

Air System Program — Constant or Inlet-Vane Damper Versus Variable Speed Drive

PROJECT: SAMPLE PROJECT TITLE: AH-Unit #6-1 Inlet-Vane Damper Vs. Variable Speed DATE: Apr-24-02 SYSTEM #: 6-1		<table border="1"> <tr> <th>Base System</th> <th>Supply Fan</th> <th>Return Fan</th> </tr> <tr> <td>MAX.CFM :</td> <td>22,540</td> <td>0</td> </tr> <tr> <td>MAX.KW :</td> <td>20.82</td> <td>0.00</td> </tr> </table>		Base System	Supply Fan	Return Fan	MAX.CFM :	22,540	0	MAX.KW :	20.82	0.00	
Base System	Supply Fan	Return Fan											
MAX.CFM :	22,540	0											
MAX.KW :	20.82	0.00											
Air System with Variable Speed Drive TYPICAL-DAY * KW PROFILE FOR EACH MONTH OF THE YEAR													
TIME	PEAK	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	8.7	7.4	7.4	7.4	7.4	7.8	8.2	8.2	8.2	8.2	8.2	7.8	7.4
8	7.8	7.0	7.0	6.6	6.6	7.0	7.4	7.4	7.4	7.8	7.4	7.4	6.6
9	11.6	9.2	9.2	8.2	7.8	7.8	8.2	8.2	8.7	9.8	9.8	9.8	9.8
10	12.6	10.3	9.2	7.8	7.4	7.4	7.8	7.8	8.2	9.2	9.8	10.9	10.3
11	13.7	11.3	9.2	7.8	7.4	7.4	8.2	8.2	8.2	8.7	10.3	11.9	12.3
12	14.5	11.6	9.2	8.2	7.8	7.8	8.2	8.2	8.7	9.2	9.8	12.3	12.6
13	15.8	12.6	10.3	8.7	8.2	8.2	8.7	8.7	9.2	9.8	11.3	13.4	13.7
14	16.8	13.4	11.6	9.2	8.7	8.7	9.2	9.2	9.8	10.9	12.6	14.1	14.1
15	18.2	14.5	13.0	10.9	9.8	9.8	10.9	10.3	11.3	12.6	14.1	15.4	15.0
16	13.7	11.3	10.3	9.2	9.2	9.8	10.3	10.3	10.3	10.9	11.6	11.9	11.3
17	9.8	8.7	8.7	8.7	8.7	9.2	9.8	9.8	9.8	9.2	9.2	9.2	8.2
18	9.8	8.2	8.2	8.2	8.7	9.2	9.8	9.8	9.8	9.2	9.2	8.7	8.2
19	9.2	7.8	7.8	8.2	8.2	8.7	9.2	9.2	9.8	9.2	8.7	8.7	7.8
20	7.8	6.6	6.6	7.0	7.0	7.4	7.8	7.8	7.8	7.8	7.4	7.0	6.6
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KWh/Day =	170.1	139.9	127.8	116.3	112.9	116.1	123.9	123.3	127.3	132.8	139.4	148.5	143.9
Weekdays/Mo =		21	20	22	22	21	22	21	22	21	23	21	22
KWh/Mo =		2,937	2,557	2,559	2,483	2,438	2,727	2,590	2,800	2,788	3,207	3,119	3,166
KWh/Day =	165.8	137.4	124.3	113.5	109.6	112.9	120.5	120.5	126.4	129.2	137.3	145.5	141.0
Sat/Mo =		4	4	5	4	5	4	5	4	4	4	4	4
KWh/Mo =		550	497	567	438	565	482	602	506	517	549	582	564
KWh/Mo =	99.1	82.0	71.0	63.0	59.4	60.8	64.3	64.3	68.5	71.1	78.2	86.7	84.8
Sun/Mo =		6	4	4	4	5	4	5	5	4	4	5	5
KWh/Mo:		492	284	252	238	304	257	322	343	284	313	434	424
Total KWh/Mo =		3,979	3,338	3,378	3,159	3,307	3,466	3,514	3,648	3,590	4,069	4,134	4,154
Total kWh/Year =													43,736