**	**53**	**49**	**47**	**54**	18	67	60	54	49	47	54	18	67	60	54	49	47	54	18	68	61	55	49	47	54	19
	1600	0.12	61	59	53	49	48	54	18	68	62	54	50	49	56	20	68	62	54	50	49	56	20	69	63	55	51	50	57	21
	1800	0.12	62	59	53	49	48	54	18	69	64	56	52	51	58	22	69	64	57	53	52	59	23	71	65	58	53	53	60	24
5-12	1200	0.13	59	56	50	47	44	50	<15	64	58	50	47	44	50	<15	64	58	50	47	44	50	<15	65	58	50	47	44	52	16
	1400	0.13	61	58	53	49	47	54	18	67	60	53	49	47	54	18	67	60	54	49	47	54	18	68	61	55	49	47	54	19
	1600	**0.13**	**61**	**59**	**53**	**49**	**48**	**54**	18	68	62	54	50	49	56	20	68	62	54	50	49	56	20	69	63	55	51	50	57	21
	1800	0.13	62	59	53	49	48	54	18	69	64	56	52	51	58	22	69	64	57	53	52	59	23	71	65	58	53	53	60	24
	2000	0.13	64	61	55	51	50	56	20	69	64	56	52	51	58	22	69	64	57	53	52	59	23	71	65	58	53	53	60	24
6-16	1700	0.14	58	56	45	46	41	38	<15	69	63	49	50	45	44	20	70	64	49	50	46	45	21	72	66	50	51	47	46	24
	2100	0.14	60	58	47	48	44	45	<15	71	65	50	51	47	49	22	72	66	50	51	48	50	24	74	68	51	52	49	51	26
	2500	**0.14**	**64**	**61**	**49**	**48**	**45**	**51**	18	74	67	52	51	48	54	26	75	68	52	51	49	55	28	77	70	53	52	50	56	30
	2900	0.14	65	63	53	50	49	56	20	75	69	55	53	51	58	28	76	70	55	53	52	59	29	78	72	56	54	53	60	31
	3300	0.14	66	65	55	52	51	59	23	76	71	58	55	54	62	30	77	72	58	55	55	63	31	79	74	59	56	56	64	34
7-18x16	1800	0.15	56	57	47	44	41	47	<15	66	63	50	47	44	50	20	67	64	50	47	45	51	21	70	66	51	48	47	52	24
	2300	0.15	60	60	50	46	45	52	16	68	66	52	48	46	53	22	69	66	52	48	47	54	24	72	67	53	49	49	56	25
	2800	**0.15**	**62**	**62**	**53**	**48**	**47**	**55**	19	71	67	55	50	49	57	25	72	68	55	50	50	58	26	74	69	56	51	52	59	28
	3300	0.15	64	62	54	50	50	58	22	73	68	57	52	52	60	26	74	69	57	52	53	61	28	76	71	58	53	54	62	30
	3800	0.15	66	64	57	52	53	62	26	75	69	59	54	55	63	28	76	70	59	54	56	64	29	79	72	60	55	57	65	32

1) *AHRI certified data is highlighted while all other data are application ratings*
2) *Discharge sound is noise emitted from unit discharge into downstream ductwork*
3) *Sound power levels expressed in decibels, (dB) re 10^{-12} Watts*
4) *Min ΔPs is the min. operating pressure requirement of the unit with the damper full open and is the static pressure drop from the unit inlet to the unit discharge*
5) *Performance data based on laboratory tests conducted in accordance with ASHRAE 130-2016 and AHRI 880-2017*
6) *NC values are calculated using attenuation credits outlined in AHRI 885-2008 Appendix E*
7) *Blank spaces indicate Minimum Ps if unit exceeds the ΔPs across the unit*
8) *Sound performance based on units lined with standard dual density fiberglass insulation*
9) *Discharge sound power levels include duct end reflection corrections per AHRI Standard 880-2017*
10) *Discharge (external) static pressure is 0.25" w.g. for all cases*

XG-FCQ-700 PSC FAN MOTOR AMPERAGE RATINGS

Case Size	Motor HP	Standard PSC Motor Amperage Ratings		
		120v-1 Phase 60 Hz Rated Amps	208-240V-1 Phase 60 Hz Rated Amps	277V-1 Phase 60 Hz Rated Amps
2	1/8	2.6	0.8	1.1
3	1/4	4.8	1.9	1.9
4	1/3	8.8	3.0	1.9
5	1/3	8.8	3.0	3.6
6	1/3 (two motors)	17.6 (two motors)	12.4 (two motors)	12.4 (two motors)
7	3/4 (two motors)	22.8 (two motors)	8.0 (two motors)	8.6 (two motors)

XG-FCQ-700 ECM FAN MOTOR AMPERAGE RATINGS

Case Size	Motor HP	ECM Motor Amperage Ratings		
		120v-1 Phase 60 Hz Rated Amps	208-240V-1 Phase 60 Hz Rated Amps	277V-1 Phase 60 Hz Rated Amps
2	1/3	4.2	2.7	2.1
3	1/2	6.6	3.8	3.2
4	1	11.8	6.6	6.0
6	1/2 (two motors)	13.2 (two motors)	7.6 (two motors)	6.4 (two motors)

XG-FCQ-700 DAMPER LEAKAGE

Standard Construction			
Inlet Diameter	Static Pressure " w.g.	Maximum Airflow	Max Damper Leakage
4	3	300	5
5	3	375	5
6	3	540	5
7	3	760	7
8	3	990	9
9	3	1250	12
10	3	1640	16
12	3	2350	22
14	3	3250	32
16	3	4100	41
20	3	6430	64
24	3	7270	72

PERFORMANCE NOTES

1) Leakage testing conducted in accordance with ASHRAE 130-2016
2) Per ASHRAE Standard 130-2016 "terminal damper leakage: the amount of air in ft 3/min (L/s) leaking through a fully closed damper/valve of a supply/exhaust terminal unit at a given inlet pressure"opened"
3) Damper leakage shall not exceed 1% of the maximum rated airflow at 3" w.g.
4) 4" and 5" inlets are built with 6" casings

XG-FCQ-700 HOT WATER COILS MBH SELECTION DATA

Case Size	Rows	GPM	Head Loss (ft-H_2O)	CFM				
				200	400	500	600	750
2	One	1	0.64	8.9	12.1	13.1	14.0	15.0
		2	2.46	9.7	13.5	14.8	16.0	17.4
		4	9.40	10.1	14.4	15.9	17.2	18.9
		Airside Ps		0.02	0.07	0.11	0.15	0.22
2	Two	2	0.62	15.0	22.0	24.4	26.4	28.9
		4	2.38	16.0	24.3	27.3	29.9	33.2
		8	9.10	16.6	25.7	29.1	32.1	36.0
		Airside Ps		0.05	0.16	0.23	0.32	0.46

Case Size	Rows	GPM	Head Loss (ft-H_2O)	CFM				
				500	700	900	1100	1300
3	One	4	1.64	18.6	21.6	24.0	25.9	27.6
		8	6.27	19.7	23.0	25.7	28.0	29.9
		10	9.66	19.9	23.3	26.1	28.4	30.4
		Airside Ps		0.06	0.10	0.15	0.22	0.29
3	Two	4	1.84	31.0	36.9	41.5	45.3	48.5
		6	4.09	32.5	39.1	44.3	48.7	52.4
		8	7.19	33.3	40.3	45.9	50.6	54.6
		Airside Ps		0.12	0.22	0.33	0.46	0.61

Case Size	Rows	GPM	Head Loss (ft-H_2O)	CFM				
				1000	1200	1400	1600	1800
4	One	3	1.19	28.4	30.5	32.2	33.8	35.1
		6	4.54	31.1	33.6	35.7	37.6	39.4
		9	9.93	32.1	34.8	37.1	39.2	41.1
		Airside Ps		0.11	0.15	0.19	0.24	0.30
4	Two	4	1.32	48.8	52.9	56.3	59.3	62.0
		8	5.19	54.6	59.8	64.4	68.4	72.0
		10	8.06	56.0	61.5	66.3	70.6	74.4
		Airside Ps		0.23	0.32	0.41	0.51	0.62

Case Size	Rows	GPM	Head Loss (ft-H_2O)	CFM				
				1000	1200	1400	1600	1800
5	One	3	1.19	28.4	30.5	32.2	33.8	35.1
		6	4.54	31.1	33.6	35.7	37.6	39.4
		9	9.93	32.1	34.8	37.1	39.2	41.1
		Airside Ps		0.11	0.15	0.19	0.24	0.30
5	Two	4	1.32	48.8	52.9	56.3	59.3	62.0
		8	5.19	54.6	59.8	64.4	68.4	72.0
		10	8.06	56.0	61.5	66.3	70.6	74.4
		Airside Ps		0.23	0.32	0.41	0.51	0.62

Case Size	Rows	GPM	Head Loss (ft-H_2O)	CFM				
				1500	2000	2500	3000	3300
6	One	4	1.43	58.3	65.6	71.3	76.0	78.5
		8	5.61	65.1	74.5	82.1	88.5	91.9
		10	8.71	66.7	76.6	84.7	91.6	95.2
		Airside Ps		0.03	0.05	0.07	0.10	0.12
6	Two	4	1.07	87.6	99.6	108.8	116.2	120.0
		8	4.22	102.2	119.4	133.3	145.0	151.1
		12	9.42	108.2	127.7	144.0	157.8	165.2
		Airside Ps		0.07	0.11	0.16	0.21	0.25

Case Size	Rows	GPM	Head Loss (ft-H_2O)	CFM				
				2000	2500	3000	3500	4000
7	One	4	1.43	65.6	71.3	76.0	80.0	83.4
		8	5.61	74.5	82.1	88.5	94.1	98.9
		10	8.71	76.6	84.7	91.6	97.5	102.7
		Airside Ps		0.05	0.07	0.10	0.13	0.16
7	Two	4	1.07	99.6	108.8	116.2	122.2	127.3
		8	4.22	119.4	133.3	145.0	154.9	163.5
		12	9.42	127.7	144.0	157.8	169.8	180.3
		Airside Ps		0.11	0.16	0.21	0.27	0.34

1) *All coil performance in accordance with AHRI Standard 410-2001*
2) *Heating capacities are in MBH*
3) *Performance data based on a temperature differential of 115°F (180°F entering water temperature and 65°F entering air temperature)*
4) *For temperature differentials other than 115°F, multiply the MBH by the correction factors below*
5) *Head Loss is in feet of water*
6) *Airside ΔPs is the air pressure drop of the hot water coil*
7) *Aire temperature rise =927 x MBH/CFM*
8) *Water temperature drop = 2.04 x MBH/GPM*
9) *Values in tables are listed for 0 ft. of altitude and no glycol in the system*

MBH CORRECTION FACTORS

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

XG-FCQ-700 ELECTRIC HEATER CAPACITIES

Single Phase XG-FCQ kW Limits				
Case Size	Heater Voltage	Min. kW per Step	Max. kW	Max. Steps
2	120	0.5	5	2
2	208	0.5	9	2
2	240	0.5	9	2
2	277	1.0	9	2
2	480	2.0	9	2
3	120	0.5	5	3
3	208	0.5	9.5	3
3	240	0.5	11	3
3	277	0.5	13	3
3	480	1.0	13	3
4	120	0.5	5	3
4	208	0.5	9.5	3
4	0.6	0.5	11	3
4	277	0.5	13	3
4	480	1.0	19	3
5	120	0.5	5	3
5	208	0.5	9.5	3
5	240	0.5	11	3
5	277	0.5	13	3
5	480	1.0	23	3
6	120	0.5	5	3
6	208	0.5	9.5	3
6	240	0.5	11	3
6	277	0.5	13	3
6	480	0.5	23	3
7	120	0.5	5	3
7	208	0.5	9.5	3
7	240	0.5	11	3
7	277	0.5	13	3
7	480	0.5	23	3

Three Phase XG-FCQ kW Limits				
Case Size	Heater Voltage	Min. kW per Step	Max. kW	Max. Steps
2	208	0.5	9	2
2	480	2.5	9	2
3	208	0.5	13	3
3	480	1.0	13	3
4	208	0.5	17	3
4	480	1.0	19	3
5	208	0.5	17	3
5	480	0.5	24	3
6	208	0.5	17	3
6	480	0.5	39	3
7	208	0.5	17	3
7	480	0.5	39	3

NOTES:

1. *Heaters less than 10 kW are specifiable to nearest 0.5 kW. Heaters greater than 10.0 kW are specifiable to nearest 1.0 kW.*
2. *Minimum flow rate for electric heat is 70 CFM / kW. Lower CFM's can cause nuisance tripping, excessive discharge temperatures, rapid cycling, and rapid element failure. Electric Heat units running below 70 CFM / kW will void all warranties.*
3. *For optimum thermal comfort, the suggested discharge temperature should not exceed 20°F above room set point.*
4. *We do not recommend discharge temperatures in excess of 115°F to protect heater coils.*
5. *Maximum number of steps at minimum kW per Step is one step.*
6. *If more than 1 heater is wired into a building's circuit breaker (multi-outlet branch circuit) each heater will require the addition of power side fusing.*

ELECTRIC HEAT SELECTION:

A. Specify electric duct heaters using voltage, phase, kW, and number of steps.

B. Use above chart to select voltage. Calculate required kW using following equations:

$$kW = \frac{BTU / HR}{3413} \qquad kW = \frac{CFM \times \Delta \times 1.085}{3413} \qquad \Delta = \frac{kW \times 3413}{CFM \times 1.085}$$

$$CFM = \frac{kW \times 3413}{\Delta \times 1.085} \qquad CFM = \frac{kW \times 3413}{\Delta \times 1.085}$$

** air density at sea level — reduce by 0.036 for each 1000 feet of altitude above sea level*

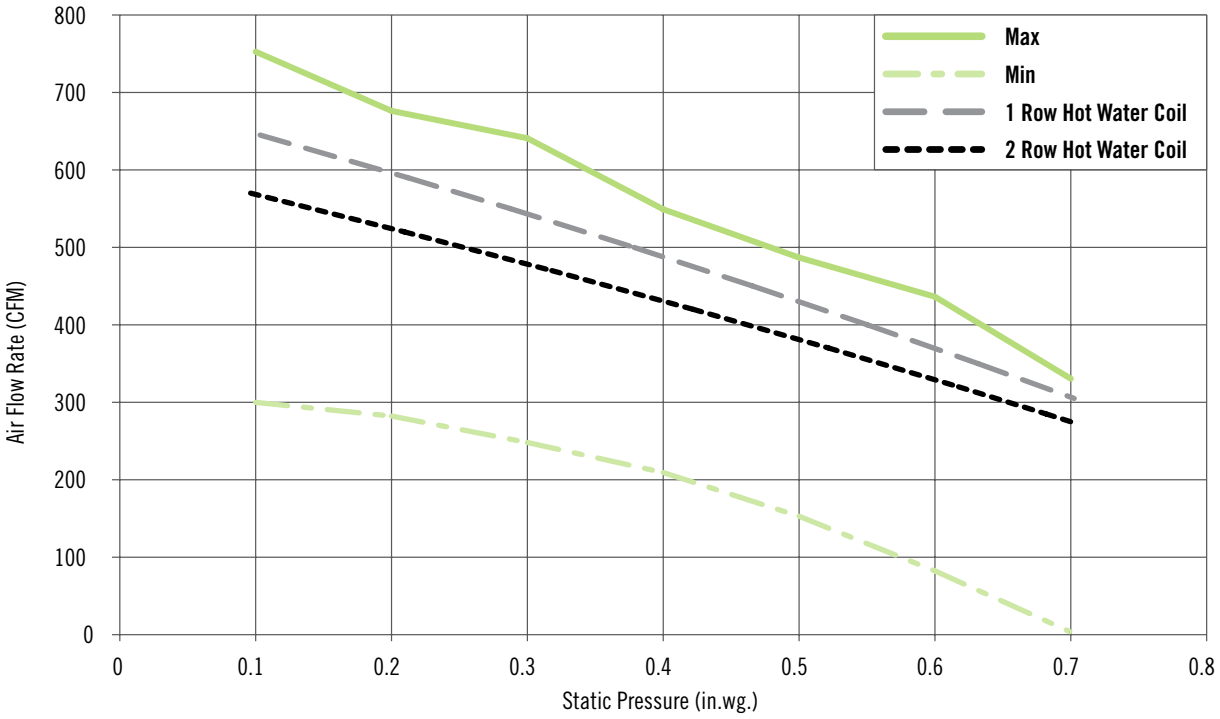
Where: BTU / Hr = Required heating capacity

CFM = volume of air during heating. Typically 100% of maximum cooling air volume

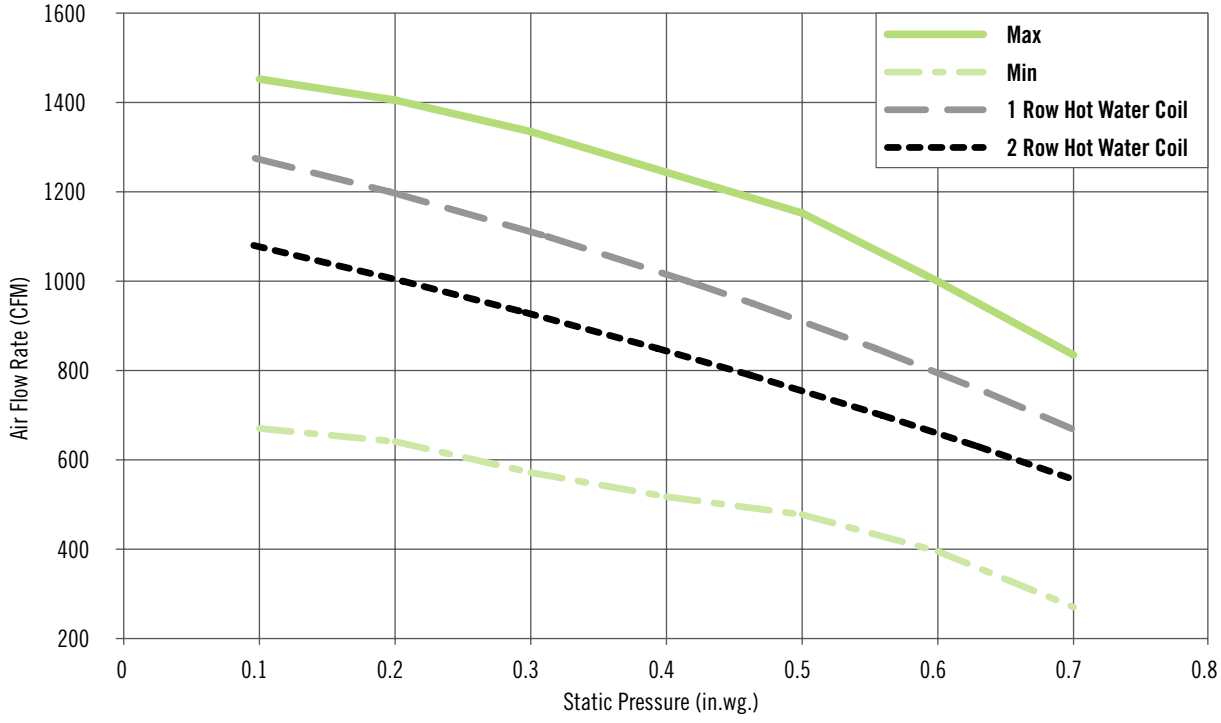
Δ = desired air temperature rise across the electric heater

Inlet air temperature = primary air temperature, usually 55°F

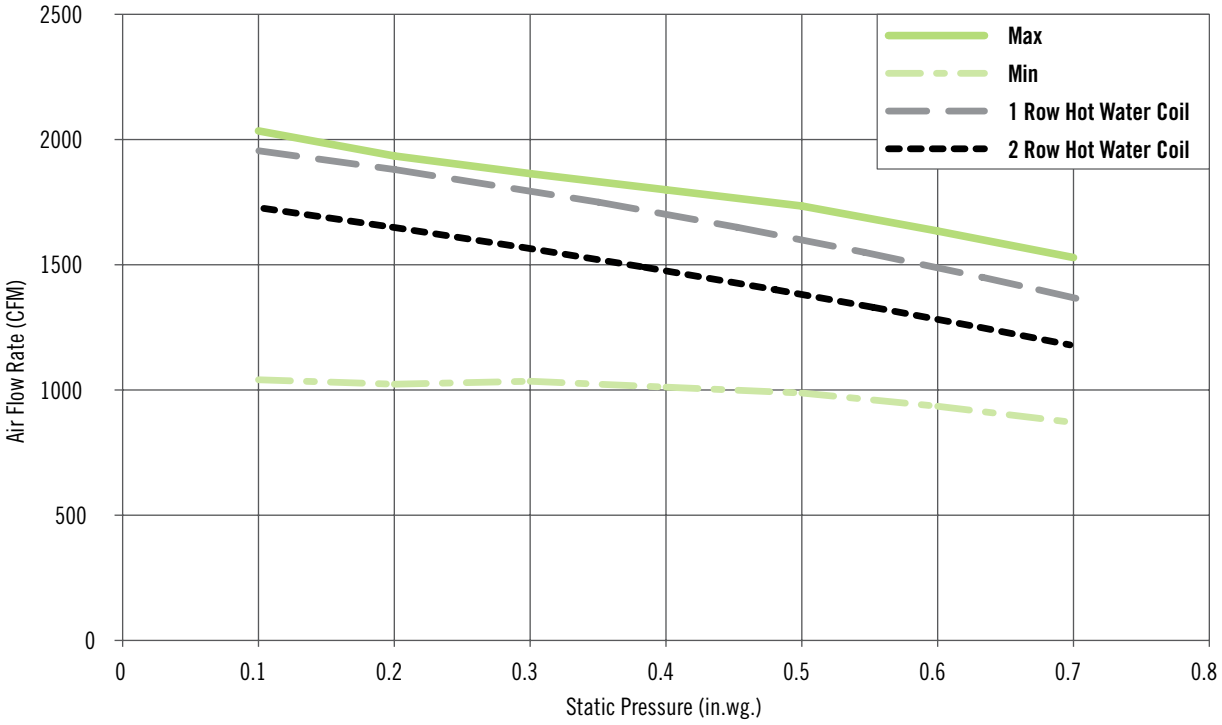
XG-FCQ-700 FAN PERFORMANCE CURVES
CASE 2 - PSC MOTOR



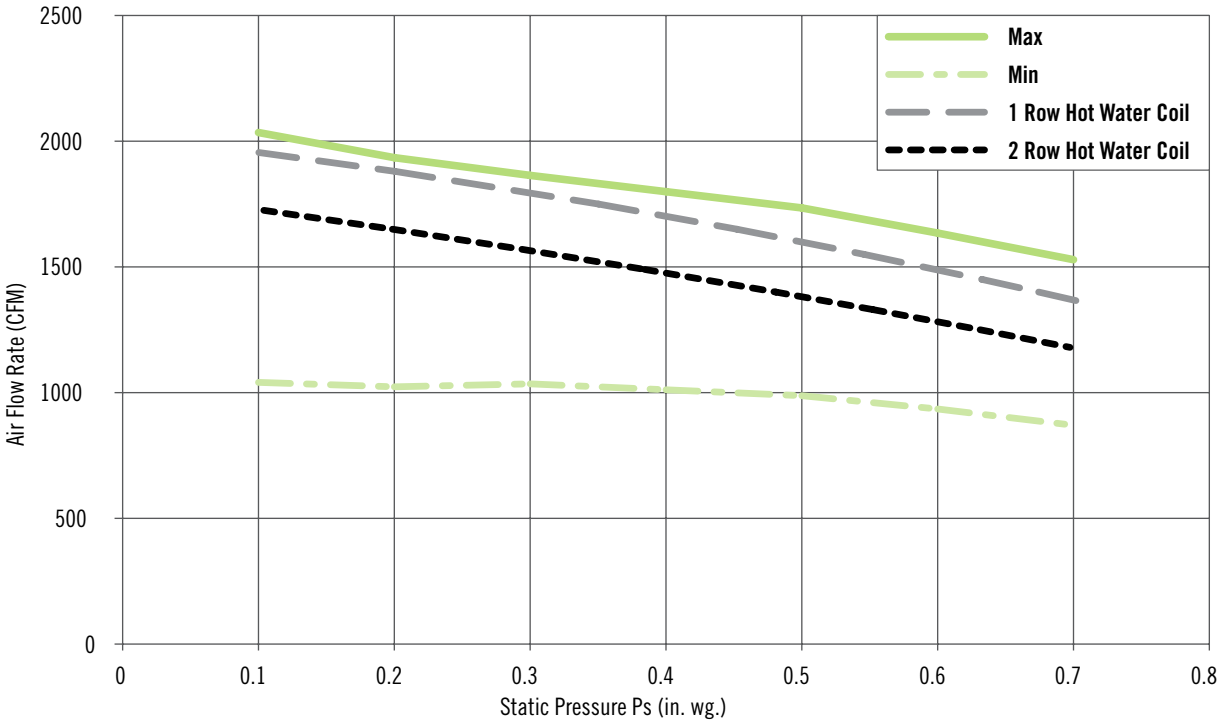
XG-FCQ-700 FAN PERFORMANCE CURVES
CASE 3 - PSC MOTOR



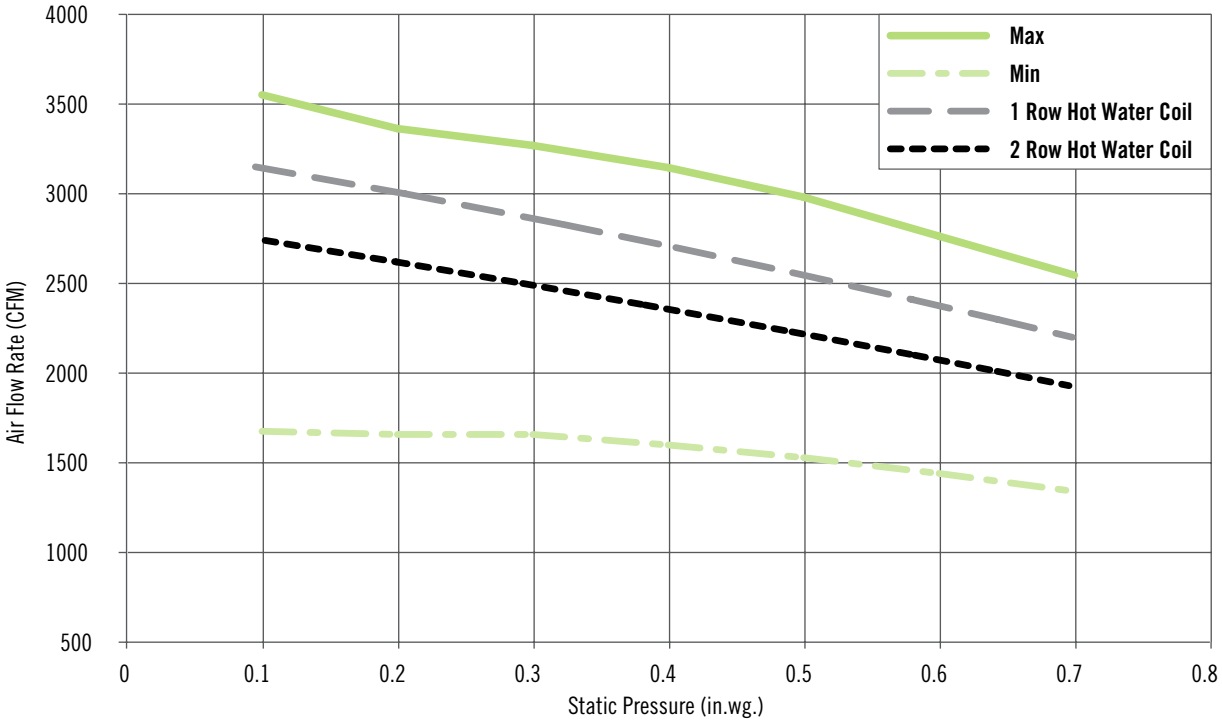
XG-FCQ-700 FAN PERFORMANCE CURVES
CASE 4 - PSC MOTOR



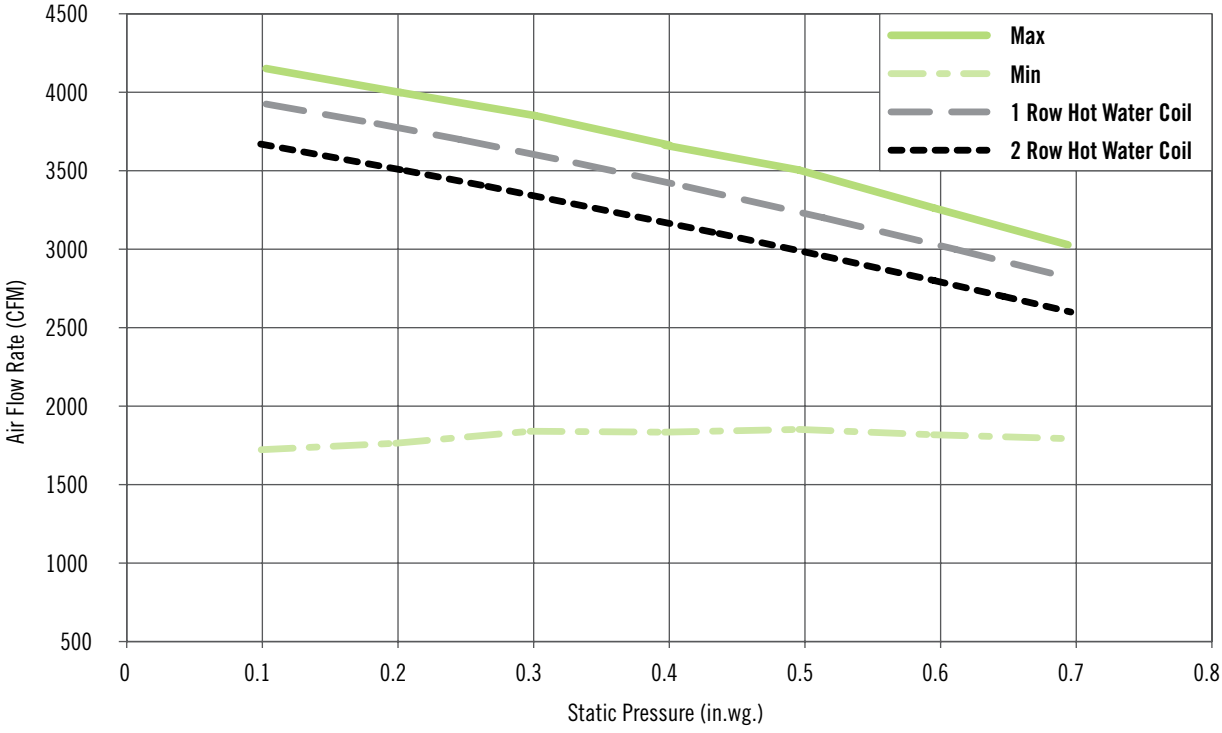
XG-FCQ-700 FAN PERFORMANCE CURVES
CASE 5 - PSC MOTOR



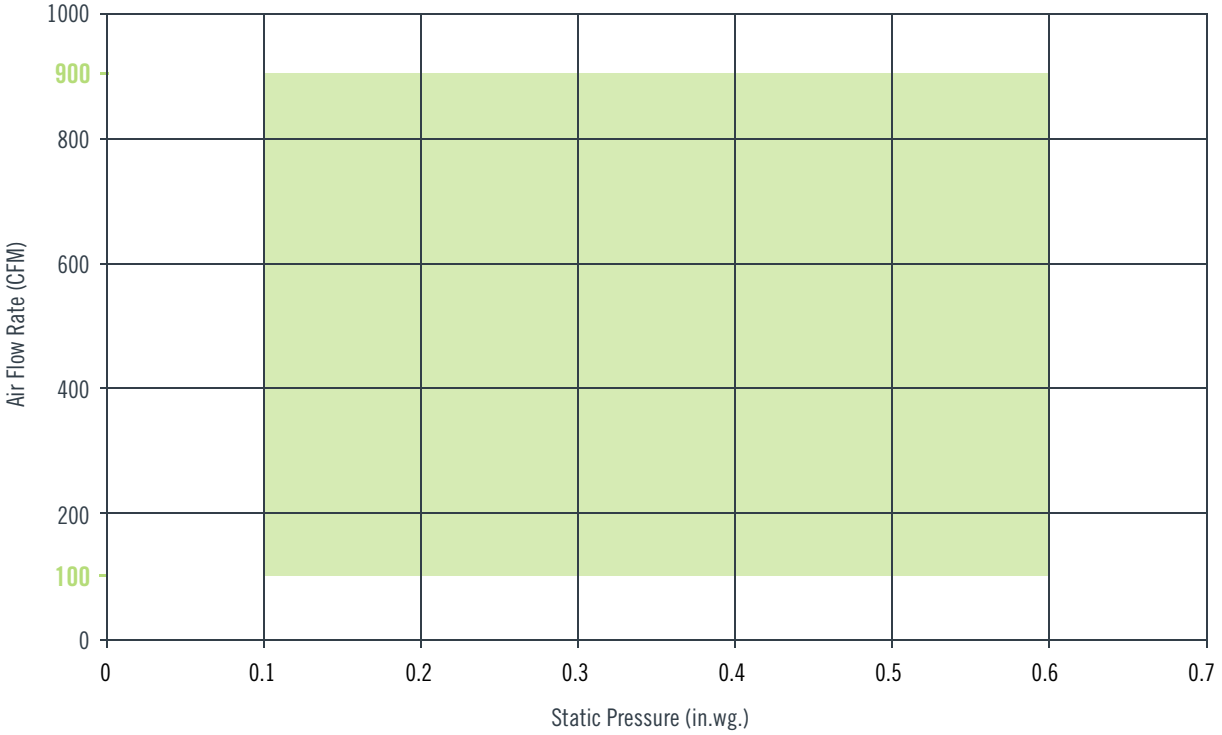
XG-FCQ-700 FAN PERFORMANCE CURVES
CASE 6 - PSC MOTOR



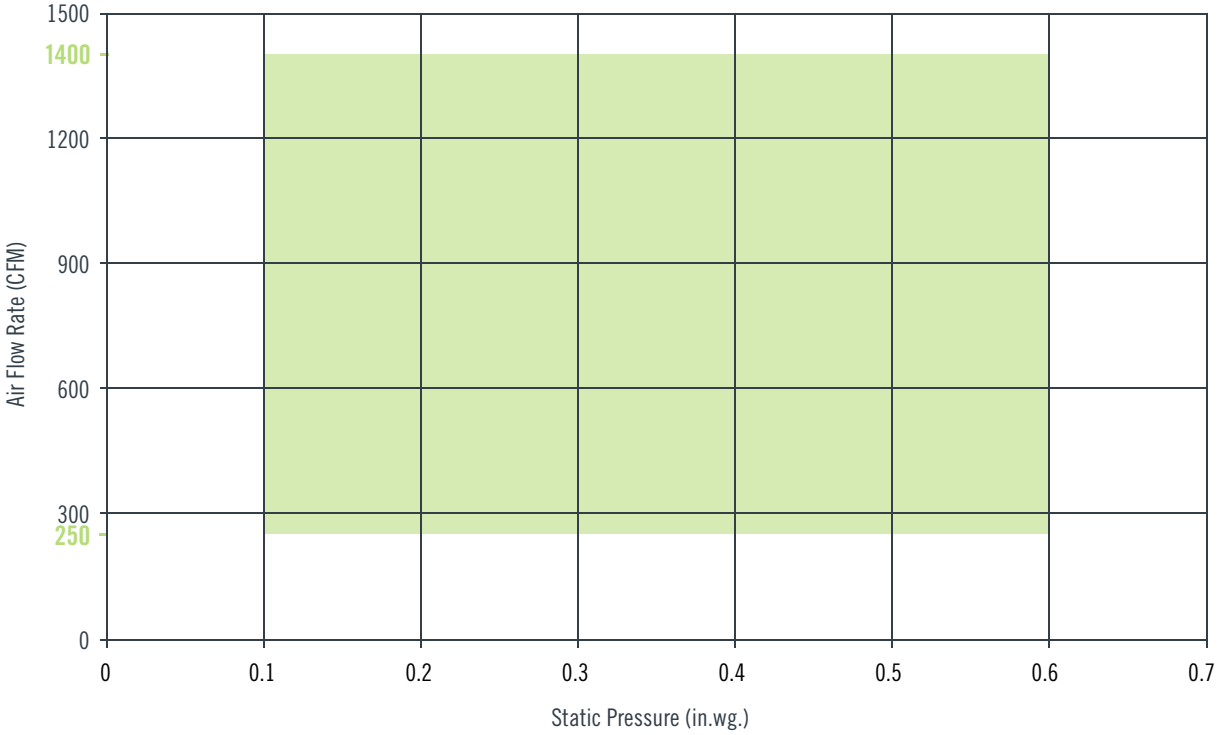
XG-FCQ-700 FAN PERFORMANCE CURVES
CASE 7 - PSC MOTOR



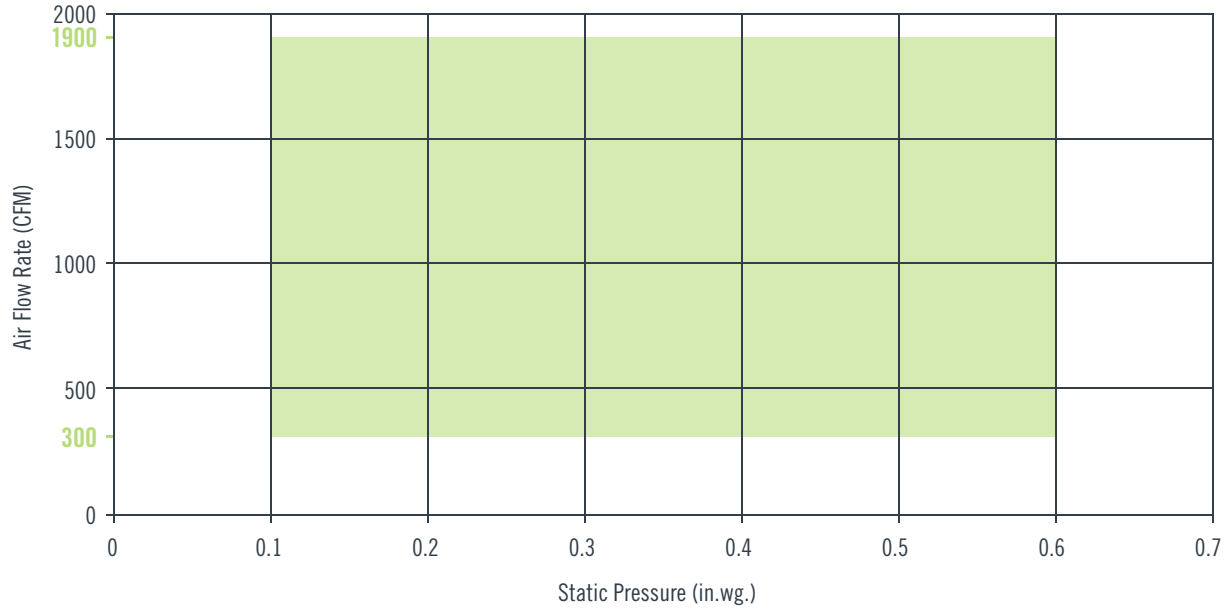
XG-FCQ 700 ECM FAN PERFORMANCE CURVES CASE 2



XG-FCQ 700 ECM FAN PERFORMANCE CURVES CASE 3



XG-FCQ 700 ECM FAN PERFORMANCE CURVES CASE 4



XG-FCQ 700 ECM FAN PERFORMANCE CURVES CASE 6