

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 100

VAV - PID - WRH - 125

VAV - PID - WRH - 150

1st ROW COIL GPM	CFM									Water Side Head Loss
	50	100	150	200	230	300	360	400	500	
	Heating Capacity (MBH)									
1.0	3.7	5.6	6.8	7.8	8.3	9.3	9.9	10.4	11.2	0.48
2.0	3.8	5.9	7.3	8.5	9.1	10.3	11.1	11.6	12.7	1.83
3.0	3.9	6	7.5	8.8	9.4	10.7	11.6	12.1	13.3	4.01
4.0	3.9	6.1	7.6	8.9	9.6	10.9	11.8	12.4	13.7	6.99
Air Side Pressure Drop (in W .G)										
	0.01	0.01	0.02	0.04	0.05	0.07	0.1	0.12	0.18	
2nd ROW COIL GPM	CFM									Water Side Head Loss
	50	100	150	200	230	300	360	400	500	
	Heating Capacity (MBH)									
1.0	5.1	8.1	10.3	12	12.9	14.5	15.7	16.3	17.7	0.12
2.0	5.3	8.8	11.4	13.6	14.7	16.9	18.5	19.4	21.4	0.46
3.0	5.4	9	11.9	14.2	15.4	17.9	19.7	20.7	23.1	1.01
4.0	5.4	9.1	12.1	14.6	15.8	18.4	20.4	21.5	24	1.75
6.0	5.5	9.3	12.3	14.9	16.3	19	21.1	22.3	25.1	3.84
8.0	5.5	9.4	12.5	15.1	16.5	19.4	21.5	22.8	25.7	6.69
10.0	5.5	9.4	12.6	15.2	16.7	19.6	21.8	23	26.1	10.3
Air Side Pressure Drop (in W .G)										
	0.01	0.03	0.05	0.08	0.1	0.16	0.22	0.26	0.38	
3rd ROW COIL GPM	CFM									Water Side Head Loss
	50	100	150	200	230	300	360	400	500	
	Heating Capacity (MBH)									
1.0	6	10.2	13.3	15.7	16.9	19.2	20.8	21.7	23.6	0.19
2.0	6.1	10.8	14.4	17.5	19.1	22.3	24.5	25.9	28.8	0.71
3.0	6.1	11	14.9	18.2	19.9	23.5	26.1	27.6	31	1.56
4.0	6.2	11.1	15.1	18.5	20.4	24.1	26.9	28.6	32.3	2.71
6.0	6.2	11.2	15.3	18.9	20.8	24.9	27.8	29.7	33.7	5.92
8.0	6.2	11.2	15.5	19.1	21.1	25.2	28.3	30.2	34.4	10.32
10.0	6.2	11.3	15.5	19.2	21.3	25.5	28.7	30.6	37.9	15.89
Air Side Pressure Drop (in W .G)										
	0.01	0.04	0.08	0.12	0.15	0.24	0.33	0.39	0.56	
4th ROW COIL GPM	CFM									Water Side Head Loss
	50	100	150	200	230	300	360	400	500	
	Heating Capacity (MBH)									
1.0	6.3	11.1	14.7	17.4	18.8	21.4	23.2	24.1	26.2	0.13
2.0	6.4	11.7	16.1	19.6	21.5	25.3	28	29.5	32.9	0.5
3.0	6.5	11.9	16.5	20.5	22.6	26.9	30	31.8	35.9	1.11
4.0	6.5	12.1	16.8	20.9	23.1	27.7	31.1	33.1	37.6	1.96
5.0	6.5	12.1	17	21.2	23.5	28.2	31.8	34	38.7	3.03
7.0	6.5	12.2	17.1	21.5	23.9	28.9	32.6	34.9	40.1	5.87
9.0	6.5	12.2	17.2	21.7	24.1	29.2	33.1	35.5	40.9	9.61
11.0	6.5	12.3	17.3	21.8	24.3	29.5	33.5	35.9	41.4	14.25
Air Side Pressure Drop (in W .G)										
	0.01	0.05	0.1	0.16	0.21	0.32	0.43	0.52	0.75	

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 175

VAV - PID - WRH - 200

1st ROW COIL	CFM									Water Side Head Loss
	GPM	140	100	300	400	500	600	710	800	
	Heating Capacity (MBH)									
1.0	7.5	8.9	10.7	12.1	13.1	14	14.8	15.3	16	0.65
2.0	8	9.7	11.8	13.5	14.8	16	17	17.8	18.7	2.47
3.0	8.2	10	12.3	14.1	15.5	16.8	18	18.8	19.9	5.4
4.0	8.3	10.1	12.5	14.4	15.9	17.2	18.5	19.4	20.5	9.42
	Air Side Pressure Drop (in W .G)									
	0.01	0.02	0.04	0.07	0.11	0.15	0.2	0.24	0.31	
2nd ROW COIL	CFM									Water Side Head Loss
	GPM	140	200	300	400	500	600	710	800	
	Heating Capacity (MBH)									
1.0	10.9	13.4	16.3	18.5	20.2	21.5	22.7	23.6	24.5	0.17
2.0	11.9	15	18.9	21.9	24.4	26.4	28.3	29.7	31.3	0.63
3.0	12.3	15.6	20	23.4	26.3	28.6	30.9	32.5	34.5	1.38
4.0	12.5	16	20.6	24.3	27.3	29.9	32.4	34.2	36.4	2.39
6.0	12.8	16.4	21.2	25.2	28.5	31.3	34.1	36.1	38.6	5.23
8.0	12.9	16.6	21.6	25.7	29.1	32.1	35	37.1	39.8	9.12
10.0	13	16.7	21.8	26	29.5	32.6	35.6	37.8	40.6	14.04
	Air Side Pressure Drop (in W .G)									
	0.03	0.05	0.1	0.16	0.23	0.32	0.42	0.51	0.65	
3rd ROW COIL	CFM									Water Side Head Loss
	GPM	140	200	300	400	500	600	710	800	
	Heating Capacity (MBH)									
1.0	13.4	16.6	20.3	23	25	26.5	27.9	28.8	29.9	0.13
2.0	14.5	18.6	23.8	27.9	31.1	33.7	36.1	37.8	39.8	0.5
3.0	14.9	19.3	25.3	29.9	33.7	37	40	42.1	44.7	1.11
4.0	15.1	19.8	26	31.1	35.3	38.8	42.2	44.7	47.6	1.96
5.0	15.3	20	26.5	31.8	36.3	40.1	43.7	46.4	49.6	3.03
7.0	15.4	20.3	27.1	32.7	37.5	41.6	45.6	48.5	52.1	5.87
9.0	15.5	20.5	27.4	33.2	38.2	42.5	46.7	49.8	53.6	9.61
11.0	15.6	20.6	27.7	33.6	38.7	43.1	47.5	50.6	54.6	14.25
	Air Side Pressure Drop (in W .G)									
	0.04	0.08	0.15	0.24	0.35	0.47	0.63	0.77	0.98	
4th ROW COIL	CFM									Water Side Head Loss
	GPM	140	200	300	400	500	600	710	800	
	Heating Capacity (MBH)									
1.0	14.7	18.5	22.8	25.8	28	29.7	31.1	32.1	33.2	0.09
2.0	16	20.8	27	31.8	35.6	38.7	41.5	43.4	45.7	0.36
3.0	16.4	21.6	28.7	34.4	39	42.9	46.5	49	52.1	0.8
5.0	16.7	22.3	30.2	35.8	42.2	46.9	51.1	51.6	58.7	2.18
7.0	16.9	22.6	30.9	37.7	43.7	48.8	53.8	57.5	62	4.23
9.0	16.9	22.8	31.3	38.4	44.6	50	55.3	59.2	64	6.94
11.0	17	22.9	31.5	38.8	45.2	50.8	56.3	60.3	65.4	10.31
13.0	17	23	31.7	39.1	45.6	51.4	57	61.1	66.4	14.34
	Air Side Pressure Drop (in W .G)									
	0.06	0.1	0.2	0.32	0.46	0.63	0.84	1.02	1.3	

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 250

1st ROW COIL GPM	CFM							Water Side Head Loss
	290	500	700	900	1100	1300	1450	
Heating Capacity (MBH)								
1.0	11.8	14.6	16.3	17.6	18.6	19.4	19.9	0.11
3.0	13.9	18.1	20.9	23	24.8	26.3	27.3	0.9
5.0	14.5	19	22.2	24.7	26.7	28.4	29.6	2.42
7.0	14.7	19.5	22.8	25.4	27.6	29.5	30.8	4.63
9.0	14.9	19.8	23.2	25.9	28.2	30.2	31.5	7.53
Air Side Pressure Drop (in W .G)								
	0.02	0.06	0.1	0.15	0.22	0.29	0.35	
2nd ROW COIL GPM	CFM							Water Side Head Loss
	290	500	700	900	1100	1300	1450	
Heating Capacity (MBH)								
1.0	17.6	22.3	25	26.9	28.4	29.5	30.2	0.12
3.0	21.8	29.7	35	39.1	42.5	45.2	47	1.05
5.0	22.9	31.9	38.2	43.2	47.3	50.8	53	2.86
7.0	23.5	32.9	39.7	45.2	49.7	53.6	56.2	5.54
9.0	23.8	33.6	40.7	46.4	51.3	55.4	58.2	9.07
11.0	24	34	41.3	47.4	52.3	56.6	59.5	13.46
Air Side Pressure Drop (in W .G)								
	0.05	0.12	0.22	0.33	0.46	0.61	0.74	
3rd ROW COIL GPM	CFM							Water Side Head Loss
	290	500	700	900	1100	1300	1450	
Heating Capacity (MBH)								
1.0	22.1	27.8	31	33.1	34.6	35.8	36.6	0.09
2.0	25.8	34.9	40.6	44.8	48	50.6	52.3	0.36
3.0	27.2	38	45.2	50.7	55	58.6	60.8	0.8
5.0	28.5	40.8	49.6	56.5	62.1	66.9	70	2.2
7.0	29.1	42.2	51.7	59.4	65.8	71.2	74.8	4.26
9.0	29.4	43	53	61.2	68	73.9	77.8	6.99
11.0	29.6	43.5	53.9	62.3	69.5	75.7	79.9	10.39
13.0	29.8	43.9	54.5	63.2	70.6	77.1	81.4	14.44
Air Side Pressure Drop (in W .G)								
	0.07	0.19	0.33	0.5	0.69	0.92	1.1	
4th ROW COIL GPM	CFM							Water Side Head Loss
	290	500	700	900	1100	1300	1450	
Heating Capacity (MBH)								
1.0	25.4	32.3	36	38.4	40.2	41.5	42.2	0.11
2.0	29.4	40.8	47.9	53.1	57	60.1	62.1	0.42
3.0	30.9	44.3	53.4	60.4	65.8	70.3	73.1	1.26
4.0	31.7	46.3	56.6	64.6	71.1	76.5	80	1.64
6.0	32.4	48.3	60	69.4	77.3	83.9	88.3	3.64
8.0	32.8	49.4	61.9	70.1	80.7	88.1	93	6.41
10.0	33.1	50.1	63	73.8	82.9	90.8	96.1	9.93
12.0	33.3	50.6	63.8	74.9	84.4	92.7	98.2	14.21
Air Side Pressure Drop (in W .G)								
	0.1	0.25	0.43	0.66	0.93	1.23	1.47	

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 300

1st ROW COIL GPM	CFM							Water Side Head Loss
	420	700	1000	1300	1600	1900	2100	
	Heating Capacity (MBH)							
1.0	15.9	19.1	21.4	23	24.1	25.1	25.7	0.14
2.0	18.3	22.9	26.2	28.7	307	32.3	33.2	0.55
4.0	19.9	25.4	29.7	32.9	35.6	37.8	36.9	1.19
6.0	20.5	26.5	31.1	34.7	37.6	40.1	41.6	4.54
Air Side Pressure Drop (in W .G)								
	0.02	0.06	0.11	0.17	0.24	0.33	0.39	
2nd ROW COIL GPM	CFM							Water Side Head Loss
	420	700	1000	1300	1600	1900	2100	
	Heating Capacity (MBH)							
1.0	23.3	28.4	31.6	33.8	35.4	36.7	37.3	0.14
2.0	28.1	36.2	41.9	46.1	49.3	51.9	53.3	0.56
4.0	31.3	41.9	50.1	56.3	61.2	65.4	67.8	2.15
6.0	32.6	44.3	53.5	60.8	66.7	71.6	74.5	4.76
8.0	33.3	45.6	55.5	63.3	69.8	75.3	78.5	8.37
10.0	33.7	46.5	56.8	65	71.8	77.7	81.1	12.96
Air Side Pressure Drop (in W.G)								
	0.05	0.13	0.23	0.36	0.51	0.68	0.81	
3rd ROW COIL GPM	CFM							Water Side Head Loss
	420	700	1000	1300	1600	1900	2100	
	Heating Capacity (MBH)							
1.0	29.1	35	38.5	40.7	42.2	43.3	43.9	0.11
2.0	35.4	45.9	53.1	58.1	61.9	64.7	66.3	0.42
3.0	37.9	50.9	60.4	67.4	72.7	77	79.4	0.92
5.0	40.1	55.6	67.7	76.9	84.3	90.4	93.9	2.5
7.0	41.1	57.8	71.2	81.8	90.4	97.6	102	4.85
9.0	41.7	59.1	73.4	84.7	94.1	102	107	7.94
11.0	42.1	60	74.8	86.7	96.6	105	110	11.78
13.0	42.4	60.6	75.8	88.2	98.5	107	113	16.37
Air Side Pressure Drop (in W .G)								
	0.08	0.19	0.35	0.54	0.77	1.02	1.21	
4th ROW COIL GPM	CFM							Water Side Head Loss
	420	700	1000	1300	1600	1900	2100	
	Heating Capacity (MBH)							
1.0	32.4	38.8	42.4	44.5	46	47.1	47.7	0.09
2.0	39.8	52.1	60.4	65.9	70	73	74.7	0.33
3.0	42.6	58.2	69.5	77.6	83.8	88.6	91.3	0.71
5.0	45.1	63.9	78.6	89.9	98.8	106	110	2.01
7.0	46.1	66.5	83.1	96.1	107	116	121	3.91
9.0	46.7	68	85.7	99.9	112	122	127	6.41
11.0	47.1	69	87.5	102	115	126	132	9.52
13.0	47.4	69.7	88.7	104	117	129	136	13.24
Air Side Pressure Drop (in W .G)								
	0.11	0.26	0.46	0.72	1.02	1.36	1.61	

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 350

1st ROW COIL GPM	CFM							Water Side Head Loss
	580	1000	1400	2000	2400	2800	2900	
	Heating Capacity (MBH)							
1.0	20.2	24	26.3	28.5	29.5	30.4	30.6	0.11
2.0	26.1	33.2	37.8	42.8	42.3	47.4	47.9	0.97
3.0	27.7	36	41.5	47.7	50.9	53.6	54.2	2.64
	Air Side Pressure Drop (in W .G)							
	0.02	0.06	0.1	0.19	0.25	0.33	0.35	
2nd ROW COIL GPM	CFM							Water Side Head Loss
	580	1000	1400	2000	2400	2800	2900	
	Heating Capacity (MBH)							
1.0	29.1	34.8	37.8	40.6	41.9	42.9	43.1	0.1
2.0	36.8	47	53.2	59.4	62.3	64.7	65.2	0.39
3.0	40.2	53.1	61.3	70	74.2	77.7	78.5	0.86
4.0	42.3	56.8	66.4	76.8	82.1	86.4	87.4	1.52
6.0	44.5	61.1	72.5	85.1	91.7	97.3	98.6	3.37
8.0	45.2	63.5	75.9	90	97.5	104	105	5.93
	Air Side Pressure Drop (in W .G)							
	0.05	0.12	0.22	0.39	0.54	0.69	0.74	
3rd ROW COIL GPM	CFM							Water Side Head Loss
	580	1000	1400	2000	2400	2800	2900	
	Heating Capacity (MBH)							
1.0	36.1	42.3	45.2	47.7	48.8	49.6	49.7	0.09
2.0	46.5	59.5	66.8	73.7	76.9	79.3	79.9	0.33
4.0	53.2	73	85.9	99.2	106	111	112	1.3
6.0	55.7	78.6	94.3	111	120	128	129	2.89
8.0	57.1	81.7	99.1	119	129	138	139	5.08
10.0	57.9	83.6	102	123	135	144	146	7.89
12.0	58.4	85	104	127	139	149	151	11.3
	Air Side Pressure Drop (in W .G)							
	0.07	0.19	0.33	0.59	0.8	1.04	1.1	
4th ROW COIL GPM	CFM							Water Side Head Loss
	580	1000	1400	2000	2400	2800	2900	
	Heating Capacity (MBH)							
1.0	39.1	45.2	48	50.2	51.1	51.8	52	0.06
2.0	51.4	65.8	73.5	80.5	83.6	86	86.5	0.23
4.0	59.3	82.6	97.4	112	120	125	127	0.92
6.0	62.2	89.5	108	128	139	147	149	2.05
8.0	63.7	93.3	114	138	150	160	162	3.63
10.0	64.5	95.6	118	144	158	169	172	5.65
12.0	65.1	97.2	121	148	163	176	179	8.1
	Air Side Pressure Drop (in W .G)							
	0.1	0.25	0.43	0.79	1.07	1.39	1.47	

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 400

1st ROW COIL GPM	CFM							Water Side Head Loss
	740	1200	1700	2200	2700	3200	3700	
Heating Capacity (MBH)								
1.0	23.8	27.5	30	31.7	33	33.9	34.7	0.12
2.0	29.2	35.3	39.7	42.9	45.3	47.3	48.9	0.47
4.0	33.1	41.2	47.4	52.1	55.9	59	61.6	1.81
6.0	34.6	43.7	50.8	56.2	60.6	64.4	67.6	4.02
Air Side Pressure Drop (in W .G)								
	0.02	0.06	0.1	0.16	0.23	0.3	0.39	
2nd ROW COIL GPM	CFM							Water Side Head Loss
	740	1200	1700	2200	2700	3200	3700	
Heating Capacity (MBH)								
1.0	31.8	36.4	39.2	40.9	42.2	43.1	43.8	0.06
2.0	42.1	51.2	57.3	61.5	64.6	67	69	0.23
4.0	50.2	64.1	74.4	82.1	88	92.8	96.7	0.92
6.0	53.6	70	82.7	92.4	100	106	112	2.05
8.0	55.5	73.4	87.6	98.6	108	115	122	3.62
Air Side Pressure Drop (in W .G)								
	0.06	0.12	0.22	0.34	0.48	0.64	0.82	
3rd ROW COIL GPM	CFM							Water Side Head Loss
	740	1200	1700	2200	2700	3200	3700	
Heating Capacity (MBH)								
1.0	38.6	43.1	45.6	47.1	48.1	48.9	49.3	0.05
2.0	52.6	63.4	70.3	74.7	77.8	80.2	82	0.19
4.0	63.1	81.5	91.7	101	111	117	121	0.76
6.0	67.3	89.5	107	119	129	137	144	1.7
8.0	69.5	94.1	113	128	140	150	158	3.02
10.0	70.9	97	118	134	147	159	168	4.71
12.0	71.9	99	121	139	153	165	176	6.77
Air Side Pressure Drop (in W .G)								
	0.08	0.19	0.33	0.51	0.72	0.96	1.22	
4th ROW COIL GPM	CFM							Water Side Head Loss
	740	1200	1700	2200	2700	3200	3700	
Heating Capacity (MBH)								
1.0	42.1	16.6	48.9	50.3	51.2	51.7	52.2	0.04
2.0	58.7	70.7	77.9	72.5	85.6	87.9	89.7	0.17
4.0	71	92.7	108	119	127	133	138	0.66
6.0	75.7	102	123	138	149	158	166	1.49
8.0	78.2	108	132	149	164	175	185	2.64
10.0	79.7	111	137	157	173	187	198	4.12
12.0	80.7	114	141	163	181	195	208	5.93
Air Side Pressure Drop (in W .G)								
	0.11	0.25	0.44	0.68	0.96	1.28	1.63	

Engineering Data

With water reheat coil

Model: VAV - PID - WRH - 600

1st ROW COIL GPM	CFM							Water Side Head Loss
	1420	2000	3000	4000	5000	6000	7100	
	Heating Capacity (MBH)							
1.0	34.7	37.6	40.7	42.6	43.8	44.8	45.7	0.15
2.0	46	51.6	58	62.3	65.4	67.8	69.9	0.57
4.0	54.8	63.1	73.3	80.5	86	90.1	94.4	2.22
6.0	58.4	68.1	80.2	89.1	95.9	102	107	4.9
	Air Side Pressure Drop (in W .G)							
	0.03	0.06	0.12	0.2	0.3	0.41	0.55	
2nd ROW COIL GPM	CFM							Water Side Head Loss
	1420	2000	3000	4000	5000	6000	7100	
	Heating Capacity (MBH)							
1.0	43.8	46.7	49.5	51.1	52	52.8	53.4	0.07
2.0	63.8	71.2	78.9	83.6	86.8	89.2	91.2	0.26
4.0	81.8	95.1	111	121	129	134	139	1.02
6.0	90.1	107	127	142	152	161	169	2.28
	Air Side Pressure Drop (in W .G)							
	0.08	0.13	0.27	0.43	0.63	0.85	1.13	
3rd ROW COIL GPM	CFM							Water Side Head Loss
	1420	2000	3000	4000	5000	6000	7100	
	Heating Capacity (MBH)							
1.0	50.7	53	54.9	55.9	56.5	57	57.3	0.05
2.0	78.3	86	93	97.9	99.9	101	103	0.21
4.0	103	120	138	149	158	163	168	0.83
6.0	114	136	162	180	193	202	210	1.85
8.0	120	146	177	199	216	228	240	3.27
10.0	124	152	188	213	232	247	261	5.1
12.0	127	157	195	223	244	262	277	7.32
	Air Side Pressure Drop (in W .G)							
	0.11	0.2	0.4	0.64	0.94	1.27	1.69	
4th ROW COIL GPM	CFM							Water Side Head Loss
	1420	2000	3000	4000	5000	6000	7100	
	Heating Capacity (MBH)							
1.0	53.7	55.6	57.1	57.9	58.4	58.7	58.9	0.05
2.0	86	93.6	100	104	106	108	109	0.18
4.0	116	135	155	166	174	180	185	0.71
6.0	129	155	185	204	218	229	237	1.59
8.0	137	167	204	230	248	263	275	2.82
10.0	141	175	217	247	270	287	303	4.39
12.0	144	180	226	260	286	306	325	6.31
	Air Side Pressure Drop (in W .G)							
	0.15	0.27	0.53	0.86	1.25	1.7	2.25	