Engineering Data

ED 18509

Group: Unit Vent

Type: Capacity Data

Date: October 2013

Daikin Classroom Unit Ventilator - Steam Coil Heating Capacity Data

Floor Models AVS, AVV, AVR, AVB (F Vintage)





Coil Selection

Steam Heating Selection

The maximum allowable steam pressure, especially in public buildings, is often fixed by state or local boiler codes. Steam Capacity in Table-1 is based on steam supply pressure of 2 PSI gauge and steam temperature of 218.5°F.

To determine total capacity for conditions other than shown in the Steam Capacity Table-1, multiply the total capacity given by the proper constant from the Steam Capacity Correction Factor in Table-2.

Maximum steam pressure is 6 PSIG at coil inlet.

Traps are by others. Either float and thermostatic traps or thermostatic traps may be used.

Table 1. Steam Heating Capacities - 2# Steam Coils1

	Coil Capacity	Airflow SCFM		Entering Air Temperature °F																		
Unit			-20			-10		0 1		10 20		0	30		40		50		60		70	
			МВН	LAT, db	МВН	LAT, db	МВН	LAT, db	MBH	LAT, db	MBH	LAT, db	МВН	LAT, db	МВН	LAT, db	MBH	LAT, db	МВН	LAT, db	МВН	LAT, db
750	Std	750	55.1	47.8	52.7	54.9	50.3	61.8	47.8	68.8	45.3	75.7	42.7	82.6	40.0	89.2	37.3	95.9	35.6	103.8	32.9	110.5
	High	750	73.0	69.8	69.8	75.8	66.5	81.8	63.2	87.7	59.8	93.5	56.4	99.3	52.7	104.8	49.1	110.4	45.4	115.8	41.6	121.1
1000	Std	1000	82.1	55.8	78.7	62.6	75.2	69.3	71.6	76.0	68.0	82.7	65.6	90.5	61.8	97.0	58.0	103.5	54.1	109.9	50.4	116.5
	High	1000	98.3	70.6	94.1	76.8	89.9	82.9	85.6	89.0	81.3	95.0	77.0	101.0	72.3	106.7	67.7	112.4	63.0	118.1	58.4	123.9
1250	Std	1250	97.0	51.6	93.0	58.6	89.0	65.7	85.0	72.7	80.9	79.7	76.7	86.6	72.3	93.3	67.9	100.1	63.5	106.9	59.9	114.2
	High	1250	122.6	70.4	117.6	76.7	112.5	83.0	107.3	89.2	102.1	95.3	96.8	101.4	91.2	107.3	85.6	113.2	80.0	119.0	74.4	124.9
1500	Std	1500	121.3	54.6	116.5	61.6	111.5	68.5	106.5	75.5	101.4	82.3	96.3	89.2	90.8	95.8	85.5	102.5	80.0	109.2	75.6	116.5
	High	1500	140.0	66.0	134.3	72.5	128.5	79.0	123.6	86.0	117.7	92.4	111.8	98.7	105.5	104.8	99.2	111.0	92.8	117.1	86.6	123.2

^{1.} Data based on 2psig steam pressure @ 10°F superheat vapor.

Table 2. Steam Capacity Correction Factors

Steam Pressure	Entering Air Temperature Mixture, °F												
PSIG	-20	-10	0	10	20	30	40	50	60	70			
0	0.97	0.97	0.97	0.96	0.97	0.97	0.97	0.96	0.96	0.96			
2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
5	1.02	1.03	1.03	1.04	1.04	1.05	1.05	1.05	1.05	1.05			

