

PESV, AESV, DESV / HOT WATER COIL CAPACITY, MBH / 1- AND 2-ROW

Rows	gpm	Head Loss	Airflow, CFM									
			50	100	150	200	250	300	350	400	450	
One-Row	1.0	0.48	3.7	5.6	6.8	7.8	8.6	9.3	9.9	10.4	10.8	
	2.0	1.82	3.8	5.9	7.3	8.5	9.5	10.3	11.0	11.6	12.2	
	4.0	6.98	3.9	6.1	7.6	8.9	10.0	10.9	11.7	12.4	13.1	
	5.0	10.75	3.9	6.1	7.7	9.0	10.1	11.0	11.8	12.6	13.3	
	Airside ΔPs		0.01	0.01	0.02	0.04	0.05	0.07	0.10	0.12	0.15	
Two-Row	1.0	0.12	5.0	8.1	10.3	12.0	13.4	14.5	15.5	16.3	17.0	
	3.0	1.04	5.4	9.0	11.9	14.2	16.2	17.9	19.4	20.7	22.0	
	5.0	2.80	5.4	9.2	12.2	14.7	16.9	18.8	20.5	22.0	23.4	
	7.0	5.38	5.5	9.3	12.4	15.0	17.3	19.2	21.0	22.6	24.1	
	Airside ΔPs		0.01	0.03	0.05	0.08	0.12	0.16	0.21	0.26	0.32	
Rows	gpm	Head Loss	Airflow, CFM									
			100	200	300	400	500	600	700	800	900	
One-Row	1.0	0.64	6.2	8.9	10.7	12.1	13.1	14.0	14.7	15.3	15.9	
	2.0	2.46	6.6	9.7	11.8	13.5	14.8	16.0	16.9	17.8	18.5	
	3.0	5.38	6.7	10.0	12.3	14.1	15.5	16.8	17.9	18.8	19.7	
	4.0	9.39	6.8	10.1	12.5	14.4	15.9	17.2	18.4	19.4	20.3	
	Airside ΔPs		0.01	0.02	0.05	0.07	0.11	0.15	0.19	0.24	0.30	
Two-Row	1.0	0.17	8.8	13.4	16.3	18.5	20.2	21.5	22.6	23.6	24.4	
	3.0	1.40	9.7	15.6	20.0	23.4	26.3	28.6	30.7	32.5	34.1	
	5.0	3.77	9.9	16.2	21.0	24.8	28.0	30.8	33.2	35.3	37.2	
	7.0	7.24	10.0	16.5	21.4	25.5	28.8	31.8	34.4	36.7	38.8	
	Airside ΔPs		0.02	0.05	0.10	0.16	0.23	0.32	0.41	0.51	0.62	
Rows	gpm	Head Loss	Airflow, CFM									
			200	300	400	500	600	700	800	900	1000	
One-Row	2.0	0.41	11.0	13.5	15.4	17.0	18.3	19.5	20.5	21.3	22.1	
	3.0	0.90	11.4	14.1	16.3	18.1	19.6	20.9	22.0	23.0	23.9	
	5.0	2.41	11.8	14.7	17.1	19.0	20.7	22.2	23.5	24.6	25.7	
	6.0	3.43	11.9	14.9	17.3	19.3	21.0	22.5	23.9	25.1	26.2	
	Airside ΔPs		0.01	0.02	0.04	0.06	0.08	0.10	0.13	0.15	0.19	
Two-Row	2.0	0.47	16.4	21.0	24.5	27.4	29.8	31.8	33.6	35.1	36.5	
	4.0	1.84	17.6	23.0	27.3	31.0	34.2	36.9	39.4	41.5	43.5	
	6.0	4.08	18.0	23.8	28.5	32.5	36.0	39.1	41.8	44.3	46.6	
	8.0	5.00	18.3	24.2	29.1	33.3	37.0	40.3	43.2	45.9	48.3	
	Airside ΔPs		0.03	0.05	0.09	0.12	0.17	0.22	0.27	0.33	0.40	
Rows	gpm	Head Loss	Airflow, CFM									
			300	500	700	900	1100	1300	1500	1700	1900	
One-Row	2.0	0.54	15.5	19.8	22.9	25.2	27.1	28.7	30.1	31.2	32.3	
	3.0	1.19	16.2	21.0	24.5	27.2	29.5	31.4	33.0	34.5	35.7	
	5.0	3.18	16.9	22.1	26.0	29.1	31.7	34.0	35.9	37.6	39.2	
	6.0	4.52	17.0	22.4	26.5	29.7	32.4	34.7	36.7	38.5	40.1	
	Airside ΔPs		0.01	0.03	0.06	0.09	0.13	0.17	0.22	0.27	0.33	
Two-Row	2.0	0.55	23.2	30.8	36.2	40.2	43.5	46.1	48.3	50.2	51.9	
	4.0	2.15	25.3	34.8	41.9	47.6	52.3	56.3	59.7	62.7	65.4	
	6.0	4.75	26.1	36.4	44.3	50.7	56.1	60.8	64.8	68.4	71.6	
	8.0	6.16	26.5	37.2	45.6	52.5	58.3	63.3	67.8	71.7	75.3	
	Airside ΔPs		0.03	0.07	0.13	0.20	0.27	0.36	0.46	0.57	0.68	

PESV, AESV, DESV / HOT WATER COIL CAPACITY, MBH / 1- AND 2-ROW

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Rows	gpm	Head Loss	Airflow, CFM									
			400	700	1000	1300	1600	1900	2200	2500	2800	
One-Row	2.0	0.43	20.4	26.3	30.3	33.2	35.5	27.4	39.0	40.4	41.5	
	3.0	0.96	21.6	28.4	33.2	36.8	39.7	42.0	44.1	45.9	47.4	
	5.0	2.63	22.7	30.5	36.0	40.3	43.8	47.8	49.3	51.6	53.6	
	6.0	3.77	23.1	31.0	36.8	41.3	45.0	48.2	50.9	53.3	55.4	
	Airside ΔPs			0.01	0.03	0.06	0.09	0.13	0.17	0.22	0.27	0.33
Two-Row	2.0	0.39	30.1	40.3	47.0	51.8	55.5	58.5	60.9	62.9	64.7	
	4.0	1.51	33.5	47.1	56.8	64.3	70.3	75.3	79.6	83.2	86.4	
	6.0	3.36	34.9	49.9	61.1	69.9	77.2	83.3	88.6	93.2	97.3	
	8.0	3.95	35.6	51.5	63.5	73.1	81.1	88.0	93.9	99.2	103.8	
	Airside ΔPs			0.03	0.07	0.12	0.19	0.27	0.36	0.46	0.57	0.69

  

Rows	gpm	Head Loss	Airflow, CFM								
			600	1000	1400	1800	2200	2600	3000	3400	3800
One-Row	3.0	1.07	29.5	37.4	42.8	47.0	50.4	53.1	55.5	57.5	59.3
	5.0	2.92	31.4	40.6	47.2	52.3	56.5	60.1	63.1	65.8	68.2
	7.0	5.65	32.4	42.1	49.3	55.0	59.7	63.7	67.1	70.2	72.9
	9.0	6.48	32.9	43.1	50.6	56.6	61.6	65.9	69.6	72.9	75.9
	Airside ΔPs			0.02	0.04	0.07	0.10	0.14	0.19	0.24	0.30
Two-Row	3.0	0.53	43.1	55.9	64.7	71.1	76.1	80.1	83.4	86.2	88.6
	5.0	1.46	47.0	63.1	74.6	83.5	90.7	96.6	101.6	105.9	109.7
	7.0	2.84	49.0	66.8	80.0	90.3	98.8	106.0	112.1	117.5	122.2
	9.0	2.54	50.2	69.0	83.3	94.6	104.1	112.1	119.0	125.1	130.5
	Airside ΔPs			0.04	0.08	0.14	0.22	0.30	0.40	0.51	0.63

  

Rows	gpm	Head Loss	Airflow, CFM								
			600	1200	1800	2400	3000	3600	4200	4800	5400
One-Row	3.0	1.31	35.3	49.4	58.3	64.7	69.6	73.5	76.8	79.6	82.0
	5.0	3.57	37.6	54.2	65.2	73.4	79.9	85.3	89.9	93.8	97.3
	7.0	6.89	38.7	56.5	68.7	77.9	85.4	91.6	96.9	101.5	105.6
	9.0	8.50	39.3	58.0	70.8	80.7	88.7	95.5	101.3	106.4	110.9
	Airside ΔPs			0.01	0.02	0.05	0.08	0.11	0.15	0.20	0.25
Two-Row	3.0	0.59	48.8	70.9	84.3	93.4	100.1	105.3	109.4	112.8	115.7
	5.0	1.63	53.1	81.0	99.4	112.9	123.3	131.6	138.5	144.3	149.3
	7.0	3.17	55.2	86.2	107.6	123.8	136.6	147.1	155.9	163.5	170.0
	9.0	3.06	56.4	89.4	112.8	130.8	145.3	157.3	167.5	176.4	184.2
	Airside ΔPs			0.02	0.05	0.10	0.16	0.24	0.32	0.42	0.52

- All coil performance in accordance with AHRI 410-2001
- Heating capacities are in MBH
- Data based on 180°F entering water and 55°F entering air
- For temperature differentials other than 125°, 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 ½ OD male solder for 1-row coil sizes 04-08. All other coils have 7/8" 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	110	125	140	150
Factor	0.40	0.48	0.56	0.64	0.72	0.80	0.88	1.00	1.12	1.20

Note: Airside ΔPs reflects the air pressure drop of the hot water coil

PESV, AESV, DESV / HOT WATER COIL CAPACITY, MBH / 3- AND 4-ROW

Rows	gpm	Head Loss	Airflow, CFM									
			50	100	150	200	250	300	350	400	450	
Sizes 4-5-6	Three- Row	2.0	0.70	6.1	10.8	14.4	17.5	20.0	22.3	24.2	25.9	27.4
		3.0	1.54	6.1	11.0	14.9	18.2	21.0	23.5	25.7	27.6	29.4
		5.0	4.14	6.2	11.1	15.2	18.8	21.8	24.6	27.0	29.2	31.3
		6.0	5.90	6.2	11.2	15.3	18.9	22.1	24.9	27.4	29.7	31.8
		Airside ΔPs		0.01	0.04	0.08	0.12	0.18	0.24	0.31	0.39	0.47
	Four- Row	3.0	1.11	6.5	11.9	16.5	20.5	23.9	26.8	29.5	34.8	34.0
		4.0	1.95	6.5	12.1	16.8	20.9	24.5	27.7	30.6	33.1	35.5
		6.0	4.33	6.5	12.2	17.1	21.4	25.2	25.6	31.7	34.5	37.1
		8.0	5.42	6.5	12.2	17.2	21.6	25.5	29.1	32.3	35.3	38.0
		Airside ΔPs		0.02	0.05	0.10	0.16	0.24	0.32	0.41	0.52	0.63
Sizes 7-8	Rows	gpm	Head Loss	Airflow, CFM								
				100	200	300	400	500	600	700	800	900
	Three- Row	2.0	0.50	11.2	18.6	23.8	27.9	31.1	33.7	35.9	37.8	39.4
		4.0	1.95	11.6	19.8	26.0	31.1	35.3	38.8	41.9	44.7	47.1
		6.0	4.33	11.7	20.2	26.9	32.3	37.0	41.0	44.5	47.6	50.4
		8.0	5.42	11.7	20.4	27.3	33.0	37.9	42.1	45.9	49.2	52.2
		Airside ΔPs		0.02	0.08	0.15	0.24	0.35	0.47	0.61	0.77	0.93
	Four- Row	4.0	1.40	12.4	22.1	29.6	35.8	40.9	45.3	49.1	52.4	55.3
		6.0	3.12	12.5	22.5	30.6	37.3	43.0	48.0	52.4	56.3	59.7
		8.0	3.53	12.6	22.7	31.1	38.1	44.2	49.5	54.2	58.4	62.2
10.0		5.46	12.6	22.9	31.4	38.6	44.9	50.4	55.4	59.8	63.8	
Airside ΔPs		0.03	0.10	0.20	0.32	0.47	0.63	0.82	1.02	1.25		
Sizes 9-10	Rows	gpm	Head Loss	Airflow, CFM								
				200	300	400	500	600	700	800	900	1000
	Three- Row	3.0	0.80	21.0	27.9	33.4	38.0	41.8	45.2	48.1	50.7	52.9
		5.0	2.19	21.6	29.2	35.5	40.8	45.5	49.6	53.2	56.5	59.4
		7.0	4.26	21.9	29.8	36.5	42.2	47.2	51.7	55.7	59.4	62.7
		9.0	4.49	22.1	30.2	37.0	43.0	48.3	53.0	57.3	61.2	64.7
		Airside ΔPs		0.04	0.08	0.13	0.19	0.25	0.33	0.41	0.50	0.59
	Four- Row	4.0	1.16	23.5	32.2	39.4	45.6	50.9	55.5	59.6	63.2	66.5
		5.0	1.80	23.7	32.7	40.4	46.9	52.6	57.7	62.2	66.2	69.8
		8.0	2.75	24.1	33.6	41.8	49.0	55.4	61.2	66.4	71.1	75.5
10.0		4.25	24.2	33.9	42.3	49.8	56.4	62.4	67.9	72.9	77.5	
Airside ΔPs		0.05	0.11	0.17	0.25	0.34	0.43	0.54	0.66	0.79		
Size 12	Rows	gpm	Head Loss	Airflow, CFM								
				300	500	700	900	1100	1300	1500	1700	1900
	Three- Row	3.0	0.91	30.3	42.2	50.9	57.6	63.0	67.4	71.1	74.3	77.0
		4.0	1.61	31.0	44.0	53.8	61.5	67.8	73.1	77.6	81.5	84.9
		6.0	3.57	31.8	45.9	56.9	65.8	73.3	79.7	85.2	90.1	94.5
		8.0	4.32	32.2	46.9	58.5	68.2	76.3	83.4	89.6	95.1	100.0
		Airside ΔPs		0.05	0.11	0.19	0.29	0.41	0.54	0.69	0.85	1.02
	Four- Row	4.5	1.63	34.6	50.5	62.9	72.7	80.8	87.6	93.4	98.4	102.8
		5.0	2.01	34.8	51.1	63.9	74.2	82.7	89.9	96.0	101.4	106.1
		7.0	2.88	35.1	52.6	66.5	78.0	87.7	96.1	103.4	109.8	115.6
9.0		4.11	35.6	53.4	68.0	80.3	90.8	99.9	107.9	115.1	121.5	
Airside ΔPs		0.06	0.15	0.26	0.39	0.55	0.72	0.92	1.13	1.36		

PESV, AESV, DESV / HOT WATER COIL CAPACITY, MBH / 3- AND 4-ROW

Rows	gpm	Head Loss	Airflow, CFM									
			400	700	1000	1300	1600	1900	2200	2500	2800	
Sizes 14	Three- Row	4.0	1.30	41.3	59.8	73.0	83.0	90.9	97.3	102.7	107.3	111.1
		5.0	2.01	42.1	61.8	76.3	87.6	96.6	104.1	110.4	115.8	120.5
		6.0	2.88	42.6	63.2	78.6	90.8	100.7	109.0	116.1	122.2	127.6
		8.0	3.27	43.3	65.0	81.7	95.2	106.3	115.8	124.0	131.2	137.5
		Airside ΔPs		0.04	0.10	0.19	0.29	0.41	0.54	0.69	0.86	1.04
	Four- Row	6.0	2.06	46.7	71.1	89.5	104.0	115.7	125.5	133.7	140.8	146.9
		7.0	2.79	47.1	72.2	91.6	107.1	119.8	130.4	139.5	147.4	154.2
		8.0	2.03	47.4	73.1	93.3	109.5	123.0	134.4	144.1	152.7	160.2
		10.0	3.15	47.8	74.4	95.6	113.0	127.7	140.2	151.1	160.7	169.2
		Airside ΔPs		0.05	0.14	0.25	0.38	0.54	0.72	0.93	1.15	1.39
Sizes 16	Three- Row	6.0	1.71	58.5	80.9	97.0	109.3	119.2	127.3	134.0	139.9	144.9
		8.0	1.51	60.1	84.4	102.5	116.7	128.3	138.0	146.2	153.4	159.6
		10.0	2.35	61.1	86.7	106.1	121.6	134.4	145.3	154.6	162.7	169.9
		12.0	3.36	61.8	88.2	108.6	125.1	138.8	150.5	160.7	169.6	177.5
		Airside ΔPs		0.06	0.14	0.24	0.37	0.51	0.68	0.86	1.06	1.28
	Four- Row	9.0	1.58	67.4	97.6	120.6	138.8	153.7	166.2	176.8	185.9	193.9
		10.0	1.95	67.9	98.8	122.6	141.6	157.3	170.5	181.8	191.6	200.2
		11.0	2.36	68.3	99.7	124.2	144.0	160.3	174.1	186.0	196.4	205.6
		12.0	2.80	68.6	100.5	125.6	146.0	162.9	177.3	189.8	200.7	210.3
		Airside ΔPs		0.08	0.18	0.32	0.49	0.68	0.90	1.15	1.42	1.71
Sizes 24 x 16	Three- Row	6.0	1.86	65.0	103.8	129.6	148.2	162.3	173.5	182.5	190.1	196.5
		8.0	1.76	66.4	108.6	138.0	160.0	177.3	191.2	202.8	212.6	221.1
		10.0	2.74	67.2	111.5	143.4	167.9	187.4	203.4	216.9	228.5	238.6
		12.0	3.92	67.8	113.6	147.2	173.4	194.7	212.3	227.3	240.3	251.6
		Airside ΔPs		0.03	0.09	0.17	0.27	0.40	0.54	0.70	0.88	1.07
	Four- Row	9.0	1.80	72.6	124.0	161.1	189.2	211.2	229.0	243.6	256.0	266.7
		10.0	2.22	73.0	125.5	164.1	193.6	217.1	236.2	252.1	265.6	277.2
		11.0	2.68	73.3	126.7	166.5	197.3	222.0	242.3	259.3	273.9	286.4
		12.0	3.18	73.5	127.7	168.6	200.5	226.3	247.6	265.6	281.1	294.5
		Airside ΔPs		0.04	0.12	0.23	0.37	0.53	0.72	0.93	1.17	1.42

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- Heating capacities are in MBH
- Data based on 180°F entering water and 55°F entering air
- For temperature differentials other than 125°, 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
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- Connection size is ½ OD male solder for 1-row coil sizes 04-08. All other coils have 7/8" 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	110	125	140	150
Factor	0.40	0.48	0.56	0.64	0.72	0.80	0.88	1.00	1.12	1.20

Note: Airside ΔPs reflects the air pressure drop of the hot water coil