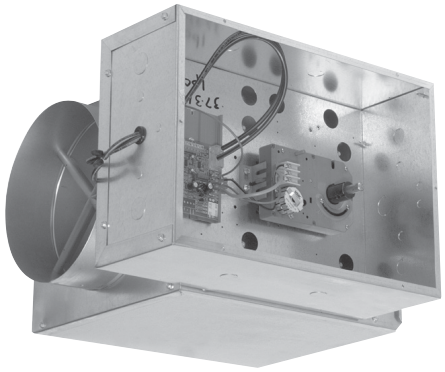
RECOMMENDED PRIMARY AIR CFM RANGES / ALL TERMINALS

Control Types:

PESV / Pneumatic
AESV / Analog Electronic
DESV / Digital Electronic



QUICK SELECTION PROCEDURE

1. Select unit inlet size based upon acoustic parameters and/or maximum pressure drop requirements, using pages M15-M16
2. Check inlet size selection against cfm control limits based on control type shown on this page
3. Select accessories (multi-outlets, attenuators) as required
4. Select reheat coil, if required. Make your selection using the actual heating flow rate, not cooling.

Inlet Size	Total CFM Range	CFM Ranges of Minimum and Maximum Settings							
		PESV - Pneumatic Titus II Controller		PESV - Pneumatic Titus I Controller		AESV - Analog Electronic TA1 Controller		DESV - Digital Typical Controller	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
4	0-225	50-210	90-225	65-210	90-225	50-225	50-225	30-225	30-225
5	0-350	70-300	125-350	90-300	125-350	70-350	70-350	40-350	40-350
6	0-500	80-345	145-500	100-345	145-500	80-500	80-500	45-500	45-500
7	0-650	120-515	210-650	150-515	210-650	120-650	120-650	70-650	70-650
8	0-900	160-700	285-900	205-700	285-900	160-900	160-900	90-900	90-900
9	0-1050	205-900	370-1050	260-900	370-1050	205-1050	205-1050	120-1050	120-1050
10	0-1400	250-1110	455-1400	325-1110	455-1400	250-1400	250-1400	145-1400	145-1400
12	0-2000	330-1460	600-2000	425-1460	600-2000	330-2000	330-2000	190-2000	190-2000
14	0-3000	525-2335	955-3000	675-2335	955-3000	525-3000	525-3000	300-3000	300-3000
16	0-4000	665-2970	1215-4000	860-2970	1215-4000	665-4000	665-4000	385-4000	385-4000
24 X 16	0-8000	1245-5555	2270-8000	1605-5555	2270-8000	1245-8000	1245-8000	720-8000	720-8000

Note: On controls mounted by Titus but supplied by others (FMA or Factory Mounting Authorization), these values are guidelines only. Controls mounted on an FMA basis are calibrated in the field.

PESV, AESV, DESV / RADIATED SOUND PERFORMANCE

Size	CFM	Min ΔPs	Octave Band Sound Power, Lw																										
			0.5" ΔPs							1.0" ΔPs							1.5" ΔPs							2.0" 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
4	100	0.02	49	45	36	33	31	26	**11**	52	48	39	36	35	31	**15**	53	50	41	37	37	34	**17**	55	51	43	38	39	36	**18**
	125	0.03	52	49	39	36	32	27	**16**	55	52	42	38	36	32	**20**	57	54	44	40	39	36	**22**	58	55	45	41	40	38	**23**
	150	0.04	55	52	41	37	34	28	**20**	58	55	44	40	38	34	**23**	60	57	46	41	40	37	**25**	61	58	47	42	42	39	**27**
	175	0.06	58	55	42	39	35	29	**23**	61	58	46	42	39	34	**27**	63	59	48	43	41	38	**28**	64	61	49	44	43	40	**30**
	200	0.08	60	57	44	40	36	30	**25**	63	60	47	43	40	35	**29**	65	62	49	44	42	38	**31**	66	63	51	45	44	41	**33**
5	150	0.01	49	44	36	32	31	25	**10**	53	49	41	36	35	30	**16**	55	51	43	38	37	33	**18**	57	53	45	39	39	35	**21**
	200	0.02	53	48	39	35	34	27	**15**	56	53	44	38	37	32	**21**	59	55	46	40	40	35	**23**	60	57	48	42	41	37	**25**
	250	0.03	55	52	41	37	35	29	**20**	59	56	46	40	39	34	**24**	62	59	49	42	41	37	**28**	63	61	51	44	43	39	**30**
	300	0.04	58	54	43	39	37	30	**22**	62	59	48	42	41	35	**28**	64	61	50	44	43	38	**30**	65	63	52	45	44	40	**33**
	350	0.06	60	56	45	40	38	31	**24**	63	61	49	43	42	36	**30**	66	63	52	45	44	39	**33**	67	65	54	47	45	41	**35**
6	300	0.07	55	49	40	35	32	28	**16**	59	54	45	39	37	33	**22**	61	57	48	41	39	36	**25**	63	59	50	42	41	38	**28**
	350	0.10	57	52	42	37	34	29	**20**	60	57	47	41	38	34	**25**	62	59	50	43	40	37	**28**	64	62	52	44	42	39	**31**
	400	0.13	58	53	44	39	35	30	**21**	61	58	49	42	39	35	**27**	63	61	52	44	42	38	**30**	65	63	54	46	43	40	**33**
	450	0.16	59	55	45	40	36	31	**23**	62	60	50	44	40	36	**29**	64	63	53	46	43	39	**33**	66	65	55	47	45	41	**35**
	500	0.20	59	56	47	42	37	32	**24**	63	61	51	45	41	37	**30**	65	64	54	47	44	40	**34**	67	67	56	49	46	42	**37**
7	450	0.07	59	48	42	38	33	24	**20**	61	54	48	42	38	30	**23**	62	57	51	45	41	33	**25**	63	59	53	46	43	35	**28**
	500	0.09	60	50	43	39	34	24	**22**	62	55	49	43	39	30	**24**	63	58	52	46	42	34	**27**	64	60	54	48	44	36	**29**
	550	0.10	60	51	44	40	35	25	**22**	63	57	50	45	40	31	**25**	64	59	53	47	43	34	**28**	66	62	55	49	45	37	**31**
	600	0.12	61	53	45	42	35	25	**23**	63	58	51	46	41	31	**27**	65	61	54	48	44	35	**30**	66	63	56	50	46	37	**33**
	650	0.15	62	54	46	43	36	26	**24**	64	59	52	47	41	32	**28**	65	62	55	49	44	35	**31**	66	64	57	51	46	38	**34**
8	600	0.02	59	50	44	40	38	32	**20**	62	55	49	43	43	39	**24**	64	58	52	46	45	44	**27**	65	60	54	47	47	47	**29**
	650	0.02	60	51	44	41	39	32	**22**	63	56	50	44	44	40	**25**	65	59	53	47	46	45	**28**	66	61	55	48	48	48	**30**
	700	0.02	60	52	45	42	40	33	**22**	63	57	50	45	44	41	**25**	65	60	53	47	47	45	**29**	67	62	56	49	49	48	**31**
	750	0.02	61	53	46	43	40	34	**23**	64	58	51	46	45	41	**27**	66	61	54	48	48	46	**30**	67	63	56	50	50	49	**33**
	800	0.03	62	54	47	43	41	34	**24**	65	59	52	47	46	42	**28**	66	62	55	49	48	47	**31**	68	64	57	51	50	50	**34**
9	800	0.04	58	47	43	36	34	30	**19**	61	53	49	42	40	35	**23**	62	57	52	46	44	38	**26**	63	59	55	48	47	40	**29**
	850	0.04	58	48	43	37	34	31	**19**	61	54	49	43	41	35	**23**	63	58	53	46	45	38	**27**	64	60	55	49	47	40	**29**
	900	0.05	59	49	44	37	35	31	**20**	62	55	50	43	41	35	**24**	64	58	53	47	45	38	**27**	65	61	56	49	48	40	**30**
	950	0.06	59	50	44	37	35	31	**20**	62	56	50	43	42	36	**24**	64	59	54	47	45	38	**28**	65	62	56	49	48	40	**31**
	1000	0.06	60	50	44	38	36	31	**22**	63	56	50	44	42	36	**25**	65	60	54	47	46	39	**29**	66	62	57	50	48	40	**31**
10	900	0.01	60	50	47	45	42	29	**22**	63	57	53	50	48	37	**27**	65	60	57	53	52	41	**31**	67	63	59	56	54	44	**34**
	1000	0.01	60	51	48	46	43	30	**22**	64	58	54	51	49	38	**28**	66	61	57	54	53	42	**31**	67	64	59	56	55	45	**34**
	1100	0.01	61	52	48	47	44	32	**23**	65	58	54	52	50	39	**28**	67	62	57	55	54	43	**31**	68	64	60	57	56	46	**35**
	1200	0.01	62	53	48	47	45	32	**24**	65	59	54	53	51	40	**28**	67	63	58	56	55	44	**33**	69	65	60	58	57	47	**35**
	1300	0.01	63	54	49	48	45	33	**25**	66	60	55	53	52	41	**29**	68	63	58	56	55	45	**33**	69	66	61	58	58	48	**36**
12	1200	0.01	58	50	47	41	37	30	**20**	62	56	52	47	43	37	**26**	64	59	56	50	46	41	**30**	66	61	58	53	49	43	**32**
	1400	0.01	60	52	48	42	38	32	**22**	63	57	54	48	45	39	**28**	65	60	57	52	48	42	**31**	67	63	60	54	51	45	**35**
	1600	0.01	61	53	50	43	40	34	**24**	64	59	55	49	46	40	**29**	66	62	59	53	50	44	**34**	68	64	61	55	52	47	**36**
	1800	0.01	61	55	51	44	41	35	**25**	65	60	56	50	48	41	**30**	67	63	60	54	51	45	**35**	69	65	62	56	54	48	**37**
	2000	0.01	62	56	52	45	43	36	**26**	66	61	57	51	49	43	**31**	68	64	61	55	52	47	**36**	69	67	63	57	55	49	**38**
14	1500	0.02	56	51	45	43	40	36	**18**	60	56	50	48	45	41	**24**	62	59	53	51	48	45	**28**	64	61	55	53	50	47	**30**
	1800	0.03	58	53	46	44	41	36	**21**	62	58	51	49	46	42	**27**	64	60	54	52	49	45	**29**	66	63	56	54	51	48	**33**
	2100	0.04	59	54	47	45	42	37	**22**	63	59	52	50	47	43	**28**	66	62	55	53	50	46	**31**	67	64	58	55	52	49	**34**
	2400	0.05	60	55	48	46	43	38	**23**	64	60	53	51	48	43	**29**	67	63	56	54	51	47	**33**	69	65	58	56	53	49	**35**
	2700	0.06	62	56	49	47	44	38	**24**	66	61	54	52	49	44	**30**	68	64	57	55	52	47	**34**	70	66	59	57	54	50	**36**
16	2000	0.02	55	48	43	41	39	31	**36**	59	53	47	45	44	38	**21**	61	56	50	47	47	41	**24**	63	58	52	49	49	44	**27**
	2400	0.02	57	51	45	43	41	33	**18**	61	56	49	47	46	39	**24**	64	59	52	49	49	43	**28**	65	61	54	51	51	46	**30**
	2800	0.03	59	53	46	44	42	34	**21**	63	58	51	48	47	41	**27**	66	61	54	50	50	45	**30**	67	63	55	52	52	48	**33**
	3200	0.04	61	55	48	46	44	36	**23**	65	60	52	50	49	42	**29**	67	62	55	52	52	46	**31**	69	64	57	53	54	49	**34**
	3600	0.05	62	56	49	47	45	37	**24**	66	61	54	51	50	44	**30**	69	64	56	53	53	48	**34**	71	66	58	55	55	50	**36**
40	3900	0.03	70	65	63	59	57	54	**38**	72	68	66	62	61	58	**41**	74	69	67	63	63	61	**42**	75	70	68	64	65	63	**43**
	4600	0.04	73	68	66	62	59	55	**41**	75	71	68	64	63	60	**43**	77	72	70	66	65	63	**46**	78	73	71	67	67	64	**47**
	5300	0.06	75	71	68	64	61	56	**43**	78	73	71	66	65	61	**47**	79	74	72	68	67	64	**48**	80	75	73	69	68	66	**49**
	6000	0.07	77	73	71	66	63	57	**47**	80	75	73	68	66	62	**49**	81	76	74	70	68	65	**50**	82	77	75	71	70	67	**51**
	6700	0.09	79	75	72	67	64	58	**48**	82	77	75	70	68	63	**51**	83	78	76	71	70	66	**52**	84	79	77	72	71	68	**53**

- Radiated sound is the noise transmitted through the unit casing
- Min ΔPs is the static pressure drop from the unit inlet to the unit outlet with primary damper full open
- Sound power levels are in dB, ref 10^{-12} watts
- Sound performance based on units lined with standard dual density fiberglass lining
- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI certified. See page M23 for AHRI Certified Performance Listings.
- Sound performance for seismic and valve package configurations are equal to the above

PESV, AESV, DESV / DISCHARGE SOUND PERFORMANCE

Size	CFM	Min ΔPs	Octave Band Sound Power, Lw																									
			0.5" ΔPs							1.0" ΔPs							1.5" ΔPs							2.0" 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
4	100	0.02	70	56	47	42	40	33	**28**	71	59	51	46	47	41	**29**	72	61	54	49	50	46	**30**	73	62	56	51	53	49	**31**
	125	0.03	72	60	50	44	42	35	**30**	73	63	54	49	49	43	**31**	74	64	57	52	52	47	**33**	75	65	59	54	55	51	**34**
	150	0.04	73	63	52	47	44	36	**31**	75	65	57	51	50	44	**34**	76	67	60	54	54	49	**35**	76	68	61	56	57	52	**35**
	175	0.06	75	65	54	48	45	37	**34**	76	68	59	53	51	45	**35**	77	69	62	56	55	50	**36**	78	71	64	58	58	53	**38**
	200	0.08	76	67	56	50	46	38	**35**	77	70	61	55	53	46	**36**	78	72	63	58	56	51	**38**	79	73	65	60	59	54	**39**
5	150	0.01	68	53	47	43	41	34	**25**	70	58	52	47	47	42	**28**	72	60	55	50	51	46	**30**	73	62	58	52	53	49	**31**
	200	0.02	71	57	50	46	43	36	**29**	73	61	56	51	49	44	**31**	75	64	59	53	53	48	**34**	76	66	61	55	55	51	**35**
	250	0.03	73	60	53	49	45	38	**31**	75	65	58	53	51	45	**34**	77	67	61	56	55	50	**36**	78	69	63	58	57	53	**38**
	300	0.04	74	62	55	51	47	39	**29**	77	67	60	55	53	46	**33**	78	70	63	58	56	51	**34**	79	72	66	60	59	54	**35**
	350	0.06	76	64	57	52	48	40	**31**	78	69	62	57	54	47	**34**	80	72	65	60	57	52	**36**	81	74	67	61	60	55	**38**
6	300	0.07	68	60	54	50	45	39	**21**	72	65	59	54	51	46	**26**	75	68	62	57	54	50	**30**	77	70	64	58	56	53	**33**
	350	0.10	69	62	55	52	47	40	**22**	74	67	61	56	52	47	**29**	76	70	64	59	55	51	**31**	78	72	66	60	58	54	**34**
	400	0.13	71	63	57	54	48	41	**25**	75	69	62	58	53	48	**30**	78	72	65	60	57	52	**34**	79	74	67	62	59	55	**35**
	450	0.16	72	65	58	55	49	42	**26**	76	70	64	59	54	49	**31**	79	73	67	62	58	53	**35**	81	76	69	63	60	56	**38**
	500	0.20	73	66	60	56	50	43	**28**	77	72	65	61	55	50	**33**	80	75	68	63	59	54	**36**	82	77	70	65	61	57	**39**
7	450	0.07	71	61	54	51	47	40	**25**	74	66	59	54	51	46	**29**	75	70	61	56	54	49	**30**	77	72	63	58	56	52	**33**
	500	0.09	71	62	55	52	48	40	**25**	74	68	60	56	52	47	**29**	76	71	63	58	55	50	**31**	77	74	64	59	57	53	**34**
	550	0.10	72	64	56	54	49	41	**26**	75	69	61	57	53	48	**30**	76	73	64	59	56	51	**33**	78	75	65	60	58	54	**36**
	600	0.12	72	65	57	55	49	42	**26**	75	70	62	58	54	48	**30**	77	74	64	60	57	52	**34**	78	76	66	61	59	55	**37**
	650	0.15	72	66	58	56	50	43	**26**	75	72	63	59	55	49	**32**	77	75	65	61	58	53	**36**	79	77	67	62	59	55	**38**
8	600	0.02	73	63	56	52	48	40	**28**	76	69	60	55	52	47	**31**	78	72	62	56	55	51	**34**	79	75	64	57	57	54	**36**
	650	0.02	74	64	57	53	48	41	**29**	77	70	61	56	53	47	**33**	78	73	63	57	55	51	**34**	79	76	65	58	57	54	**37**
	700	0.02	74	65	57	54	49	41	**29**	77	71	61	56	53	48	**33**	79	74	64	58	56	52	**35**	80	77	65	59	58	55	**38**
	750	0.02	75	66	58	54	49	42	**28**	77	72	62	57	54	48	**31**	79	75	64	58	56	52	**34**	80	78	66	60	58	55	**38**
	800	0.03	75	67	58	55	50	42	**28**	78	73	63	58	54	49	**32**	79	76	65	59	57	53	**36**	81	78	67	60	59	56	**38**
9	800	0.04	73	61	57	53	49	43	**25**	76	66	61	57	54	49	**29**	77	69	63	59	57	53	**30**	78	71	65	60	59	56	**31**
	850	0.04	74	62	57	53	49	43	**26**	76	67	61	57	54	50	**29**	78	70	63	59	57	54	**31**	79	72	65	61	59	56	**33**
	900	0.05	74	63	58	54	50	43	**26**	77	68	62	57	55	50	**30**	79	70	64	59	57	54	**33**	80	72	66	61	59	57	**34**
	950	0.06	75	63	58	54	50	44	**28**	78	68	62	58	55	50	**31**	79	71	64	60	58	54	**33**	80	73	66	61	60	57	**34**
	1000	0.06	75	64	59	55	50	44	**28**	78	69	62	58	55	50	**31**	80	72	65	60	58	54	**34**	81	74	66	62	60	57	**35**
10	900	0.01	75	62	58	55	50	44	**28**	77	67	62	59	55	50	**30**	78	70	65	61	58	54	**31**	79	73	67	63	61	57	**33**
	1000	0.01	76	63	59	56	50	44	**29**	78	68	63	60	56	51	**31**	79	71	66	62	59	55	**33**	80	74	68	64	61	57	**34**
	1100	0.01	76	63	59	57	51	45	**29**	79	69	64	61	56	51	**33**	80	72	66	63	60	55	**34**	81	74	68	65	62	58	**35**
	1200	0.01	77	64	60	57	52	45	**30**	79	70	64	61	57	52	**33**	81	73	67	64	60	56	**35**	82	75	69	66	63	59	**36**
	1300	0.01	78	65	61	58	52	46	**31**	80	70	65	62	58	53	**34**	81	74	68	65	61	56	**35**	82	76	69	66	63	59	**36**
12	1200	0.01	73	64	60	55	53	46	**25**	76	69	64	59	57	52	**29**	78	72	66	62	60	56	**31**	79	74	68	64	62	59	**33**
	1400	0.01	74	65	62	56	54	47	**26**	77	71	66	61	59	53	**30**	79	74	68	63	61	57	**33**	80	76	70	65	63	60	**36**
	1600	0.01	75	66	63	57	55	48	**28**	78	72	67	62	59	55	**31**	80	75	69	64	62	58	**34**	81	77	71	66	64	61	**37**
	1800	0.01	76	68	64	58	55	49	**29**	79	73	68	63	60	56	**33**	80	76	71	65	63	59	**36**	81	78	72	67	65	62	**38**
	2000	0.01	76	69	65	59	56	50	**29**	79	74	69	64	61	56	**33**	81	77	72	66	64	60	**37**	82	79	73	68	66	63	**39**
14	1500	0.02	69	57	56	53	50	44	**20**	72	63	56	59	57	53	**24**	74	67	56	62	62	59	**26**	76	69	56	65	65	62	**29**
	1800	0.03	70	59	58	53	50	44	**21**	73	65	58	59	58	53	**25**	75	68	58	63	62	59	**28**	77	71	58	65	65	63	**30**
	2100	0.04	71	60	59	54	51	44	**22**	74	66	59	60	58	54	**26**	76	69	59	63	63	59	**29**	78	72	59	66	66	63	**31**
	2400	0.05	72	61	60	54	51	44	**24**	75	67	60	60	59	54	**28**	77	70	60	64	63	59	**30**	78	73	60	66	66	63	**32**
	2700	0.06	72	62	61	54	51	45	**24**	76	68	61	61	59	54	**29**	78	71	61	64	63	60	**31**	79	74	61	67	66	63	**33**
16	2000	0.02	68	59	57	54	52	45	**19**	71	63	57	58	56	51	**22**	73	66	57	61	59	54	**25**	74	68	57	63	61	57	**26**
	2400	0.02	70	62	59	55	53	46	**21**	73	66	59	60	58	52	**25**	75	68	59	62	61	56	**28**	76	70	59	64	62	58	**29**
	2800	0.03	71	64	61	57	55	48	**22**	75	68	61	61	59	54	**28**	77	70	61	64	62	57	**30**	78	72	61	66	64	60	**31**
	3200	0.04	73	65	63	58	56	49	**25**	76	69	63	62	60	55	**29**	78	72	63	65	63	59	**31**	79	73	63	67	65	61	**33**
	3600	0.05	74	67	65	59	57	50	**26**	77	71	65	63	61	56	**30**	79	73	65	66	64	60	**33**	81	75	65	68	66	62	**35**
40	3900	0.03	76	70	66	62	61	56	**29**	81	75	66	67	67	62	**35**	84	78	66	69	70	66	**39**	86	80	66	71	72	68	**42**
	4600	0.04	77	71	67	63	63	58	**30**	82	77	67	68	68	64	**37**	85	80	67	71	71	67	**40**	88	82	67	73	74	70	**44**
	5300	0.06	79	73	69	65	64	60	**33**	84	78	69	69	70	65	**39**	87	81	69	72	73	69	**43**	89	83	69	74	75	71	**45**
	6000	0.07	80	74	70	66	65	61	**34**	85	79	70	71	71	67	**40**	88	82	70	73	74	70	**44**	90	84	70	75	76	73	**47**
	6700	0.09	81	75	71	67	67	62	**35**	86	80	71	72	72	68	**42**	89	83	71	74	75	71	**45**	91	85	71	76	77	74	**48**

- Discharge sound is the noise emitted from the unit discharge into the downstream ductwork
- Min ΔPs is the static pressure drop from the unit inlet to the unit outlet with primary damper full open
- Sound power levels are in dB, ref 10^{-12} watts
- Sound performance based on units lined with standard dual density fiberglass lining
- All performance based on tests conducted in accordance with ASHRAE 130-2008 and AHRI 880-2011
- All NC levels determined using AHRI 885-2008 Appendix E. See Terminal Unit Engineering Guidelines.
- Dash (-) in space denotes NC value less than NC10
- Only highlighted data points are AHRI certified. See page M23 for AHRI Certified Performance Listings.
- Sound performance for seismic and valve package configurations are equal to the above

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
Sizes 4-5-6	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
Sizes 7-8	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
Sizes 9-10	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
Size 12	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

Performance notes appear at end of table

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

	Rows	gpm	Head Loss	Airflow, CFM								
				400	700	1000	1300	1600	1900	2200	2500	2800
Sizes 14	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
Sizes 16	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	0.36
	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	0.76

	Rows	gpm	Head Loss	Airflow, CFM								
				600	1200	1800	2400	3000	3600	4200	4800	5400
Sizes 24 x 16	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	0.30
	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	0.63

- 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 ⅞" 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								
Sizes 4-5-6				50	100	150	200	250	300	350	400	450
	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
	Rows	gpm	Head Loss	Airflow, CFM								
Sizes 7-8				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	358.0	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
	Rows	gpm	Head Loss	Airflow, CFM								
Sizes 9-10				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
	Rows	gpm	Head Loss	Airflow, CFM								
Size 12				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

Performance notes appear at end of table

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

	Rows	gpm	Head Loss	Airflow, CFM								
Sizes 14				400	700	1000	1300	1600	1900	2200	2500	2800
	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
	Rows	gpm	Head Loss	Airflow, CFM								
Sizes 16				600	1000	1400	1800	2200	2600	3000	3400	3800
	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
	Rows	gpm	Head Loss	Airflow, CFM								
Sizes 24 x 16				600	1200	1800	2400	3000	3600	4200	4800	5400
	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

- 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

SELECTION AND CAPACITIES

Recommended Coil Selection Data

The table at the right describes the maximum recommended kW capacities and number of stages available for Titus single duct terminals.

To make a coil selection:

1. Check the desired kW is available in desired unit size and number of stages. (Required to prevent excessive watt density and current draw, while taking into account unit size limitations.)
2. Check the desired minimum airflow limit is within recommended operating range. (Ensures velocity pressure will be sufficient to close airflow sensing switch.)
3. Multiply desired minimum airflow limit by a factor of 0.0142 and check the result is equal to or greater than desired kW. (Limits temperature rise across the coil to 45°F.)

$$kW \leq cfm \times 0.0142$$

These requirements established to prevent excessive temperature rise caused by low airflow and/or oversized coils. Minimum airflow limits

Titus electric heating coils are specifically designed for use with VAV terminal units. They include an extended plenum section and diffuser plate to minimize stratification. The heating elements are designed to minimize hot spots and nuisance tripping of the thermal cutouts.

Must be within recommended ranges to ensure proper operation and long service life. For optimum diffuser performance and maximum thermal comfort, coil discharge temperatures should not be more than 15°F above desired room temperatures. For proper coil operation it is recommended that coil discharge temperatures do not to exceed 100°F.

Note: The Titus 480V, 3-phase electric heat configuration is 4-wire wye. 3-wire configuration is available.

PESV, AESV, DESV / APPLICATION DATA (STAGED HEAT)

Inlet Size	Heating cfm Range	Number of Steps Available	120V 1 Phase kW Range		208V 1 Phase kW Range		240V 1 Phase kW Range		277V 1 Phase kW Range		208V 3 Phase kW Range		480V 3 Phase kW Range	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
4	55-225	1	0.5	5.0	0.5	3.0	1.0	3.0	1.0	3.0	1.5	3.0	2.5	3.0
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
5	85-350	1	0.5	5.0	0.5	5.0	1.0	5.0	1.0	5.0	1.5	5.0	2.5	5.0
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
6	105-500	1	0.5	5.0	0.5	7.5	1.0	7.5	1.0	7.5	1.5	7.5	2.5	7.5
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
7	135-650	1	0.5	5.0	0.5	9.5	1.0	9.5	1.0	9.5	1.5	9.5	2.5	9.5
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
8	190-900	1	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	13.0	2.5	13.0
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
9	225-1050	1	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	16.0	2.5	16.0
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
10	300-1400	1	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	16.0	2.5	21.0
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
12	425-2000	1	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	16.0	2.5	30.0
		2	1.0		1.0		1.5		1.5					
		3	1.5		1.5		2.0		2.5					
14	575-3000	1	0.5	5.0	1.0	9.5	1.0	11.0	1.5	13.0	1.5	16.0	3.0	36.0
		2	1.0		2.0		2.0		2.0		2.0			
		3	1.5		3.0		3.0		3.0		3.0			
16	750-4000	1	0.5	5.0	1.0	9.5	1.0	11.0	1.5	13.0	1.5	16.0	3.0	36.0
		2	1.0		2.0		2.0		2.0		2.0			
		3	1.5		3.0		3.0		3.0		3.0			
24x16	1800-8000	1	1.0	5.0	1.0	9.5	1.0	11.0	1.5	13.0	1.5	16.0	4.0	36.0
		2	2.0		2.0		2.0		3.0		2.0			
		3	3.0		3.0		3.0		4.5		3.0			

Useful formulas: $kW = \frac{cfm \times \Delta T}{3160}$ or $\Delta T = \frac{kW \times 3160}{cfm}$ or $cfm = \frac{kW \times 3160}{\Delta T}$

Where ΔT = air temperature rise.

PESV, AESV, DESV / APPLICATION DATA (LYNERGY HEAT)

Inlet Size	Heating cfm Range	120V 1 Phase kW Range		208V 1 Phase kW Range		240V 1 Phase kW Range		277V 1 Phase kW Range		208V 3 Phase kW Range		480V 3 Phase kW Range	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
4	55-225	0.5	2.5	0.5	3.0	1.0	3.0	1.0	3.0	1.5	3.0	2.5	3.0
5	85-350	0.5	4.5	0.5	5.0	1.0	5.0	1.0	5.0	1.5	5.0	2.5	5.0
6	105-500	0.5	5.0	0.5	7.5	1.0	7.5	1.0	7.5	1.5	7.5	2.5	7.5
7	135-650	0.5	5.0	0.5	9.5	1.0	9.5	1.0	9.5	1.5	9.5	2.5	9.5
8	190-900	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	10.5	2.5	13.0
9	225-1050	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	10.5	2.5	16.0
10	300-1400	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	10.5	2.5	21.0
12	425-2000	0.5	5.0	0.5	9.5	1.0	11.0	1.0	13.0	1.5	10.5	2.5	25.0
14	575-3000	0.5	5.0	1.0	9.5	1.0	11.0	1.5	13.0	1.5	10.5	3.0	25.0
16	750-4000	0.5	5.0	1.0	9.5	1.0	11.0	1.5	13.0	1.5	10.5	3.0	25.0
24x16	1800-8000	2.0	5.0	1.0	9.5	1.0	11.0	1.5	13.0	1.5	10.5	4.0	25.0

AHRI Directory Of Certified Performance

Titus is a charter member company and current participant in the AHRI Directory of Certified Performance. This voluntary certification program was developed by participating manufacturers in conjunction with the former Air-Conditioning and Refrigeration Institute (ARI) in the 1990's. It is currently administrated by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). The purpose of this program is to provide for the independent verification of manufacturers' published performance data. Only participating products are authorized to bear the AHRI VAV Certification Mark. Certified data may be viewed and downloaded at www.ahrinet.org.

In order to participate in this program, member companies pay annual dues based on sales volume, submit published performance data for all applicable model types, and agree to provide a number of randomly selected product samples for annual rounds of independent testing at the manufacturers' expense. All verification testing is conducted in accordance with ASHRAE Standard 130 'Methods of Testing Air Terminal Units'. These tests are conducted to verify that a manufacturer's published certified ratings are within the test tolerances outlined in AHRI Standard 880 'Performance Rating of Air Terminals'. Any failure to demonstrate the certified performance is punished by additional testing requirements, mandatory performance re-rating, monetary penalties and possible expulsion from the Certified Directory.

Product samples provided for certification testing are standard production units with standard ½" dual density fiberglass lining (unless otherwise specified) and no optional appurtenances such as add-on attenuators or heating/cooling coils. The certified ratings are measured at the standard operating points under the following test conditions:

PESV, EESV, AESV, DESV

- Rated airflow (cfm) – Based on an inlet velocity of 2000 fpm
- Rated Min ΔPs (in wg) – Minimum static pressure drop from the unit inlet to discharge at rated airflow with damper full open
- Rated ΔPs (in wg) – A static pressure drop of 1.5 in wg from unit inlet to discharge
- Rated sound power by octave band (dB, re 10^{-12} watts) – Radiated and discharge sound performance conducted in a reverberation room that meets both the broadband and pure tone qualifications of AHRI Standard 220

PESV, AESV, DESV

Inlet Size	Rated CFM	Min ΔPs	Discharge		Radiated Sound Power						Discharge Sound Power					
			H	W	2	3	4	5	6	7	2	3	4	5	6	7
04	150	0.04	8	12	60	57	46	41	40	37	76	67	60	54	54	49
05	250	0.03	8	12	62	59	49	42	41	37	77	67	61	56	55	50
06	400	0.13	8	12	63	61	52	44	42	38	78	72	65	60	57	52
07	550	0.10	10	12	64	59	53	47	43	34	76	73	64	59	56	51
08	700	0.02	10	12	65	60	53	47	47	45	79	74	64	58	56	52
09	900	0.05	12.5	14	64	58	53	47	45	38	79	70	64	59	57	54
10	1100	0.01	12.5	14	67	62	57	55	54	43	80	72	66	63	60	55
12	1600	0.01	15	16	66	62	59	53	50	44	80	75	68	64	62	58
14	2100	0.04	17.5	20	66	62	55	53	50	46	76	69	66	63	63	59
16	2800	0.03	18	24	66	61	54	50	50	45	77	70	66	64	62	57
40	5300	0.06	18	38	79	74	72	68	67	64	87	81	77	72	73	69

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